CHAPTER IV

REVIEW OF RELATED LITERATURE
A review of literature not only helps the researcher in identifying variables but also in the formulation of hypothesis, a review of literature on this subject reveals a relative paucity of studies in India. This chapter is divided into five sections, the first deals with studies on role ambiguity, the second studies locus of control, the third deals with studies on quality of work life; the fourth on studies of occupational stress in general and the last section deals with studies occupational stress among the police force. In each of these sections the studies reviewed are arranged in order of relevance to the research and in terms of the year of research was carried out, to bring about the significance of the present research.

4.1 ROLE AMBIGUITY

In research relating to role ambiguity very often role ambiguity and role conflict are used interchangeably, though in the strict sense of the term, they are not one and the same. The commonality between them are so close and so interconnected, one does not err in indulging in this interchangeable use of role ambiguity and role conflict together. In this research, the term used predominately is role ambiguity, though at times the term role conflict might have been used especially in the review of literature. A review of the previous literature on role conflict and ambiguity (Rizzo, House & Lirtzman, 1970) supported the Kahn et al., (1964) theory and found both conflict and ambiguity to be clearly associated with low job satisfaction and dysfunctional behaviour due to the stress and anxiety of role pressures.
4.1.1 ROLE AMBIGUITY AND ITS CORRELATES

Most research suggests that role ambiguity is negatively correlated with job satisfaction, job involvement, propensity to leave the job and job performance variables (Singh, 1998).

Irving et al., (2003) examined the potential moderating effect of different forms of organizational commitment to relations between role ambiguity (a particular form of stressor) and job tension (an outcome of stress) in an organization that was undergoing significant change. They surveyed 225 individuals working for the public-sector organization that was being partially privatized. Results supported the hypothesis that, continuance commitment exacerbates relations between role ambiguity and job tension. Contrary to their hypothesis, affective commitment also exacerbated these relations.

In a study conducted by Mishra and Srivastava (2000) examined the moderating effects of role ambiguity on affective commitment and job satisfaction relationship. An incidental sample of 250 male doctors (age 42-50 years) were administered the Occupational Stress Index (Srivastava and Singh, 1981), the Organisational Commitment Scale (Mayer and Allen, 1984), and the Employee's Inventory (Pestonjee, 1973). Moderated regression analysis revealed that role ambiguity had a moderating effect on the affective commitment and job satisfaction relationship.

Nandal et al., (2001) investigated the relationship between charismatic leadership, self-efficacy and role-clarity. The sample consisted of 105 executives of a manufacturing organization. Conger-Kanungo 20-item scale (CK-20) (Conger & Kanungo, 1998) was used to measure charismatic leadership. Perceived role clarity
was assessed by administering the Role Ambiguity Scale and the Role Conflict Scale (Rizzo, House & Lirtzman, 1970). Self-efficacy was measured by selected items from Spreitzer Scale (1995), which was designed to assess empowerment. Results indicated a positive correlation between charisma and lack of role ambiguity. Lack of role ambiguity was related to three of the five charisma variables namely, strategic vision and articulation, sensitivity to environment and sensitivity to member’s needs. There was a negative correlation between lack of role conflict and unconventional behaviour variable. A significant correlation between lack of role ambiguity and self-efficacy was obtained. Lack of role conflict and charisma did not have a significant relationship with self-efficacy.

4.1.2 ROLE AMBIGUITY AND STRESS

Stress in the work place is increasingly becoming a critical problem for employees and employers. Research has demonstrated the direct and indirect costs of stress (Matteson & Ivancevich, 1987). Role ambiguity has been linked repeatedly with job stress and low job satisfaction (House & Rizzo, 1972; Cordes & Dougherty, 1993) and is one of the antecedents of work stress which have been most cited in research literature (Fisher & Gitelson, 1983). Various other studies like Quah and Quah, et al., (1994), studied role conflict and role ambiguity as factors causing work stress among managers in Singapore.

Sharada, N and Raju, M.V.R (2001) examined the effects of gender on stress associated with role overload, role conflict and role ambiguity. Results show that females experienced more role conflict and role ambiguity. As well, subjects aged 40 years and above experienced less role ambiguity and role overload than did younger subjects thus experiencing more stress.
Friedman et al. (2000) argued that an individual's conflict style may shape employees' social environment, affecting the level of ongoing conflict and thus his/her experience of stress. Using data from 82 staff members of a hospital affiliated clinical department, the researchers found that those who used a more integrative style experienced lower levels of conflict, reducing relationship conflict, which in turn reduced stress. Those who used a more dominating or avoiding style experienced higher levels of conflict, increased relationship conflict and stress. It was concluded that an employee's work environment is in part of his/her own making.

Mathur (1997) compared stress among 400 professional women, namely doctors, school teachers, college teachers and bank employees. It was found that doctors had scored significantly higher on all the dimensions of role stress as compared to school teachers, college teachers and bank employees and college teachers' experienced a minimum role stress in comparison to the other three groups.

In another study, Martin and Berthiaume (1993), examined stress and the Union steward's role. They surveyed 285 Union stewards and findings indicated that participants perceived a moderate amount of role ambiguity and a lesser amount of role conflict. Participants who were more motivated to remain stewards for personal reasons had both higher role ambiguity and higher role conflict.

Abdel-Halim A. Ahmed, (1978), examined the relative importance of three role variables- role conflict, ambiguity and overload as sources of stress and dissatisfaction among managerial-level personnel and the moderating effects of job enrichment characteristics on the relationship between role stressors and intrinsic job satisfaction. Data was collected from a sample of 89 managerial personnel of a large, heavy equipment manufacturing company in the Midwest. Results showed that role
ambiguity had the strongest relationships with role conflict and between role ambiguity and role overload, but not role conflict and job characteristics.

On the other hand, Weston et al., (1998), revealed a significant relationship between role ambiguity and stress among 17 intern paralegals who were experiencing stress.

According to Dass, S.L, (1981), tolerance for ambiguity was found to have positive correlation with self confidence and emotional stability. Intolerance for ambiguity was rooted in man's basic anxiety. Those who have high a degree of intolerance are reported to have lack of delegation, indulge in over supervision and low interpersonal competence. They are talkative, dogmatic and insensitive to feedback. They attach too much importance to the peripheral aspects of their jobs. Tolerance for ambiguity can be improved by individuals having a high regard for their jobs, performing their jobs with interest and enthusiasm and benefiting from varied experiences.

4.2 LOCUS OF CONTROL

In recent years, locus of control has been recognized as an important variable in the process of explaining human behaviour. Locus of control has been used to predict a wide range of behavior and in general, research indicates that an internal locus of control is an advantageous personality trait (Lefcourt, 1982; Rotter, 1966).

In a very interesting research, Rhee and Gatz (1993) studied cross-generational attributes concerning locus of control beliefs. They examined age differences and contribution of age differences in locus of control orientation for 60 college students and 97 adults, aged between 65-85 years. Findings showed that both age groups...
misattributed levels of control orientation to the other groups when compared to that groups self-rating. Older adults endorsed more internal beliefs than did college students. College students viewed older adults as more external than older adults viewed themselves, while older adults viewed college students as more internal than students self-rating indicated.

Spector et al., (2002), collected data on locus of control, job satisfaction, psychological strain, physical strain and individualism/collectivism from 5,185 managers in 24 geopolitical organisations. Results supported the hypothesis that the salutary effects of perceived control on well-being were universal. Further, the individualism/collectivism level of each sample did not moderate the magnitude of correlations of locus of control with measures of well-being.

Kopp et al., (1993) also opined that, locus of control also plays an important part in well being of an individual. They examined the relationship of multiple roles and internal-external locus of control with psychological well-being among 162 women returning to school at a community college. Results indicated that participants occupying two or three of the roles, of partner, mother and paid employee were happier than those occupying one or none.

