CHAPTER II
REVIEW OF LITERATURE

2.1 INTRODUCTION

“Man’s greatest enemy is himself” and stress is an inevitable characteristic of life and work. Occupational stress describes physical, mental and emotional wear and tear brought about by incongruence between the requirement of job and capabilities, resources and needs of the employee to cope with job demands. There is a vicious cycle of alarm, resistance and finally exhaustion in a turbulent mind.

An attempt is made to critically review the literature of the past research work in relevance to the present study. Some important and relevant studies on stress and coping strategies among the software professionals and also the studies relating to work related variables to occupational stress, its impact and coping ability were presented under the following headings:

- Review of Literature based on causes of job stress
- Review of Literature based on causes of job stress among software professionals
- Review of Literature based on effects of job stress
- Review of Literature based on effects of job stress among software professionals
- Review of Literature based on stress coping strategies
- Review of Literature based on stress coping strategies among software professionals

2.2 REVIEW OF LITERATURE BASED ON CAUSES OF JOB STRESS

Ivencevich JM and Matterson MT (1980)\(^1\) a research study undertaken on “Stress at work”, identified three critical factors such as role ambiguity, role conflict and the degree of responsibility as the major sources of employees stress. This study did promote some understanding about stressors but did not provide realistic solutions to reduce the job stress.

Watha (1980)\(^2\) showed that role conflict is experienced more frequently at the middle management rather than at the lower management level, supervisors manifest higher role conflict than workers. This study also demonstrated that role conflict decreases with an increase in job tenure in organisation.
Sri Vastava AK and Singh AP (1981)\(^3\) in their study on “Construction & Standardisation of occupational stress index: A pilot study” have developed an occupational stress index. It assesses perceived occupational stress related to role overload, role ambiguity, role conflict, group and political pressures, responsibility for persons, under participation, powerlessness, poor peer relation, intrinsic impoverishment, low status, strenuous working condition and profitability.

Das GS (1982)\(^4\) in the study “Organisational determinants of anxiety based management stress” reported that negative work group climate and powerlessness may be dominant cause of stress experienced by Indian managers than role ambiguity.

Narayanan S (1983)\(^5\) in his study, “Role conflict differential (RCD): A direct method of assessing the role conflict,” overload difficulty in the task domain, the demands and the requirements are closely associated with role conflict.

Jackson and Schuler (1985)\(^6\) in their study “A Meta analysis & conceptual the critique of research on role ambiguity & role conflict in work settings, organisational behavior & human decision processes” found that there is no relationship between role stress variables and individual characteristic with respect to age, they felt that there was no theoretical proof that age should be correlated with role ambiguity or role conflict, through spurious correlation may occur due to an association of age with job experience or tenure.

Ahmad S, Bharadwaj A and Narula S (1985)\(^7\) in their study “A study of stress among executives” found that public sector executives experience slightly more stress than their counterparts in the private sector. Background factors like age, education, income, experience and marital status of executives were unrelated to role stress in both the groups.

Sandhimann (1988)\(^8\) in his research work stated that employees who are under increasing pressure to appear enthusiastic, interested, cheerful and friendly at all times in their place are highly stressed.

Kumar S (1989)\(^9\) in his study on “Role stress, role satisfaction and role efficacy among public sector executives” indicated that unmarried executives, executives married to working women and marketing executives have significantly high role stress. Role stagnation and adequacy were found to be significantly higher among lower level executives.

Dastur RM (1990)\(^10\) in his research paper “Are you killing yourself” states that work group climate is an important cause of managerial stress and perceived power is the
second most potent cause of managerial stress. Role ambiguity did not arise as a significant cause of stress in this study. Thus, negative group climate and powerlessness may be dominant causes of stress experienced by Indian managers.

**Cummings R (1990)** from the findings of his study on “Job stress & the buffering effect of supervisory support, group & organisation” suggested role conflict and ambiguity, workload, under utilization of skills, resource inadequacy and lack of participation as the main categories of work stressors.

