CHAPTER – II

REVIEW OF LITERATURE
After giving a brief conceptual framework (Chapter One), studies relating to stress, burnout, well-being and job performance in police personnel are reviewed in this chapter. Review is based on APA’s Psychological Abstracts retrieval system stored in Computer Network of National Informatic Center, New Delhi and National Medical Library, New Delhi. The period of review was from 1960 to 1999. Psychological Bulletins, and Abstracts and other periodicals stored in M.D.U. Rohtak Library, J. N. U. Library, New Delhi, D. U. Library, New Delhi, B. P. R. & D. Library Delhi, Medical College Library, Rohtak were also consulted. Some literature was also got from Internet for latest literature in the area. Some popular texts on stress and well-being were also consulted. Retrieval search was guided by stress, stressors, burnout, coping skills, and general well-being and job outcome variables.

STRESS, STRESSORS AND BURNOUT:

In this section studies related to police stress, burnout stress syndrome and job stressors contributing to high incidence of stress in police personnel are reviewed: Police work ranks as one of the most hazardous occupation, even exceeding the formidable stresses and strains of air traffic control (Selye, 1978). They face strong job demands, besides being constantly under
political and media scrutiny, many of the demands can not be met adequately. Crime as an instance is not readily solved or resolved. There are many professional and legal strictures that circumscribe the policing response, which can, lead to frustration and this overlaid with job demands cause strain and stress in individual police officer. Stevens (1999) concluded that the everyday work activities of a police officer produce greater stress than other stressors, often leading to dangerous official and unofficial conduct. The implication of this study suggest that the very nature of police work produce consequential pain and frustration for officers and ultimately, to the community at large.

Martin Symonds (1970) whose association of 29 years with the New York City Police department exposed him to the nature of police work and the stresses it places on the individual. He reported that the job of being a Policeman is unique. It is one of the few occupations that a man engages in for which he feasted, sometimes hated occasionally reviled or even assaulted in the ordinary performance of his duties, when we consider that most people need and want to be liked, and that the young patrolman starts his career by seeing himself as an individual who will help and protect others, the uncooperativeness, antagonism or hospitality of the public whom he serves will place emotional strain on him. Symonds (1970) divided the sources of stress in police work into two broad categories: (a) the nature of Police work (b) Nature of Police organization. French & Caplan (1972) found that when officers had to change Partners, Patrol area duties, supervisors, or otherwise cross the organizational boundaries, it was a source of stress and posed a threat to the officers health.
Davidson and Robinson (1982) found that perceived court leniency led to stress. Cooper (1982) investigated the sources of stress among 200 British Supervisory Officers at rank Sergeant, Inspector, Chief Inspector and Superintendent. The study’s assessed physical health, mental health and sources of work stress for all ranks. The Police work stressors identified were work over load, lack of personal recognition and frustration of ambition, perceived unnecessary obstacles which inhibit the police function, autocratic management consequences, the effect of perceived police/public relations, work functions environment interface, short term high intensity police stressors, responsibility for a police unit and complaints against police.

Bhaskar’s in a study (1986) among police officers and constables reported that, it is the nature of their job that leads to stagnation, and psychological fatigue, that is to say that, factors intrinsic to the job and relationship at work contributes more to stress than organizational structure and climate. His research findings that police personal of crime branch, railways and security scored higher on job stress than others. Pillai (1987) conducted a study on Police Personnel’s wives who experienced stress as a result of police job of their husbands. Reviewing the literature on stress among police personnel, he reported frequent appearance and leniency by courts; lack of administrative backup; lack of support from the public; ineffective measures against criminals; and poor pay as potent job stressors. The rank wise analysis of vulnerable age groups showed constables in the 36-40 years of age range as most vulnerable to disease. There were differences in vulnerability to stress and related illness depending on age and rank. Constable with tenure of 15-20 years of service showed more stress. These findings were based on a Personal Inventory and medical records of
Ahmedabad city police constables, sub-ordinate officers and Deputy Superintendent of Police and some Policemen’s spouses.

Kasolf (1989), the emotional, psychological or physical stress experienced by police officers may vary by career stage and by ability to handle stress. Chaudhary (1993) examined a sample of Rajasthan State Police officers and reported that, role distance and role erosion were the major stressors whereas role ambiguity caused minimum stress. The RPS (Rajasthan Police Service) officers experienced more stress than IPS (Indian Police Service) and differed significantly on almost all the dimensions of role stress. The subjects 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.

Results of Savery, Soutar and Weaver (1993) study revealed that policemen in the physically stressed group were older while the unstressed groups were younger. The unstressed group contained the highest percentage of recruits and probationary constables and its members were more likely to be involved in general petrol duties, suggesting they had the least experience. The physically stressed group had the highest percentage of sergeants and commissioned officers. Also, the stressed group was more likely to be constables who tended to hold negative views about success in their jobs and had lower levels of satisfaction than colleagues in other groups. This survey of western Australian Police Force suggested that stress and its outcomes have affected many police officers although the problem is likely to be a long term, one as most officers reported good health
conditions. It was felt that the issue needed further investigation to identity, if possible, background data which could assist in distinguishing those people at risk from job related stress.

Yadav (1994) also observed stress in a sample of Police personnel of Rajasthan State. Police Personnel under training were found to have lesser sources on the global measures of stress as well as on various measures of emotional problems than those who had sufficient experience on the job. The organizational hierarchy was also found to be an important variable. DYSP’S (Deputy Superintendent of Police) showed much lower stress levels and emotional problems than the constables group. Sub-Inspectors and Inspectors group was the most stressed one recording the highest scores on all the three scales of anxiety in the study.

In a study among police officers reported (Dangwal, 1982) that sub-inspectors as a group obtained highest stress when compared to all functional groups. They concluded that SI’s are highly stressed subordinate officers in the organization.

McLaren (1998) compared the perceived stress scores of 54 male police officers, 99 ambulance officers, and 51 correctional officers. Results revealed that scores on the perceived stress scales were not high, and did not differ among groups.

Gulle (1998) reported a preliminary exploration of stress in the South African Police Service (SAPS). 91 SAPS members (aged 21-53yrs.) 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 (SA) context. Results showed the South African sample evidenced a greater degree of stress than USA’s
sample (J.M. Violanti and F. Aron, 1994). This indicates that the way in which the police organization operates in SA creates stress in addition to the inherent pressure already existing as a result of the nature of police work. This finding indicates a potential area of intervention, and also shows that further research could profitably be conducted.