In a study in India, Wadhwa, (1982) studied the internal-external locus of control in Indian sample of Hindu male students and American male students. For the US sample, Rotter's data on male students studying elementary Psychology course at Ohio State University, were used. Mean and standard deviation of the scores on Internal-External Scale indicated that the differences between the two mean scores were significant at .05 level. The results indicated that the Indian college students
were of the belief that they had more external control than their American counterparts.

In another similar study, Kureshi and Hussain (1981) explored the locus of control among Indian, Iranian and Palestinian students. 75 undergraduate and post graduate Indian, Iranian and Palestine were administered Rotters Internal-External Scale. The groups were matched with respect to number, age, level of education, level of proficiency in English (the medium of the test), religious faith and socio-economic status. Results indicated that, the amount of internal control was significantly higher among the Palestinian than the Iranian participants, no significant differences were found to exist between the Palestinian and Indians. The lower mean scores of the Indian participants as compared to the Iranian participants suggests greater internality in the former group.

Locus of control is also related to personality variables, human behavior, achievement, stress, motivation, personal adjustment, hostility, problem-solving skills, and self-defeating attitudes (Enger et al., 1994; Kulas, 1996; Payne & Payne, 1989; Daniels & Guppy, 1992; Howerton et al., 1993; Gaziel & Weiss, 1993).

In one study, Spector and O'Connell, (1994), studied the contribution of personality traits, negative affect, locus of control and Type A personality pattern to the subsequent reports of job stressors and job strains. Personality variables (negative affectivity, locus of control and two components of Type A behaviour) were assessed in a cohort of graduating college seniors. The assessment was used approximately one year later to predict reports of job stressors (autonomy, role ambiguity, role conflict, workload, constraints and interpersonal conflict) and job strains (job satisfaction,
work anxiety, frustration and somatic symptoms), for all variables, except work
frustration, personality was a significant predictor.

Paton and Yeh (1973) investigated the concept of one's sense of locus of control or
the belief that locus of control depends upon one's deliberate behaviour as opposed to
fate, found no significant associations. Similarly no significant association was found
between sex and locus of control or between family background and locus of control.
The results however indicated that there was a significant association between
ethnicity and locus of control. Black students tended to have lower internal locus of
control than white students.

4.2.1 LOCUS OF CONTROL AND GENDER

Most of the early studies on gender differences in Internal-External scores failed to
support presence of such differences. However, work by McGinnies et al., 1974;
Parson and Schneidewer, 1974, found small differences in favor of greater externality
in women. However, the difference between early research and more recent studies is
due to change in cultural role expectation in men and women are hard to assess.

Results on gender differences in locus of control have varied. Some studies found that
females have more external locus of control than do males while other studies did not

Raja and Kuppa (1980) studied 225 males and 283 female graduate students of four
colleges in Madras city. Locus of Control Scale and the IPAT Anxiety Scale were
administered. Results indicated that there was no significant relationship between
external and internal as well as between boys and girls in the level of anxiety.
Rotter (1966) reported that women scored significantly more external than men, and this was replicated by Cellini and Kantorowski (1982). However, no significant sex differences were reported by Strickland (1977).

Beck (1977) found no sex differences in either internality or lack of effort attributions; and Nicholls (1975) found no main effect in sex difference in attributions of failure due to lack of effort.

4.2.2 LOCUS OF CONTROL AND PERFORMANCE

Since locus of control is a generalized belief regarding control over one's own life v/s a general belief in individuals ability to control their environment, it should have implications for all walks of life including the work setting. Using locus of control, work behaviour may be explained in terms of whether employees perceive their outcome as controlled internally or externally. Employees who perceive external control consider that their outcomes are controlled by external forces and employees who perceive internal control consider that it is because of their ability, skill or effort. This differential perception of their outcome may have an impact on their performance and satisfaction.

Locus of control has been used to predict a wide range of behavioral pattern and in general research indicates that an internal locus of control is an advantageous personality trait (Robinson & Shaver, 1969; Nowicki & Barnes, 1973; Lefcourt, 1982; Rotter, 1966).

An individual's belief about locus of control has been frequently studied as an antecedent to important social behaviors and psychological states. One set of
behaviors that have received extensive study concerns achievement related activities (Findley & Cooper, 1983).

A positive relation between locus of control, beliefs and achievement is logical and intuitively appealing. Logically, if success is positively valued, people who feel more able to control outcomes would exert more effort. Also, internals and externals would (and do) react differently to success and failure. Internals take pride in good outcomes and feel ashamed in bad outcomes, whereas externals experience less intense emotions (Phares, 1976). This difference should enhance the relative attractiveness of the success experience for the internal. In order to study this effect, Pandey and Tewary, (1979), measured 44 applicants of a reputed financial corporation who wanted to start their own small scale industries. They used Rotter’s Internal-External Scale, and also Mukherjee’s Sentence Completion Test of Achievement Values. Applicants selected by the researchers showed significantly greater amount of V-Ach and more internality on the scale of locus of control. The participants above 35 years in age were found to be lower in V-Ach combined with less internality than those who were below 35 years of age.

In addition to logical appeal, a number of studies have associated internal locus of control beliefs with behaviors that affect the probability of attaining success (Findley & Cooper, 1983). For instance, Ducette and Wolk (1972) found that externals tend to exhibit less persistence at tasks. Others have found a positive relation between internality and willingness to delay rewards in order to maximize them (Bailer, 1961) and a preference to perform in skill rather than to chance situations (Rotter & Mulry, 1965). These tendencies mean that internals have a greater likelihood of achievement.
Locus of control plays a very important role in motivating an individual in task performance. This was researched by Harkins et al., (2000). They found out that, when participants were asked to strive to achieve a stringent criterion, they outperformed participants who were asked to do their best (a goal-setting effect). However, the goal-setting effect occurred only when participants were subject to experimenter's evaluation. Participants not subject to experimenter's evaluation performed no better than experimenter evaluation participants who were asked to do their best.

In another similar study, Webb et al., (1993), studied the relationship between locus of control and performance on the National Board of Medical Examiners. Their sample included 50 third and fourth year medical students of African-American Caribbean and African backgrounds from four medical schools. They completed a questionnaire consisting of Rotter's Internal-External Locus of Control Scale, a demographic survey and items inquiring about their Medical College Admission Test (MCAT) and National Board of Medical Examiners (NBME) success and medical school performance. An internal locus of control was correlated with National Board of Medical Examiners (NBME) performance whereas the more traditional index, the Medical College Admission Test (MCAT) was not.

4.3 QUALITY OF WORK LIFE

The activity of quality of work life evolved over the past 25 years, when a broad group of researchers became interested in how to influence the quality of an individual on the job experience.
With improved working conditions in the organisations, there is ample evidence to highlight the implications of autonomy and participation at work to foster the quality of work. Ritti (1970) used the result of research to support the argument that lack of opportunity to perform meaningful work is at the root of frustration among engineers. Those who have more autonomy at work place feel more satisfied with their work life. Similar findings are found by others. (Brown, 1975).

Fields and Thacker (1992) investigated potential outcomes for union involved in joint union and management quality of work life efforts to improve participants (rank and file union members) from three different quality of work life initiatives within one organisation were identified and measured at two points in time to determine what impact a joint quality of work life initiatives would have on union’s perceptions. Results indicated that, after quality of work life involvement programmes, participants perceived a higher union influence in job areas where unions have not traditionally been involved (implementing technological changes, helping improve service to customers). In traditional job areas (scheduling, shift changes and vacations) an interaction between the perception of quality of work life and union influence was noted. The findings also indicate a desire by the silent majority of union members to become involved in quality of work life initiatives.

In another study by Bocialetti (1987) it was observed that workers of relatively low seniority were benefited more than and sometimes at the expense of workers with relatively high seniority. It was also reported that in some respects, senior workers suffered negative effects whereas junior workers remained unchanged.