**Mc Donald and Korabik (1991)** in their study titled “Sources of stress and ways of coping among male and female managers” studied stress and coping among managers. Ten male managers in low stress group and ten female managers in a high stress group described work related situations that they have experienced, and how they coped with them. A work stress questionnaire was used to assess additional type of stressors. It was found that women were more likely than men to report that prejudice and discrimination and work/family interferences were sources of stress.

**Singh AP and Singh B (1992)** in their study on “Stress and strain among Indian middle managers”, they asked 400 middle level managers of Bokoro steel plant to fill out role stress and job anxiety questionnaire. Their results showed that high anxiety employees showed positive relationship with role stress.

**Singh A (1993)** in his work “Stress in newspaper industry” explained that certain kinds of professions / occupations cause greater stress than others. For e.g., Singh found technocrats to experience greater stress when compared to non-technocrats.

**Biswas UN (1998)** studied the relationship between “Life style stressors, organisation commitment, job involvement, and perceived organisational effectiveness across job levels”. He collected data from 160 managers, 47 supervisors and 50 workers of public sector organisation. The results showed that the stress caused by performance, threat and frustration led to low degree of organisation commitment.

**Vijayalakshmi A and Meti V (2000)** in their study on “Occupational stress executives and non – executives of private industrial organisation” found that non-executive employees exhibited signs of significantly higher occupation stress than executives on such dimensions as role conflict, political pressure, poor peer relations and job responsibility.
Mubashir and Saima Ghazal (2005) on their study on “Occupational stress and job performance” conducted a research to identify role of different contributing factors of job stress and to investigate level of stress on those factors among different departments of Wall’s Unilever Pakistan. The study intended to evaluate how job performance is affected by job stress. The results showed that workload, co-workers and repetitive work are the major factors causing stress. The results also showed that there is moderate level of stress with no significant difference in different departments. The authors concluded that there is no affect of stress on job performance in the selected organisation.

Ahsan et al. (2009) in “A Study of Job Stress on Job Satisfaction among University Staff in Malaysia: Empirical Study” conducted a research to evaluate the relationship between job stress and job satisfaction. The results also showed that there is significant negative relationship between job stress and job satisfaction. Employees who are highly motivated will feel happier and are more willing to work for the organisations.

Tang and Chen-Hua Chang (2010) conducted a research to examine how role stress and various performances of individuals are related. The study analysed how role ambiguity and role conflict (via self-efficacy and job satisfaction) affect employee creativity directly and indirectly. The results showed that there is not only a direct and negative link between role ambiguity and creativity, but also a direct and positive link between role conflict and creativity.

2.3 REVIEW OF LITERATURE BASED ON CAUSES OF JOB STRESS AMONG SOFTWARE PROFESSIONALS

Ivancevich et al. (1983) in a study on “Occupational Stress, Attitudes and Health Problems in the Information Systems Professional” propose a model which first identifies Work Environment Stressors as related to i) Job (time pressures, job scope, obsolescence), ii) Role (ambiguity, conflict) iii) Career (development) and iv) Organisation (rewards, change, communication). They then identify Personal (Individual) Factors such as self-confidence, decisiveness, tolerance of ambiguity and locus of control.

Baroudi JJ and Ginzberg MJ (1986) in their study, “Impact of technological environment on programmers / analysts job outcomes”, showed that the work of software profession in a team based one that requires them to function from different location as a part of functional team as well as report to several people at various levels. This causes software professionals to receive conflicting job performance information and hence there is a lack of clear and precise information of what is expected of them.
Cooper C et al. (1989) conducted a research on “Mental Health, Job Satisfaction, and Job Stress among General Practitioners” to identify sources of job stress associated with high levels of job dissatisfaction. For this purpose a sample of 1817 general practitioners was selected at random by 20 family practitioner committees in England. The results showed that Women general practitioners showed positive signs of mental wellbeing and were satisfied with the job. On the other hand, male doctors showed significantly higher anxiety scores than the norms, had less job satisfaction, and drank more alcohol than their women counterparts.