Kirkcaldy (1994) reported that Police officers from Berlin and Northern Ireland have in common the task of policing divided communities and cohabiting with a military presence, and as such can be expected to share similar profiles of job-related stressors and exhibit equivalent coping strategies. While questionnaire responses reveal some similarities, the 90 German police officers emerged as more stressed and reported using a greater variety of coping strategies, compared with the 66 police officers from Northern Ireland.

Role erosion, self-role distance, inter-role distance, role stagnation, role inadequacy, role isolation, role expectation conflict, role overload, role ambiguity and personal inadequacy were reported as significant sources of stress by Mathur (1994) in an exploratory study of role stress in Police in India.

Mishra (1995) examined a sample of Orissa Police personnel, and reported that there are significant differences between Urban Police personnel and rural Police Personnel on lack of group cohesiveness as a factor of stress. Role ambiguity and role overload cause stress in both groups rural as well as urban. Some degree of occupational stress is common to every organization at various levels of its hierarchy.
Rechard (1973) reported a negative relationship between role ambiguity and age. Peltit (1973) reported a positive correlation between level of education and role conflict.

Hurrell, Jr. (1972) conducted a study involving 100 male policeman having mean age of 28.5 years ranging from 21 to 53 years with Cincinnati Police force. They found Perceived stress arising from the court was reported by more than 50% of the respondents. About half of the respondents complained about administration problem which falls into two broad areas; administration Police concerning work assignments, Procedures, and Personal conduct; administration backing and support of Patrolmen including the relationship and report between patrolman and administration. 69% mentioned the poor condition of the equipment as bothersome, air conditioning was listed by 31%, lack of equipment by 2%. Twenty-two officers responded as being bothered by lack of Public support, and 16 to the negative image problems, crisis situation 60%, changing shift 56%, isolation/boredom 43%, relations with supervisors 22%. 13% of the sample reported disruption in eating habits, 38% reported negative effect on their family lives and 29% of the sample reported disruption in sleep due to the stress from their job.

Patterson (1992) in a survey of 2,166 criminal justice personnel provided cross-occupational comparisons of perceived job stress. They were given a questionnaire, which was a modified version of the Police Stress Survey. Results revealed that police and probation/parole officers demonstrated an apparent curvilinear relationship between time on the job and perceived stress. However, the trend was more linear when only line
officers of both groups were considered. Correctional officers, as a group, did not show a curvilinear pattern, although line correctional officers did.

Violanti (1993) in a study on 103 police officers investigated the sources of police stressors, job attitudes, and psychological distress. Results revealed that police organizational stressors, mediated by job satisfaction and organizational goal orientation, increased psychological distress 6.3 times more than did inherent police stressors. The indirect effect of organizational and inherent stressors appeared to nullify the distress-reducing potential of increased job satisfaction.

Carlier (1997) examined internal and external risk factors for post-traumatic stress symptoms in 262 traumatized police officers. Results show that 7% of the entire sample had post-traumatic stress disorder (PTSD) as established by means of a structured interview; 34% had post-traumatic stress symptoms or subthreshold PTSD. Trauma severity was the only predictor of posttraumatic stress symptoms identified at both 3 and 12 months post-trauma. At 3 months post-trauma, symptomatology was further predicted by introversion, difficulty in expressing feelings, emotional exhaustion at time of trauma, insufficient time allowed by employer for coming to terms with the trauma, dissatisfaction with organizational support, and insecure job future. At 12 months post-trauma, posttraumatic stress symptoms were further predicted by lack of hobbies, acute hyper arousal, subsequent traumatic events, job dissatisfaction, brooding over work, and lack of social interaction support in the private sphere.

Brown, (1996) examined the data from the Occupational Stress Indicator completed by 500 senior police officers in England, Wales, Scotland, and Northern Ireland and reported that officers serving in England
and Wales exhibited the highest job stress related to structure and climate, coworker relationships and their managerial role. There were no inter-regional differences on the individual difference variables. Type A behavior, locus of control, or on physical health measures. Superintendents in Scotland used coping methods least frequently including domestic/home support, time management and social support, the latter strategy being most used by Northern Ireland officers. Findings relating job stress to job satisfaction were inconsistent with other police populations. Results are discussed in the context of organizational reform in the police service.

There is overwhelming evidence implicating psychological stress in the development and maintenance of Pathology. The etiological role of stress is now taken by social scientists, almost for granted. Life stresses are implicated in coronary heart disease and myocardial infarction (Friedman & Rosenman 1959; Theorell & Rake, 1971) and asthma, arthritis, diabetes, Peptic Ulcer (Mahendru 1971; Grand 1974) and bone fractures (Tollefson, 1972). Schizophrenia (Brown and Birley 1968) and relapse of depression after treatment (Paykel and Tunner, 1976).

Kreos, Margolis and Hurvell (1974) in a study on 100 Police officers reported that 32% of the sample had digestive disorders and 24% had headaches compared to 14% of the civilian population. Digestive disorders were reported by 32% and 24% reported headaches compared with 14% of the civilian population.

Grenik (1973) found that the onset of strain occurs early in an officers' career. Medical finding determined that 15% of the officers had levels of cholesterol which rendered them twice as prone to coronary heart disease: triglycerides were elevated in 27% of the officers. Some 56% of the
officers were from 6 to 20 pounds overweight, while 28% were more than 2 pounds overweight. The heart attack risk categories found 11% with low risk, 61.9% with average risk, 24.7% with medium high risk, and 2.4% with a high risk of coronary heart disease.

Schwartz & Schwartz (1975) found that back problems and heart disease account for high percentages of disability pensions in most police agencies, and relegate other men to special light duty assignments. They are also responsible for absenteeism, and increased turnover rates due to early retirements. Stren (1973), proposed that there was a high rate of ulcers in the US Police and this has also been verified empirically by Hurrel (1977). In addition to heart disease, Davidson’s (1979) identified stress induced health maladies in the Northern Territories Police consisted of higher incidences of hypertension, asthma, fever, skin trouble, ulcers, trouble with gastrointestinal tract, migraine and headaches, mental illness or nervous breakdown and gout compared to the same age and sex, Australian male population sample.

