CHAPTER – II
REVIEW OF RELATED LITERATURE

2.0 INTRODUCTION

Job stress or occupational stress among Physical Education teachers has become quite inevitable these days due to manifold increase in job complexities and challenges. A general lack of administrative understanding and support, role ambiguity, role conflict, students’ indiscipline are some of the identified stressors. Task demands, physical demands, role demands and interpersonal demands are the four areas from where job stress originates and results into the risk of developing job dissatisfaction which is directly associated with adjustment. In this chapter, studies related to job stress, job satisfaction and adjustment among teachers in general and Physical Education teachers in particular will be reviewed.

2.1 STUDIES ON JOB STRESS

Cunningham (1983) described the phenomenon of teacher burnout as physical, emotional and attitudinal exhaustion that results in a significant decrease in teacher job satisfaction and performance. The data collected from 226 school teachers in USA schools revealed that teacher burnout was caused by high levels of stress related to inordinate time demands, inadequate relationships, large class sizes, lack of resources, isolation, fear of violence, role ambiguity, limited promotional opportunities, lack of support etc. In addition to resulting in a number of emotional and physical illnesses,
burnout manifested itself in increased job turnover and absenteeism, reduced job satisfaction, mental and physical withdrawal and detachment, increased inter and intra-individual conflicts and a general reduction in individual and ultimately school performance. It was suggested that burnout can be reduced by improving teacher status; rewarding ambition, commitment, motivation and performance; job enrichment or redesign; preservice stress preparation; teacher conditioning; improved supervision and support; implementing quality circles; joint student-parent-teacher problem solving and participatory team leadership.

Brimm (1983) found stress to be associated with supervising and coordinating tasks of many principals. In a study conducted on 113 school principals, handling interpersonal relationship was found to be the most common source of stress. Making decisions that affect the lives of other people, trying to resolve parent-school conflicts, handling student discipline problems and trying to resolve differences among staff members were identified as other important stressors. The principals suffering from high levels of stress and anxiety procrastinated in making decisions or avoided making decisions altogether. The study suggested that in handling such stress a carefully throughout school management plan will be important, as will be the development of communication skills, conflict resolution strategies and strategies for delegating authority and specifying role responsibilities.

Sorbom and Wallius (1985) adopted Lazarus' stress model and attempted to test invariance in stress-strain relationship over time. In a longitudinal study they asked Swedish teachers to fill in questionnaires concerning coping strategies and social support, work load, mental health,
physical well-being and the quality of their sleep. Data were collected twice, at the beginning and at the end of a period of six months. Co- variations between variables were analyzed and relations were found between stress and strain. Relationships between stress and coping strategies and stress and social support, respectively were weak. The study had to face one major criticism i.e. only 63 teachers filled in all items and were used in the analyses. This is rather a small number for structural equation purposes.

In a survey conducted by Armes (1985) the head teacher came in for more criticism where out of 291 respondents, 60% found their head teacher to be a source of stress and only 40% found that the Head was a means of alleviating stress. Further, the study revealed that dissatisfaction with their salary caused 'some stress' for 45% teachers, 'considerable stress' for 18% teachers and 27% teachers experienced 'no stress' arising from considerations of their salaries. Repetitive work and unchallenging tasks were also found to be sources of stress for teachers. Burden of work expressed in form of time spent doing school work in the evenings and at weekends was also found to be 'crushing' for school teachers. Adequate facilities for relaxation in terms of 'a break from working' and 'neuromuscular and mental relaxation' were suggested to alleviate the effects of stress upon physical and mental functions and upon efficiency of performance.

Savery and Detiuk (1985) investigated the sources of stress for principals of high schools and large primary schools. A sample of 400 principals was given questionnaires for which there was an 80% return rate. Perceived work-related stress was found to be a 'major problem'. Nearly one third of the sample was diagnosed as suffering from high blood pressure in
the previous twelve months and nearly half of the principals who perceived the stress under which they worked as 'excessive' were so diagnosed. It was also notable that only 18% of the principals had a managerial qualification such as educational administration. Specific stressors were identified related to role ambiguity, autonomy, decision making, role overload and role conflict. Role overload and role conflict appeared to be the most serious stressors.

Evans, Ramsey and Johnson (1986) analyzed the effect of intrinsic and extrinsic job stressors on 47 Physical Education teachers randomly selected from the Florida public schools. Perceived levels of stress were compared among these teachers when physical illness, psychological strain and absenteeism were functions. The analysis of variance technique was used to analyze the collected data using three demographical variables. Results indicated that Physical Education teachers who experienced physical illness or psychological strain during the school years had significantly higher levels of both intrinsic and extrinsic job-related stress than the teachers who did not. Stress also appeared to be a significant factor among teachers who experienced excessive absenteeism from work.

