CHAPTER – II
REVIEW OF LITERATURE

2.1 STRESS CREATION

Introduction

Society, the working world, and daily life have changed almost beyond recognition in the past 50 years. These changes have contributed to a major increase in stress. Changes include rapid population growth, migration from rural areas to cities, a rise in the number of elderly people, and the developing role of women. The role of women has changed dramatically over the past 100 years, especially in urban societies. As women make up a greater part of the total labour force, they are judged by the same criteria and put under the same stress as men. However, women often suffer more stress than their male colleagues because of conflict between work outside the home and work within the home, where they may continue to shoulder the main responsibility for traditional female roles. These changing roles also challenge male identity and work patterns as women take on job traditionally held by men. Changes in the work place like technical, operational and cultural in organizations have had profound and far reaching effects on the employees of the organizations that undergo them. A number of studies have pointed out that although workers are adaptable, there are limits to the amount of change that human beings can absorb. If the organizations keep reaching and exceeding these limits they may find that eventually their workers can no longer tolerate the demands made of them.

Francis (1969) in his study found that experienced role conflict is highly correlated with disagreement with one’s superior over the degree of authority to allocate organizational regards, e.g., pay, promotions, etc., to one’s subordinates. He also found that granting managers a high degree of authority to define their own jobs had no significant relationship to the degree of role conflict.

Hall, D.T. (1972) appropriately pointed out that the numerous sub-identities of women often result in chronic role conflict. They express conflict over the desire to work and concern about working. They weigh the benefits of working against the
concern for the well-being of their children and nature of material relationships. Often these conflicts are a function of role overload and time conflicts rather than a function of role incompatibility. Bearing the prime responsibility for home and children, Women tend to give foremost importance to their home-making role and developing feelings of guilt that their work role is responsible for their becoming less-effective mothers. Participants were unanimous about experiencing physical exhaustion in trying to balance work assignments, family responsibilities, and commuting time.

**Cooper and Marshall (1976)** have reported important sources of stress: poor physical conditions, work overload, physical danger, role conflict, responsibility, under-promotion, over-promotion, lack of security, lack of training, and poor relations with supervisors and subordinates. In spite of the above reported causes there are so many reasons which contribute to the experience of occupational stress.

**Spector (1978)** in his organizational frustration model explained that task performance and personal goals can be blocked by several factors. The performance and personal goals can be blocked by several factors. The physical environment can place several limitations on possible activities. The rules, procedures, and formal structure of the organization can also impede goal-directed activity and goal attainment. Interpersonal relations with peers, superiors and subordinates as well as with others outside may cause frustration.

**Albrecht (1979)** hypothesized that there are eight relatively “Universal” factors that come into play when evaluating the balance between stress and reward in organizations. These are: 1) workload, 2) physical variables, 3) job status, 4) accountability, 5) task variety, 6) human contact, 7) physical challenge and 8) mental challenge. Each individual has a “comfort zone” for eight factors. The goal of management is to find the “comfort zone” for each employee those results in optimal performance without producing undesirable side effects.

**Judi Marshall, Cary L. Coper (1981)** in their research note on methods and initial findings tried to find out the various causes of stress. The main aim of the
study was to investigate the effect of relocation on their managers and their families and to study generic problem area of managerial work stress. The sample size was 200 senior managers from large companies ranging from 27 to 60 years and the various job functions were Research, Production, Service, Marketing and Engineering. They found out that multiple regressions is a more powerful statistical tool and job as well as personality factors appear to contribute to stress. A wider organizational context must be investigated to identify the main cause of stress. Psychological and physical stress symptoms vary with person environment combination concerned.

**Surti, K. and D. Sarupria (1981)** in their study ‘Psychological Factors Affecting Women Entrepreneurs’ studied 40 Women entrepreneurs. They found that married women experienced more role stress such as self-role distance, result inadequacy, resource inadequacy as well as over all role stress as compared to unmarried women. Locus of control dimensions was to be positively and significantly associated with all types of role stress. Similar pattern of association was observed between role stress and total externality as where internal control was insignificantly associated with role stress variables. Fear of success was positively and significantly related to result inadequacy and role inadequacy. Intrapersistive style was the dominant mode of coping with various role stresses experienced by women entrepreneurs.

**Cooper, Carly L. and Davidson, Marilyn J, (1982)** study on working lives of women managers found that there are substantial and unique differences in the way in which male and female managers perceive and experience stress. Women managers are experiencing significantly more pressure and a greater number of stress manifestations than men managers. Females in managerial position are often faced with additional stress factors not experienced by male managers. Condition entranced stress may in turn deter women from entering or remaining in managerial positions, diminish their pursuit of upward mobility, and have an adverse impact on their health and behavior.

**Gupta, A. (1982)** carried out a study to analyze stress among working women and its effect on marital adjustment. The dual responsibilities of the home
and work call for multiple roles which put great strain on working women and this may affect their capacity to make marital adjustment.

Sruti, K. (1982) studied 360 working women about role stress and their coping styles. The main findings of the study are:

1. Self-role distance was experienced mostly by bankers and least by university and college teachers.
2. Doctors experienced maximum inter-role distance while it was minimum among gazetted officers, researchers, university and college teachers.
3. Role stagnation was highest among nurses, followed by bank employees and researchers.
4. Role overload was experienced in more or less the same intensity by all professional groups expect university and college teachers.
5. Role isolation was experienced by bank employees, nurses, doctors and gazetted officers.
6. Nurses and bank employees experienced role erosion to higher extent than the other groups.
7. Role inadequacy stress was experienced most by nurses, bank employees and researchers.
8. Total role stress was experienced most by nurses followed by bank employees. University and college teachers experienced least role stress.

Pestonjee (1984) identified three important sectors of life in which stress may originate: (1) job and organization, (2) the social sector, and (3) the intra-psychic sector. The job and organization sector refers to the totality of the work environment (task atmosphere, colleagues, compensations, policies etc.). The social sector refers to the social/cultural environment of one’s life. The intra-psychic
sector encompasses those things which are intimate, personal and specific to the individual like temperament, values, abilities and health. In a balanced state the magnitude of stress emanating from the three sectors of life is in consonance with the Stress Tolerance Limit (STL) of the individual.

Ahmad, S., Bhardwaj, A. and S.Narula (1985) conducted a study on stress among executives. A group of 30 executives from the private sector and another group of 30 executives from public sector were compared on role stress. It was found that there was no major difference. Out of 10 dimensions of role stress, however, significant differences were obtained in three dimensions.

Bhatnagar, D. and K.Bose (1985), took 140 Branch managers as samples to study Organisational role stress. They found out that branch managers scored lower on role ambiguity, self–role distance and roles stagnation indicating that the respondents do not experience major stresses in these areas. Three role stresses, namely, role erosion, inter-role distance and role isolation were found to be dominant. There was no significant association between age and role stress variables. Stressors were related with leadership styles namely, role isolation, role ambiguity and self–role distance. Public sector executive’s experience slightly more stress than their counterpart in the private sector. Age, education, income, marital status and experience were found to be unrelated with role stress in both public and private sector executives.

Debra L. Nelson and James C. Quick (1985) in their study found that Role, Job and environment, causes organizational stress and marriage &children causes’ extra organizational stress. Discrimination, Stereo typing, social isolation is unique stressors found by women. Professional women can utilise personal resources in order to manage stress and ensure that its outcomes are healthy and productive.

Khanna, S. (1986), Life stress, anxiety and depression, with dogmatism and religiosity as moderators in working, non-working, married and unmarried Hindu and Sikh women were studied. A set of instruments was administered to 406 respondents to elicit information pertaining to anxiety, depression, life stress, religiosity and dogmatism. The analysis of the data revealed that (a) Working
married hindu women were significantly high on anxiety, depression, religiosity and dogmatism, (b) religiosity and dogmatism were reported to variously moderate the relationship between life stress, depression and anxiety in the case of non-working, married, unmarried, Hindu and Sikh women. These were not found to have moderating effect for working women.

**Fullan, M.G, P.B.Park and T.R.Williams (1987)** studied the Supervisory officer belonging to 26 Boards out of total population of 113 boards in Ontario, Toronto. A total of 224 Supervisory officers completed an adoption of ORS. They found out that Business officers and assistant directors tend to record lower levels of overall stress than do other supervisory officers. Supervisory officers who were high on overall stress were likely to be substantially of the same group who report constrained feelings in their work. Supervisory officers in expanding boards tend to feel more stress related to the availability of resources. Supervisory officers in boards with both area and functional responsibilities tend to report more stress related to availability of resources. Supervisory officers in boards which have a flat structure are less likely to record high role isolation stress. Supervisory in boards with flat structure tend to record lower level of role ambiguity stress. Personal adequacy does not appear to be a type of stress which Supervisory officers experience much.

**Jasmine (1987)** conducted a study to compare the level of job-related stress among public and private sector blue-collar employees. A job stress scale developed by the author was administered to a sample of 120 blue-collar workers from public and 120 from private sector organizations. The analysis of the data revealed that role incumbents of public sector organizations experienced significantly more stress than those of private sector organizations. Second, job stress was reported to be significantly and negatively associated with income. No significant relationship was found between stress and age. The author speculated about a number of causes for higher role stress scores obtained by public sector professionals as compared to private sector professionals. First, the management in the public sector does not give freedom to optimize its own performance in the pursuit of single objectives whereas in private organizations, the management uses convergent means to achieve a single
purpose. Second, the public sector is plagued by frequent changes in policies whereas centralization of control and decision making are characteristics of the private sector. Third, the role incumbents of the public sector organization, included in the study were more highly educated than private sector professionals. Therefore, their expectations from work and the organization may also have been higher and difficult to fulfil.

Nigel R. Long and Kevine E Voges (1987) wanted to determine the degree of convergence between husband’s perception of the sources of their job stress and their wives perception of the same sources and to compare husbands and wives perceptions of the magnitude of specific sources of stress. Participation in this study was 301 couples nationwide. Husbands reported greatest stress originating from the perceived changes in their behaviour, while wives reported greatest stress arising from the violent nature of their husband’s work and wives reported a significantly greater magnitude of stress in their assessment of the violence associated with their husbands.

Shenoy (1987) in his study dealt with the stressfulness of daily roles, personality and mental health of 135 women. Three categories of women - married and working, married and not working, and unmarried but working – constituted the sample population. The Role Strain Scale was used to obtain information pertaining to household, marital and occupational role stress; the Self–Report Questionnaire was used to elicit information related to mental health/ psychological distress; and the Eysenck Personality Inventory (EPI) Questionnaire was used to assess traits like personality-neuroticism and extraversion-introversion.

The analysis of the data revealed a positive and significant relationship between role stress and psychological distress. Marital stress was higher and significant among housewives as compared to working women. On the basis of these findings, the author concluded that married working women were significantly less distressed than housewives in spite of experiencing occupational stress.

Sharma (1987) conducted a study on two job categories, namely, managers and supervisors of both public and private pharmaceutical organizations to ascertain
the effects and roles of motivational climates on four psychological variables such as job satisfaction, participation, alienation and role stresses. The sample comprised 150 respondents from public and private organization each, including 75 managers and 75 supervisors. A set of five instruments was administered to the respondents. The MAO-C (Pareek, 1989), S-D Inventory (Pestonjee, 1973) and the ORS Scale (Pareek, 1983c) were used to collect data pertaining to six climate dimensions, seven job satisfaction variables and 10 role stress variables as well as overall role stress. Two other instruments – Psychological Participation Index (Singh and Pestonjee, 1978) and the Alienation Scale (Dutt and Kureshi, 1976) - were also administered to the target group. The findings of the study can be summarized as follows:

- Employees of the private organization scored higher and significantly differed from those of public organization as regards inter-role distance, role expectation conflict, role erosion, role isolation, personal inadequacy and resource inadequacy. Public organization employees however scored significantly higher on role stagnation.

- Supervisors of the public sector organization scored significantly higher on role stagnation, role ambiguity and resource inadequacy than managers (public). On the other hand, managers of the public organization scored significantly higher than supervisors (public) on role erosion and role overload.

- Supervisors of the private organization scored higher and significantly differed on role overload, role isolation, personal inadequacy, self-role distance, role ambiguity and over all role stress.

- Role stresses correlated negatively with job satisfaction variables and positively with participation in case of the four data sets.

- The most important explanatory variable of role stress was found to be dependency climate in the public sector organization and control climate in the private sector organization.
**Chakraborty (1989)** the malady that quality of work life suffers from was categorized as:

1. Widespread unhappiness due to comparisons with colleagues
2. Disillusionment with performance appraisal systems and promotion criteria
3. Division into camps and cliques hampering fruitful communication
4. Frequent fits of anger amongst top level officials or entrepreneurs
5. Regional prejudice
6. Glorification of speed and excitement as against serenity and harmony
7. Unreasonable personal expectations
8. Limitless addiction to lower-order material needs

**Dwivedi, R.K. (1989)** study titled “Some Correlates and Clusters of Organizational Role Stress among Public Sector Personnel in India” studied 101 executives from four organizations and administered Pareek’s Organizational Role Stress Scale with a view to determine the relative importance of various factors influencing the structure and dynamics of organizational role stress as a measure to identify strategies for managing role stress among personnel.

The study revealed low but significant negative relationship between most of the ORS measures followed by age, experience, education and leader effectiveness and low but significant relationship of one ORS measure with children. This implies that such correlates of ORS measures may be taken into account in evolving preventive stress management strategies (i.e., developmental, selection and placement system design, compensation design) in organizations similar to those under study.

**Gupta N.K. (1989)** Studied 50 Executives of an irrigation Design Organization, Roorkee and found out that role erosion were experienced by a higher
number of executives followed by role inadequacy (78%), role stagnation (74%), self-role distance (60%), personal inadequacy (65.8%), role isolation (62.2%) and role expectation conflict (44%).