Khosrowpour M and Culpan O (1989) published a stress-related study “The impact of management support and education: Easing the causality between change and stress in computing environments” applied to individuals working in computer-related fields. They observed: ‘Information processing professionals see change in technology as a prerequisite for their existence, yet the speed of this change can have profound psychological and physiological effects.’

Karasek and Theorell (1990) in his book “Healthy Work: Stress, Productivity, and the Reconstruction of Working Life”. Efficient use of IT systems demands competent users with certain kind and amount of knowledge. Persons lacking necessary knowledge feel that they cannot satisfactorily handle the work demands and control their work situation, and lack of control is a well-known stress factor. This is described in the widely used stress model called the demand-control model or the Karasek model. The model subsequently became three-dimensional, by adding the factor social support (i.e. support from supervisors and colleagues). Social support has been shown to have an important effect on work related stress and health.

Igbaria M and Greenhaus JH (1992) Research conducted by them in the study “Determinants of MIS employees. Turnover Intention: A Structural Equation Model” confirms that a range of job factors can influence attitudes, causing job dissatisfaction which in turn, can influence turnover intention. It has been proved that increase in stress related factors lead to reduced job satisfaction.

Aronsson et al., (1994) in their study, “Winners and Losers from Computerisation, a Study of the Psychosocial Work Conditions and Health of Swedish State Employees’ showed that efficient use of IT systems demands competent users with certain kind and amount of knowledge. Persons lacking necessary knowledge feel that they cannot satisfactorily handle the work demands and control their work situation, and lack of control is a well-known stress factor.
S Bagnara, M Mariani and O Parlangeli (2001)\textsuperscript{27} on their study on “Quality of Working Life in Services” reported that work within the high technology and continuously facing uncertainty are potentially more stressful than others.

Javernpaa E and Eloranthay E (2001)\textsuperscript{28} in their study “Information and Communication Technologies and Quality of Working Life: Implications for Competencies and Well-Being”, there was a strong consensus that IT professionals would need to continuously enhance their skill sets in order to remain employable in the IT industry Work associated with greater task variety, task discretion and skill development opportunities foster the competency development among the workforce.

KS Rajeswari and RN Anantharaman (2003)\textsuperscript{29} in their study “Role of need for clarity in relation between occupational stress and work exhaustion among software professionals”, made on 156 responses obtained from software industry in India. They found that need for clarity served to moderate the relationship between stresses caused by threat of obsolescence, work family interface and technical constraints and work exhaustion.

KS Rajeswari and RN Anantharaman (2003)\textsuperscript{30} in their study “Development of an instrument to measure stress among software professionals: a factor analytic study ” published in SIGMIS CPR April 2003 investigated sources of negative pressure among software professionals, from the perspective of the software development process. The results indicate that stress resulted from fear of obsolescence and individual team interactions accounted maximum

KS Rajeswari and RN Anantharaman (2005)\textsuperscript{31} in their study “Role of Human-Computer Interaction Factors as Moderators of Occupational Stress and Work Exhaustion” found that IT professionals have long work hours with different time zones, total team work, task to be completed on deadline with perfection as per client needs, which requires interpersonal, technical, and organisational characteristics. These characteristics lead to occupational stress and work exhaustion.

Gopal Mahopatra (2005)\textsuperscript{32} published an article in ‘The Hindu’, the main reason for many IT-Professionals having lopsided work-life balance is the long working hours. They are left with little time for themselves or their families and this tells on their mental and physical health. Although, IT-Professionals are living in higher middle class criteria, they are not exactly on the spot when it comes to a good work-life balance and a happy marriage.
VP Sudhashree, K Rohit and K Srinivas (2005) in their study “Issues and concerns of health among call center employees” talks more about the Burnout Stress Syndrome (BOSS), which is the result of continuous noise pollution by way of sudden high frequency acoustic shocks and musculoskeletal disorders.