A unique attempt was made by Glen and Weaver (1982) to compare the enjoyment of work by full-time workers in the US (1955 and 1980). This survey noticed the net
change during the 25 years. It was found that enjoyment of work resulted largely from
the decline that grew out of changes in the orientation and attitudes workers brought
to their jobs, rather than out of changes in job conditions and nature of work.

In another similar study, Cascioli and Saba (1981) interviewed shift workers and day
workers (N=100 each) in two Italian chemical firms to assess industrial relations in
shift work organisation and their impact on social and personal conditions of workers
and innovations in work structure and environment. Based upon their analysis, they
proposed increased medical and union support for shift workers for effective
reformation in the work life.

Sinha, (1981) studied class three male employees, of 25-45 years of age from an
organization with modern technology, engaged in production of communication
equipment. 50 participants in each group, i.e., urban, semi urban and rural participated
in this study. Job Satisfaction Scale (Taylor & Browers, 1974), Job Attractiveness
Scale (Agarwal, 1976), Control and Influence Scale (Tannenbaum, 1968), Intrinsic
Motivation Scale (Lawler and Hall, 1970), Job Involvement Scale (Agarwal, 1976)
Work Value Scale (Blood, 1969), and Quality Of Life questionnaire based on
interviews on the lines of Evens and Lasseau (1950) and Sinha (1969) were
administered. A total of 112 completed questionnaires were received with a response
rate of 57% and utility rate of 60%. Results indicated that, quality of work life and
quality of life as such have a direct relationship, but this relationship varies with
socio-cultural effect implying that an individual leading a happy and contended life
will certainly have a quality of work life than an unhappy person whose life quality is
not good.
4.3.1 QUALITY OF WORK LIFE AND JOB CORRELATES

Conditions of employment do affect the quality of work life. In addition to conditions of employment there are also other job related factors like absenteeism and efficiency that affect quality of work life.

Malhotra et al., (2001) studied quality of work life and absenteeism behaviour. 250 white-collar workers were drawn from a population of two years attendance record was noted down from their office records. The results revealed that white collar workers and blue collar workers differed significantly on both quality of work life scores and absenteeism.

A study by Karrir and Khurana (1996) on 491 managers showed that age, experience and number of dependents were not significantly related to either the quality of work life-conditions (QWL-C) or quality of work life-feelings (QWL-F), where as educational qualifications, naïve v/s migrant status and income level were significantly related to quality of work life-conditions and feelings. The results indicate that managers who had higher educational qualifications experienced better quality of work life. As far as income level was concerned the managers having the income between Rs. 1,20,000 to Rs. 1, 80,000 per annum showed significantly higher quality of work life-conditions and feelings when compared to those who had the income less than Rs. 1, 20,000 per annum.

Long (1993), studied the impact of new office information technology on job quality of female and male employees, 81 clerical/secretarial (92.6% female) 89 professional (31.5% female) and 83 managerial (22.9% female) employees of 112 Canadian companies to assess the impact of new information technology on the job quality of
white-collar workers were interviewed. On the average, participants had received the new technology about 29 months prior to the interview. Results indicated that while both female and male employees experienced significant increase in job quality subsequent to the introduction of computerization, females experienced significantly larger increases than males. This occurred because clerical and secretarial employees experience much larger increases in

Nilakant and Tendon (1982) suggested that managements can initiate a number of changes in work procedures, rationalize wage structures and bring about improvements in worker amenities and working conditions as all these would lead to improvements in the quality of work life.

Kavoussi (1978) compared the unauthorized absenteeism rates in two large textile factories in Isfahan, Iran. The working conditions in the factory were unsatisfactory, unlike the control factory. Findings showed significantly higher absenteeism rates in the factory under study.

Tamowieski, D. (1973) in a survey of 2821 American managers, found that 70% of the managers were less than minimally satisfied with their present career. The study revealed that within the preceding five years nearly 50% of the surveyed executives had either changed or seriously considered changing their line of work for a more meaningful career. Further, the researcher reported that the middle level managers were highly disenchanted with the contemporary organisational work life.

4.3.2 QUALITY OF WORK LIFE AND STRESS

From documented evidence, Beehr and Newman (1978) concluded that as far as work life is concerned extreme stress is so aversive to employees that they will try to avoid
it by withdrawing either psychologically (through disinterest or lack of involvement in the job), physically (frequent late comings, absenteeism, lethargy) or by leaving the job entirely.

Occupational stress resulting from bad quality of work life predisposes the individual to develop several psychosomatic illnesses. In contrast, the absence of extreme stress would result in more satisfied, happy, healthy and effective employees. However, the stress one experiences on the job vary from mild to severe depending on one’s physiological, psychological and social make up (French and Caplan, 1973, Margolis et al., 1974).

Patnayak (2001) conducted a study on the topic, “towards building a better human resource development climate: a study on organisational role stress and quality of work life”. The two factors were types of organizations (old/new) and role positions in the organisational hierarchy (executives/non-executives). The findings revealed that there were significant differences between the executives of the old and new public sector with regard to organisational role stress and perception of quality of work life.

Tuuli and Karisalmi (1999) measured six dimensions of the quality of work life in the retail trade (N = 1,164) vs. metal industry (N = 1,435). Burnout was measured by emotional exhaustion from the Maslach Burnout Inventory (MBI). Results showed great impact of psychological job demands on burnout in both business lines. The impact of the other five indexes (conflicts, job control, work of superior, organization of work and monotonous job) on burnout were different in these two business lines.

Zautra Alex et al., (1986) investigated the relationship of job stress and task interest with two factors in work life quality of nursing staff. Results revealed that job stress
was negatively related with job satisfaction, whereas task interest was positively related with job satisfaction as a factor of quality of work life. Moreover, turnover was also predicted by both the job stress and lack of interest in the task. It was also observed that employees tended to stay at work even if the job was stressful when the task was interesting.

### 4.4 OCCUPATIONAL STRESS

Occupational stress is part and parcel of any occupation, often does not become a matter of concern except in certain specified occupations. These occupations are also considered as potential stress inducing occupations. The nature of stress in these occupations not only harms the organisation, it often damages and even eliminates the individual. Therefore, for any organisation, the factors that induce this stress are worth studying. The factors within the organisation which create this stress are not limited in number, nor is their impact constant. Therefore, identification of these factors have been and continues to be a topic of research.

#### 4.4.1 STRESS AND ORGANISATIONAL PROCESSES

The factors that induce stress of course are dependent on the organisation and its processes, which would indicate the environment in which the work is carried out, the extent of autonomy and organisational climate.

Bhowan and Kion J-Ah, (2004), found that the organisational climate plays a very important role in the experience of stress. This study examined the relationship of perceived organisational climate and stress. Seven dimensions of stress and
organisational climate were extracted through varimax rotated factor analysis. Experience of inequity, role overload and inadequacy of role authority emerged as strong dimensions of stress, whereas job difficulty and lack of group cohesiveness were work dimensions of stress. The study found significant relationship between dimensions of stress and climate indicating that employee’s perceptions of the organisations structure and process determine stress experience.

In a similar study, Gelsema, et al., (2005), examined the influence of organizational and environmental work conditions on the job characteristics of nurses and on their health and well-being. The sample consisted of 807 registered nurses working in an academic hospital in Leiden (Netherlands). The direct influence of work conditions on outcomes was examined. Job characteristics and the relationships between work conditions and outcomes were tested by means of regression analysis. The results indicated that job characteristics, such as demands and control, mediated the relationship between work conditions, such as work agreements/rewards and outcomes. By managing organizational and environmental conditions of work, job characteristics can be altered and these in turn influence nurses’ job satisfaction and distress. Nurses have been found to have especially high levels of stress.