**Gupta P. (1989)** in his study ‘A Study of First Generation Entrepreneurs’ examined 60 first generation entrepreneurs regarding role stress, Locus of control, Coping Style and Role Efficacy. The major findings were maximum role stress was experienced in the dimension of result inadequacy. Trained entrepreneurs experienced maximum stress in inter-role distance and non-trained in role adequacy. Age did not have significant effect on the role stress of entrepreneurs and age of the establishment was significantly related to role stress. Married entrepreneurs experienced significantly more role stress and nuclear family entrepreneurs experienced more role stress compared to joint family entrepreneur’s. Entrepreneurs who employed less than 20 people experienced significantly more role stress.

**Kumar, S. (1989)** also conducted a study of role stress, role satisfaction and role efficacy among public sector executives. The sample consisted of 252 lower and middle management executives from different functional areas in an oil company. Questionnaires like the ORS, MAO-R and Role Efficacy Scale were administered. Some of the main findings were:

(a) It was found that unmarried executives experienced significantly higher role stress as compared to married executives.

(b) Personal inadequacy was found to be significantly higher among graduate / undergraduate executives in comparison to postgraduate executives.

(c) Executives married to working women were observed to experience significantly high total role stress in comparison to executives married to housewives. They also scored higher on role expectation conflict and role overload.

(d) Role stagnation, personal inadequacy and self-role distance were found to be significantly higher among lower level executives.
(e) Marketing executives experienced maximum role stress in comparison to finance and accounts, production and engineering services, and personnel and administrative executives. Personnel executives obtained lowest scores on total role stress.

**Dhadda, N. (1990)** studied 50 Railway and 50 Aviation Officials to measure Role stress, job involvement and personality. The main findings of the study were

1. Role Overload causes maximum stress among railway officials and role ambiguity causes least, whereas among aviation official’s role erosion causes maximum stress and role overload minimum.

2. Job involvement is positively related to role stress. Higher the stress, higher is job involvement among the officials belonging to two different organizations, i.e., railways and aviation.

3. The relationship between job involvement and role stress amongst the officials with Type-B personality is found to be positively significant.

**Madhu et al. (1990)** conducted a study on role stress: differential influences of some antecedental factors. 173 managerial personnel from steel organization and 76 from petroleum organization participated in the study. The present study attempted to compare the influence of the antecedent factors namely, personal, organizational, job, superior, leadership styles and communication factors on role conflict and role ambiguity. It was found that role conflict and role ambiguity experienced by the employees were most significant in the petroleum organization.

**Sahgal, P. (1990)**, in his study on organizational role stress took 222 executives belonging to junior, middle and senior levels to study role stress, job involvement and coping style. The major findings of his study were, role erosion and role inadequacy are predominant role stressors experienced by executives. Executives also experience stress from other role dimensions like resource inadequacy, inter-role distance, self-role distance and personal inadequacy. Middle level executives experience relatively higher stress arising out of role stagnation. Alienation in two forms, i.e., meaninglessness and normalesness, is the result of stress, particularly role erosion and resource inadequacy.
Reddy and Ramamurthy (1991) studied the effect of age, personality, and general intellectual ability on stress in 200 male executives in four age groups (21-30, 31-40, 41-50 and 51-60 years). The subjects took the Standard Progressive Matrices, the Sixteen Personality Factor Questionnaire (16PF) and a measure of stress and coping. Results of the stepwise multiple regression analysis indicated that there were age differences in the sources of stress. The influence of personality and general ability on the stress experience were limited but significant. On the basis of these findings, the authors suggested that the stress experience may be better conceived as interplay of the factors studied and other situational and organizational factors.

Ahmad and Khanna (1992) investigated the relationship between job stress, job satisfaction and job involvement among 50 middle level hotel managers aged 22-36 years. The analysis revealed a significant negative relationship between job stress and job satisfaction irrespective of sex, marital status, education and experience. Occupational stress was reported to be negatively correlated with job involvement.

Barnes (1992) conducted a study on stress in aviation personnel. A sample of 25 captains, 16 flight engineers, and 11 cabin crew members from Air India were considered for the study. The results revealed that the cabin crews have far more stressors than other aviation groups. This is followed by pilots.

Tharakan (1992) studied on occupational stress and job satisfaction among working women. He observed that professional women experienced greater work related stress than non-professional women. The expectation of technocrats was much higher than non technocrats.

Arlee (1993) in his study listed the various factors that cause stress. Factors that contribute to the stress experienced by dual carrier couples are work role ambiguity, work schedule, inflexibility, lack of career progress, job-parent conflict and quality of spouse relationship.
Aditya and Sen (1993) attempted to study the nature and extent of stressors faced by male and female executives in their job situation. A group of 160 middle level executives consisting of 80 male (aged 28-50 years) and 80 female (aged 27-50 years) executives constituted the sample of the study. A set of three psychometric instruments - the ORS Scale (Pareek, 1983c), the Job Anxiety Scale (Srivastava and Sinha, 1977) and the Bem Sex Role Inventory (Bem, 1981) was administered to the respondents. The analysis of the data revealed that (a) Male executives who were predominantly masculine in their sex role orientation faced greater stress and anxiety in their job situation than female executives who were predominantly androgynous in their sex role orientation, and (b) the two groups differed maximally in terms of role ambiguity, role conflict, inter-role distance, future prospects, human relations at work, and femininity and masculinity dimensions. The authors discussed their findings in terms of greater reluctance to self-disclosure among men and different socialization pattern specified for both men and women in Indian Society.

Cooper and Davidson (1993) has said that society appears to demand that the “Women managers of today be superwoman” in order to succeed and survive. They predicted that till recently men had much higher incidents of stress – related illness but as more and more women take on full time career - oriented jobs, the trend would start reversing.

Goklaney (1993) explored whether a high level of stress is associated with greater creativity in 55 middle level managers from three age groups (below 31 years, 32-41 years, and 42-56 years). The subjects completed exercises on stress and were administered the Indian adaptation of the Wallach and Kogan Test of Creativity (Paramesh, 1972). On the basis of their stress scores, subjects were grouped in terms of their vulnerability to stressors. Results revealed that age did not affect creativity. Low stress groups differed significantly from moderate and high stress groups, but the latter two groups were comparable. Adaptation and anxiety-reactive stress variables were positively related to creativity.

Mitra and Sen (1993) in their study found that male and female executives differed significantly on role ambiguity, role conflict, inter role distance, future prospects and human relation at work and femininity and masculinity dimensions. Male executives with masculine sex role orientation faced greater job stress and
anxiety than females possessing an androgynous personality. Authors attributed this fact to a greater reluctance to self disclose among men and different socialization patterns laid down for both men and women in Indian Society.

Panchanatham et al. (1993) investigated the problem solving styles of executives and assessed the influence of occupational stress on problem solving styles using a sample of 150 executives randomly selected from a large government organization. The Occupational Stress Index (A.K. Srivastava and A.P Singh, 1981) and the Basadur et al.’s (1990) Creative Problem Solving Inventory were administered to the subjects. The analysis of the data established the adoption of both optimizer style and implementer style by the executives for problem solving and the absence of a significant relationship between occupational stress and problem solving styles. In addition, a lower degree of occupational stress was experienced by administrative executives as compared to their counterparts in other departments.

Pattanayak (1993) examined the level of stress experienced by 240 employees of industrial public sector undertakings in Orissa. The Job Stress Questionnaire (Singh and Sinha, 1986) was administered to two groups of employees (executives and supervisors) and employees from two areas of work (production and service). Results revealed that supervisors experienced greater job stress, lack of leadership support, and inequity than executives. Employees of the production unit experienced greater job stress, role conflict, role ambiguity, role overload, job difficulty, lack of leadership support, inequity, inadequacy of role authority than service employees. The analysis further showed that production supervisors scored highest on role conflict; production executives scored lowest on experience of inequity; and service executives scored lowest on lack of leadership support.

Arora (1994) compared the level of stress, alteration and physical health among Video Display unit (VDU) users and non-VDU users. Findings of the study revealed that clerical VDU users, as compared to clerical non-VDU users and managerial VDU users, experienced pressure and time urgency, and were controlled by their supervisors. On the bases of stress findings the author argued that stress generated by computerization lead to alienation and had adverse effect on health.
Grover and Sen (1994) compared job stress and organizational commitment of 75 managers and 75 supervisors in a private sector organization. The Job Stress Questionnaire (Singh and Sinha, 1986) and the Organizational Commitment Scale (Sayeed, 1989) were administered to the subjects. The data were subjected to statistical techniques like the t-test, stepwise multiple regression analysis and factor analysis. Results of the study revealed that managers experienced less job stress and expressed greater organizational commitment as compared to supervisors. Four factors were extracted for each group. However, stepwise multiple regression analysis showed that only one factor of stress emerged as significant predictor of organizational commitment in the case of both groups.

Jha et al. (1994) investigated the relationship between bureaucratic orientation and role stress. The sample consisted of 40 upper level (UL), 40 middle level (ML) and 40 lower level (LL) technocrats of a large government organization. The subjects were administered the Organizational Role Stress Scale (Pareek, 1983c) and the Work Environment Preference Scale (Gordon, 1967). The analysis of the data revealed that lower level subjects experienced more role stress as compared to middle level and upper level subjects. The middle level subjects obtained the lowest scores on bureaucratic orientation (BO) as measured by the WEPS. The upper level subjects scored higher on bureaucratic orientation and preferred specific rules and impersonal relationships. The correlation between BO and ORS factors was highest for upper level subjects, low for middle level subjects, and insignificant for lower level subjects.

Marie Mchugh, Shirley Brenner (1994) in their study managing the stress of change in the public sector was trying to identify job stress as a potential problem for the public sector employees and organizations. The study revealed that a higher level of perceived stress was evident in office which directly serves the public. The survey revealed that 25% sample of employees was to some degree affected by job stress. Further it revealed that the causes of stress are frequent interruption in job, volume of work, insufficient information, juggling work/home demands, posts becoming obsolete due to technological advance, work pressures and poor communication with their section head.
Pandey, S. (1994) in his study “Role stress - Coping Strategies and psychosocial Correlates” took 450 middle management executives, 150 lower management executives, and 150 Supervisors and studied Role stress and Coping strategies. The main findings of the study are:

1. The three levels of job hierarchy differ significantly in terms of role stagnation and role overload stresses, impunitive, intropersistive and extrapersistive coping styles.

2. Role erosion was found as a dominant role stress in all the three job hierarchy levels.

3. Psychoticism-reality and neuroticism – stability dimensions of personality were to be positively and significantly associated with all organizational role stress factors.

Extroversion - Introversion and lie dimensions were found negatively associated with most of role stresses.

Srivastava et al. (1994) compared organizational role stress and job anxiety among 50 top managers, 50 middle managers, and 50 workers in private sector organization. All subjects were administered the Organizational Role Stress Scale (Pareek, 1983c) and the Job Anxiety Scale (Srivastava and Sinha, 1977). Results indicated that middle level managers perceived greater role stress and anxiety in comparison to top level managers and workers. It was also found that workers perceived more role stress and anxiety than top managers who were least affected.

Dual career couples experience higher level of stress, family conflict, overload, role ambiguity, role conflict - David F.Elloy and Catherine R.Smith (1995).

Fulcheri et al. (1995) observed that size of workloads, the complexity of tasks responsibility is the major sources of stress factors. The reasons for frustration are delay in career development and a slow erosion of status among the managers.
Services and research and development staff are under greater stress as compared to those posted in marketing and administration divisions and it is also observed that junior executives are working under much greater stress than the middle level and senior executives in the organizations – Khanna, B.B. (1995).

Misra and Dixit (1995) attempted to reveal the coping styles of 300 allopathic doctors. It was found that each of the four type of job stress namely role based stress, task based stress, boundary spanning stress and conflict mediating stress influenced burn out among the doctors and role based stresses such as role conflict and role ambiguity are related with feeling of lack of personal accomplishment.

Peterson (1995) explored role conflict; role ambiguity and role overload as reported by industrial workers and also found that managers are more stressed due to role overload from his study “organizational issues for managers.

Satyanarayana (1995) investigated stressors among 75 executives and 75 supervisors of Bharat Heavy Electricals Ltd (BHEL), Ramachandrapuram. The ORS Scale (Pareek, 1983c) was administered to the respondents. The analysis of the data revealed that role erosion, personal inadequacy and role stagnation were experienced as dominant contributors of role stress in executives and supervisors. The two groups differed significantly in respect of inter-role distance, role overload, personal inadequacy and role ambiguity dimensions.

Role stresses are comparatively higher in case of female doctors whereas female university and college teachers experience less stress and bank employees and college teachers have least stress and role ambiguity - Sangeetha Mathur (1995).

Ushashree et al. (1995) in their study considered 80 male and 80 female high school teachers in the age group of 25-40 year (adult) and 41-60 years (middle) age to know the effect of gender on teacher’s experience of job stress and job satisfaction. Analysis of data indicated significant effect of gender on job stress.
Rajadhyaksha (1996) found that the work family conflict of the husband and wife together depended on their personality, working hours, work overload, job variety, career stage, social support from the boss, marital role reward, value and personal role commitment and family type.

Sekhar (1996) explored job stress, job-related anxiety and helplessness, and job burnout experiences among nursing personnel from three hospitals. A group of 120 nurses, 40 each from corporate, university and government hospitals was administered scales to measure job stress, work-related anxiety, helplessness and burnout experiences. Results revealed that the type of hospitals differentially affected job stress and job burnout experiences. University hospital nurses scored lower on all the stress and burnout experiences than the other two groups. Further, beta coefficients calculated for number of patients nursed and dimension-wise stress and burnout experiences indicated that work overload has a direct impact on the burnout and lose of productivity in nurses.

Basha and Ushashree (1997) studied on job stress and coping as related to perceptions of organizational climate. Significant negative relationship was found between perception of organizational climate and the amount of stress experienced by the employees. Newstrome and Avis (1998) found that when job autonomy provided to managers is high, they enjoy their work and have freedom to do the task according to their own will so that they feel less stress.