Figlre (1980) suggested that stress can affect an individual at four levels depending upon its intensity. These levels are in order of severity: level one A temporary stress characterized by heart rate increases and other physiological metabolic states. Level two Irritability, anxiety and prolonged "level one" symptoms. Level three headaches, stomach upsets and pronounced physical disorders. Level four ulcers, alcoholism, drug addiction and psychosis are the final stage of debilitating stress.

Some studies have attributed the high incidence of alcoholism and suicide in police personnel to the presence of stress in police personnel. There is an equally convincing evidence regarding the role of life stresses in
Psychiatric disorders such as depression (Paykel et al, 1969), suicide attempts (Paykel, Prusoff & Myers 1975).

Garalnik (1950) have reported that the law enforcement personnel commit suicide 2 to 6 times higher than other professionals most of the time, these people appear to be coping well; but when the pressure becomes overwhelming, they choose this maladaptive way of handling their stress.

Suicide rates of Police officers in Northern Ireland have also been very high. (Curran, 1988). Another study of Police suicide (Danto, 1978) included 12 Detroit Police officers, all male, who committed suicide from February 1968 through, 1976. 11 were patrolmen and 1 was a sergeant. In regard to their ages 2 were over 40, 3 were in their early 30's and 7 were in the last half of there 20s. 7 of the officers had served less than 6 but more than 3 years, 3 had served less than 3 years, 2 had served for over 20 years and 1 had served for about 15 years. It was concluded that department structure and other problems contributed to the frustration level of these policemen.

Richard & Fell’s (1975) in a study examined hospital medical records and revealed that the suicide ratio for police was very high. There was an extremely high number of “Premature deaths” in the officer population, and admission to hospitals was significant in the areas of circulatory problems and digestive trait problems. Police officers in the USA were ranked second in suicide rates of 36 occupations (Labovitz and Hagedorn, 1971)

Davinderjit & Reetinder (1997) observed that because of the continuous stress, police officers are prone to depression, alcoholism, anxiety, disorders and post-traumatic stress disorders, all of which are associated with an increased incidence of psychological stress. Those
experiencing high job stress have been found to drink more than those experiencing low job stress (Margolis et al, 1974). Although precise figures are not available to substantiate a high incidence of alcoholism among police, department officials report that as many as 25% of the officers in their respective departments have serious alcohol abuse problems (Hurrell & Kores, 1975). It has been proposed that alcoholism may result from the extraordinary stress of the job. They suggested that the nature of police work and the environment in which it is performed provide the stress stimulus.

Kirkcaldy (1994) explored the role of Type A behaviour and locus-of-control beliefs on job satisfaction and psychological and physical health among 90 police managers in Berlin. Subjects completed the Occupational Stress Indicator and were categorized into Type A and B personality types with either an internal or external locus of control. Ss with high levels of Type A behaviour and high perceived internal locus of control expressed least stress and most satisfaction, while Subjects with high levels of Type A behaviour and high perceived external locus of controls felt threatened and unable to control forces that led to health and satisfaction. Type B subjects with an internal locus of control were both physically and mentally healthy, while Type B subjects with an external locus of control were tense, over-controlled, or helpless. However, personality was not clearly linked to physical or psychological health.

Studies cited above clearly indicate that police personnel experienced stress which is stemming from the difficult nature of their job (Stevens, 1999), in terms of time responsibility, court-hearing, police-public relationship, work overload, role ambiguity, meeting targets (Symonds, 1970; Hurrel Jr. 1972; Kroes, 1976; Davidson & Robinson, 1982; Bhaskar,
1986; Chaudhary, 1993; Mathur, 1994). A number of studies (Gulle, 1998) have reported gender related (Brown, 1998) and organizational set up related (Kirkcaldy, 1994; Gulle, 1998) differences in stress in police personnel across different countries. Differences in experienced stress in police personnel across different countries. Differences in experienced stress due to age (Richard, 1973; Kasolf, 1989) and organizational hierarchy (Kasolf, 1989; Savery, Souter and Weaver, 1993; Yadav, 1994) have also been reported.

The high incidence of suicide (Garlnik, 1950; Richards & Fell’s, 1975; Curran, 1988) and alcoholism (Hurrell and Kores, 1975; Davinderjit & Reetinder 1997) amongst policemen are also indicative of the prevalence of high stress in policemen. The role of stress in the development and maintains of certain forms psychopathology have clearly been recognized. Life stresses are implicated in coronary heart diseases and myocardial infraction (Friedman & Ropenman, 1959) asthma, arthritis, diabetes, peptic ulcer (Mahendru, 1971; Grand et al 1974) schizophrenia (Brown & Bisley 1968) and depression (Paykel & Tunner, 1976). Studies of Grenik (1973), Stren (1973), Schwartz & Schwartz (1975), Davidson (1979) and Figlre (1980) have reported high incidence of coronary heart disease, ulcers, hypertension, asthma, fever, headache and migraine etc in police personnel. These and other studies clearly indicate the presence of stress in police force and these is no controversy about it. When we came to the question of why they are under stress or what are the causes there is no agreement in the studies. Some studies emphasize the role of organizational factors while others give emphasis on personal & societal or political causes.
BURNOUT STRESS SYNDROME (BOSS)

Burnout being a controversial and relatively new concept, much of the research deal with its conceptual framework. Though it has already been discussed in detail in the previous chapter, it is considered worthwhile to give a brief account of these conceptual studies over here.

On the controversy of the definition of burnout, Brill (1984) argues that the specificity of definitions of burnout will affect its ultimate utility and will suggest specific prevention method. He considers burnout as an exceptionally mediated, job-related, dysphoric and dysfunctional state with major psychopathology in an individual who has (1) function for a time at adequate performance and effectual levels in the same job situations and who (2) will not recover to previous levels without outside help or environmental re-arrangements.

The Pioneer worker Freudenberger in a review (1989) traces the origin of the term and development of the concept of the burnout. Ascertaining, coping with and changing the root causes of burnout require examination of (1) the values, ethics and morality of society, (2) the organization, (3) the individual worker within the institution. The contributions of society include introducing and emphasizing the concepts of stress and burnout into the consciousness of society as well as enhancing the philosophies of wellness programmes, holistic health and well-being.