The effect of job autonomy upon occupational stress among managers was explored by Das and Singhal (2003); they studied 300 male managers from various private sector concerns of Agra, Delhi and nearby cities by stratified random sampling technique. The Job Autonomy Scale and Occupational Stress Inventory were used. The findings of the study revealed that there were significant differences between the stress scores of managers with high job autonomy and those with low job autonomy. The managers with high job autonomy showed less stress, however, there were no
significant difference between the stress scores of managers with low job autonomy and managers having moderate job autonomy.

Overtime is associated with negative work-home interface and negative home-work interference (Van & Geurts, 2001) focused on the relationship between overtime and psychological health in high and low reward jobs and in jobs with high and low external pressure to work overtime. Data was collected for 535 full-time employees (mean age 43.6 years) of the Dutch Postal Service. Results showed that employees reporting low rewards had elevated risks of burnout, negative work-home interference and slow recovery. In addition, the combination of overtime and low rewards was negative home-work interference.

Hemingway and Smith, (1999), examined an occupation-specific model of the stress process in nurses in which specific organisational climate dimensions were hypothesized to affect withdrawal behaviours and injuries both directly and indirectly through the mediating effects of specific occupational stressors. Regression analyses on the responses of 252 nurses revealed direct climate-stressor and stressor-outcome relationships to exist, as well an indirect climate-outcome relationship.

4.4.2 STRESS AND POSITION WITHIN HIERARCHY

In any organisation, the responsibilities and nature of duties would always depend on the position one occupies in the organisational hierarchy setup. Tang et al., (2001) examined the mental health outcomes of job stress among Chinese teachers in Hong Kong. A total of 269 Chinese teachers (aged 21-60 years) participated. Study I provided cross-sectional data regarding the associations among stress resource factors, burnout and negative mental health. Study II was a six month longitudinal study.
which aimed to establish the direction of the associations among the hypothesised variables across two time points with a separate sample of 61 Chinese secondary school teachers (aged 25-49 years) results of the structural equation modelling analysis on the cross-sectional data at Time I showed that stress resource factors of self-efficacy and proactive attitude were negatively related to burnout, which in turn had a direct effect on negative mental health. Stress resource factors were also directly linked to mental health status of teachers.

O'Connor et al., (2000) distributed questionnaires assessing mental health (anxiety, depression and somatization), job satisfaction, psychological job demands and job control to 422, 28-67 year old general practitioners and 173, 23-69 year old white-collar workers. General practitioners were significantly more depressed and less satisfied with their jobs compared to the white-collar sample. Female general practitioners experienced similar levels of poor mental health and job dissatisfaction as their male counterparts. As hypothesised, high strain general practitioners exhibited significantly greater levels of job dissatisfaction and depressive symptoms (suicidal ideation, loss of sexual interest, feeling hopeless about the future) than other groups, with 38% scoring equal to or above the threshold for potential clinical depression.

Agrawal (1998), studied job satisfaction and job stress in three hierarchical ranks of employees working in two private organisations. A total of 60 employees, 20 from each rank was administered the Job Satisfaction Scale (Singh & Sharma, 1990) and the Occupational Stress Index (Srivastava & Singh, 1984). Results revealed that those who perceive themselves to be close to the management were satisfied and less
stressed than those who did not perceive themselves to be close to the top management.

Tsai (1993) examined Chinese nurse’s perceptions of their work stress. Data was based on the written answers of two open-ended questions from 137 randomly selected Chinese nurses working at three hospitals. Stressors in work situations of Chinese nurses were similar to those identified in the literature on their Western colleagues in four categories: nursing care related to patient condition, interpersonal relationships, workload and opportunity for promotion. The differences in stress reported by Chinese nurses and Western nurses relate to the greater emphasis that Chinese nurse place on the value of advanced study and interpersonal harmony.

4.4.3 STRESS AND PERSONALITY VARIABLES

The nature of stress though specific to certain organisations varies from individual to individual in the same organisation and doing the same kind of job. The individual personality factors do have a greater role in the causing of stress.

Grant and Langan-Fox, (2007), examined the role of the Big Five traits in the occupational stressor-strain relationship by investigating 211 managers. Personality, stress, coping, and strain variables were measured and analyzed with path analysis and hierarchical regression. Results indicated that the neuroticism-physical strain relationship was partially mediated by perceived role conflict and substance use and the neuroticism-psychological strain relationship were mediated by perceived stress.

According to Spector et al., (2000) interpretation of observed relations between job stressors and job stains in cross-sectional surveys is often ambiguous because of possible third variables (both stable background factors such as personality and
transitory occasion factors such as mood). In this longitudinal study, negative affectivity and strains were assessed both in college and later on the job. Stressors were assessed only on the job. Evidence was found that some background factors affected measures of job stressors and job strains in that college measures were significantly related to subsequent measures on the job. Relations between job stressors and job strains however were in most cases not affected significantly when prior strains and negative affectivity were controlled.

Srivastav and Singh (1996) examined the independent and moderating effect of Type A behaviour pattern on stress-health relationship among 200 male managers. The results revealed that the Type A behaviour pattern was positively and significantly correlated with role overload, role ambiguity, role conflict and overall job stress. Also Type A behaviour pattern was found to moderate the relationship between psychosomatic health complaints and role overload, role conflict and overall job stress and between pathogenic health habits and role ambiguity and overall job stress.

Riodan et al., (1991) found from their study on 211 shrimpers and 99 men working in land based occupations that personality variable, optimism was not an important predictor of stress but a sense of greater mastery was associated with reduced stress. They also concluded that among land-based workers optimism was negatively related to stress and greater feeling of mastery was associated with greater stress.

Kivimaki et al., (1998), examined whether hostile individuals were more vulnerable than others to health problems when faced with stressful changes in their working lives. Results show that exposure to stressors during the period of economic decline was related to increased rates of sickness absence. In men, hostility increases risk of sickness absence after exposure to stressors only in cases of absence because of
trauma. In women, hostility increases risk of absence through sickness overall and absence because of musculoskeletal disorders in individuals facing stressors such as severe organisational downsizing, high or increased levels of job demands or negative change in work.

Pandey (1998) studied the relationship between personality dimensions and organizational role stress in a public sector organization. There were no differences in the role stress of middle level managers, lower level managers and supervisors. The psychoticism-reality and neuroticism-stability dimension of personality were positively related to participants' perceived organizational role stress the extroversion-introversion dimension was negatively related to role stress.

In another study, Singh and Nath (1991) examined the effects of organisational climate, role stress and locus of control on job involvement on banking personnel. Job involvement is also related to the experience of stress.

Sutherland and Cooper, (1993) identified sources of job stress and personality factors as predictors of psychological ill-health and job dissatisfaction among 670 male and 243 female general practitioners (aged 27-73 years) in the UK. Compared to a normative sample, male participants exhibited significantly higher levels of anxiety and depression, whereas female participants compared favourably to the population norm. Job satisfaction levels were significantly lower than when they were measured in 1987, although women were less job dissatisfied than men. The main predictors of lack of mental well-being were the job stressors associated with the demands of the job and patient’s expectations, practice administration and routine medical work, role stress and the use of social support as a coping strategy.
4.4.4 STRESS AND AGE

It is not uncommon that as individual progresses in age, there is often an increase in his responsibilities, whether in the family, the society or his occupation. Therefore, age is a determining factor in understanding occupational stress. Age had no significant impact on stress levels among male and female engineers (Deosthalee, 2000).

Pravin G. Deosthalee (2000) attempted to assess the occupational stress experienced by Indian males and females working in Sultanate of Oman of different age groups, and different levels of educational qualifications. The sample for the present study consisted of 573 Indians working in Sultanate of Oman, both males and females, working in small and large organizations in and around Muscat city, who were from three age groups (< 30 years, 31 years to 45 years and > 45 years). A.K. Srivastava and A.P. Singh’s Occupational Stress Index (O.S.I.) was used to measure the stress experienced by the Indians working in Sultanate of Oman. It was found that all the three variables had impact on stress: Indian females working in Sultanate of Oman experienced more stress than that of Indian males. People who were above 45 years experience more stress whereas middle aged people experienced the least. There is direct relationship between education and stress experienced by the Indians working in Oman.