Chand and Sethi (1997) conducted a study to examine the organizational factors as predictors of job-related strain. For this purpose, the Occupational Stress Index (A.K. Srivastava and A.P.Singh, 1981) and the Index of Job Related Strain (Indik et al.,1964) were administered to a sample of 150 junior management scale-I (JMS-I) officers working in various banking institutions in the state of Himachal Pradesh. Coefficients of correlation and stepwise multiple regression analysis were used to analyse the data. The main findings of the study may be summarized as follows:

(a) Significant positive relationships were obtained between job-related strain and role overload, role conflict and strenuous working
conditions. The relationships of other organizational variables with job-related strain were also in the expected directions though not significant.

(b) Role conflict, strenuous working condition in an organization may lead to stress among the employees.

**Daga (1997)** conducted a study to examine the influence of social family role stress and social support on quality of life among working women belonging to three occupational groups of clerks, doctors, and teachers. The sample consisted of 300 working women. Of these, 100 women belonged to each occupational group. The Quality of Life Scale (Daga and Hussain, 1997), the social Family Role stress Scale (Vadra and Akhtar, 1989) and the significant Others Scale (Power, Champion and Aris, 1988) were administered to the respondents. Several statistical techniques like product moment, coefficients of correlation and multiple coefficients of correlation were used to analyze the data. The main findings were summarized as follows:

(a) Quality of life was correlated negatively and significantly with social family role stress among clerks, doctors, and teachers.

(b) Quality of life was found to be associated positively and significantly with social support among clerks and teachers.

(c) Social family role stress was reported to be correlated positively and significantly with social support among clerks, doctors, and teachers.

(d) Significant differences were observed among all the three groups on the relationship scores of quality of life and social family role stress.

(e) Clerks scored significantly higher on the relationship scores of quality of life and social support as compared to doctors.

(f) A significant difference was found between clerks and doctors on the relationship scores of social family role stress and social support.
Dwivedi R.K. (1997) conducted a study with the intention of exploring the magnitude of trust, distrust and organizational role stress and determining the extent of relationship among and their consistency across the ‘low’ and ‘high’ performance on public and private organizations. A group of 55 executives from the public sector and another group of 62 executives from the private sector served as sample for the study. The ORS Scale (Pareek, 1983c) and the Trust Industrial Scale (Dwivedi, 1995) were administered to the respondents. The major findings of the study may be summarized as follows:

(a) All the trust measures, namely, individual distrust, group trust, organizational trust, the composite trust, were found to be negatively associated with organizational role stress variables.

(b) On the contrary, all the distrust measures, namely, individual distrust, organizational distrust, and the composite distrust, were reported to be positively related with role stress variables.

(c) All the trust measures had higher level and distrust measures had lower level in the high performance (private sector) organization when compared to the low performance (public sector) organization. Low performance organization was marked by lower level of trust and a higher level of distrust.

(d) In the high performance organization, stress levels were found to be low whereas in low performance organization, stress reported to be high.

(e) The trust measures had positive impact on organizational performance where as distrust and role stress variables had negative impact.

(f) Trust, distrust and role stress variables significantly differentiated the low performance (public sector) and high performance (private sector) organizations.
Joshi, P.C. and Singhvi, M.K. (1997) in his study Role Stress and Burnout studied the role stress as experienced by the teachers at different levels in the college, and the personal factors that contribute to burnout at different levels. The sample of 167 teachers were drawn from arts and science colleges of M.I.Sukhadia University, Rajasthan Agriculture University and R.N.T. Medical College of Udaipur. The study showed hardly any difference between the various dimensions of role stress on the total of 167 teachers. Role erosion stress was felt high because the role occupant does not have adequate resources to perform the role effectively or he may lack internal resources. It can be concluded that similar stresses are being experienced by the teachers in all the four colleges. The teachers experienced high degree of burnout on the emotional exhaustion. It can be concluded that externality, submission and desurgency, Machiavellianism and alienation are important dimensions in relation to role stress and burnout. Teachers with high externality, high alienation and high withdrawal are on high role stress.

Mukherjee (1997) studied the relationship between organizational role stress, role efficacy, and organizational climate among banking professionals. The sample consisted of 71 managers which included 27 senior level and 44 junior level management personnel of a large banking organization. For the purpose of the study, a set of three psychometric instruments – the ORS Scale (Pareek, 1983c), the Role Efficacy Scale (Pareek, 1986b) and the MAO-C (Pareek, 1989) was administered to the respondents. The data were subjected to statistical analyses such as the critical ratio test and correlational and factor analyses. The Major findings of the study may be summarized as follows:

(a) Junior level managers experienced higher stress on all the role stress dimensions as compared to senior level managers. Significant differences were observed between the two groups on the dimensions of inter-role distance, role-overload, personal inadequacy and total role stress.

(b) Maximum role stress was experienced on the dimensions of role erosion, role isolation and self-role distance by both the groups’.
Senior level managers scored high on all the role efficacy dimensions as compared to junior level managers. Significant differences were found between the two groups on the dimensions of proactivity, creativity, helping relationship, influence, growth and total role efficacy.

Role stress variables were found to be inversely associated with role efficacy in both the groups.

Dependency and affiliation were reported to be dominantly perceived whereas extensions and expert influences as remotely perceived motivational climates in case of senior level managers.

Dependency and control were reported to be dominantly perceived whereas extension and affiliation as remotely perceived motivational climates in case of junior level managers.

A significant difference was observed between the two groups in the perception of affiliation climate.

On the basis of these findings, the author suggested that the organization may use HRD interventions to improve the culture, promote spirit-de-corps, collaboration and take corrective measures for confronting conflict situations rather than avoiding them. He further argued that culture can also be improved upon by working out a detailed programme on the commonly perceived values in the organization and reinforcing it repeatedly through well-planned reward systems.

Pattanayak and Mishra (1997) conducted a study to make a comparative assessment of work organizations in old and new public sectors in relation to organizational role stress and quality of work life as an index of organizational effectiveness. Also, the study tried to find out the differences between executives and non-executives in this regard. The sample of this study consisted of 800 employees of two industrial organizations, one from the old public sector and another from the new public sector. In each organization, half of the respondents (n=200) were selected from production department and the other half (n=200) were selected from the various production departments. Further, half of the production
employees (n=100) were non-executives and the other half (n=100) were executives. Similarly, half of the service employees (n=100) belonged to the category of executives and the other half (n=100) belonged to the category of non-executives. Samples were drawn from both the organizations on this very pattern.

The Organisational Role Stress Scale (Pareek, 1983c) and the Quality of Work Life Scale (Jain, 1991) were administered to the respondents. The salient findings of the study were as follows:

(a) Significant differences were observed between the old and the new public sector organization on all the 10 dimensions of organizational role stress and total role stress.

(b) Production and service employees showed significant differences on all the dimensions of organizational role stress and total ORS.

(c) Executives and non-executives also differed significantly on all ORS dimensions and total role stress.

(d) The old and the new organizations showed significant differences on all the eight sub-scales of QWL or Quality of Work Life.

(e) Production and service employees differed significantly on all the sub-scales of QWL.

(f) Like organizational role stress, executives and non-executives showed significant differences on all the QWL sub scales.

Pandey (1997) conducted a study to determine the relationship between personal demographics and organizational role stress. The study was conducted on 61 personnel of Indian Railways (aged 28-58) years. The analysis revealed a positive but non significant relationship of age with all the dimensions of role stress except role ambiguity. Education showed a positive but non significant correlation with all the dimensions of role stress. Experience was reported to be positively and significantly associated with inter-role distance, role expectation conflict, role ambiguity, personal inadequacy, role stagnation, role erosion, and role distance.
**Pattanayak and Mishra (1997)** conducted a study to identify occupational stress and role conflict problems among working women belonging to the service sector. The respondents were 120 women representing two categories of employees, namely, executives and assistants. One half of the respondents (n=60) were randomly selected from different schools, colleges, and hospitals, and the other half (n=60) were similarly selected from different offices. The Occupational Stress Index (A.K. Srivastava and A.P. Singh, 1981) and the Role Conflict Questionnaire (N. Rao, 1988) were administered to the sample. The following conclusions were obtained:

1. Significant differences were found between executives and assistants on such occupational stress dimensions as role overload, role ambiguity, and role conflict, responsibility for persons, intrinsic impoverishment and low status.

2. There were no significant differences between executives and assistants on total occupational stress.

3. There was a statistically significant difference between the two groups on role conflict.

On the basis of these findings, the authors argued that further research should focus on the dynamics of both stress and role conflict experienced by working women so that stress intervention and prevention programmes can be designed to promote the psychological well-being of working women in India.

**Aminabhavi and Triveni (1998)** found that the signal maintainers have higher occupational stress as compared to other employees in railways. It also showed that railway employees who expressed moderate level of job satisfaction and life satisfaction have significantly higher occupational stress than those who expressed higher life and job satisfaction.

**Boroun et al. (1998)** studied the job stress and job performance among 150 self-paced repetitive workers. He indicated that the low satisfied workers experienced more ‘after work’ stress than the high satisfied workers.
Jennifer Smith (1998) stated that workplace bullying consisting of victimisation, pressure management, long hours, difficult duties, lack of support and unsought promotion results in stress. She advocated that managers should be aware of change in atmosphere among staff, hold agenda free meetings and conduct interviews to identify workplace bullying.

Oi-ling, Luo and Cary (1999) investigated occupational stress in managers in Hong Kong and Taiwan using the occupational stress indicator-2(OSI-2). The results showed that there were gender differences in managerial stress in Hong Kong. Female managers scored higher in sources of stress and quitting intention, but had lower job satisfaction, worse mental and physical well being than male managers. These differences could not be found in Taiwanese managers, yet Taiwanese female managers did report more stress related to managerial role than their counterpart.

Padmakali Mishra, Gopa Bhardwaj and Prabhat Kumar Mishra (1999) study derived its impetus from the observation that it is the man in the middle who is the worst sufferer, because of the conflicting demands made from below as well as above. This study tried to examine the frustration and alienation of these managers, selected from the state of Orissa, India. A group of 100 middle level managers from the private sector constituted the sample of the study. The sample belonged to five large scale mineral-based organizations. Of these, three organizations were in the private sector and the other two were in the public sector. Organisational Frustration Questionnaire developed by Spector (1975) and Alienation from work Questionnaire developed by Shepard (1972) was used to measure personal frustration and work alienation. The study clearly showed that private sector middle level managers scored significantly higher on organizational frustration in comparison to the public sector middle level managers. Private sector managers were significantly higher on powerlessness and namelessness. One finding clearly stands out is the presence of alienation among these middle level managers.

Shah Alam, Sayeed-Uz-Zafar and Shamim A. Ansari (1999) made a comparative study of occupational stress among guards and engine drivers who can be considered as head and tail of a single organism (the train). Stress generating
factors affect the state of mind of a person and this becomes a major factor in the occurrence of accidents whether minor or major. A sample consisting of 100 railway guards and engine drivers were randomly drawn from the Indian Northern Railways. The breakup was 50 guards and 50 engine drivers. The t-test was applied for testing the significance between the two groups on their perceived occupational stress. The results showed that t-value of guards and drivers on total occupational stress are significant. Apart from total occupational stress, there are some stressors which are specifically identified as sources of occupational stress on which the two sample groups differ. These stressors include role overload, under participation, powerlessness, poor peer relations and strenuous working conditions. The study clearly shows the general trend that guards are more stressed on the job on the stated dimensions of occupational stress as compared to drivers. The guards have greater overload as compared to drivers. Under participation has also been found to be greater among guards than among the drivers. Guards have a greater sense of powerlessness, despite having a greater role overload. On the poor peer relation dimension of occupation stress, guards and drivers differ because guards are alone in the running trains and this isolation accentuates the stress at work, as it deprives them of the opportunity to fulfill the basic social need for affiliation. Guards have a greater feeling of their job working conditions being more strenuous because the job is quite boring and yet it demands greater responsibility despite giving little or no effective power.

Upadhyay and Singh (1999) compared the level of occupational stress experienced by the 20 college teachers and 20 executives. The executives showed significant higher levels of stress than college teachers on role overload, role ambiguity and role conflicts factor.

Aminabhavi and Triveni (2000) revealed that nationalized bank employees have significantly higher occupational stress than non nationalized bank employees, in the dimensions such as role conflict, unreasonable group/political pressure, intrinsic impoverishment and strenuous working conditions.
**Achala Pareek and Manju Mehta (2000)** compared three group of working women i.e gazetted officers, bank employees and school teachers on the type of role stress they experience. The result of the study is

a) Women gazetted officers were found to be significantly higher in all kinds of stresses compared to school teachers.

b) Women gazetted officers were also higher on inter role distance, role stagnation, role ambiguity and work overload in comparison to bank employees.

c) School teachers were found to be lower on all kinds of stresses in comparison to both gazetted officers and bank employees.

d) Role stress was experienced most by gazetted officers, followed by bank employees and least by school teachers.

The presence of work exhaustion in the area of information system among software professionals are caused by role overload, role conflict and role ambiguity, lack of autonomy, interpersonal conflict and lack of rewards. The other consequences that have been identified are satisfied, organizational commitment and intent to turnover.

**Adeline Broadbridge (2000)** in “Stress of female retail manager” found that female managers were reported having statistically significant higher pressure scores than male managers for poor interpersonal relationship at work. Male managers were more likely than female managers to agree with positive discrimination in training. Male managers were significantly more likely to be concentrated at the higher level of management compared to females.

**Debra L. Nelson and Ronald J.Burke (2000)** in their study “Women Executives: Health, stress and success” wanted to examine women executive’s health risks and to study various stressors women face and also to study the various ways to cope stress. A survey was conducted among 325 CEOS and 46% women at the levels of vice president. The various stressors women executive face are internal
sources, pressure at home, isolation, lack of self-confidence, subtle forms of discrimination, minority status in organization, lack of learning opportunities and monotonous work. The task stressors that pose particular risks for executives are barrier to achievement, tokenism, overload and downsizing. The role and interpersonal stressors for which executives are at risk include organizational politics, social-sexual behavior, work-home conflict and work alcoholism. Managerial women experience more pressure at work which comes from internal source like being isolated at work, lack of confidence, forms of discrimination, major burden of home and family problems, lack of learning opportunities and monotonous work.