The exhaustive work of Maslach and her colleagues (1976, 1977, 1978, 1979, 1981, 1982 & 1986) have described burnout as a syndrome of emotional exhaustion and cynicism toward one’s work resulting from chronic organizational stressors. Maslach and Jackson (1982) have
developed comprehensive scales to measure 'burnout' as syndrome of emotional exhaustion (EE), depersonalization (DP) and reduced personal accomplishment (PA). Several studies (Belcastro, Gold & Hays, 1983; Green and Walkey 1988; Lee and Ashforth 1990) have tested and confirmed the factor structure of three sub-scales of MBI.

The development of MBI paved way for systematic studies of burnout and it has now reported that burnout is a process initiated by 'unmediated stress' at individual level which encompasses society as causing distortion of personal, professional, social, intellectual and spiritual affairs.

With regard to the relationship between stress and burnout several studies (Brill 1984; Watmough 1983) have been conducted. Though there is some disagreement in the studies for example some (Brill, 1984) suggests that stress and burnout are separate constructs that can be thought of distinct identities. Stress can lead to burnout but not all who are stressed are burned out. Majority of the studies agreed to the proposition that burnout occurs at a final step in progression of unsuccessful attempts to cope with a variety of negative stress conditions (Savita, 1993). It is remarkable to note that stress does not necessarily have a negative effect on the individual, while burnout always does (Starrin et al, 1990). Burnout have been extensively studies and researcher have attempted to identify organizational stressors such as management policies, manpower planning, appraisal system, promotions, work routines, interpersonal relations, lack of co-ordination and the perception that abilities remain unutilized (Despande, 1978), lack of communication, general, social, political, economic environment poor interpersonal relationship (Shah, 1978, 1980), role ambiguity, role conflict (Holloway and Wallinga, 1990).
Burnout has been found to be positively related with personal factors such as Anxiety State and repression-sensitization (Naisberg, Fennig, Keinan and Elizur, 1991) thinking and feeling types, (Garden, 1989), type A/BP (Green and Yarnold, 1984, Ganster, 1987). Socio-demographic factors such as age, sex, religion have also been reported to be associated with burnout (Maslach & Jackson 1981, 1984).

A few studies relating to the phenomenon of burnout have been undertaken in India. However some studies (Savita, 1993; Singh, Dang and Singh 1989; Singh Dang, Gombar & Gombar, 1991) have investigated the existence, and extent of burnout is physicians and anesthetists and have reported that the phenomenon of burnout exists in Indian physicians though at a low level.

The following section deals with burnout in police personnel, its relationship with well-being, job satisfaction, job performance, and stress are reported.

Richard & Bloom (1988) in a study administered stress and burnout scales to 43 police officers, 30 prison guards, 43 probation officers, 35 fire fighters and 29 emergency medical technicians. They concluded that policing was stressful but no more stressful than other people – possessing occupations in criminal justice system. In 26 of 36 specific comparisons between policemen and those in remaining occupations, significant differences were not observed. Dishkin (1989) discussed the police burnout stress syndrome and mentioned job pressures including responsibility of protecting the public, the inactivity/crisis see-saw, internal departmental conflicts, bipolar thinking (good-bad), emotional distancing from others, poor diet and lack of a regular exercise programme to help discharge internal
pressures as well as the negative public image of the police officer as factors which may lead to state of burnout. It was emphasized that such cumulative pressure can be more emotionally, psychologically and physically debilitating than the risk that an officer may be injured or perhaps even killed in the line of duty. Burke (1989a) reported that career plateaued (CP) subjects developed a non-work carrier orientation. This was seen in measurers of work alimentation, burnout, job satisfaction and intention to quit policing. Career plateaued subjects also reported a more negative work setting and greater experienced stress. In an another study Burke (1989b) reported that officers with 6-15 years of service have more negative work setting, greater experienced stress, greater psychological burnout, greater work alienation, greater work family conflict and more sick days in the preceding 6 months. Officers in the most advanced career stage reported the poorest physical health.

Hills (1991) examined the relationship among stress measures (perception of stress, report of daily hassles, and items unique to police work) and the specific consequences of stress (burnout, physical symptoms, and job dissatisfaction), on a sample of 234 male highway patrol officers. The hypothesis was that hardiness and neuroticism would moderate the relationship between stress and its consequences and that the perceived Stress Scale (PSS) would emerge as a significant predictor of the strain experienced. The 2 moderator variables that were examined exerted clearer main effects, rather than moderating influences, on the outcome measures. Police specific stress appeared to be an important and significant predictor of stress-induced consequences.
Stearns and Moore (1993) examined variables correlated with job burnout in 138 police officers. An adaptation of the Maslach Burnout Inventory (MBI) was used. Step-wise multiple regression analyses was carried out to determine which set of variables was most strongly related to 4 measures of burnout (total MBI, emotional exhaustion, depersonalization, and personal accomplishment). Physiological well-being was consistently found to be one of the strongest correlates. Health concerns and cynical and authoritarian attitudes were also highly correlated with burnout. Increased time spent pursuing sports or hobbies was correlated with reduced levels of burnout. Results show that burnout is a more global construct then it was originally thought.

Burke, (1994) examined a research model developed to understand work attitudes and emotional and physical well-being. Data were collected from 828 police officers using questionnaires completed anonymously. Five groups of predictor variables were considered: individual demographic and situational variables, stressful events, work-family conflict, coping responses, and psychological burnout components. Considerable support for the model was found. Work attitudes and psychological well-being were more strongly predicted than were physical health and lifestyle behaviors.

In a detailed study, on stress and burnout in police personnel, Suresh (1992) concluded that police personnel possessing more experience manifest higher emotional exhaustion and depersonalization.

The studies cited above indicates that the phenomenon of burnout exists in police personnel as in other human service and caring professions (Hill 1991).
The relations of burnout with stress, stressors and organizational, personal, socio-demographic factors have also been found to be similar to that of reported in other human service professions. Intention to quit policing, more sick-days, work-family conflict, work alienation, job-dissatisfaction well-being have been found to significant correlates of burnout (Burke 1989A; Hill 1991; Stearns and Moore 1993; Burke 1994).

Keeping the controversial nature of the burnout construct and relative paucity of researches in Indian context. The present study is intended to investigate whether burnout exists in Indian police forces. It was also intended to investigate its relation with police specific stress, well-being and job outcome.