Pradhan and Mishra, (1999) explored experiences of organisational role stress perceptions of human resource development climate among 120 younger (25-45 years old) v/s 120 older (46-65 years old) executives from private and public sector organisations. Younger participants significantly differed from older participants with regard to their experience of role stagnation, role ambiguity and self role-distance,
suggesting that younger participants experienced a slightly higher degree of stress with regard to role expectation conflict. On total organisational role stress scores, there were significant differences between younger and older participants, with regard to perceptions of human resource development climate; there were significant differences by age but not by public v/s private sector.

Reddy and Ramamurthi (1990) examined on the job stress of middle aged and elderly executives, they found that executives within 41-50 years of age had more stress than those in 51-60 years. Further, they stated that stress is attributed to working conditions, role in the organisation, relationship with subordinates, organisational structure and home-work interface.

The findings of Bhatnagar and Bose (1985) did not confirm the general impression that age gives person strength to take stressors in his stride or that advancing age makes a person more nervous.

4.4.5 STRESS AND GENDER

The ways in which males and females respond to stimuli are often different. Stress is also a response to various stimuli in an occupation. Therefore, the response of male and female employees in the same organisation would differ and therefore the levels of stress.

González-Morales, et al., (2006), investigated the positive value of women’s interpersonal way of coping by examining coping benefits on distress depending on gender socialization in the Spanish cultural context. The participants were 332 men and 129 women employed by financial companies. Results showed that women used social support coping more frequently than men, whereas there were no gender
differences in the use of direct action coping. Interactive effects of gender in the relationship between coping strategies and distress and psychosomatic complaints were found; social support coping was only beneficial for women, whereas direct action coping was more beneficial for men than for women.

In another related study on work-related stress and adaptation pattern among women professionals by Gaur et al., (2000) explored the relationship between work related stress and adaptation pattern among women professionals. The sample consisted of teachers, doctors, bank officers and bureaucrats (age 25-55 years). The Work-Related Stress Scale (Gaur, 1996), the Indian Adaptation of Behavioural Attributes of Psychosocial Competence (Tyler and Pargament, 1984), Rotter’s Internal External Scale (Rotter, 1966) and Rotter’s Trust Scale (Rotter, 1967) were used to assess stress and adaptation patterns. Results revealed a moderate level of overall work related stress. The four groups experienced differential levels of stress in career development and stressors specific to working women. The groups did not differ significantly from each other with regard to adaptation pattern.

In another similar Indian study, Pareek and Mehta (1997) compared three groups’ of working women, gazetted officers, bank employees and school teachers on the types of role stress experienced by them. The results revealed that gazetted officers and bank employees scored significantly higher on all the dimensions of organisational role stress, when compared to teachers.

Tharakan (1992) conducted a study on 90 technocrat-working women (doctors, engineers and lawyers) and 90 non-technocrats working (clerks, officers and teachers) and compared their stress level and job satisfaction. He found that professional
working women experienced greater work-related stress than that of non-professional working women.

Akinnusi (1994) reported that women have less of Type A personality and show greater behavioural stress than men. Educational attainment and level on the organisation are positively related to organisational stress, while marital status is negatively related to stress. Women tend to relieve stress by talking while men mostly by exercise, smoking and drinking.

Barnes et al., (1999), examined the relationship of five economic variables (partner working, income level, saving, flexibility and education) to three stress-related variables (satisfaction, fulfillment and stress) measured on 130 employed married 19-60 year old women with children. Participants completed the mother and marital role satisfaction scale adapted from G. Parry and P.War (1980), the mother work role fulfillment scale adapted from J.V Mitchelle (1983) and physical indicators of stress subscales. Results suggest that savings or regular contributions to savings and the middle level of educational status were significantly associated with poor stress outcomes relating to work role fulfillment, marital and mother role satisfaction, physical indicators of stress among employed, married women with children living at home. The more long-term assets of maintaining savings were tied to positive scores on all the stress response profile variables.

Chattopadhyay and Dasgupta (1999) compared stress and job satisfaction between married and single female executives but found no significant difference between the two groups as concerned to role stress and job satisfaction.
Golderhar et al., (1998) examined the impact of a number of job stressors including sexual harassment and gender-based discrimination on female construction workers level of job satisfaction and psychological and physical health. Results from a telephone survey with 211 female labours indicated that having responsibility for others safety and having support from supervisors and male co-workers was related to greater job satisfaction. Increased reported psychological symptoms were also related to increased responsibility as well as skill underutilization, experiencing sexual harassment and gender based discrimination from supervisors and co-workers and having to overcompensate at work. Perceptions of overcompensation at work and job certainly were positively associated with self-reports of insomnia. Finally, sexual harassment and gender discrimination were positively related to reports of increased nausea and headaches.

Ibrahim et al., (2001) investigated the effects of gender and high strain jobs on self-rated health for employed Canadian residents. 4,230 males and 4,043 females (aged 18-64 years) completed the Canadian National Population Health Survey concerning self-rated health, work categories, work stress, home/family variables, demographic factors, personal/social resources, non-work stressors, health behaviours and illness. Results showed that 70% of female participants and 73% of male participants rated their health as very good or excellent. Compared with other females, women in high-strain jobs were 1.7 times more likely to report poor or fair self-rated health than very good or excellent health. High job insecurity was significantly associated with good vs. very good/excellent health for female participants and poor/fair vs. very good/excellent health for male subjects. Both males and females in more physically demanding jobs were consistently less likely to report poor/fair health or good health instead of very good/excellent health. Female participants who were single parent
were 2.3 times more likely to report poor/fair health vs. very good/excellent health. Medium and high levels of self esteem and sense of coherence were associated with lower odds for reporting poor/fair and good health rather than very good/excellent health for both genders.

Soumi 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. The 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.

Rout, Usha (1999) compared job stress, job satisfaction and mental well-being of 130 male and 75 female general practitioners (GPs) in a questionnaire study. Female general practitioners showed positive signs of mental well-being in contrast with a normative group. Conversely, male doctors showed significantly higher anxiety and depression scores than the norm. Although there were no significant differences between male and female general practitioners in the job satisfaction scale, both genders were unhappy about their rate of pay, hours of work and amount of work they do. Multivariate analysis disclosed three job stressors that were predictive of high levels of job dissatisfaction for both male and female general practitioners; these were; time pressure/interruption, working environment/communication and career and goal achievement.

Fontana and Abouserie, (1993) measured, stress levels, gender and personality factors in teachers. They administered D Fontana’s (1989) Professional Life Stress Scale and
the Eysenck Personality Questionnaire to 95 teachers (51 women and 44 men). Results revealed that 72.6% of the sample experienced moderate levels of stress and 23.2% experienced serious levels. No significant gender related differences in stress levels were found.

4.5 POLICE STRESS

In the recent years, there has been a spurt in research on occupational stress in police. There is considerable evidence suggesting that more enforcement officers are killed by job related stress than by criminals. For every police officer slain by an assailant in the line of duty, hundreds perhaps thousands succumb to the insidious long range effects of job induced pressures, (Territo and Vetter, 1981). The destructive effect of stress on police personnel has been given due recognition in the Western countries and steps have been taken to control the menace of police stress. A lot of research emphasizes that the job of policing is an extremely stressful one.