**Gaur and Dhawan, N. (2000)** examined that the relationship between work related stressors and adaptation pattern among women professionals. A sample of 120 women professionals (30 teachers, 30 doctors, 30 bank officers and 30 bureaucrats) participated in the study. It showed that teachers experienced more stress as far as opportunities and obstacles of career development are concerned.

**Mirchandani, Kiran (2000)** said that working at home sometimes allow individuals to gain a full and successful integration of their paid and family work but the physical proximity of home and work activities accompanying home work is portrayed as the cause of great anxiety and stress.

**Pandey and Srivastava (2000)** studied the work stress experienced by teachers, railway and bank employees. Maximum work stress was reported by the railway employees but the level of stress was lesser in bank personnel and least in teachers.

**Vashishtha and Mishra (2000)** found that appraisal support had a partially moderating effect on occupational stress in organizational commitment relationship.

**Benamati and Lederer (2001)** Software professionals face unanticipated need to integrate the old and new technologies that create dilemmas about which particular information technologies to acquire and when to acquire it. This leads to ambiguity with respect to updating their knowledge or expertise and also dealing with obsolescence.
Hasnain et al. (2001) in his study “Role stress and coping strategies in different occupational groups” assessed the coping strategies in three different occupational groups (20 engineers, 20 managers and 20 teachers). Role overload and role erosion were found to be major sources of role stress in all three groups.

Pandey and Tripathy (2001) also found that teaching is a stressful occupation. Job stressors in this profession are role ambiguity and unreasonable group pressure.

Steven Murcher (2001) in his study found out that nurses perceive staffing levels and increased job demands as a direct cause of stress with high frequency of inclusion and high path strength.

Sandy Ornelas and Brain H.Klenier (2001) listed out the various factors that cause stress among employees in an organization. They are job design, management style, interpersonal relationship, work roles, career concerns and environmental conditions which lead to stress.

Suresh and Anantharaman (2001) conducted a study among 220 police personnel which showed that round the clock duty, lack of time to spend with family, and political pressure from outside the department, were the most stressful situations.

Steppala, Pentti (2001) in their study stress in Municipal work places found that work load and haste, management and work atmosphere, work demands and defects of work place causes stress among employees.

Tang et al. (2001) reported that teachers experience a great deal of stress in the course of their career. Burn out represents teachers’ negative response to the mismatch between job requirements and their perceived abilities, self-efficacy and proactive attitude. Triveni et al. (2006) concluded that the major sources of job stress perceived by 90 veterinary assistant surgeons were numerous meeting, work load, lack of personal growth, lack of facilities and monotone.
Harshpinder and Aujla (2002) found in their study that working women were more stressed due to sociological factors whereas non working women were more stressed due to environmental factors.

Kaila (2002) studied 120 managers in metropolitan Mumbai and found that 80% of them experienced the most common workplace stresses and challenges such as meeting deadlines, working in a competitive industry, managing finances, exhausting working hours and rotation work in addition to handling regular tasks such as sales, marketing, training, research and development, and accounts of core clients.

Das and Singhal (2003) explored the effect of job autonomy upon occupational stress among managers, 300 male managers were selected for the study. The findings of the study revealed that the managers with high job autonomy show less stress as compared to managers with low job autonomy.

Osmany and Khan (2003) conducted a study on Organizational stress in working women by taking 30 married and 30 unmarried working women. He found that unmarried working women reported high stress at work place due to political pressure and for married women, it may be due to poor peer relation.

Rastogi and Kashyap (2003) conducted a study on “Occupational stress and work adjustment among working women”. Sample consisted of 150 nurses, clerks, and teachers. The results concluded that maximum occupational stress is found among nurses as compared to other two groups. Nurses work under the most severe occupational environment. Teachers perceive the minimum occupational stress because their working climate is best in comparison to the other two groups.

Taap, Fontaine and Chon (2003) examined sources of stress among Malaysian managers working in multinational companies. A total of 440 managers participated in this survey. Data was collected through a questionnaire distributed to the managers in 34 multinational companies operating in Malaysia. It was found that workloads, working conditions and relationship at work were main concerns of the managers that lead to stress at the workplace. The results also indicated that certain demographic variables do influence the level of stress among managers.
Factor analysis were employed to identify key organizational factors which generates stress among employees of the electronic industry. Ten organizational factors were identified and stress has been found associated positively and significantly with poor organizational structure and climate, poor interpersonal relations, work inhibitors, lack of resources, inconsiderate superiors and role ambiguity Kang and Singh (2004).

Mohsin Aziz (2004) conducted research on information professionals. He found out that information technology professionals constantly struggle to learn new ways of doing things, of mastering newer and complex technologies and this put tremendous pressure on the people working in this field.

Vashishtha and Mishra (2004) explored the relative contribution, social support and occupational stress to organizational commitment of supervisors (n=200) the result revealed that the social support and occupational stress significantly predict the degree of organizational commitment of supervisors.

Bhatia and Kumar (2005) attempted to explore occupational stress and burn out among employees. A sample consisted of 100 employees belonging to supervisor and below supervisor level. Employees at supervisor rank experienced more occupational stress than below supervisor level due to more responsibility and accountability.

Bidlan (2005) conducted a study on “Job involvement, job frustration, and occupational stress among workers of small and large scale industrial units”. He examined semi-skilled workers (n=200) from small and large scale industrial units. Results showed that small scales industrial worker had significantly greater degree of job stress than the workers of large scale industrial units.

Kasper, Meyer and Schmidt (2005) conducted an explorative analysis on managers dealing with work-family conflict. The sample was drawn largely according to the principles of theoretical sampling; family - work constellations provided the bases of selection. Thirty problem oriented interviews were content analysed. Results showed three distinct prototypes of dealing with work family
tension career as subject of social fascination, family as a factual task, the pressure of tasks. One outstanding result was that if both partners were professionally active, the family was increasingly dominated by merely functional requirements.

Srivastava (2005) in his study on effects of cognitive appraisal on the relationship of job stress and job related health outcomes considered the sample size of 300. The results showed that the employees who are appraised the severity of threats posed from stressful situation experience higher degree of job stress in comparison to those expected threats to be low.

Bhattacharya and Guha (2006) conducted a study on stress and coping: “A study on lady criminal lawyers of Kolkata city”. A group of 34 lady criminal lawyers were selected for the study. The significant factors, which are generating stress, are busy schedule of work, odd duty hours, poor interaction, leading tendency of superiors, and poor interpersonal relationship among the colleagues in the work environment.

Lakhwinder Singh Kang and Raghbir Singh (2006) in their study stress at work tried to examine the magnitude of various organizational stressors having a potential to produce stress. Study was carried out in six organizations dealing with electronic equipment and services. The analysis revealed that stress is associated positively and significantly with poor organizational structure and climate, poor interpersonal relations. ‘Poor interpersonal relation with partial correlation is the most significant factor causing stress at work. The second biggest factor is ‘poor organizational structure and climate’. The third factor is ‘work inhibition’. Rigid rules and inconsiderate superior is the fourth and fifth significant factor.

Panchanatham et al. (2006) analyzed the stress pattern of coercive and non coercive leaders. A group of 60 problem solving executives who belong to implementer style were considered for the study. It proved that coercive leaders are more stressful than non coercive leaders.

S.R.L.M. and Sarada Devi (2006) assessed the probable ratio of satisfaction to stress of women in different occupations. The total sample comprised of 120
working women consisting of 30 lawyers, 30 engineers and 60 clerks. The findings of the study revealed that among all the three categories of women employees, the probable ratio of stress was more than satisfaction in their role performance.

Avinash Kumar Srivastav (2007) in ‘Stress in Organizational Roles: An Empirical Study across age groups’ studied the different types of stress encountered in organizational roles measured on 453 randomly selected respondents in public sector industry using ORS-Scale. The sample was divided into lower, middle and higher age groups. For each age group, means for different types of role stress were rank ordered to identify the prominent role stressors. The t-test was performed on means to find out the significant differences for each type of role stress and for the total role stress under each pair of age groups. Role erosion was the most prominent role stressors for each group but role stress was not uniformly experienced across the age groups. Role isolation was stronger in the lower age groups as compared to the middle age group. Inter–role distance, role stagnation, role isolation, self-role distance and total role stress were stronger in the lower age group as compared to higher age group, Role erosion and self–role distance were stronger in the middle age group as compared to higher age group. The study proved weakening of role stress with advancement of age and existence of significant differences in role stress experienced across the age groups.

Bholanath Dutta (2007) in his study ‘Stress at Work’ emphasized that in today’s world most of the stress comes from the work place, owing to the nature of work, high expectations of the employer and ever increasing competition. Some of the reasons of work-related stress are as follows namely, insufficient back-up, long or unsociable hours, poor status, pay and promotion prospects, unnecessary rituals and procedures, uncertainty and insecurity. Specific causes of stress at work are role conflict, unrealistically high self-expectations, inability to influence decision-making, frequent clashes with superiors, isolation from colleagues support, over work time and pressures, poor communication, inadequate leadership, inability to finish a job, fighting unnecessary battles and the responsibility of the job.

Latha and Panchanatham (2007) found out the job stressors and their implications on the job performance of 40 software professionals. Result showed
that work load acts as major stressors for software professionals. Long work hours are indirectly associated with psychological distress.

**Margaret Francis (2007)** in her paper ‘Stress - Personality Relationship: an empirical Study’ examines the relationship between personality and stress. Data on eight secondary personality factors and perceived stress collected from 50 business students using 16 personality factors and perceived Stress Scale respectively. Student’s t-test was done for each secondary personality factor to detect significant differences perceived stress among low and high categories. Stress is higher in low extraversion group as compared to high extraversion group. Stress is higher in high anxiety group as compared to low anxiety group. People who have high adjustment are experiencing less stress. Stress is higher on people with low leadership compared to people with high leadership quality. The study proves that personality factors do have impact on stress.

**Trite Pande Dasai (2007)** I in his study “Stressors and strains of an emerging work force with special reference to Dual career Couples” studied the latest career trends and implication of stress on dual career couples. He found out that stressors and the source of stress can be present in several life domains of dual couples. Dual career can also experience stress due to the interaction of their own role with their partners. The various types of stress experienced by couples are intraindividual work role stressors, Intraindividual family role stressors; intraindividual inter-role stressors, interim individual work role stressors, interinindividual family role stressors and interindividual inter role stressors.

**David Walker (2008)** in his article ‘Public sector stress rises with privatization threats’ examined the threat of privatization that sharply increased stress levels among public service workers during the 1990’s. Researchers, Jonathan Gardener and Andrew Oswald at Worrick University analysed data collected between 1991 and 1999 for the British household panel study, a government sample survey of 5000 households. It was found that compulsory privatization and more private style management causes stress. They found that stress raised significantly more among civil and public servant’s especially manual and junior clerical staff, than employees of companies. Stress was high among non-graduates employees.
Shah Alam, Richa Garg and Md. Abuzafar (2008) in their study on Bank employees regarding stressors took 50 employees from nationalized Bank of Aligarh and all respondents were male having an average age of 45.6 years and having more than 11 years experience in the present position. The results are

a. The bank employees are overloaded because they are expected to play various roles during their work.

b. Bank employees perceive role conflict “Low status and unpredictability” have emerged as low stressors.

Sandhya A Mehta and Sandeep Kaur (2009) tried to understand the differences in organizational role stress experienced by teachers in technical and nontechnical institutes in Ludhiana district. In addition to the comparison in the whole sample, a comparative analysis has been done among teachers of technical and nontechnical institutes having age above 30 and below 30. The primary data was collected using cluster sample technique. Organisational Role Stress Scale was administered to measure the 10 role stressors. Z-test was carried out to find out the significant differences for each role stressors between the two categories, for the whole sample, and for higher and lower age groups. They found out that technical teachers do not differ from non technical teachers in terms of their inter-role distance, role stagnation, role expectation conflict, role erosion, role overload, role isolation, self-role distance and role ambiguity in the whole sample and in the age group less than 30 years. Resource inadequacy is stronger for technical teachers in the whole sample and age group less than 30 years. For the age group greater than 30 years, technical teachers do not differ from non technical teachers in terms of their role stagnation, inter-role distance, role expectation conflict, role erosion, role overload; role isolation, self-role distance and resource inadequacy are stronger for technical teachers in the age group greater than 30 years.

2.2 STRESS OUTCOMES

The modern women live in two systems and need to perform professional as well as family roles that of Corporate Manager and Family Manager. Unfortunately
more and more women are having difficulty in their dual managerial role and they are either divorcing and limiting their family size or coping well in both worlds at the expense of their physical and psychological health. The effects of stress are closely linked to individual personality. The same level of stress affects different people in different ways.

Sales (1970) investigated some effects of role overload and under load which are relatively common features of organizational life. The results suggest that role overload is stressful to the overloaded person and that effects of this stress are most severely experienced by individuals with a specific personality constellation. In addition, the data indicates that the effect of variation in the objective work load may be substantially different from the effect of variation in subjective (experienced) work load. That individual characteristics help moderate effects of role stressors which has also been noted by Abdal and Ahmadi (1978).

Rosenman et al. (1975) found that persons who were rated as hard driving, persistent and involved in their jobs, experienced more overload in the same objective situations than persons who lacked these characteristics. The high level of role overload in such persons and the resulting psychological strain it produces has been regarded as the intervening link in the apparent between coronary heart disease and personality factors.

Cooper and Marshall (1976) report growing evidence that all cardiovascular diseases account for 12 per cent of the time lost by the working population in the United States. Further, incapacity of men suffering from mental psychometric and personality disorders, nervousness and migraine headaches accounts for 22.8 million works lost in a single year. Stress leading to coronary heart disease and mental ill-health due to workload, therefore represents a serious cost to industry in human and financial terms.