**STRESS AND COPING**

Studies relating to the relationship of stress and use of various coping strategies to effectively cope with the stress experienced are reviewed here. Pearlin & Schuler (1978) categorized coping as: (a) Response that modify the situation such as direct action negotiation and advice seeking, (b) Responses that control the meaning of the problem such as engaging in positive comparisons selectively ignoring, changing goal and values, deviating objects, disengaging from others (c) Responses that control stress after it has occurred such as avoiding conformations, using relation, engaging in denial or withdrawl or maintaining hopefulness. On the other hand, Billings and Moos (1982) have categorized coping in a different way: Cognitive coping whereby individuals solve the problems, (b) Behavioural coping whereby individuals engage in attempt to deal directly with the
problem, and (c) Avoidance coping whereby individual avoid the problems. However all these conceptualizations of coping strategies have not been put in to empirical validation both in the private and public sector organization in the Indian context. In a recent study with the frontline executives of the National Aluminum company, it was observed that in order to combat job stress, executive use more of cognitive coping strategies, avoidance coping strategies, and some times seeking social support and accepting responsibility (Mishra, 1990). It implies that seeking social support has been a common coping technique in Indian Organizations. Therefore, there is every reason to believe that both in public and private sector, social support might be playing a crucial mediating role in establishing the relationship between occupational stress and mental health and as well as influencing coping styles of executives. In the studies of the health consequences of coping, avoidance coping has shown a positive association with psychological distress (Billings & Moss 1991). Those using more avoidance coping strategies showed more psychological and physical strain (Kobasa, 1982). Holahan & Moss (1985) found that individuals who adapted to stress with little physical or psychological strain were less inclined to rely on avoidance coping than were people who showed psychological dysfunction under stress. Physical exercise and general fitness have been highlighted as stress preventions and as means of overcoming the harmful effects of stress (Kiely & Hodgson 1990).

Violanti, (1992) explored the use and impact of coping strategies in a setting of environmental stress using 180 police recruits (mean age 23.1 yrs). Subjects who scored high on personal distress tended to use more coping strategies than those who had lower distress scores. The magnitude of
personal distress may be an important factor in determining which array of coping techniques is used. In terms of effectiveness, the coping strategies of distancing and planful problem solving significantly reduced distress. Escape/avoidance and self-control coping did not appear to work in the police situation and significantly increased distress.

Winkel, (1993) assessed the impact of a Dutch police crisis intervention program on problem- and emotion-focused coping with burglary victims. Major program components included conducting a criminal investigation in the victim's home, providing oral and written crime prevention information, and performing a security check. All participating police officers were trained in utilizing interview techniques facilitating emotion – and problem-focused coping with the event. 64 victims received the intervention, and 101 victims served as controls. Results suggest that the program actually facilitated coping with the event: Victims' perceived police protection against crime was enhanced, and concern about crime was reduced. Preventive cognition, prevention awareness and responsibility, and preventive intentions were strengthened, and more extreme preventive options were generally rejected.

Evans, (1993) examined the stress-coping strategies used by 271 Australian police officers. Responses to the Revised Ways of Coping Checklist show that most officers use problem-focused, direct action coping strategies, with more limited use of social supports, self-blame, and wishful thinking. The strategies of making action plans and following them, working through situations one step at a time, and standing their ground and fighting for what they want were used most frequently by the majority of subjects. These behaviors are typical of the Type A behavior pattern. While their
coping behaviors may help them moderate problem-focused stress concerns, the data suggest that many officers may not deal effectively with their emotion-focused concerns.

Alexander, (1994) investigated how and with what success 758 police officers combated work-related stress, both off and on duty. Methods used to cope with stress were independent of gender, rank, and duties. While healthy methods such as exercise were used, there was a tendency toward the increased use of alcohol, smoking, and eating as means of relieving stress. The most frequently reported method of coping while on duty was talking things over with colleagues. The number of subjects who used professional methods of help, including prescribed medications and sick leave, was low. In general, subjects did not report much satisfaction with their methods of coping with work-induced stress.

Kirkcaldy, (1994) examined the psychometric properties of 2 of the Occupational Stress Indicator’s (OSI’s) scales, coping strategies and mental (ill) health, among 533 senior police officers from the UK, as well as their degree of interrelationship. There was little evidence of these being 6 subscales of coping, nor did the OSI’s measure of mental health emerge as a single, global dimension of psychological health. In fact, 2 major factors of mental health emerged, negative affectivity and positive affect or psychological well-being in the workplace. Moreover, the more reliable coping skills sub-scale, active/rational coping was scarcely related to either of the 2 sub-components of mental health.

Beehr, (1995) examined workers’ and their spouses’ stress-related responses, including both strain responses and coping responses, to study issues related to occupational stress and coping activities. 177 police officers
and their spouses from 2 metropolitan areas completed separate questionnaires regarding stress and coping. Four coping activities in which at least some officers and their spouses reported engaging in when they experience stress were problem-focused coping, emotion-focused coping, rugged individualism, and religiosity. Three special issues in police strains (drinking, divorce, and suicide) were significantly related to the officers' reported coping activities. Results indicate that both officers and their spouses reported using problem-focused coping more frequently than the other 3 types; however, emotion-focused coping behaviors were more consistently associated with strain reduction.

Kirkcaldy, (1995) examined coping behavior (i.e., seeking social support) among 90 German Police managers (6 females), who completed scales measuring job stress, coping skills, job satisfaction, and mental and physical health contained in an occupational stress indicator. There was evidence of a direct impact of social support on both mental and physical health. Job satisfaction had a direct impact on mental ill-health (showing high satisfaction associated with superior psychological health). There was no direct relationship between overall job stress and job satisfaction.

Wearing, (1996) examined the nature and degree of the relationship between the choice of coping strategies, personality, situational appraisals and the extent to which these relationships are domain-dependent is open. This study surveyed 330 police officers in order to answer 7 specific question: (1) Is the selection of coping strategies independent of the situational domain? (2) Is the experience of hassles and uplifts independent of the situational domain? (3) Is the experience of hassles independent of the experience of uplifts? (4) Is the selection of problem-focused coping
independent of the selection of emotion-focused coping? (5) Is personality related to the selection of coping strategies? (6) Is personality related to the reappraisal of the situational events? (7) Does the selection of the coping strategy relate to the reappraisal of the situational event? The finding indicate that extraversion (E) and neuroticism (N) are related to the selection of coping strategy, and that personality, domain and coping strategy make independent contributions to the final appraisal of the events. Personality, coping and situational experiences operate as discrete subsystems, with N, emotion-focused coping and hassles.