The job of being a policeman is unique. It is one of the few occupations that a man engages in for which he is feared, sometimes hated, occasionally reviled or even assaulted in the ordinary performance of his duties. The present review of literature will attempt to emphasize the manifestations and symptoms of strain that facilitates the recognition identification and delineation of the stressors experienced by police officers.
4.5.1 RECOGNITION OF THE FACTORS OF POLICE STRESS

Individuals differ in their susceptibility to the effects of stress. Stress tolerance refers to the degree of stress the individual can tolerate without undergoing disorganization or decomposition. In general, both the characteristics of the individual and the external resources and supports available to an individual determine their level of stress tolerance. According to Kaslof (1989), the emotional, psychological or physical stress experienced by police officers may vary by career stage and by ability to handle stress. Savery, Soutar and Weaver (1991), concluded,

... it seems that sergeants and experienced constables are the ranks most at risk and these groups are stressed while the more junior officers who have general patrol responsibilities seem least stressed.

As a result of the growing concern about stress and how police personnel deal with it, several studies have been conducted concerning its effects on the police officers.

Job stress exacts a heavy toll in terms of the physical, psychological, social and job related consequences for the individual. The first constructive step toward coping more effectively with stress is to recognize its presence (Territo & Vetter, 1981). The fifteen most prevalent stress warning signs of law enforcement which would facilitate the recognition of the problem by the police administrators and supervisors have been enlisted by the Psychological Services Unit, Dallas Police Department as follows, sudden changes in behaviour, usually directly opposite to the usual behaviour, gradual change in behaviour but in a way that points to deterioration of the individual, erratic work habits, increased sick time due to minor problems, inability to maintain a train of thought, excessive worrying, grandiose behaviour, excessive use of alcohol on duties, fatigue, peer complaints, excessive complaints, inconsistency in complaint
pattern, sexual promiscuity, excessive accidents and or injuries and manipulation of fellow officers and citizens.

Malach and Keinan, (2006) measured a representative sample of Israeli Border Police officers (N=497), a total of 18% were interviewed and responded to a questionnaire at the height of the Palestinian violent uprising and at a time of unusually high stress. At the top of the list of stressors reported by the officers were: low salary, lack of resources and overload. This was significant in the light of the finding that 74% reported a traumatic experience such as a terrorist attack, 52% reported high or very high levels of stress as compared to 32% reported by blue police officers their burnout level was also high (4.15 as compared to the national burnout level of 2.8 and 3.05 found during the same period of time among blue police officers). However, despite the high stress of their work, the officers’ evaluation of their work was high and they expressed satisfaction from their work.

Thompson et al., (2006), studied sources of stress in police women. Sixteen sources of felt stress were rated by 206 policewomen. Exploratory factor analysis suggested a three-factor model of operational, interpersonal and management/organizational stress. Confirmatory factor analysis with a second sample of 213 policewomen confirmed the three-factor structure. Interpersonal stressors accounted for most variance in ratings of felt stress. This suggested that the interpersonal climate experienced by female officers contributed significantly to rated stress levels.

Roberts and Levenson (2001) examined the impact of job stress and the physical exhaustion on the physiological and subjective components of emotional responding marital interactions between 19 male police officers (mean age 36.5 years) and their spouses (mean age 34.2 years). Couples completed 30-day stress diaries and
participated in four weekly laboratory interaction sessions. During interactions on
days of greater stress, both spouses were more physiologically aroused, husbands
reported less positive and more negative emotion and wives reported less emotion
(both positive and negative). On days of greater exhaustion, husbands were more
physiologically aroused. The findings indicated heightened risk or poor marital
outcomes by which stress and exhaustion can negatively impact marriage.

Lim et al., (2000) examined the perceived job image of police officers in Singapore
and its differential effects on their work-related attitudes (job satisfaction,
organisational commitment and intention to quit). The authors obtained data from
questionnaire surveys and focus group interviews. Perceived job image consisted of
four dimensions namely, prestige, integrity, competence and non-routine job nature.
Results of hierarchical regression analyses suggested that the first two dimensions of
the perceived job image construct were salient in affecting the police officers work-
related attitudes.

(SAPS) in the Western Cape area. A preliminary exploration of stress in the 91 South
African Police Service members (aged 21-53 years) in the Cape Peninsula completed
a questionnaire consisting of Spielberger’s 60 item Police Stress survey and a 12 item
Likert scale identifying potentially stressful areas specific to the South African
context. Results showed that the South African sample had a greater degree of stress
than the USA sample (Violanti & Aron, 1994). Results also indicated that, the way in
which the Police organisation operates in South Africa creates stress in addition to the
inherent pressure already existing as a result of the nature of police work.
Savery, Soutar and Weaver (1991) in a survey of the Western Australian Police force found that stress and its outcomes affected many police officers. Further analysis revealed that the policeman in the physically stressed group were often the older officers while the unstressed group were younger officers. The unstressed group contained the highest percentage of recruits and probationary constables and its members were more likely to be involved in general patrol duties, suggesting that they had the least experience in policing. The physically stressed group had the highest percentage of sergeants and commissioned officers; also, the stressed groups were also likely to be constables who tended to hold negative views about success in their jobs and had lower levels of satisfaction than their colleagues in other groups.

Coman and Evans (1991) studied stressors facing Australian Police in the 1990’s and suggested that Australian police officers like their counterparts in the US and UK faced a number of job content and job context stressors which made policing a highly stressful occupation. Job content events included organizational structure and communication, supervisory practices, career planning concerns, work environment which stresses detachment from others, suspiciousness toward the community and cynicism regarding the job. In addition, job context factors which police encounter are the daily prospect of being exposed to dangerous uncontrolled and anxiety provoking situations which may result in death or physical injury to officers or innocent bystanders. These acute stressors may compound the already high levels of stress officers feel as a result of daily hassles in the job. It is the combination of job content and job context stressors which makes policing a potentially high stress occupation. The fear of a violent attack is a constant worry and the threat of disciplinary action arising from custodial duties only added to the anxiety felt by the officers. According to a survey conducted by the University of Wales backed by the North Wales Police.
officers said they suffered stress symptoms including lack of appetite, loss of sleep and inability to settle and relax, irritability with their families and friends and a feeling of hopelessness or being close to the edge. One in ten had already needed medical treatment for stress related illness.

In another study by Volcano et al., (1984), on the Canadian Police officers, revealed high prevalence rates of psychosomatic symptoms and conditions. The 571 Canadian Police officers completed demographic and health symptom self report inventories which included the following symptoms and conditions: headaches, indigestion, constipation, nervous stomach, stomach aches, diarrhea, high blood pressure, asthma, ulcers and colitis. The participants reported a greater frequency of psychosomatic symptoms and conditions than the previously tested general population samples in Canada, indicating that occupational stress of police work could be a contributory factor in these elevated rates.

4.5.2 STRESSORS RELATED TO POLICE WORK

The empirical evidence and observations by researchers substantially support the validity of the statement that policemen as an occupational group are a stressed lot. The presence of various warning signals and symptoms of strain in the police population the world over highlights the importance of a proper diagnosis, a description of the various categories of stressors, categorization of the police subgroup differing in susceptibility to job stress.

The initial attempts to define sources of stress in police work relied upon personal experience and observations. Among the first publications was that of Symonds (1970) who drew upon his experience of seven years in the New York City Police as a
The first category of nature of police work included negative response of the public, demands for good judgment and flexibility in stressful unpredictable situations, maintaining a constant state of ready alertness and functioning in public view.

The second category of nature of police organisation included quasi-military structure of police and problems concerning law enforcement, promotions, interdepartmental orders, assignments, hours of duty among others.

Dishkin (1986) discussing the police burnout syndrome mentioned job pressures including the responsibility of protecting the public, the inactivity/crisis see-saw, internal departmental conflicts, the maintenance of macho defenses, bipolar thinking, emotional distancing from others, poor diet and lack of a regular exercise programme to help discharge internal pressures as well as the generally negative public image of the police officer. It was emphasized that such cumulative pressures can be more emotionally, psychologically and physically debilitating than the risk that an officer may be injured or perhaps even be killed in the line of duty.