Managers and blue collar workers primarily supported the presence of negative linear relationship between job stress and measures of job performance and no positive relationship between job stress and performance was found Muhammed Jamal (1985).
Sub-codification has fewer effects for Indian sale persons as compared to US sale persons and rule observation has less deleterious effect, for Indian sale person as compared to US sale person Agarwal Sanjeev (1993).

Misra and Pandey (1993) sub divided stress response into four activities: (a) Cardiovascular activity, which includes rate, depth and amplitude of heartbeat, diameter of blood vessels and composition of blood; (b) gastrointestinal activity, including rate and amplitude of stomach contraction, secretion of salivary and gastric juices; (c) respiratory activity, including changes in rate, depth and regulation of breathing; and (d) endocrine glands, egs, pituitary, thyroid, parathyroid, adrenal and pancreas. So, we see how vital the psychological processes involved in stress response are, as they regulate almost all the physiological reactions.

Bushe et al. (1996) research was to reduce costs through fewer overheads and to speed up problem resolution. The organizational outcomes were found to increase productivity and effectiveness. This was due mainly to quicker response rates through empowerment and, in part, to the removal of organizational barriers often brought about by increased motivation from a greater sense of ownership and responsibility. Also, automation has left workers virtually on call 24 hours a day, as well as shortened the turnaround time from project conception to completion. The ten hour business day has become routine for many workers. Corporate restructuring has left employees anxious about the security of their job. Symptoms of these stressed workers include drops in productivity, changes in work attitude, low morale and increased absenteeism.

Seghal (1997) attempted to assess the effect of role stress on the level of involvement the person has in the job and alienation, and coping mechanisms used by him/her to deal with stress. The sample consisted of 222 executives belonging to junior, middle and senior levels in a large public sector organization. For the purpose of the study, a set of four instruments - the ORS Scale (pareek, 1983c), the Job Involvement Scale (Kanungo, 1981), the Alienation Scale (Kureshi and Dutt, 1979) and the Role PICS (Pareek, 1983) - was administered to the sample population. The main findings of the study were as follows:
Role erosion, resource inadequacy and inter-role distance were dominant contributors of role stress for the total sample.

Junior level executives experienced relatively higher role isolation and self-role distance, middle level executives reported higher role stagnation and senior level executives experienced more role expectation conflict.

Senior level executives scored higher on total ORS as compared to junior and middle levels.

Job involvement was found to be correlated negatively and significantly with role stress, Inter-role distance, role erosion, self-role distance and total ORS were associated negatively and significantly with job involvement.

Total ORS was correlated positively and significantly with despair (powerlessness), unstructured universe (normlessness), and psychological vacuum (meaninglessness) variants of alienation.

Avoidance styles of coping were used more frequently than approach styles of coping.

A significant negative relationship was observed between approach styles of coping and total ORS.

Kumar and Murthy (1998) conducted a study related to working women. The main purpose of the study was to examine the stressors, strains and coping strategies among women managers of a public sector oil company. A group of 100 women managers aged 24-57 years constituted the sample for the study. The questionnaire used for the study consisted of a list of stressors, strains and Coping strategies. These factors were chosen on the basis of an interview and pilot study carried out on 20 female respondents in the organization. Weighted Average Score (WAS) was calculated for each of the item included in the list of stressors, strains and coping strategies. The results indicated that the most frequently experienced stressors for working managers were office politics, followed by conflict between work and home, travel to place, lack of opportunity, challenge, and child care
problems. The major strains experienced by women managers were found to be anxiety (ranked first), tension (ranked second), fatigue (ranked third), and lack of concentration (ranked fourth), irritation (ranked fifth) and physical health problems (ranked sixth). The most frequently used coping strategies were reported to be talking with spouse / friends / parents / supervisors / colleagues about the problem, followed by efforts to increase knowledge / information, withdraw physically from the situation for a while, engage in socio-cultural or religious activities, and engage in physical exercise / yoga / meditation.

Negative correlation was found between locus of central and aggregated perceived work stress indicating that the stronger the external tendency of control, the more sources of stressors were perceived at work Luo Lu, Hung - Luanwe & Cary L. Cooper (1999).

The outcome of stress are listed by women managers which are strain on their families, missing social events, suffer from health problems, interpersonal conflict between their colleagues, lot of confusion and feeling humiliated Kalia, N.L. (Jan 2001).

Amit Gupta and Rajesh Chandwani (2004) selected that job stress can be broadly classified into external factors relating to organization and work–family conflicts, and internal factors relating to family conflict. Certain occupations are more stressful, especially those in which there is high emotional involvement. The holistic view of antecedents to job stress should take into account the interaction between the three categories of factors and the impact of socialization which has proved to be a significant moderator in stress perception and coping with it.

Men reported higher work over load and higher cognitive demands than women and women reported higher emotional demands at work. There is a bi-directional cross over from husband to wives as well as from wives to husbands and there is a bi-directional cross over of work engagement from husbands to wives and vice versa Arnold B. Baker, Crangelic Demerit and Willmar B. Schafelic (2005).
60% of the public sector organizations cite role stress as the leading cause of long term sickness absence than twice the amount in the Private Sector and stress in work place increase the risk of heart attack or stroke - Chartered Institute to Personal and Development (2008).

The outcomes of stress faced by nationalized and non-nationalized bank employees are physical and health problems, increased frequency of drinking and smoking and psychological and behavioural problem like job dissatisfaction, behavioural problems, production turnover, increased absenteeism, increased accidents and lower productivity Prof Dileep Kumar (2008).

Married professionals are more stressed in comparison to the unmarried professionals with average physical stress; psychological stress level of job anxiety is high amongst the call center executives. Physical stress, psychological stress, relation stress is positively related with job anxiety – Dausaha (2008).

Job stresses among Information system Managers are positively related to psychological and physiological strains and level of social support among IS Managers is lower then the level of Social support among other managers Maleline Weiss (2008).

Rumi Dasgupta (2008) in her study “Increasing Competition Creates stress on Marketing Managers” took three Multinational companies ie Samsung, LG & Nokia and studied their Marketing strategies. In course of her study she found that to cope with the present marketing scenario, the marketing managers have to take to much mental stress to achieve their target or fulfill their objectives. Too much stress on the marketing managers cause loss of confidence, depression, anger, frustration, anxiety and panic attacks etc. very frequently they become addicted to alcohol, drugs& in many cases they become victims of fatigue related diseases, high blood pressure, heart ailment etc; in worst cases heart attacks etc. are the results of increasing mental stress, due to increase in competition on marketing managers.

Maria Caracota Dimitriu and Andrea Mitovski (2009) in their study listed out the problems faced by people at work namely increasing job competition,
globalization terrorism, annual appraisal, financial crisis, even new technology. Besides these employees are put under pressure to meet sales targets, attend meetings on time, fit in within changes in organization by learning and following up new procedures. All these can result in different level of stress.

2.3 COPING STRATEGIES

When individuals experience stress, they adopt ways of dealing as they cannot remain in a continual state of tension. The word ‘coping’ has been used mainly with two meanings: ways of dealing with stress, and the effort to ‘master’ conditions of harm, threat or challenges. Research has shown that social and emotional support available to the persons help him to effectively cope with stress. Persons maintaining close interpersonal relationships with friends and families are able to use more approach strategies. However studies have also shown that unsolicited support may have negative consequences. Studies of various coping strategies or styles used in role stress reveal that approach styles have a strong relationship with internality, optimism, role efficacy, job satisfaction and effective role behavior in organizations. Individuals and organizations cannot remain in a continuous state of tension. Psychologists have identified two different ways in which people cope with stress. One way is to suffer or deny the experienced stress. This is the passive approach. The other way is to face the realities of experienced stress and clarify the problems through negotiations with other members. This is the active approach.

Research Findings

Selye (1956) has described this reaction as a three stage ‘General Adaptation Syndrome’. The three stage are (1) alarm reaction, (2) resistance, and (3) exhaustion.

Alarm Reaction: When faced with any threat to safety or well-being, the individual experiences an immediate alarm reaction. It is characterized by autonomous excitability and increased heart rate. There is confusion, disorientation and distortion of realities, and the level of resistance is down.
Resistance: Maximum adaptation occurs during this stage. The bodily signs that are characteristic of the alarm reaction disappear. If stress persists, the organism deteriorates to the next stage known as exhaustion.

Exhaustion: At this stage, the adaption energy is exhausted, signs of the alarm reaction reappear, and the resistance level begins to decline irreversibly, the organism collapses.

Sen, P.C. (1981) studied 446 Bank employees of four levels ie top management, senior and middle management, junior management and clerical staff, about Role stress and Coping strategies of some public sector banks. The main findings are

1. Top management obtained lower scores on role stagnation whereas clerical staff obtained the highest score on this dimensions.
2. Defensive style was the most frequently used strategy followed by intropersistive style and impunitive style.
3. Junior level manager exhibited significantly more impunitive behaviour than top managers.
4. Top and senior/middle level managers showed more self-initiated action than junior managers and clerks.
5. No significant sex differences were observed.
6. Women employees obtained slightly higher impersistive scores and lower defensive scores than males.
7. People in the 36-40 years age group exhibited more impunitive style than the other group. Intopersisitve style generally increased with income.
8. Inter-role distance was ranked lower among clerical staff, whereas it was ranked fairly high among top managers.
Golembiewski (1982) has suggested that Organizational development (OD) is helpful in reducing and managing stress. According to him, OD ameliorates and prevents burnout of intervenors.

Philosophy and methods ameliorate the conditions that lead to burnout. OD can be of specific help in dealing with burnout. OD can be of specific help while dealing with burnout as a phased phenomenon and methods ameliorates the conditions that can lead to burnout.

Wilder and Plutchik (1982) have suggested a preventive strategy for burnout through Need Assessment and Coping Assessment (NAC) training method. The following steps are suggested. The following steps are suggested:

- Sensitize the individuals to their own needs.
- Help the individuals to assess the need–fulfilling characteristics of a potential job.
- Increase the probability of an appropriate match between an individual and a job.
- Focus individual’s attention on the areas they should work on to provide maximum satisfaction on the job.

Pareek (1983) has developed Role PICS (Projective Instrument for Measuring Coping Styles), which involves a semi-projective technique, to obtain profiles of coping styles adopted by a person while dealing with role stress situations. The instrument depicts 24 situations, three each for eight types of role stress (Pareek, 1982), in which one person narrates the role stress he is experiencing in that situation to another person, who is supposed to respond to the former’s problem. The various responses, thus obtained on this instrument are scored in eight styles, which can broadly be grouped as an approach and avoidance modes of coping. Eight possible strategies to cope with stress, which Role PICS measures are Impunitive, Intropunitive, Extrapunitive, Defensiveness, Impersistive, Intropersistive, Extrapersistive and Interpersistive.
Gupta and Murthy (1984) studied role conflict and coping strategies among Indian women. The coping strategy which was most popular amongst the respondents was personal role re-definition. This strategy was significantly associated with low role conflict and high satisfaction with coping. Reactive role behavior methods, on the other hand, were associated with high role conflict and low satisfaction with coping. The qualitative data also indicated that ‘Adjustment’ and ‘Compromise’ were the most commonly used and successful methods of coping.

Misra and Ganguly (1984) have investigated coping with stresses resulting from cultural transition among a group of African students studying in India. They found that the students with high psycho-social competence used more problem focused coping and less amount of wishful thinking and self-blame than their low competent counterparts. In addition, they showed greater amount of positive effect, positive self–perception and fewer amounts of somatic complaints and negative effect than low competence students. The relationship of coping strategies with health measures also differed for the two groups.

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

Singh and Singh (1985) explained the relationship of coping strategies with job-related strain among 156 male supervisory level executives of a large industrial organization, using a measure of coping strategy designed by the researchers was studied. It was found that various dimensions of coping strategies were related to strain dimensions in a specific pattern of weighted linear combination. Considered individually, they found that cheerful and optimistic work orientation and Yogic resources appeared to be superior coping strategies.

Kaur and Murthy (1986) also studied the coping strategies of the managerial personnel at different organizational levels in public sector. The results indicated significant differences in the coping strategies adopted by individuals
working at different organizational levels. Avoidance strategies were predominant at the junior level and approach strategies were predominant at the senior level. The defensive style was used to the maximum by the junior management personnel, impunitive by the middle management personnel, and intropersistive by the senior/top management. There was a positive and significant relationship between role stress and avoidance strategies, between role stress and externality, and between externality and avoidance strategies. Organizational role stress was negatively and significantly associated with approach strategies.

_Tandon (1986)_ in his research work titled “Development of a measure of stress tolerance” hypothesized that those who cope with life like stresses without impairing their health would be characterised by a more positive philosophy of life and perception of meaning while suffering.

_William and Huber (1986)_ suggested five managerial actions that can be used to reduce stress in workers namely

1. Clarifying task assignments, responsibility, authority and criteria for performance evaluation.
2. Introducing consideration for people into one’s leadership style.
3. Delegating more effectively and increasing individual autonomy where the situation warrants it.
4. Clarifying goals and decision criteria.
5. Setting and enforcing policies for mandatory vacations and reasonable working hours.

_Sen (1987)_ studied that personal and organizational factors correlates to role stress and coping strategies among bank employees. The defensive style of coping was found to be the most common, followed by the “introspective” style and then the “imperative style”. No sex differences were found in coping styles. A tendency was found for those with higher income to solve problems by their own efforts, probably because of the power and authority conferred by higher paying positions.
Organizational role stress and coping strategies among public sector executives with the specific objective of relating these to length of an organization was studied. Pareek’s “ORS” scale was used to assess role stress and “Role-Pics” was used to assess the coping style. Gupta found that ‘avoidance’ is used by 69 percent of the executives to cope with stress Gupta (1988).

Ahmad, S. et al. (1990) studied stress and coping strategies among executive technocrats and collected data to examine whether there is any difference in the coping styles of male and female technocrats on Role PICS. The sample consisted of 100 executive technocrats-60 males and 40 females. The results indicated that the total sample scores were higher for the approach style than for the avoidance style. The executive technocrats used introperssive style as the dominant style for coping, followed by defensive and extrapersistive styles. A significant difference was observed in the coping styles of male and female technocrats. While men used defensive style more often than women, females largely used the approach style for coping. It was also found that none of demographic variables - age, number of dependents, income, drinking/smoking habits, health of the individual - had a significant bearing on the strategies used for coping with stress.