Latha G and Panchanatham N (2007) in their study “Job Stress Related Problems and Coping Strategies” 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.

2.4 REVIEW OF LITERATURE BASED ON EFFECTS OF JOB STRESS

Keniston (1965) in his study on “The uncommitted: alienated youth in American society” has explained that alienated individuals often appear to be angry & depressive. In the early stage of burnout individuals experience perceptual feelings of anger when calm, accepting & easy going individual begins to burnout he becomes chronically angry. Individual’s anger often becomes more focused if the work stress of individuals is unabated.

Anderson BO (1971) in the findings of study “Reactions to a study of bureaucracy & alienation” done by emphasized that when individual perceives to have lost his/ her control over his self and constrained to act according to the forces external to him/her feelings are alienated.

Freudenberger (1977) has examined the effect of stress in his study on “Burnout; The occupational hazard of the child care worker”. He has concluded in his study the stress experienced by child care worker is found to increase fatigue & turn the individual cynical & left with burnout.

Lazarus RB and Launier R (1978) in their study on “Stress-related transactions between person and environment”, emphasizes that, if the individual experiences job stress for any period of time, he or she likely becomes demoralized and he or she is ineffective in problem solving.

Maslach C and Jackson SE (1979) in the findings of the study, “Burned-out cops & their families” pointed out that burn out people lose interest in their job and develop intentions to leave their job.
Thomas G Cummings and Gary L Cooper (1979)\textsuperscript{40} in their study, “A cybernetic framework for studying occupational stress” analysed the impact of job stress on the employees’ physical health. However this study could not throw light on the impact of job stress of employees on their work.

Cherniss C (1980)\textsuperscript{41} in his study “Staff burn out: Job stress in the Human services” argues that psychological stress is more disruptive than motivating the workers.

Veninga RL and Sparadlay JP (1981)\textsuperscript{42} in their study on ”The work stress connection: how to cope with job burnout” revealed that the individual who perceives stress higher will find less relief and burn out more easily; perception of tension with regard to family pressures, environmental demands and work problem are two stress points for many individuals.

Devi SR (1980)\textsuperscript{43}, conducted a study on 170 bank employees, consisting of 70 officers and 100 clerks “A study of role conflict in relation to anxiety, alienation & probabilistic orientation” does not have significant effect on role conflict.

Singh AP and Singh HC (1980)\textsuperscript{44} in their study on “Occupational stress, security – insecurity & job involvement of first level industrial supervisors, investigated the influence of occupational stress & security – insecurity on job involvement of first level industrial supervisors” showed positive relationship between occupational stress and job involvement.

Holt P (1985)\textsuperscript{45} in his study on 134 elementary regular & special education teachers titled,” A study of the interaction levels of occupational stress, degree of burnout & personality hardiness in female elementary teachers” revealed that those who had high levels of occupational stress and a low level of burn out felt more alienated. The findings also suggested that alienation was significantly correlated with levels of stress, emotional exhaustion and physical illness.

White head JT (1987)\textsuperscript{46} in the study on “Probation officer job burnout: A test of two theories” revealed that stress and burnout are not synonymous rather excessive and prolonged levels of job stress produce strain and result in burnout on the part of individual if the coping mechanism adopted by the individual is improper.

Chatterjee A (1992)\textsuperscript{47} in his study on “Commitment cognitive appraisal on occupation stress” conducted a study on 300 technical personnel at the middle level of management in the heavy engineering industry. On the basis of their score on self
efficacy, they were divided into high and low efficacy categories. When their occupation stress score was compared, high efficacy employees experienced greater occupational stress than their low efficacy counterparts.

Singh AK and Sehgal P (1995) in their study on “Men and women in transitional pattern of stress, strain and social relations” have explained that gender and age difference also contribute to differences in experiences of stress. They collected data on 172 respondents. Their results showed that male showed greater somatic problems while female showed greater anxiety.