Gudjonsson at al., (1985) investigated life event stressors in over 100 British police officers. In terms of stressful events, the police reported promotion, trouble with their own children and trouble with superiors at work as the most frequent stressful life events experienced in the previous year. Subsequently, Gudjonsson and Adlam (1985) adopted an individually rated a list of potentially stressful situations on a scale from 0 to 100 (high score equated wit high stress) a different procedure, 93 senior British police officers of the rank inspectors or above. Five situations which the officers rated
as potentially most stressful were compared with responses of five main critical life events in an American police reported by Swell (1983). Following were the views of extremely stressful situations.

British Police (Gudjonsson & Adlam, 1985), being taken hostage by terrorists, confronting a person with a gun, being taken hostage in a crime, negotiating over hostages and dangerous or violent confrontation

American Police (Swell, 1983), violent death of a partner in the line of duty, dismissal, taking a life in the line of duty, death of a colleague on duty and departmental inquiry

Gudjonsson and Adlam (1985) expanded their research still further with a study comparing the occupational stressors of probationary constables, station sergeants and senior officers. It was found that overall the probationary constables and the sergeants reported significantly higher level of stress. The probationers more frequently reported dangerous or violent confrontations and dealing with messy car accidents, the senior officers most frequently cited paper work and job overload as causing stress. Both junior and senior police officers nominated the following factors as stress reducing, better training in how to cope with demanding situations, greater support from senior colleagues, better familiarity with police procedures, improved police-community relations and fewer bureaucratic obstacles.

Most of the law enforcement stressors can be grouped into four broad categories as done by Swanson and Territo (1983). These are organizational practices and characteristics, criminal justice practices and characteristics, public practices and characteristics and police work itself.
Coper et al., (1982) investigated the source of stress among 200 British supervisory officers of the rank of sergeant, inspector, chief inspector, superintendent and chief superintendent. The study assessed physical health, mental health and sources of work stress for all ranks. The following were identified as work stressors of the police namely, work overload, lack of personal recognition and frustration of ambition, perceived unnecessary obstacles which inhibit the police function, autocratic management consequences, effect of perceived police/public relations, work function/environmental interface, short term high intensity police stressors, responsibility for a police unit and complaints against police.

In a review of research literature on police stress, Terry (1981) distinguished four types of stressors:

1. External stressors including frustration with the workings of the criminal justice system such as perceived light sentence for offences, unfavorable public opinion of the police, poor media coverage and dislike of administrative and political decisions which are seen as interfering with the job of policing.

2. Internal stressors are mainly organizational in nature including discontentment with training equipment, promotion prospects, career structure, amount of paper work and level of pay.

3. Task related stressors including fear, danger, exposure to distressing events such as accidents and child abuse and work overload.

4. Individual stressors including concern about personal competence success and safety.

Hillgren (1976) polled 20 police chiefs and sheriffs at a law enforcement seminar and asked them to identify stressors they thought were affecting their line personnel and
also those that weighed heavily on them as chief administrators. The major stressors they mentioned are listed below:

Major stressors of line personnel included administration, role conflict, double standards, courts, peer group pressure, social exclusiveness, home life, public opinion versus sworn duty and supervisors.

Major stressors of Chief Administrators included imposing discipline, communication difficulties, public versus personal (conflicting) demands, performance/conduct (of line officers), change in law enforcement, decision making process, news media, recruitment (pay of officers) and limited authority (restricted) by higher officials and laws.

While working with the San Jose Police Department, Eisenberg (1975) was able to identify numerous sources of psychological stress that were basically reflections of his personal observations and feelings while performing the functions of a patrol officer for approximately two years. Over 30 alleged/implied sources of psychological stress were briefly discussed and classified into six categories namely:

1. Intra-organizational practices and characteristics which included poor supervision, absence of/lack of career development opportunities, inadequate reward/reinforcement system, offensive policy, excessive paperwork and poor equipment.

2. Inter-organizational practices and characteristics which included absence of lack of career development opportunities and jurisdictional isolation.

3. Criminal justice systems practices and characteristics which included ineffectiveness of corrections subsystem, unfavorable court decision.
misunderstood judicial procedure, inefficient courtroom management and preoccupation with street crime

4. Public practices and characteristics which included distorted press accounts of police incidents, unfavorable minority attitudes, unfavorable majority attitudes, derogatory remarks by neighbours and others, adverse local government decisions and ineffectiveness of referral/agencies

5. Police work itself which included role conflict, adverse work scheduling, fear and danger, sense of uselessness, absence of closure, people in pain, consequences of actions and twenty plus years

6. Police officer him/her self which included incompetent, fear ridden, non-conformist, ethnic minority officer and female officer

Speculating on the consequences of psychological stress in police work such as premature disability, early retirement, reduced productivity, increased incidence of alcoholism, divorce, suicide and internal affairs, complains and poor labour management relations. Eisenberg (1975) stressed that the consequences of psychological stress should be attended to with greater attention by police administrations and city officials than has apparently been the case so far.

In a study based on interview with 100 patrolmen in the Cincinnati Police Department, Kroes, Margolis and Hurrell (1974) identified the following stressors, courts, administration, equipment, community relations, changing shift routine, relations with supervisors, non-police work, pay, other policemen, bad assignments isolation (boredom) and other personal off-the-job problems that affected work.
4.5.3 OCCUPATIONAL STRESS AMONG POLICE OFFICERS IN INDIA

In the past decade there have been some attempts by police officers and social scientists to analyze the stress among police in India. Dangwal et al., (1982) conducted a questionnaire survey with inspectors and subinspectors of state police organizations. They reported a positive relationship between alienation and stress. Police inspectors in the age group of 31-40 years obtained the highest stress scores. It was found that higher the educational qualification higher the stress level.

In a study on Police Officers in West Bengal Deb Sibnath et al., (2005), assessed the level of psychological stress among West Bengal police officers. A group of 50 senior police officers with atleast five years working experience were administered the Occupational Stress Index (A.K Srivastava & A.P Singh, 1998). Findings indicated that 14% of the police officers were suffering from high psychological stress. Further analysis revealed that domain-wise analysis of stressor factors revealed that 22% of Police Officers had a feeling that they get less salary in comparison to their quantum of outputs in the organisation. 18% of the police officers were of the feeling that they were not given proper instructions about their job duties, their work being interfered by senior officials; even working conditions were not very satisfactory from the point of view of employee welfare and convenience. The other the main areas of stress included un-profitability (22%), role overload (18%), role conflict (18%), powerlessness (18%), role ambiguity (16%), unreasonable group and political pressure (16%), intrinsic impoverishment (16%) and under participation (16%).

Marwah (1997) undertook a study on stress in police personnel in Andra Pradesh through a questionnaire survey. She found that the following events caused severe stress among police personnel:
1. Personnel working in non-agency areas like suspension, anti-terrorist operations, death/severe injury to colleagues, health problems, departmental inquiry, handling communal riots, neglecting family due to workload, financial crisis, staying away from family, trouble with boss, personal failure, close to retirement or facing an ambush

2. Personal working in agency areas which include suspension, anti-terrorist operations, health problems, death/sever injury to colleague, facing an ambush, handling communal riots, personal injury/illness, financial crisis, departmental inquiry, staying away from family, non-grant of leave, personal failure and neglecting family due to work load

Kumar (1995), while studying the stress profiles of police personnel posted in the police stations of Hyderabad found the following stressors affecting the life of station house officers insufficient time for family, heavy work load, residential/accommodation problems, working hours/conditions, lack of confidence of superiors, no time for intellectual development, recreational and social activities, need to keep everyone satisfied, risky/insecure situations, problems in job condition and lack of clarity in expectations and coping with superiors

Another recent study by Yadav (1994) also observed stress in a sample of police personnel of Rajasthan State. Police personnel under training were found to have lesser scores on the global measure of stress as well as the various measures of emotional problems when seen in comparison to the groups which had served for sufficient periods of time. The officer's rank in the hierarchical power ladder was found to pay an important role. Deputy Superintendents of Police showed much lower stress levels and emotional problems than the constable groups. Sub-Inspectors and
Inspectors group were the most stressed recording the highest scores on all the three scales of anxiety in the study.