Galloway, Kathleen and Kathy (1986) completed a 63 item check-list on sources of stress on a stratified sample of 40 primary school head teachers in the North Island of New Zealand. The most highly rated items referred to stress arised from management of time, administrative tasks and interpersonal relationships. A principal components analysis identified four factors, namely: staff, workload/administration, role conflict and meetings. Comparison between groups suggested that experiences of stress were
related to the school's catchment area, to the adequacy of its building and to the head teacher's responsibilities.

**Louden (1987)** in a major Western Australian study sent General Health Questionnaire (GHQ) to a sample consisting of government teachers in the state. 20% of the teachers were found to be suffering from psychological distress whereas 9% suffered from severe psychological stress. Differences between respondents based on sex, age, geographical region, teaching status, subject taught or level of qualification were not significant. The occupational stressors identified were correlated with level of distress and grouped into categories of unacceptable student behaviour, time pressures, relationships with colleagues and the community, opportunities for alternative employment and working conditions. Of these, relationships with colleagues and unacceptable student behaviour were found to be of particular importance.

**Sinclair and Ryan (1987)** described in their study that people in distress grasp for coping behaviours that are primarily designed to ease their own feelings of distress even if the behaviours are not in the interests of those with whom they are interacting. In their study with students and beginning teachers, it was evident that, in coping, the teachers (N = 150) progressively adopted more and more authoritarian control techniques. While adopting custodial and authoritarian behaviours is helpful to the teacher in attempting to gain a greater sense of personal control over the teaching situation, it is not necessarily in the best personal or learning interests of the students. The study concluded that it often only exacerbates the problem of teacher-student relationships so that it is not ultimately effective in reducing stress or anxiety.
and when teacher stress is experienced as anxiety, reduced teaching effectiveness and student performance are the likely outcomes.

**Bertoch (1988)** tested a prototype treatment developed to significantly reduce symptoms of stress among in-service teachers. 30 participants selected for high stress levels were randomly assigned to treatment and control groups. They were assessed on environment, personality and emotional variables, using self-report expert-judge measures, at both pre and post treatment. The experimental treatment was holistic, incorporating all processes previously found to be related to reducing teacher stress. At post-treatment, the treatment group averaged 1.02 standard deviations lower on the stress measures than the control group. Significant differences in the post-test means, favouring the experimental group, were found for 23 of the 39 variables measured on the three self-report instruments. As a group, the participants demonstrated substantially lower stress levels than the control group after the treatment, with a substantial decrease from their pre-treatment stress levels.

**Hipps and Smith (1991)** conducted a study with the purpose to determine the amount of variance in burnout and job satisfaction in public school teachers and principals which could be accounted for by stress related to the state's performance-based accreditation standards, to examine the relationship between stress related to state standards and the age and gender of the educators and to develop measures of educator job stress common to both teachers and principals and stress related to the state performance based accreditation standards. Surveys were sent to teachers (N=445) and principals (N=128). Responses were received from 219 teachers and 58
principals. A cross validation study of non respondents yielded usable responses from 13 additional teachers and 7 principals. Five factors describing the dimensions of education stress were identified: (1) Job overload; (2) Subordinate super-ordinate relationships; (3) relationships with students; (4) relationships with peers and (5) salary and compensation. Results of the study suggested that educators were experiencing a significant amount of stress related to their everyday job situations and to performance-based accreditation standards, and that this stress was mediated by locus of control.

**Borg and Riding (1991)** investigated teacher stress, job satisfaction, absenteeism, career intention, career commitment and self image in a context which allowed many of the characteristics of an educational system to be incorporated in the design. A questionnaire survey of 545 teachers in Maltese secondary schools revealed that some of the demographic characteristics of the sample were related to self reported teacher stress, job satisfaction and career commitment. Results also showed that teachers who reported greater stress were less satisfied with teaching, reported greater frequency of absences and a greater number of total days absent, were more likely to leave teaching (career intention) and less likely to take up a teacher career again (career commitment).

**Friedman (1991)** examined personal and organisational factors associated with high and low teacher burnout, with a particular emphasis on environmental variables. The findings of the study revealed four major school variables in high burnout schools, including, (1) the pressure of measurable goal achievement behaviours imposed by school management. (2) distrust of
teachers' professionalism, (3) a school culture which was perceived as circumscribed and (4) an unpleasant physical environment. For teachers in high burnout schools, the effect on professional functioning included a decline in teaching, performance, emotional and physical exhaustion, low commitment to teaching goals, absenteeism and early retirement. Friedman in this study also discussed the influence of teacher burnout on students, citing exaggerated behavioral rigidity and inflexibility towards students, reduced expectations for student effort and low frustration tolerance within the classroom. In essence, the study described the psychological and behavioral manifestations of work stress and implicitly identified the direction of effect as 'teacher to student'.