Mohammad Jamal (1997) a research study on “Job stress, satisfaction & mental health: An empirical examination of self employed & non-self employed Canadians”- had examined the differences between fulltime self employed & organisationally employed Canadians in a large metropolitan city on the east coast with regard to their work and non-work experiences. From the analysis, it was found that self – employed experienced higher job stress than the non-self employed.

Hans Bosma, Richard Peter, Johannes Siegrist & Michael Marmot (1998) in their work on “Two alternative job stress models & the risk of coronary heart disease” examined the association between two alternative job stress models-the effort reward imbalance model and the job strain model and the risk of coronary heart disease among male and female British civil servants. The findings of the study indicated that the imbalance between personal efforts and rewards are associated with the higher risk of coronary heart disease.

Ashok K Sahni (1998) in the study on “Stress in managers and professionals in Indian organisation” revealed that low stressed group compared with high stressed group tends to be significantly higher in respect of job commitment, self esteem, satisfaction and human relations. According to the researchers, they were more flexible in their attitudes and values and experience lesser conflict with the superiors.

Loulu (1999) in his study on “Work motivation job stress & employees well being” investigated the relationship between occupational stressors (Job demands, discretion & conflicts) and strain and impact of two potential moderating variables: work motivation and social support from colleagues, superiors, friends and families. 300 work adults were interviewed. Intrinsic motivation was positively related to job satisfaction. Whereas, extrinsic motivation was positively related to depression. Both supervisors support and family support were negatively related to depression.
Mishra PK and Rani DL (2001) in their study on “Occupational stress among working women in emergency services” collected data from 144 doctors & 82 nurses drawn from various hospitals. Their results showed that nurses experience greater stress in the job than doctors.

Cleopatia A Veloustson and George G Panigyraksib (2004) in their work, “Consumer brand managers’, Job stress, job satisfaction, perceived performance and intention to leave”, revealed that increased role stress is associated with lower levels of perceived job performance & job satisfaction. But its influence on the intention to leave was not significant.

Andrew Marantz (2006) in his article U.Mississippi: Editorial: “Stress management is more important than ever” stated that common reactions to stress include eating or avoiding food, smoking, panic, drinking or having emotional breakdowns. The author suggested developing positive attitudes, finding a friend or mentor who would listen to one’s problems on a regular basis.

2.5 REVIEW OF LITERATURE BASED ON EFFECTS OF JOB STRESS AMONG SOFTWARE PROFESSIONALS

Maslach C and Jackson S (1986) which seeks to elicit a respondent’s level of burnout using three dimensions namely emotional exhaustion, depersonalization, and personal accomplishment.

Wastell D and Newman M (1993) present an eclectic model of work-related stress and organisational behavior similar to the one above, cast in cause-effect terms “The Behavioral Dynamics of Information System Development: A Stress Perspective”. It identifies Sources of Stress at work (physical working conditions, role factors, interpersonal conflict, over/under promotion, job insecurity and organisational change). These sources interact with Individual Characteristics, Organisational Context, and Work Group Factors, yielding Individual Symptoms (e.g., poor health, absenteeism, resistance to change, ego defense mechanisms) as well as Group Symptoms (e.g., group think, internecine strife).

Bergkvist U (1993) on the study “Health Problems during Work with Visual Display Terminals” reported problems in IT-supported work are well known and well documented. The main symptoms are visual discomfort, musculoskeletal disorders (repetitive strain injuries, RSI) and stress-related symptoms.
Lewis S (1997) on “An International Perspective on Work-Family Issues” argues that the advantage of being able to work anywhere and at anytime has blurred the boundaries of work and leisure hours. Ironically, with IT revolution and intensified virtual communications, workload and working hours among the workforce have increased. The extended function of IT as a communication tool necessitates employees to distinguish between significant and insignificant information. This could increase the intensity of work because the information overload through e-mail consumes a considerable amount of time. Therefore, IT professionals to some extent are required to work long hours; hence compromising their personal time will lead to an imbalance between work and non-work life.