Mathur (1993) closely observed the source of stress to the Central Reserve Police Force and Border Security Force personnel deployed in Punjab, Jammu and Kashmir, North-eastern states and other parts of the country and identified traumatic events like witnessing dead bodies of their colleagues or innocent people, separation from their family and children, irregular grant of leave and refusal of leave, inadequate resources and inequalities in pay, job status, job overload, non-recognition, constant threat to life and subsequent tension.

In a recent study of gazetted police officers, Pragya Mathur (1999) found working conditions, work overload, lack of recognition, fear of severe injury or being killed on duty, short term high intensity stressful events, inadequate equipment, shooting someone in the line of duty, anti-terrorist operations, complaints against police by public, confrontation with public, lack of job satisfaction and police hierarchy. The five most stressful events perceived by the respondents were staying away from family and children, dismissal/removal/suspension form service, severe injury/loss of limb, death of colleague on duty and departmental inquiry were all sources of stress.

Exploring the various aspects of job stress in law enforcement offers a challenge and opportunity for preventive action. Chaudhary (1993) examined a sample of Rajasthan State police officers and her major findings enriched literature on stress on police in the Indian scenario. The major stressors experienced by the respondents were inter-role distance and role erosion whereas role ambiguity caused minimum stress. The Rajasthan Police Service officers experienced more stress than the Indian Police Service and differed significantly on almost all the dimension of role stress. The
respondents in general reported good health. Police officers made more use of control and less use of escape and symptom management. Total health was significantly negatively related to total stress and most of its dimensions. No significant correlation was found between personality Type A and stress.

The Bureau of Police Research and Development conducted a study and identified a constellation of variables which provide information about the nature of stressors encountered by police. The UP State police personnel responded to a questionnaire survey conducted by Tripathi et al., (1993) for the Bureau of Police Research and Development. The following major problem areas were identified, atmosphere of mistrust at all levels, negative public image, negative self image, increased incidence of stressful life events and daily hassles, indications of suicidal ideation and depressive problems, negative health outcomes due to lifestyle characterized by hostility, maladjustment and unhappiness arising from frustration of goals and feelings of guilt, dissatisfaction, non grant of leave, inadequate housing/security for the family, irregular work hours, inadequate provisions for children’s education, lack of medical services, inconsistent policies regarding evaluation, accountability, promotion and transfer and insensitive handling of personnel.

A more systematic study of police stress and burnout in India from the psychologist’s point of view was that of Suresh (1992). The data collection was done using self report stress inventory (specially designed for the study), Affective States Index (French, 1982) and Type A self report inventory (Blumenthal et al, 1981). Interestingly, the sample included women police, subordinate officers of the Madras city police. Suresh (1992) found a positive relationship between stress and burnout. Young officers (25-35 years) perceived less stress in job events pertaining to routine
stressed than the middle aged (36-42 years) more experienced officers. Superiors perceived more stress than their subordinates in measures of physical and psychological threat and cumulative stress. An increase in age was accompanied by increase in burnout. Officers with (12-20 years) of experience perceived routine stress to be more stressful than those with lesser experience (2-11 years). No significant interactions of Type A personality with perceived stress and its salient dimensions was found. Officers were reported to experience more stress in administrative and organizational events. The study emphasised the negative buffering effects of age and experience and focused on individual characteristics in regard to stress and burnout.

Pillai (1987) conducted a rank wise analysis of vulnerable age groups which showed constables in the age range of 36-40 as most vulnerable to disease. There were differences in vulnerability to stress and related illness depending on age and rank. Constables with a tenure of 15-20 years of service showed more stress.

Bhaskar (1986) studied the relationship between job stresses and personality variables among police officers and constables. She noted that a majority of police men were hard working and conscientious. However, their job frequently led to mental stagnation, psychological fatigue, growth of personality in one direction, dehumanizing working conditions, task pressures, lack of proper training and professional as well as personal obligations which produced anxiety and mild to severe stress. The sample comprised of 390 male police personnel from eight ranks belonging to eight departments of Delhi police. Two questionnaires on Job Stress specially designed for the study and Multivariable Personality Inventory developed by Muthaya were used to collect data. The job stress questionnaire measured eight job stress factors such as physical factors, factors intrinsic to the job, role in the
organisation, relationships at work, career development, organizational structure and climate, extra-organisational sources of stress and personality and behavioural factors. The Multivariable Personality Inventory measured empathy, ego ideal, pessimism, introversion, neuroticism, need achievement, self confidence, dogmatism and dominance. The important findings of the investigation were as follows:

1. Factors intrinsic to the job and relationships at work were most dominant whereas organisational structure and climate were the least dominant contributors to stress for the total sample.

2. Crime, railway and security departments scored significantly higher as compared to their departments on all job stress factors. The same was true for two job categories, namely, sub-inspectors and senior officers as compared to others.

3. The scores of policemen of different ranks in each of the eight departments were found to vary.

4. A remarkable similarity in the different ranks of eight departments was observed in relation to personality variables. However, neuroticism and introversion emerged as dominant, whereas empathy and need for achievement as the least dominant personality variables for the total sample as well as for various ranks and departments.

5. Coefficients of correlations among job stress variables were found to be positive and high. The same trend was found in the case of personality variables.

6. Pessimism, neuroticism and self confidence were correlated negatively and significantly with job stress variables. The only exception was
coefficients of correlation of neuroticism and self-confidence with role in the organisation and organisational structure and climate.

7. Ego ideal was correlated positively and significantly with factors intrinsic to the job, role in the organisation, relationships at work, career development and total job stress in all the departments. Similarly, need for achievement was correlated positively and significantly with relationships at work and extra organisational source of stress at all the levels.

8. Personal and family background variables such as age, educational qualifications, present salary, number of jobs changed, total years of service, number of years in present position, marital status, size of family, number of dependents and total income were found to play a significant role in their perception of job stress.

9. Some demographic variables such as age, present salary, total years of service, marital status, total family income and number of children were found to have no relationship with personality or its factors. On the other hand, several demographic variables were correlated negatively and significantly with given personality variables—education with ego ideal, number of job changes with domain, need for achievement, self confidence, dogmatism and overall personality.

The researcher concluded that personality variables, personal as well as family background variables played a significant role in the perception of job stress.
4.5.4 COMPARISON OF OCCUPATIONAL STRESS AMONG POLICE OFFICERS TO DIFFERENT PROFESSIONS

Policing is a profession which is inherently stressful as compared to any other profession, but there are professions where stress is present almost in equal intensity. A comparison between police profession and other professions gives a fair idea of the nature of stress in these professional.

Bakker and Heuran (2006) conducted a comparative study on emotional dissonance, burnout, and in-role performance among nurses and police officers. Two studies which included 108 nurses and 101 police officers tested the proposition that emotionally demanding interactions with recipients may result in emotional dissonance, which in turn, may lead to job burnout and impaired performance. More specifically, on the basis of the literature on burnout and emotional dissonance, the authors hypothesized that emotional job demands would explain variance in burnout (exhaustion and cynicism/disengagement) through their influence on emotional dissonance. In addition, the authors predicted that emotional dissonance would be (negatively) related to in-role performance through its relationship with burnout. The findings of a series of structural equation modeling analyses supported both hypotheses.

Oluatelure, F. A (2001) compared levels of psychopathology among three groups: pastors, patients with mental illness and police officers. A total of 180 male and female subjects (60 participants from each group) were administered the Stress Checklist and Religious Affiliation scale. Although the results showed significant group differences across the variables and significant sex differences in anxiety and depression, no significant differences in anxiety and depression were found. In
addition, no significant difference existed between pairs of groups on many of the psychopathological conditions. Pastors and police personnel were similar to the patients with mental illness on some of the variables.