Jenkins, (1997) discussed that fire and police dispatchers and 911 operators (N = 68) from the central Dade County, Florida communications center completed self-rating of acute stress measures, ways of coping items, a social network index, the impact of the event scale to measure Intrusion and Avoidance symptoms, a psychosomatic symptoms scale, and the brief symptom inventory during a three-day period 2.5 months after Hurricane Andrew. In multiple regression analyses controlling for acute stress, Social Support coping explained 10% of the variance in Intrusion. Distancing and anger coping explained 7% and 6%, respectively, of the variance. Positive reappraisal coping explained 8% of psychosomatic symptom variance. Brief symptom inventory of distress scores were related positively to anger coping and negatively to social network involvement (12% and 13% respectively, of unique variance). Results highlighted the importance of examining coping strategies in relation to specific distress symptoms.

Harvey, (1997) examined the psychological impact of the April 29, 1992 Los Angeles civil unrest on the stress levels of law enforcement officers. Levels of post-traumatic stress disorder (PTSD) symptomatology in
Los Angeles Police Department officers assigned to a major riot areas were evaluated. Factors implicated in individual coping processes after a traumatic event were examined, as were subjects perceptions of the event. 141 subjects (aged 20-51yrs) replied to a questionnaire that included 4 instruments: The Mississippi Scale for Combat-Related PTSD, Moos’ Coping Responses Inventory, the Police Perception Survey, and a demographic survey. Results indicate that 17% of the subjects who responded were experiencing stress symptomatology, and that these subjects were twice as likely to use approximately twice the avoidance coping strategies than were their counterparts without symptomatology. Results indicate a positive relationship of PTSD symptomatology with cognitive avoidance, acceptance of resignation, and emotional discharge, and suggest an inverse relationship between PTSD symptomatology and seeking support and information, and seeking alternative rewards.

Mearns, (1998) investigated links between occupational stress, negative mood regulation expectancies, coping, anger, and distress. Participants were 56 police officers (mean age 36.2 yrs) from two small, urban departments. They filled out the Negative Mood Regulation (NMR) Scale, as well as measures of police stress, coping, anger, and distress. Simultaneous multiple regression analyses revealed that high NMR expectancies predicted Ss use of adaptive active coping strategies. High NMR Scale scores were also independently associated with lower levels of anger and distress, and anger significantly predicted distress. Results suggest that strong mood regulation expectancies buffer the effects of even high levels of occupational stress. Interventions directed toward raising mood
regulation expectancies may help protect officers from the consequences of job stress. Results may also have implications for combat stress.

Studies cited above clearly indicate that those using more coping strategies showed more stress or vice-versa (Kobasa, 1982; Violanti, 1992; Harvey, 1997). A number of studies have reported more use of problem focused coping than emotion focused coping (Evans, 1993; Beehr 1995) in police personnel. In some studies, physical exercise and general fitness have been highlighted as stress reducing and as means of overcoming the harmful effect of stress, (Kiely & Hodgson 1990; Alexander, 1994). Studies indicates that in police personnel, there was a tendency toward the increased use of alcohol, smoking and eating as a mean of relieving stress (Alexander, 1994). Number of studies have indicated that active cognitive coping and social support are correlated with negative mood, anger stress and mental ill health (Kirkcaldy, 1994; Kirkcaldy, 1995; Jenkins, 1997; Mearns, 1998). Personality factors have also been found to be related to coping (Wearing, 1996). The strategies of making action plan and following them, working through situation one step at a time and standing their ground and fighting for what they want were used most frequently by majority of subjects. These behaviours are typical of Type-A behaviour pattern and Evans (1993) have found relationship among these and use of coping strategies.

The magnitude of personal distress may be an important factor in determining which array of coping technique is used (Violanti, 1992). In terms of effectiveness, the coping strategies of distancing and planful problem solving significantly reduced distress. Escape / avoidance and self-control coping did not appear to work in the police situation and significantly increased distress (Violanti, 1992). The methods used to cope
with stress have found to be independent of gender, rank and duties (Alexander, 1994). In coping with competed work-related stress, both on and off duty there was significant increase in the use of alcohol, smoking and eating as means of relieving stress, though healthier coping methods were also used. The most frequently reported method of coping was talking things over with colleagues (Alexander, 1994). Thus it appears that a variety of coping methods / strategies are used by policemen to relieve them of their stress. Some of these are healthier e.g., cognitive where the person prepare himself for the worst thing to happen or thinks of other alternatives and some are not healthy e.g. escape or avoidance coping where the persons tries to escape facing the stressors or adopts maladaptive coping means such as smoking, drinking etc. which further add to their woe’s. Excessive use of these may further enhance the chances of stressgenic/ psychogenic problems, may inversely affect their well-being and consequently their work performance is also reduced. Thus, it is pertinent to investigate the coping strategies prevalent in police personnel working at different levels of organizational hierarchy. Further it also intended to see how the use of various coping strategies is related with police stress, burnout, well-being and job-performance.

**STRESS, COPING, WELL-BEING AND JOB OUTCOME**

General well-being as a construct refers to the harmonious functioning of the physical as well as psychological aspects of the personality, giving satisfaction to the self and benefit to the society. The person reporting low well-being means that he/she is not having complete and harmonious
functioning of the whole personality in relation to physical and mental health. Health is significantly related with stress. The stress may be due to environmental factors, i.e. economic uncertainty and political uncertainty etc., or due to individual factors i.e. family problems, economical problems, personality etc. Or due to organizational factors i.e. task-demands, role expectations, role ambiguity, role conflict, decision latitude, communication quality, work overload, noxious physical environment, organizational structures etc. (Robins, 1996). Studies reviewed here pertains to the relationship among stress, coping, well-being and job performance.

Kirkcaldy, (1992) assessed the stress experienced by 90 Berlin senior police officers, particularly under conditions of change. Subjects completed the Occupational Stress Indicator by Cooper (1988). When compared with 132 senior managers in private industry, the police officers had similar stress profiles. They enjoyed equivalent mental and physical health, displayed a similar pattern of Type A behavior, suffered from the same job stressors, and used comparable coping strategies. Ss experienced both physical ill-health (e.g., indigestion and sickness, headaches, pains in the head, muscle trembling) and mental ill-health (e.g., moodiness, worrying, self-confidence, tension). Overall level of job satisfaction was positively related to psychological well-being but not to physical health.