Sam Batlivala (1990) compared the stressors experienced by the Indian executive at the organizational and at the personal level with his American counterpart. The sample comprising 230 senior executives working in banks, textile mills, pharmaceutical, engineering, electrical and petrochemical industries had participated in a workshop on Management of Executives Stress and Role Effectiveness.

The executives identified 19 stressors at the organizational and 15 at personal level. The data indicated that these executives experienced more personal stressors than their American counterparts, but Sam Batlivala (1990) compared the stressors experienced by the Indian executive at the organizational and at the personal level with his American counterpart. The two compared fairly well on the organizational front. Insubordination, inadequate training, housing, demanding spouses and in-laws integrity, noisy environment, and transfer of jobs were recognized as some of the typical stressors in Indian executives.
The typical coping strategies adopted by Indian executives included are critical analysis and recognition of problems, Yoga, practising good management, sex, go and talk to the boss, improve self-image, upwinding and going on vacation, overvalue outcome of others, overvalue your inputs, be decisive, acquire more qualification, use better communication and resign.

Sharma and Acharya (1991) investigated the dominant coping strategies used by 150 male electrical engineers (aged 30-44 years) working in a state electricity board to deal with their job hierarchy and job anxiety. The Role PICS (Pareek, 1983d) and the Job Anxiety Scale (A.K.Srivastava, 1974) were administered to the respondents. Results indicated that job hierarchy did not significantly determine the nature of the dominant mode of coping. Irrespective of job hierarchy, subjects with higher job anxiety exhibited a greater tendency to use avoidance coping strategy relative to total coping efforts. In the light of these findings, the authors argued that the casual relation between coping and job anxiety appears to be bidirectional.

Srivastava, A.K., (1991) measured Role stress and mental health relationship as a moderator by adopted coping strategies with the help of 300 supervisory cadres at Life Corporation of India.

The main findings of the study are:

- Significant positive correlation of various dimensions of role stress with the symptoms of mental ill health was found.
- Stress arising from role ambiguity and role stagnation most intensively correlated with somatic concomitants of anxiety.
- Moderated multiple regression analysis showed that the relationship of perceived role stress and mental health is not simple: it is moderated by various personal characteristics of the focal person and the situational variables.

Srivastava, A.K. (1991) also examined the effects of avoidance and approach modes of coping in relation to organizational stress and mental health. A sample of 300 supervisory personnel (aged 38-51 years) completed the ORS Scale (Pareek, 1983c), the Mental Health Questionnaire (O.N. Srivastava and V.K. Bhatt, 1974) and the Role PICS (Pareek, 1983d). The main findings of the study were as follows:

(a) Role stress was positively related to mental illness. Stress from role ambiguity and role stagnation correlated intensively with mental illness.

(b) Total role stress was correlated with the somatic concomitants of anxiety.

(c) The approach group experienced more role stress than the avoidance group, but scored lower on the mental health questionnaire than the avoidance group.

On the basis of these findings, the author suggested that the approach coping strategy contributes to immediate perceived stress, but in the long run reduces tension and anxiety. On the other hand avoidance strategies may reduce immediate stress, but in the long run contribute to greater tension and anxiety. This study employed a measure of coping strategies involving four factors namely, active problem solving, non-directional work approach, constructive deferred problem solving, and information seeking. He found that the high level executives
experienced lesser stress and strain, utilized better coping strategies, and enjoyed more positive outcomes. Also, a combination of coping strategies forming a condition of passive coping strategy was related to high stress condition.

**Byrum-Robinson (1993)** has suggested a cognitive-central stress management training programme with ten ‘Ds’ (steps):

- Define (introduction to the dynamics of stress process including causes and symptoms).
- Dig (help participants to analyse their own stress level and related phenomena by using relevant instruments etc.)
- Delineate “how tos”
- Decide (to do something)
- Detach (relaxation with various techniques)
- Declare (public commitment)
- Dispute (negative thoughts and messages)
- Dream (visualize future state)
- Do (take action; carry out and continue)

**Lazarus and Folkman (1984) and Pareek (1993)** have suggested different coping strategies to manage stress. Several organizational interventions have been used to manage stress. They are corporate restructuring, compensation, participative decision-making, team building, management and supervisory training, recruitment, job-fit and performance management, career development, communication organizational policies, change of workloads and deadlines, change in work schedules, casual dress days, wellness programmes, employee assistance and community involvement.

**Srivastav, Avinish (1993)** studied 453 public sector executives coping strategy and role stress. He found out that role stress was positively correlated with
dysfunctional climate and avoidance coping strategy negatively with functional climate. Role stress was the general stress and the overload stress. Role erosion was the dominant stressor, followed by role isolation, resource inadequacy and personal inadequacy. Role expectation conflict and personal inadequacy were positively correlated with age. Role erosion was negatively correlated to dependency but positively to extension. Role erosion was the dominant stressor, followed by role isolation, resource inadequacy and personal inadequacy. Role erosion was negatively correlated to dependency but positively to extension.

**Mishra and Dixit (1995)** attempted to reveal the coping styles of 300 allopathic doctors. It was found from the investigation that those who use effective coping (*i.e.* above average control style and below average escape style) are less burned out than those who use ineffective coping (*i.e.* above average escape style and below average control style).

**Verma et al. (1995)** conducted a study to examine the coping strategies among college students. Two groups of 120 male and 85 female students (aged 19-20 years) from different colleges of Punjab University, Chandigarh were administered the Reaction to Hassles/coping Strategies Questionnaire to find out their typical coping strategies. Results were discussed under four major coping styles: seeking help, cognitive appraisal, emotional defusing, and withdrawal. The main findings were as follows:

- College students coped with difficult situations in a mature manner, yet they tended to withdraw from problems they faced in life.

- Gender differences were observed: men occasionally sought refuge in alcohol or drugs to escape from their problems and women resorted to prayer and hoped for better.

- Female became more emotionally upset compared to male who confronted the problem and made an attempt to solve it.
**Williams and Huber (1996)** suggest five managerial actions that can be used to reduce stress in workers.

- Clarifying task assignments, responsibility, authority and criteria for performance evaluation.
- Introducing consideration for people into one’s leadership style.
- Delegating more effectively and increasing individual autonomy where the situation warrants it.
- Clarifying goals and decision criteria.

**Srivastava and Krishna (1997)** examined the relationship between approach and avoidance modes of coping and mental health of the supervisors. It was hypothesized, in general, that approach coping strategies relate positively with the mental health of the employees whereas avoidance coping strategies correlate negatively with it. A sample of 300 LIC employees (aged 32-54 years) of the first-line supervisory cadre was randomly selected from two of its regional offices in Uttar Pradesh. The Role PICS (Pareek, 1983d) and the Mental Health questionnaire (O.N.Srivastava and V.K.Bhatt, 1974) were administered to the sample population to obtain information pertaining to approach and avoidance coping strategies and mental health. The data were analyzed so as to reveal the patterns of relationship between coping strategies and mental health. The following conclusions were obtained:

Employees who predominantly adopted avoidance mode of coping manifested more severe symptoms of neuroticism in comparison to those who frequently used approach coping strategies.

Employees predominantly using avoidance coping strategies showed signs of the most severe symptoms of somatic concomitant of anxiety followed by neurotic depression.

Avoidance mode of coping was correlated positively and significantly with all the six dimensions of mental ill-health, whereas approach mode of coping was correlated negatively and significantly with symptoms of mental ill-health.
The two locus of stress, i.e., internal and external, in combination with avoidance mode of coping did not differ significantly in their effect on mental health of the supervisors.

Srivastava, A.K (1997) studied the various coping strategies which form a special feature of our Indian culture. They are:

- Consider difficult, adverse, or demanding job situation as inevitable parts of job life.
- Perceive stressful job situation as a temporary phase of the job;
- Try to rationalize the situation of stress and its consequences.
- Take excessive demands as challenge.
- Assess the severity of your job stress with reference to others who are facing similar or more severe stresses in their jobs.
- Think that time itself takes care of situations.
- Accept the situation of stress thinking that there is nothing you can do to change them.
- Simultaneously think about the positive outcomes of successful dealing with the situation of stress.
- Believe that every problem ultimately has some remedy.
- Think that no one is totally free from stresses, though of different nature and severity.
- Accept the situations of stress as realities of life.
- Remind yourself that work is not everything,
- Believe in Gita’s philosophy that ‘your right is to do your job only, not to expect the fruits thereof’.
Singh, S. (1998) conducted a study to examine the modifying effects of coping strategies (avoidance and approach) which employees adopt to deal with their organizational role stress on the relationship between perceived role stress and mental health. The efficacy (magnitude as well as direction) of the two modes of coping in modifying the effect of perceived role stress was also tested. The sample comprised 300 employees of supervisory cadre of the Life Insurance Corporation (LIC) Of India. The results indicated that employees experienced stress arising from various inadequacies in their job role had an adverse effect on their mental health. Employees who had experienced high role stress manifested more symptoms of free floating anxiety, obsessive neurosis, neurotic depression, hysterical neurosis, phobic anxiety and somatic concomitants of anxiety.

The findings also revealed that the avoidance coping strategies enhanced mental health, whereas the approach coping strategy attenuated the severity of mental health. The avoidance strategy adopted by the employees to deal with their organizational role stress enhanced the positive relationship between role stress and mental ill-health, whereas the approach mode of coping had a buttering effect on the relationship between role stress and mental ill-health.

Ran Deep and Ravindran (2005) attempted to explore the relationship between coping strategies and coping styles among 30 marketing executives in two private sector mobile phone companies. It was concluded that in the use of coping styles such as task strategies, logics, home and work relationship, time management and involvement, executives differ considerably with respect to their cognitive styles.

Chand (2006) studied to examine the psychological factors in the development of work stress. The respondents are 150 junior management scale-1 officers in various banking institutions. The findings of the study revealed that job related strain is positively related with escape coping and negatively related with life event stress, control coping and symptom management coping.

Sikthingnanavel (2006) explored the effect of select yogic practices on stress of working women of 15 normal female volunteers. The suitable parameters
were used beforehand after 10 days training programme. The results show that there is a greater improvement in the reduction of stress in the experimental group than the control group. All these studies have revealed that coping strategies of individuals has significant effect on mitigating of stress.

**Arun Bhatia and Rashmi Bhatia (2007)** in their article “Stress at work and how to manage” says that day to day life is full of stress-both on the personal and the professional fronts. Pressure of time often results in people reporting to their work place with migraine attacks, body aches, mental strains etc. Stress therefore, is a costly affair that affects two aspects-first, the employee’s health - which directly affects the second - the organization’s profits. This is so because, if health does not allow the body to function normally, it will lead to increased absenteeism, late comings and short leaves in the organization, which directly affect the organization’s growth and profit since employees are the main source of profit generation for an organization. There are two approaches which when adhered to, can reduce the level of stress namely Individual approach and Organizational approach. Individual approaches are deep breathing, meditation, yoga and time management. Organizational approach are focus on improved personnel selection and job placement, training and development, jobs redesigning, improved employee involvement, improved employee communication, setting realistic goals, and establishing corporate wellness programs. Stress can be both positive and negative, which has an impact on the employee’s performance at work. For most of the people, low to moderate amount of stress enable them to perform their jobs better. However, a high level of stress or for that matter even a low level stress spread over a long time eventually takes its toll, and the performance declines.

**Kalia, H.L. (2007)** in her study “Women Managers in Indian Organisations” studied 140 female managers interviewed in 81 organisations in order to review trend of problems faced by women managers, the way in which the problems affect them, and the coping strategies used by them to overcome their problems. Indepth personal interviews were conducted with the help of a structured questionnaire using open-ended questions. The narration of managers have provided a broad base in understanding managerial life and profession of women. As far as coping with
problems among women managers is concerned, it was seen that only a few managers were not able to overcome their problems. But overall, the responses towards coping with their problems were positive. Different individuals have different styles of coping with their problems, by meditating, going on holidays, taking short breaks and having appropriate medications. Other common coping strategies reported by women managers included, discussing problems with colleagues and seeking advise from superiors, spending time with friends by going for movies and holidays and planning and organizing ones schedule.

**Smitha Das and Ghosh, K.B (2009)** in their article ‘Stress at Workplace: A Mounting Concern’ dealt with the recently emerged concern of increased workplace stress its impact and the root causes for the emergence of stress. It also explains the consequences of stress and provides the strategies to be adopted for coping with stress. They found out that a feeling of hopelessness, job dissatisfaction, employment uncertainty, elevated demand for high performance, lack of technological know-how, changing of company culture, inadequate encouragement and weak leadership styles are the causes for stress among employees. Coping with stress has become a vital concern for both the employees and the employers, as human resources are considered one of the significant asset of the organization. Even the most successful executive experienced pressure, but they accomplished something because they identified how to cope with stress more effectively. Always gain a strong control over the circumstances and settle the issues wisely which, in turn, increases the intellectual and physical fitness and improves good relationship with the peer group.

### 2.4 STRESS MANAGEMENT TECHNIQUES

Over the past one decade, stress management has become a popular health programme offered in work settings. Stress management refers collectively to a group of techniques that seek first to foster awareness and recognition of stress and related health effects and secondly, to teach arousal (stress) reduction. Stress can be insidious and cumulative. The best way to avoid suffering from it is to learn to anticipate it. By analyzing and pinpointing events and times that regularly cause stress, it is possible to set about preventing further problems from occurring.
Stresses of job life can be conveniently managed to a large extent, at different stages of their operations through various organizational interventions like stress audit, job characteristic approach etc.