Allen et al., (2000) on “Consequence Associated with Work-to-Family Conflict: A Review and Agenda for Future Research” says that flexible scheduling of work hours which supposedly contribute to balance work and family relationship, which may create a conflict. Such a work arrangement demands the IT professionals to be committed with work whenever possible and hijack them from joining non work related activities. A meta-analysis has confirmed that conflict between work and non-work life is associated with impaired psychological well-being and other negative outcomes.

Huarng AS (2001) in his study on “Burnout syndrome among information systems professionals” found that IS professionals reported higher levels of emotional exhaustion than police and nurses. In particular, their emotional exhaustion was found to be lower than that of teachers, welfare managers and hospitality employees. Similarly, for depersonalisation, it was revealed that IS professionals had higher burnout tendencies than teachers and welfare workers but, lower than police and nurses.

Elisa JGV and AE Ellen (2001) in “An Examination of Work and Personal Life Conflict, Organisational Support and Employee Health among International Expatriates” revealed that the majority of employees suggested that their long work hours have negatively affected their personal life and family responsibilities. The portability and the connectivity of IT allow the connection of job task from remote areas. The stringent deadline on their tasks encourages the IT professionals to engage with work task for longer hours in a day. Indeed, the IT professionals are willing to sacrifice non-work related activities to accomplish the task on time.

Martinsons MG and C Cheung (2001) on ”The Impact of Emerging Practices on IS Specialists: Perceptions, Attitude and Role Changes in Hong Kong” further argue
that continuous changes in work related factors directly or indirectly affected the IT professionals. Indeed these changes demand them to perform. Thus an effective measure to handle its consequences is the responsibility of the organisations.

Blatter BM and PM Bongers (2002)\textsuperscript{64} conducted a research on “The duration of computer and mouse use in relation to musculoskeletal disorders of neck or upper limb”, indicates that the duration and the frequency of computer use have substantially increased the health risk of the users.

AK Sharma, S Khera, J Khandekar (2006)\textsuperscript{65} – “Computer Related Health Problems Among Information Technology Professionals” in Delhi - A publication in Indian Journal of Community Medicine found more on visual stress and musculoskeletal symptoms, initially being mild and temporary and later with increasing years assuming more intense and permanent nature. It also found that computer related morbidity had become an important occupational health problem and of great concern. It suggested an immediate need for the concerned authorities to collaborate and enforce suitable preventive measures.

2.6 REVIEW OF LITERATURE BASED ON STRESS COPING STRATEGIES

Gupta and Murthy (1984)\textsuperscript{66} in their work entitled “Role conflict & coping strategies – a study on Indian women” studied role conflict & coping strategies among Indian women. Their qualitative data indicated that adjustment and compromise were the most commonly used successful methods of coping.

Caplan, Naidu Tripathi (1984)\textsuperscript{67} in their work, “Coping and defence: constellations vs components” examined how patterns of coping and defense as well as their main effects influence well being. They suggested that coping may buffer the effects of stressors on well-being only when stressors are subjectively controllable.

Sen (1987)\textsuperscript{68} studied “The personal & organisational correlates to role stress & 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. However, this study did not analyse the relationship between the demographic variables and level of coping strategies.
Mishra N and Dixit S (1995) attempted to reveal the coping styles of 300 allopathic doctors in their study “Job stress, coping and burn out in medical professionals”. 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 burn out than those who use ineffective coping (i.e. above average escape style and below average control style).

Sahu Kand Mishra N (1995) in “Life stress and coping styles in teachers explored the life stress and coping styles in teachers”. The sample consisted of 120 male and 120 female teachers. The males used emotion-focused coping as well as problem-focused coping while females used only emotion-focused coping.

Upamanyu K (1997) in the study “Stress management in educated women” explored the stress management techniques used by the educated working women. The sleep and relaxation, exercise, time management, diet and yoga are the best way adopted to manage stress by educated working women.

Aminabhavi VA and Triveni S (2000) in their study “Variables causing occupational stress on the nationalized and non-nationalized bank employees” found that age, sex, coping strategies of bank employees have not influenced their occupational stress.