Totterdell, (1992) evaluated the effects on well-being, personal, social, and work disruption, alertness, and sleep when a shift system in Ottawa, Canada, was adopted by the police force. A survey was conducted at 4 police stations before the change and again 6 months after the change. Two of the stations did not change to the Ottawa system and hence formed a control group. The stations originally worked 8-hr shifts with blocks of 7
consecutive shifts. 32 Ss in the Ottawa group and 41 controls responded to questionnaires. Results suggest that in contrast to the control group, the Ottawa group experienced a significant improvement in well-being, a significant reduction in personal, social and work disruption, and significant increase in average sleep duration over a shift cycle. Self-rated alertness at the end of shifts was no worse under the Ottawa system.

Burke, (1993) examined a research model developed to understand work satisfactions and emotional and physical well-being among 828 police officers. Five groups of predictor variables were considered: individual demographic and situational variables (IDSVs), work stressors, work-family conflict (WFC), coping responses, and psychological burnout components. IDSVs were modestly related to the measures of work attitudes, emotional well-being, physical health, and lifestyle. Job stressors were consistently and strongly related to these measures. WFC was related only to measures of emotional well-being. Coping responses were related to measures of emotional well-being and some aspects of physical health and lifestyle. Psychological burnout was a strong predictor of work attitudes and emotional well-being but inconsistently related to measures of physical health and lifestyle.

Kirkcaldy, (1993) examined reactions to stress of 533 superintendent police officers in Great Britain and Northern Ireland. Ss completed a survey questionnaire and were categorized into 4 groups: Type A internal and external and Type B internal and external locus of control. Scores were obtained relating to experiences of work stress, job satisfaction, and mental and physical health. Results showed consistently no main effects for A/B type or interactions but strong effects for internal vs external locus of
control. Externals expressed the least job satisfaction; internals expressed least stress and most satisfaction. Locus of control was also clearly linked to physical and psychological ill-health; internal scores indicated less mental and physical ill-health than externals.

Cooper, (1994) explored the causal structure of job stress, satisfaction, and individual difference variables and their relationship to physical well-being. 533 senior British police officers (aged 28-58 yrs) completed the Occupational Stress Indicator, together with a biographic and demographic inventory. The variables “locus of control” and “coping” exerted an indirect effect on physical health through the mediating influence on job stress and overall job satisfaction. Type A behavior and job stress displayed, in addition to their indirect effect, a direct causal impact on physical (ill) health.

Kirkcaldy, (1994) examined the relationship between work stress and job satisfaction for physical well-being in a sample of 533 superintending police officers. 42% were nonsmokers, 40% were ex-smokers, and 18% were regular smokers. Results from the Occupational stress indicator showed that smokers were inclined to exhibit the highest job stress scores and report the worst physical health scores. Nonsmokers yielded the greatest level of work satisfaction and psychological well-being while ex-smokers were most distressed psychologically and least satisfied with their work. Group profiles were not statistically different from each other except for the physical health and 1 coping subscale. Job-related pressure predicted lack of job satisfaction and both physical and mental ill-health across the groups of non-smokers, ex-smokers, and smokers. The average number of days off
from work was lowest for nonsmokers, followed by ex-smokers, and then smokers.

Kirkcaldy, (1994) a large-scale study of leisure habits and life satisfaction examined the behavior of 533 senior police officers (aged 28-58 yrs) from the UK. Ss completed the Occupational Stress Indicator and a questionnaire of biographic and demographic variables. Exercisers showed a higher level of job satisfaction and better physical and mental health than non-exercisers. Mental ill-health was strongly related to stress, physical ill-health and lack of job satisfaction, with weaker linkages to coping behavior, locus of control and Type A behavior. The perceived job stress of police work was unrelated to exercise habits, and exercise was not a buffer between stress and job satisfaction or personal well-being. Whereas Type A and locus of control might be expected to influence stress and thus job satisfaction, exercise did not appear to modulate satisfaction by changing these variables.

Backman, (1997) investigated the effects of an intervention program that mentally prepared police trainees for stressful assignments in order to counteract unfavorable, possibly damaging, psychological reactions. 75 police trainees participated. An intervention group of 37 Ss received mental imaging training. A reference group of 38 subjects did not receive training. All subjects were evaluated at the beginning of their final term at the Swedish Police Academy and at the termination of supervised mental training. Subjects completed a questionnaire on both occasions and physiological factors were measured. The baseline evaluation showed no significant differences between the groups. The 2nd assessment showed that mental training affected the intervention group, which experienced their daily situation more positively than the reference group. The intervention
group also reported higher well-being with fewer intestinal and sleep problems. These findings indicate some positive cognitive and psychological effects of the image program.

Kirkcaldy (1995) Examined specific facts of subjectively perceived job stress and their effects on the job satisfaction and physical and mental health of American police officers. Occupational stress Indicators scores of 49 police officers from an Illinois town were compared to population norms for 5,500 employed workers in a range of occupations. Although the police officers perceived less stress from factors intrinsic to the job, they expressed greater job-related pressure form organizational structure and climate. They also gave higher ratings to competitiveness and assertiveness in their work behaviour.

Nachreiner (1995) examined the effect of shift work on health with shift experience with 979 police officer. Factor analyses of health complaints in groups with different lengths of shift work exposure show that the structure of these complaints changes with increasing shift experience, indicating the emergence of a shift-specific pattern of health complaints. After about 15 yrs. Of shift work, complaints related to disturbances of circadian –controlled functions can be found in the first factor while other complaints have their dominant loading on a separate factor, representing general, non-shift-specific impairments. Results indicate their shift-specific components of health impairment can be separated from other non-shift related components.

Bartol, (1992) examines the relationships among job performance, MMPI scores, self-perceived stress, and supervisory – perceived stress for female police officers. The subjects were 30 full-time female officers from
19 small-town department and 30 matched male officers who served as controls. Results show that, to a large extent, male and female officers experienced the same stressors in small-town policing. One exception was for task-related stressors, with women reporting more stress when exposed to tragedy, and feeling more stress associated with responsibility for the safety of the public and their professional colleagues. Women also reported stress associated with working in a male-dominated occupation. Performance evaluations by supervisors indicated the female and male officers did the job equally well.