**Benson (1975)** Westernized meditation in his work ‘Relaxation Response’ simply by using the word “one”. This technique is useful for decreasing body metabolism, oxygen consumption, carbon dioxide elimination and rate of breathing. Take a comfortable position, prop the feet, and support the head and arms. The actual technique is as follows:

- Sit in a quiet environment in a comfortable chair, with feet flat on the floor and hands resting comfortably on the arms of the chair.
- Close the Eyes
  - Totally relax all muscles of the lower legs, thighs and buttocks, lower abdomen, upper abdomen and chest.
  - Breathe through your nose, while breathing says “one” silently to oneself.
  - Continue the process of upper body, alternatively tensing and relaxing each part-hand, arms, shoulders, neck, lower face cheeks and eyes & forehead.
  - This technique should be practiced for 15 minutes twice a day, but must leave two-hour gap after meals.

**Golem D. Quick (1979)** concluded from their study that organizational techniques like Role Analysis Technique (RAT), work redesign, job enrichment, performance planning and individual techniques like aerobic exercise, relaxation response and psychotherapy are preventive techniques which help to improve quality of work life and also individual and organizational effectiveness.

**Biewski (1982)** has pleaded the case of organizational development (OD) to manage burnout. OD’s focus on managing stress is either by using experimental learning designs such as “stress management workshops”, or by focusing on
organizational change efforts such as attitude and skill building, building a supportive climate, building conflict management skills, integrative norm-building, need-responsive job designs, role clarification, organization integration, individual – organization fit. Golembiewski argues that OD can also produce stress, e.g., as a result of major change, the development of new culture, confrontation, pressure for results etc. He suggests that the contribution of OD in preventing burnout can be effective if one distinguishes the additive model of burnout from the phase model, and then target ameliorative designs for specific individuals in the eight phases of burnout that he has suggested.

Dua (1983) examined the various techniques and concluded that most meditation procedures included the following elements:

- Sitting or lying down, in a comfortable position, quietly and calmly, and preferably with eyes closed.
- Repetition of a prayer, word, or sound.
- Breathing control or breathing exercises.
- Removal of all distractions and all thoughts.


Dua (1992) investigated (a) the effect of meditation training on the strength of thoughts, muscle tension, heart rate and skin resistance, and (b) the comparative effectiveness of meditation alone and meditation plus desensitization in reducing thought-mediated anxiety. During desensitization, the subjects were verbally presented with anxiety producing situations. The results showed that meditation reduced the overall frequency of thoughts, heart rate and skin conductance but it had no effect on muscle tension. Meditation also produced some reduction in general anxiety and anxiety caused by specific situations. However, when meditation training was followed by desensitization training, subjects showed large reduction in
both the target anxiety and anxiety caused by specific situations. Testing at a follow up sessions, a few weeks later, showed that anxiety gains in the meditation group alone disappeared but the desensitization group maintained anxiety gains.

**Vasudevan et al. (1994)** conducted a study to examine the effect of yogic meditation on tension headache. A group of seven subjects with tension headaches underwent 30 sessions of yogic meditation. Single group design with multiple assessments was used: pre-, mid-, and post-assessments were made using psychophysiological and psycho-behavioural measures. Findings revealed that there was no statistically significant reduction in the frontals muscle tension and skin conductance, although clinically there was a decline. Reduction in pain perception was statistically significant. Yogic meditation was reported to be effective in reducing the frequency of tension headaches.

**Rao, P.V.K. (1995)** in his paper has dealt with the scientific and psychological significance of yoga as a means of attaining spiritual emancipation. Within the yogic fold, the author has described the nature and significance of raja yoga, hatha yoga, kriyas, asanas, pranayamas, bandhas, and mudras. Findings from empirical studies on yoga revealed that long-term practitioners of yoga had acquired a remarkable voluntary control over their autonomic processes, which helped them in coping with psychological stress. The author described yoga as a system of psychotherapy and called upon clinicians to perfect yoga therapy so as to make its application universal.

**Helen Whitten (1997)** revealed that ‘mind maps’ which is a method of organizing thoughts and information using key words and images helps individuals in stress management. The technique is based on understanding of all aspects of the individual’s lifestyle including family, work, friends, leisure, sports and so on, in order to help him develop appropriate stress management strategies.

**Stephen Palmer (1997)** describes problem-focussed approach consisting of identifying the problem, selecting goals, exploring options, considering consequences, making decisions, taking actions and evaluating the strategy, as an effective approach which can be applied to stress counseling and stress management training.
Dua (1998) compared the effectiveness of various meditation (a) reduced many problem behaviours or maladaptive behaviours, (b) increased emotional and physical health, and psychological well-being, (c) reduced the frequency of thoughts, (d) reduced substance abuse, and (e) generally improved the quality of life. He further pointed out that meditation should prove to be even more effective in reducing, managing, or controlling stress if elements of the first five steps of the practice of yoga (those involving behavior change, cognitive change, and relaxation) are also included as part of meditation training designed to reduce stress.

Nagarajan, K. (2005) focused on Yoga as stress management technique for business executives. Mental stress has become a disturbing factor among business executives. A person, who is under mental stress, exhibits a high level of irritability, lacks objective approach to handling of issues, fumbles in decision–making, takes unilateral decisions, develops distorted perceptions, gets prejudiced and becomes highly impatient. Therefore there is an immediate need for finding a cure for the malady of mental stress plaguing business executives. Yoga, the technique mastered by the ancient Indian Seers, provides a solution to this malady. Meditation can also be used as a technique for relieving mental stress.

Lydia Nuthan, T and Moses Christopher, T. (2007) focused on few strategies or initiatives which may be adapted by organizations to prevent, minimize and overcome stress. The various strategies companies can adopt are assessing levels of stress affecting its employees, counseling services that helps employees overcome personal or organizational stress, family-friendly and work-life initiatives like flexible working hours, job sharing, telecommuting, childcare support, temporary withdrawal strategies, wellness programs, social support, participative management and work ambience.

Samta Jain and Namrata Mehta (2007) gave importance to mental health as it is proved that it forms basis for physical health. Stress causes imbalance but proper management restores the balance. The main objectives of her study was to develop an understanding of management of stress to positively channelize the quantum of energy and to identify the dominant and backup stress management styles. It was found that with mental development, improved operational efficiency,
proactiveness and personality there are enough chances to reduce the stress levels in an individual. The best of all stress reduction and stress overcoming practices are motivation, self-control and medication, problem solving, improved reflexes and shared learning and the ultimate objectives are energy conservation, spiritual heritage and invisible nutrition to spirit. This dynamics talks of the performance boosters or steroids to the soul and may work on both the upstream stress (above normal stress) and the downstream stress (below normal stress).

**Dr. Sailaja and Vani Vasakarla (2007)** emphasis on executive stress management and highlighted various sources of stress. The primary sources of stress are work-related aspects like work overload, work design and work atmosphere, control overwork, management’s indifferent attitude towards employee’s personal life problems and unsafe, unhealthy work environment, especially for women. He says that organizations should use various techniques to reduce the level of stress of work place like firstly support, encouragement, sponsorship of employees from the management and other members of the organisation. Secondly healthy relationship between management and employees to promote positive work atmosphere to avoid unacceptable behavior and conflict. Thirdly thorough understanding of the role played by an employee in the organization to avoid role conflict and lastly organisational change (if any) communicated and managed properly in the organization to prevent ambiguity. Apart from this technique three things should be followed to reduce stress in the work environment, they are conducting a stress audit, provide counseling and executive education programme.

**Sunaina (2007)** emphasised regular practice of yoga and meditation that helps employees to manage stress and also helps create a peaceful and cordial environment to work and produce better results. Staff training, organizing formal meetings, rewarding people for their performance and extra-curricular activities are some of the means by which organizations can make employees feel valuable and enable them to overcome stress. A corporate could train its employees relaxation techniques like progressive muscle relaxation, deep breathing, visual imagery, autogenic training, thought channelization, meditation and yoga.
Bahaudin G Mujtaba (2009) discussed the impact of the slow economy on people as well as productivity and stress in the workplace. Stress increased in 2008 due to the economic crisis and emotional well-being decreased due to decline in mental health, especially for the poorest people. Coaching for productivity can be adopted as a stress management technique to reduce stress among employees due to slowing economy. The various coaching skills are reinforcing good performance, motivating employees to new heights and peak performance levels, orienting a new employee into the department or organization, providing new knowledge about changes and tactics, training a new skill for a new task that needs performing and clarifying expectations and correcting performance.

Dr Bob Murray (2009) in his study ‘Managing a High Performance Team in Stressful Times’ outlined the reasons why high performing teams succumb to stress and suggests a number of strategies for making them more resilient and their productivity more sustainable. He suggested six actions leaders that can take to distress the high performance team and they are, reward through relationships, use praise and recognition, encourage autonomy, offer learning opportunities, clarify expectations and communicate purpose. If a manager concentrates on doing these things he will ensure that HPTs function well and maintain productivity even in times of heightened stress. Particularly in these stressful times, all teams will benefit from relationship-centered approach, but this management style is especially important for HPTs, and the pay-offs are greater, HPT members need to feel that they have a say in the way they go about their job and be encouraged to bond and collaborate rather than compete with each other.

IAS Gavali (2009) in her article ‘Applied Ergonomics and ways to Reduce Work Stress’ laid emphasis on creating a warm, caring, supportive and encouraging environment for their employees at their work stations. It is very important to maintain a healthy psychosomatic balance for continuous improved performance of their employees. Ergonomics is the study of the relationship between people and their environment wherein, the workplace, tasks and tools are designed to fit individual capabilities and limitations, so that people can do their jobs safely. Physical ailments and stress at workplace is a serious concern in most organizations. A decrease in productivity and increase in absenteeism results in huge losses for the
organizations. It is the responsibility of the organization, to introduce ergonomically designed tools, devices and equipments. A design-conductive ergonomic workstation reduces stress at the workplace. Negligence towards ergonomics would cost the organization a lot in terms of efficiency / productivity, medical bills, compensation, absenteeism, etc. Further, it would not meet the employee’s expectations with regard to physical job environmental requirements at work stations.

Kathirvel, N (2009) studied stress among employees working in BPOs of Coimbatore city with an objective to study the relationship between marital status and level of stress among the respondents working in BPOs. The research concentrated on ten BPOs comprising 500 people and the researcher collected 100 samples. Based on the findings he suggested some techniques to reduce stress among BPOs employees. They are, management should protect the employee’s welfare, twelve–hour shift shall be changed to eight hours to facilitate the employees, proper counseling, active promotion and positive relation, proper communication, recreational activities, avoid night-shift duties for women employees, grievances should be redressed and relaxation techniques like yoga and meditation should be arranged by the organization.

2.5 JOB SATISFACTION AND STRESS

Stress is a mental and physical condition which affects an individual productivity effectiveness, personal health and quality of work. The stress victims experience lowered quality of work life and job satisfaction. Several researchers reported that in industrial setting job satisfaction and job involvement increases with age and as a result occupational stress would decrease. It is also reported by many researchers that low job satisfaction was associated with high stress. Individuals under excessive stress tend to find their jobs less satisfying.

Khan (1961) also indicates that role conflict is more stressful and dissatisfying in lower level positions, because the employee is more dependent on his supervisor and has little power to influence him. The employee’s inability to cope adequately with role conflict when he is highly dependent on his supervisor leads to dissatisfaction with the job.
Schuler (1975) obtained data from 331 employees of a large manufacturing firm. The sample was divided into three organizational levels: Upper level managers, professional level employees, middle level managers and entry level professionals. The result showed that role conflict has a stronger negative relationship with job satisfaction of lower level employees compared to higher level employees.

Bernardin (1981) in his study on 53 patrol officers, found role conflict to be significantly related to satisfaction with the work itself and with supervision. Similar findings were obtained by Cold Well, (1981) on two samples of 100 black industrial workers each. Significant differences were also obtained between migrant and non-migrant black workers with regard to this aspect.

Pestonjee, D.M. and U.B. Singh (1982) in their study “Job Satisfaction as a Function of Role stress” took 101 Officers working in private sector organizations engaged in generating and distributing electricity. Job stress (ORS Scale, Pareek, 1983) and job satisfaction (satisfaction-Dissatisfaction Inventory, Pestonjee, 1973, 1981) was used to measure variables. The main findings of this study are

- Those who scored high on self–role distance measure of role stress were less satisfied as compared to those who had medium or low score on this measure.
- High on inter-role distance measure scored comparatively low on dimensions of job satisfaction.
- Low on role stagnation dimension of stress had better scores on all dimensions of job satisfaction.
- Person scoring low on role ambiguity measure scored high on various job satisfaction dimensions and overall job satisfaction.
- High on role overload were less satisfied on all dimensions of job satisfaction.
- Low on role erosion scored high on overall job satisfaction measure.
Srivastava and Jagdish (1983) tested the moderating effect on mental health on the relationship between perceived occupational stress and job satisfaction in the case of 400 first–line technical supervisors, randomly selected from a large locomotive factory. The data was analyzed using coefficients of correlation and moderated regression analysis. The results showed that the supervisors perceived that occupational stress was correlated negatively with job satisfaction and mental health variables. Further, the supervisor's good mental health was found to significantly moderate the stress and job satisfaction relationship.

Singh, A.P. and Mishra, P.C. (1984) examined occupational stress for its moderating effect on job involvement and job satisfaction relationship. Three instruments, the Occupational Stress Index (A.K.Srivastava and A.P.Singh, 1981), the Employee’s S-D Inventory (Pestonjee, 1973b) an the Job Involvement Scale (Kapoor, 1982), were administered to a sample of 400 first level industrial supervisors working in the mechanical department of DLW, Varanasi. Subgrouping and moderated regression analysis were done to test the moderating effect of occupational stress.

The findings partly supported the hypothesis. For example, moderated regression analysis revealed that occupational stress moderated the job involvement-job satisfaction relationship whereas sub grouping analysis indicated that occupational stress was an insignificant moderator of this relationship. The authors concluded that there is need for further research to specify the effects of personal characteristics, different job settings and the measures of job involvement and satisfaction on the causal relationship between satisfaction and involvement.