Pandey S and Srivastava S (2000) studied “Coping with work stress in career oriented females”. It was found from the result that teachers expressed significantly better active coping than bank employees.

Gaur SP 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. They showed a configuration of adaptation pattern of active coping. The junior level job group or junior age group is significantly more active coping, greater planfulness and has more initiative as compared to middle and senior age group or level of employment status.

Harshpinder and Aujla P (2001) in their study “Physical Stress Management among women” investigated the different physical stress management techniques utilized by women. Results showed that working women were making more use of writing dairy, standard furniture and high fiber diet as compared to non working women. The two groups did not differ significantly in the use of other techniques.
Hasnain et al. (2001) on 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). No significant difference was obtained among the coping strategies of the three groups. The two coping strategies used by these three groups were extra-persistive and inter-persistive (approach coping). In a nutshell it can be said that in all the three groups approach coping strategies were more frequently used than avoidance strategies.

Aminabhavi VA and Kamble SV (2004) conducted a study on “Work motivation and stress coping behavior of technical personnel at a railway work shop”. The sample comprised of 30 technical personnel in the age range of 30-59 years. It was found that middle –aged technical personnel had significantly higher stress coping behaviour as compared to the older technical personnel.

Aujla et al. (2004) investigated in their study “Stress management techniques used by Working women and Non Working Women of Ludhiana city” to analyse the different stress management techniques used by 75 working women and 75 non working women of Ludhiana city. Results showed that majority of the respondents in both the categories were using various stress management techniques viz. relaxation, music, prayer, recreation with family, planning etc. Planning and relaxation were most preferred techniques among both the groups.

Aditi N and Kumari B (2005) in their study, “Impact of personality patterns and employment status on psychological stress tolerance of women in Kerala” found that the stress buffering effects of friendship and social support systems seem to be a significant contributor to high levels of stress.

Randeep K and Ravindran A (2005) in “Organisational Stress and Coping as a Function of Cognitive Style” 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.

Khan et al. (2005) conducted a study on “Coping strategies among male and female teachers with high and low job strain”. The results of the present study indicate that both male and female teachers used the same strategies to cope with job strain. Significant difference was not found to exist between the male and female teachers on different types of coping strategies except the use of humour.
Bhattacharya Sand 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 coping mechanisms as preferred by them are reading books, traveling or outing, listening to music etc.

Chand P (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 before and 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.

2.7 REVIEW OF LITERATURE BASED ON STRESS COPING STRATEGIES AMONG SOFTWARE PROFESSIONALS

Folkman S and Lazarus R (1980) have suggested that men and women differ in their coping strategies when dealing with stressful situations.

Weiss M (1983) in the study “Effects of work stress and social support on information systems managers” a considerable amount of research pertaining to the antecedents and consequences of work-related stress, burnout and the exhaustion among IS professionals can be found in the normative literature

Trumbell R and Appley MH (1986) in “A Conceptual Model for the Examination of Stress Dynamics”, says, when there is a poor fit between a person stress levels and their coping capacity, adjustment strategies are likely to be ineffective and negative health outcomes can occur. It is generally accepted that matching the type of stress with an appropriate coping strategy would be most effective and thus, beneficial to health, while use of an inappropriate coping strategy would be less effective and therefore, detrimental to health. This could lead to development of intentions to leave the organisation.

Lim VKG and Teo TSH (1996) in “Gender differences in occupational stress and coping strategies among IT personnel” examined stress and coping strategies among IT personnel in Singapore. Their research found that women more likely to seek social
support than their male counterparts when dealing with stress. Male IT personnel, on the other hand, were likely to engage in ‘logic’ i.e., suppress their emotions and deal with stress in an objective and unemotional manner.

Wahlstedt K (2001) in his study “Work Organisational Changes as Tools to Improve Health” Coping includes the cognitive, emotional or behavioural strategies, which are used to adjust to the stressful situation. Despite decades of research, the process of coping with stress is not well understood.
References

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