Truxillo, (1998) investigated the relationship between measures of college education and work performance for a cohort of 84 police officers over a 10-yr period. College education variables showed a statistically significant relationship with promotions (average r= -31), and supervisory rating of job knowledge (average r=.25). However, there was an inconsistent relationship with measures of disciplinary action. These patterns of relationships may indicate that college education is relevant to many aspects of police work but should not be assumed to predict all areas of job performance.

Compared the position of workers of majority and minority ethnic backgrounds in 2 Dutch organizations (the police force and health care). In study 1, 21 minority police officers, a majority colleagues of each, and their supervisor were interviewed. In Study 2, 90 interviews were conducted with minority nurses, majority colleagues, and supervisors, resulting in 32 trios. Results do not indicate a consistent difference between majority and minority workers on performance and well-being. This does not mean that they have the same experiences; most minority workers are confronted with
discrimination and negative expectations, and many are also in a solo position. Their majority colleagues do not have to face these challenges. The diversity in the group is liked by most respondents, and they see a positive effect of ethnic diversity on the quality of their work.

Ameli, (1998) Police patrol officers were surveyed to investigate how the strength of socio-emotional needs affects the relationship between perceived organizational support (POS) and work performance. The association of POS with driving-under-the-influence arrests and speeding citations generally increased with strength of the needs for esteem, affiliation, emotional support, and social approval. Patrol officers with strong socio-emotional needs, but not those with weak needs, showed a positive relationship between POS and performance. The findings are consistent with social exchange views that maintain (a) work effort is encouraged by the receipt of socio-emotional resources, (b) POS fulfills a variety of socio-emotional needs, and (c) the value of POS and the obligation to reciprocate with high performance increase with the strength of socio-emotional needs.

Study cited above clearly indicate that job satisfaction and locus of control are positively related with well-being (Kirkcaldy, 1992; Burke, 1993; Kirkcaldy, 1993; Cooper, 1994; Kirkcaldy, 1994). Totterdells (1992) indicate that working in shifts resulted in improvement in well-being, increase in average sleep, redemption in personal, social and work disruption. Shift-work (i.e. shift system at work) is related with specific set of complaints with specific shifts. Vachreiner (1985) reported shift-specific health impairment in police officers. Researches have also reported that nonsmokers yielded the greatest level of work satisfaction and psychological
well-being, while smokers were inclined to exhibit the highest job stress score and ex-smokers were most stressed psychologically and least satisfied with their work (Kirkcaldy, 1994). Job performance increased with perceived organizational support (Ameli, 1998). Gender differences are not found to be related with job performance amongst police personnel (Batrol, 1992). College education is found to be relevant to many aspects of police work but should not be assumed to predict all areas of job performance.

Thus, the studies cited above indicate that stress experienced by the police officers is clearly linked to both physical ill-health (e.g., indigestion, sickness, headaches, muscle trembling etc.) and mental ill-health (e.g., moodiness, worrying, self-confidence, tension etc.) (Kirkcaldy, 1992). Job satisfaction is negatively related to stress (Kirkcaldy, 1994; Cooper, 1994) and positively related with well-being (Kirkcaldy, 1992; Kirkcaldy, 1994; Cooper, 1994; Kirkcaldy 1995). Burnout has also been found to be a strong predictor of work attitudes and emotional well-being but inconsistently related to measures of physical health and lifestyle.

OVERVIEW

Some degree of occupational stress is common to every organization at various levels of its hierarchy. The police organization is no exception to this rule. Rather policing is widely recognized as more stressful than most other occupations (Tupper, 1995). Considering the difficult nature of police work and the stress it places on the individuals, there is strong need for understanding the stressors faced by policeman and their way of coping with these. They face strong job demands, besides being constantly under
political and media scrutiny, many of the demand cannot be met adequately. Crime as an instance is not readily solved or resolved. There are many professional and legal strictures that circumscribe the policing response, which can lead to frustration and this overlaid with job demands caused strain and stress in individual police officers. It has largely been reported in studies in America (Stratton, 1978) and Australia (Savery, Souter and Weaver, 1993). American and Australian research studies show that police officer comprise a distinctly disadvantage occupational group (Tupper, 1995) in terms of emotional as well as physical health. Long term and excessive stress can be a serious threat to health and well-being of the individual (Folkman et al. 1986). However, in India only limited attention has been paid to the investigation of stressors for police. In a survey of stress in police personnel, Mathur (1993) has noted that job stress among Indian police, remains a neglected area of police research in India. Therefore, there is great need to explore this area for the well-being of police personnel.

Psychological, physical and work related stressors have been shown to have negative affects not only on the mental and physical well-being of an individual but they also show negative effects on one's occupational duties. Stress and coping are enduring aspects of everyday life. People use variety of coping techniques to reduce it. These techniques may vary from person to person. These coping skills also differ from culture to culture and mostly have been identified as externalizers or internalizers. Lazarus and his colleagues have made significant contribution in this area (Folkman and Lazarus, 1985; Folkman et al; 1986). In an Indian study (Mathur, 1995) coping strategies employed by police personnel have been reported. The effects of stress are not only limited to personnel well-being but also reflect
on the occupational activities and job demand. Conducting research on various types of stressors that affect the general well-being and health of police personnel and, in turn, may influence the quality of service rendered, seems to be the need of time. Police force constitutes a very important segment of the society particularly due to its role of maintaining law and order in society as well as protecting society from various threats. They can fulfil their duties only if they themselves are able or trained to use effective coping mechanisms and these are further imbibed in the organizational structure, which is strictly hierarchical in nature. In India the earlier researches have identified and pointed out some stressors on the coping skills and further need of research in this area, (Mathur, 1994; Mathur, 1995) and consider the area at present, to be largely neglected by researchers (Mathur, 1993). With the advancement of society in general, crime has also become very sophisticated the complicated, simultaneously complicating the job demands of police personnel.

On the basis of above background the present investigation is planned to focus on identifying specific stressors, coping skills and their relationships with general health including both psychological and physical performance amongst the Indian police officers. The available studies, though limited in number, dealt with various types of stressors but none of the studies seem to have investigated burnout stress syndrome which has been recognized as an important variable world over. Burnout stress syndrome has been widely researched. The advantage of using this not only makes comparison of research conducted worldwide possible but also provides emotional, behavioural and performance related components. In addition to this, police related specific stressors would also be studied. Stress research makes it imperative to study
the coping mechanism, therefore, the coping skills by subjects would be identified. An attempt would also be made to explore the relation of stress with general well-being and job performance of the subjects.