Sharma, T. (1987) in his study took 150 respondents each from public and private organization, including 75 managers and 75 supervisors as samples. The findings are employees of the private organization scored higher and significantly differed from those of public organizations as regards inter-role distance, role expectation conflict, role erosion, role isolation, personal inadequacy and resource inadequacy. Public organization employees scored significantly higher on role stagnation. Role stresses correlated negatively with job satisfaction variables and positively with participation in the case of four data sets. Role stress was found to be due to dependency climate in public sector organization and control climate in the private organization.
Singh, G.P. (1987) in his study on organizational climate as moderator of role stress - job satisfaction relationship in case of different job categories of computer professionals took 348 Computer professionals from three categories as samples ie managers, system personnel and operational personnel. He found out that role erosion and role isolation were dominant whereas role ambiguity and role expectation conflict were remote contributors of role stress. Managers of private computer organization scored high on overall stress. Job satisfaction variables correlated negatively with all the factors of role stress. Out of 77 coefficients between role stress and job satisfaction variables, 65 were significant for system personnel (public sector), followed by 58 managers (public sector), 39 for operation personnel (public sector) and 37 for managers (private sector). The perception of achievement, expert influence and extension climate were reported to be negatively associated with role stress variables whereas the perception of control, affiliation and depending climates were reported to be positively associated with role stress.

Mittal, Uma (1988) in their study titled “A Study of the Relationship between Perceived Need Satisfaction and Role Stress” took 50 Government Doctors, 50 Lecturers from University of Rajasthan, Jaipur and used Role stress (ORS Scale, Pareek,1981) and perceived need satisfaction (Porter,1961) as variables measured. The main findings of the study were:

- Perceived need satisfaction is negatively related to role stress.
- Doctors experience more role stress than lecturers
- Female doctors and Female lecturers experience more role stress than male doctors and male lecturers.
- Self-role distance appears to be responsible for the low satisfaction of needs of doctors, but for not lecturers.
- Inter–role distance appears to be responsible for the low satisfaction of needs of lecturers, but not for doctors.
- Role stagnation seems to affect doctor’s needs but not of lecturers.
Role ambiguity equally affects needs of both the doctors and lecturers.

Role overload appears to be responsible for low satisfaction of the needs of doctors, but not of lecturers.

Savita and Asnani (1988) conducted a study to examine the nature of work environmental stress and job satisfaction among scientists. The sample consisted of 85 personnel belonging to different scientific organizations in and around Delhi. The Occupational Stress Index (A.K.Srivastava and A.P.Singh, 1981) and the S-D Employees Inventory (Pestonjee, 1973b) were administered to the sample population. The analysis of the data revealed that out of the total 85 scientists, 48 scientists (56.47%) experienced low stress as compared to 32 scientists (37.65%) who experienced moderate degree of stress. Only five scientists (5.88%) experienced high degree of stress. Overall job satisfaction was reported to be higher among a majority of scientists (87.06%). Only eight scientists (9.41%) were found to be dissatisfied. It was also found that majority of the sample were highly satisfied in all the four dimensions of job satisfaction, namely, job, management, personal adjustment and social relations.

Chaudhary, A. (1990) examined the relationship between role stress and job satisfaction among bank officers. The sample consisted of 100 bank officers. Half of the respondents (n=50) belonged to the higher age group (above 35 years) and the other half (n=50) belonged to the lower age group (below 35 years). He used ORS Scale, (Pareek 1983) for role stress and Satisfaction and Dissatisfaction Employee’s Inventory, (Pestonjee1982) as variables. The major findings of the study are role erosion causes maximum stress whereas role ambiguity is the cause of least stress among bank officers. Two age groups did not differ on role stress dimensions. The overall indices of role stress and job satisfaction have been found to be negatively correlated in higher as well as lower age group of bank officers.

Department of Psychology, S.V. University. Tirupati (1991) in their study ‘Effect of occupational stress on job satisfaction’ designed the study to investigate whether occupational stress has any relationship with and effect on job satisfaction.
The total sample consisted of 90 clerical cadre employees of three different organizations-business, service and common weal. The occupational stress and job satisfaction were assessed with the help of Srivastava and Singh’s Occupational stress Index and Kanungo’s Job Satisfaction Scale'. The obtained data were analysed in terms of ‘t’ test, Chi-square test, Coefficient of correlation and Duncan’s Range test. Occupational stress was found to be significantly related to job satisfaction - the greater the stresses the lower the satisfaction.

**Luhadia, V. (1991)** in his study “A Study of the relationship between Role stress and Job Satisfaction of Geological Officers at Three Different Levels” chose 20 higher level officers, 30 middle level officers and 50 junior level officers. Role stress (ORS, Scale, Pareek 1981) and job satisfaction (Satisfaction-Dissatisfaction) Employee’s Inventory, (Pestonjee, 1982) was used as variables measured. The main findings of this study are, three levels of officers differed on role stress dimensions. Role inadequacy causes maximum stress in higher level officers whereas role erosion causes maximum stress in the middle and junior level officers. Job satisfaction is negatively related to role stress. Higher the stress lower is the job satisfaction among different levels of officers. Stress due to role stagnation, influences minimum to higher level officers and also influences job satisfaction on the whole. Role stress affects job satisfaction and overall indices of role stress have been found to be highly correlated to job satisfaction. Job satisfaction and role stress are highly negatively correlated in higher, middle and junior level officers.

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

**Tharakan (1992)** hypothesized that professional Women and non-professional working women would differ in their job-related stress and level of job satisfaction. A sample of 90 technocrat working women (doctors, engineers and
lawyers) was compared with 90 non-technocrat working women (clerks, officers and teachers) on these variables. The Operational Stress Indicator developed by Cooper (1980) was administered to measure occupational stress and job satisfaction. The relationship between occupational stress and job satisfaction was found to be significantly associated with the professional qualifications of the women. Professional working women experienced greater work-related stress than non-professional working women because the expectations of the former were much higher than those of the latter.

Mehra and Mishra (1993) explored the relationship between perceived occupational stress and job satisfaction as well as the moderating effect of employee’s mental health on the relationship between these two variables. A group of 250 blue-collar industrial workers belonging to Uptron India Ltd, Lucknow constituted the sample of study. The Mental Health Inventory (Jagdish and Srivastava, 1983), the Occupational Stress Index (A.J.Srivastava and A.P.Singh, 1981) and the Employees S-D Inventory (Pestonjee, 1973b) were administered to the sample population. Subgroup analysis and moderated regression analysis were used to determine the moderating effect of mental health on intrinsic job satisfaction - occupational stress relationship. The results indicated that mental health had a moderating effect on the relationship between intrinsic job satisfaction and occupational stress. The authors argued that the moderating effect of mental health may be attributed mainly to the effective coping strategies adopted by the mentally healthy workers endowed with high participation, self-confidence, self-respect, environmental mastery, and appropriate realistic approach.

Alam (1997) conducted a study to determine the strength of job satisfaction, job involvement and organizational role stress among private and public sector executives. The sample comprised 50 private sector and 50 public sector executives. The S-D Employee’s Inventory (Pestonjee, 1973), the Job Involvement Scale (Lodahl and Kejner, 1965) and the ORS Scale (Pareek, 1983c) were administered to the sample. Means, SD, critical ratio test and Pearson’s product moment coefficients of correlation were used to analyze the data. The main findings of the study were as follows:
Executives of private and public sectors did not differ significantly on areas of job satisfaction like management, personal adjustment and social relations.

Executives differed significantly on the variable of job involvement, private sector executives being more involved with their job as compared to public sector executives.

Private Sector executives experienced more role stress as compared to their public sector counterparts.

Pattanayak and Mishra (1997) attempted to make a comparative assessment of shift and non-shift employees in relation to job satisfaction, perceived organizational commitment, job stress and HRD climate. Also, the study tried to examine the differences between executives and non-executives. The respondents of the study were 360 employees of the Rourkela Steel Plant, Orissa. Half of the respondents (n=180) had been randomly selected from amongst the shift employees and the other half (n=180) had been randomly selected from different non-shift groups. Half of the shift employees (n=90) belonged to the category of executives and the other half (n=90) belonged to the category of supervisors. Similarly, half of the non-shift employees (n=90) belonged to the category of executives and the other half (n=90) belonged to the category of supervisors.

For the purpose of the study, a set of four psychometric instruments - the Minnesota Job Satisfaction Questionnaire (Weiss et al.1967), the Perceived Organizational Commitment Scale (Sayeed,1989), the Job Stress Questionnaire (Singh and Sinha,1986) and the HRD Climate Survey (Rao and Abraham,1991) was administered to the sample population. The main findings of the study may be summarized as follows:

Executives were found to have more job satisfaction than the supervisors.

- No significant differences were observed between shift and non-shift employees on job satisfaction and organizational commitment.
The differences were also not found to be significant between executives and the members of supervisory staff on organizational commitment scores.

Shift employees perceived better HRD climate than non-shift employees. Both executives and supervisors perception of HRD climate did not differ significantly.

Executives and supervisors differed significantly on job stress; supervisors showed higher job stress than executives. No significant differences were observed between shift and non-shift employees on job stress scores.

Chandraiah, K. Agrawal, S.C Marimuthu, P. and Manoharan, N. (2003) in their study ‘Occupational Stress and Job Satisfaction Among Managers’ planned to investigate the effect of age on occupational stress and job satisfaction among managers of different age groups. A sample of 105 industrial managers working in large scale organizations was selected randomly for the present study. The Occupational Stress index (OSI) developed by Srivastava and Singh (1983) and Job Descriptive Index (JDI) by Smith Kendal (1963) were used to assess the level of job stress and job satisfaction of the sample. The findings of the study revealed higher levels of job stress and less job satisfaction among managers of 25-35 years age than their counterparts in the middle age (36-45years) and the old age group (46-55years). The Study also found that the age was found to be negatively correlated with Occupational Stress and positively with job satisfaction.

Armstron Stasson (2005) compared the reactions of executive-level and middle managers prior to a large – scale down sizing, during initial and final phases, and following the downsizing. Compared with executives, middle managers perceived greater job insecurity, were more likely to use escaping coping and reported lower job performance and higher level of health symptoms. Overtime, both executives and middle managers reported a decline in perceived threat of job loss but an increase in sense of powerlessness, a decrease in the use of control – oriented coping strategies and reduced job performance in the initial phase of
downsizing. Although less so, executive-level managers were also adversely affected by downsizing, suggesting that this group should be included in stress management interventions.

Sheena Johnson, Cary Cooper, Sue Cartwright, Ian Donald and Paul Taylor and Clare Millet (2005) aimed to compare the experience of occupational stress across a large and diverse set of occupations. Three stress related variables (psychological well-being, physical health and job satisfaction) are discussed and comparisons are made between 26 different companies on each of these measures. The relationship between physical and psychological stress and job satisfaction at an occupational level is also explored.

The measurement tool used is a short stress evaluation tool which provides information on a number of work related stresses and stress outcomes. The result showed that six occupations were reporting worse than average scores on each of these factors physical health, psychological well-being and job satisfaction. They are ambulance workers, teachers, social services, customer services, call centers, prison officers and police. The least stressed and most satisfied occupations are analysts, school lunch time supervisors and directors within private sector. Interestingly directors in the public sector score higher on all three factors than the private sector, although this finding is reversed when looking at management level rather than director level. Police officers were one of the top six occupations experiencing the most stress and least job satisfaction. However, in comparison, senior police officers are scoring much lower scores revealing them to be less stressed and more satisfied. Occupations from within the medical profession reveal that although nurses, medical, dental and allied health professionals are all scoring lower than average level of job satisfaction they are not reporting high scores on these stress factors.

Rashmi Shahu, S.V. Gole (2008) in their study ‘Effect of Job stress and Job Satisfaction on Performance’ attempted to examine the relationship between job stress, job satisfaction and performance among 100 managers of private manufacturing firms. The study’s findings suggest that higher stress levels are related to lower performance whereas higher job satisfaction indicates higher performance. The companies that are lagging behind in certain areas need to be
developed so that their employees show good performance level, as it is proved that performance level lowers with high stress and rises with high satisfaction scores.

Sainik Samachar (2009) in his study ‘Stress and its Management’ said that right from the time of birth till the last day of life, an individual is invariably exposed to various stressful situations. The stress can be either a positive or negative influence on an individual’s performance. For many people, low to moderate amount of stress enables them to perform their jobs better by increasing their work intensity, alertness and ability to react. However, a high level of stress or even a moderate amount sustained over a long period of time, eventually takes its toll and level of performance declines. Even though low to moderate levels of stress may improve the job performance individual finds stress dissatisfying. Effective management of stress involves channeling stress towards productive purposes.

2.6 GAPS IN THE LITERATURE

The previous discussion of the literature identified significant gaps that will be explored in this thesis. Most of the studies in the area of stress are limited, generally neglecting women employees’ perspective of stress. Early studies conducted on women in various occupational settings like that of the study of Hall, D.T. (1972), Judi Mashall, Cary L. Coper (1981), Sruti K. and D.Sarupriya (1981), A.Gupta (1982), Cooper, Carly L. and Davidson, Marliyn J. (1982), Shruti K. (1982), Debra, L. Nelson and James C. Quick (1985), R.L.M. and Sarada Devi (2006) have highlighted the prevalence of high occupational stress among working women, but how to manage them, coping strategies, various stress management technique have not been dealt in detail. The literature also identify various causes of stress, like that of the study of Bhatnagar, D. and K.Bose (1985), Gupa N.K. (1989) managing stress but fail to find out the impact of stress on individual and on organizational level. Many studies have identified the sources of stress like role stagnation, role ambiguity, role isolation etc but how management policies, role of women, goal achieving, will be a part of stress creating stimulus is not identified.
The central focus of stress research in India has been identifying stressors, strain and coping styles and their relationships. However, a very few attempts has been made to examine stress among working women. Therefore, the need for the present study was felt and the objective was to identify the causes of stress, outcome of stress, stress management technique adopted by women employees working in Public Sector, Private Sector and Multinational companies.