**Starnaman and Miller (1992)** aimed explicitly at developing and testing causal relationships of stress in teaching. They questioned 182 American teachers about burnout using Maslach Burnout Inventory (Maslach and Jackson 1981). Principal support, workload, role ambiguity and role conflict were also studied. Contrary to expectations, a positive relation between principal support and depersonalization emerged i.e. teachers who felt well supported by their principals had more negative attitudes about the students than teachers who perceived lower levels of support. Workload occurred as a major source of stress or emotional exhaustion. Role conflict and role ambiguity were good predictors of burnout and principal support led to less role conflict and role ambiguity, were the conclusions.

**Cheryle and Cary (1993)** collected data through a questionnaire, from a random sample of 1790 teachers drawn from a cross-section of school types, sectors and teaching grades. Univariate analysis of the results revealed
that teachers, as compared with other highly stressed occupational groups, experienced lower job satisfaction and poorer mental health. It was discovered that the 'job pressure factors' of 'management [structure of the school] and 'lack of status and promotion' were the major predictors of job dissatisfaction. Mental ill health was predicted by a variety of job pressure and personal factors, but predominantly linked to job pressure from 'ambiguity of the teacher's role'. Intention to leave was found to be most highly related to mental ill-health in teachers.

**Blix and Lee (1994)** used the Pearson-Environment Fit model to analyze the lock of fit (misfit) between motivational style and job rewards as a contributing factor in developing occupational stress symptoms in university teachers. Three motivational styles and corresponding job rewards were measured using instruments derived from Porter's motivational theory in a questionnaire mailed to 400 randomly selected university teachers.

Occupational stress symptoms were measured by items reflecting burnout, stress-related health problems, perceived work stress, productively, job satisfaction and consideration for job change. The majority of teachers indicated good fit between motivational style and job rewards. Female teachers were a noted exception with higher misfit scores than their male counterparts. Despite the 'good' fit, two-thirds of the teachers indicated they perceived stress at work at least 50 percent of the time. Teachers also reported burnout, stress related health problems, lowered work productivity, inability to cope with work stress and job change consideration. Heavy workload was the most frequently cited reason for considering job change. Female teachers were more likely to consider job change as a result of job
stress. Preventive strategies were recommended for dealing with academic stress.

Boyle and Borg (1995) used causal modeling techniques to investigate into teacher stress. Based on a sample of 710 primary teachers, exploratory factor analysis produced a five-factor model of teacher stress, accounting for 65% of variance. Dimensions of stress were workload, student misbehaviour, professional recognition needs, time/resource difficulties and poor colleague relations. To further explore the relationships, the authors found modeled links between the exogenous and endogenous variables. Student misbehaviour and workload emerged as the strongest predictors of stress and were entirely consistent with studies reported elsewhere. However, results for time/resource difficulties and professional recognition contradicted the findings of other researchers. Poor relations with colleagues failed to emerge as a direct predictor of stress in its own light, in contrast to results generally reported by other researchers. The study, however, offered support for the notion of multiple sources of teacher stress.

Punch and Tuetteeman (1996) investigated the relationship between support found in the work environment and amelioration of teacher stress in Western Australian secondary schools. The authors hypothesized that, while certain stressors may heighten levels of teacher distress, the effects may be offset somewhat by supportive relationships in the work environment, and by teachers being acknowledged for what they do. The four stressors identified in the study were, (1) inadequate access to facilities, (2) intrusion of school related work into recreational time, (3) student misbehaviour, and (4) excessive social expectations. Potential avenues for remedy were cited as,
(1) support received from colleagues, including principals, and (2) praise and recognition. For both males and females collegial support emerged as the strongest countervailing influence for the amelioration of distress, and the most significant resource for coping with student behaviour problems.

**Capel (1997)** questioned student Physical Education teachers following first and second teaching practices on their levels and sources of anxiety. Evaluation apprehension emerged as the stressor in both practices, although it declined in the second teaching practice. It was suggested that stress can be reduced by exposure and positive experiences of observation feedback.

**Cheng (1997)** attempted to understand the relationship among job stress, coping strategies and burnout for elementary school Physical Education teachers in Changhua County. He used documentary analysis, questionnaires and interviews to collect the research data from 329 teachers and the mean scores of teachers’ job stress and coping strategies were found to be above 3 on 5-point scale, while the mean score of teachers’ burnout was found to be below 3. Significant differences among the demographic variables of teachers’ job stress and coping strategies were also found. However, no significant differences among the demographic variables of teachers’ burnout were noticed. Overall, teachers’ job stress and coping strategies had a positive correlation whereas teachers’ coping strategies and burnout had a negative correlation, and so did the teachers’ job stress and burnout.

**Verma (1997)** investigated the job stress and job satisfaction of Physical Education Teachers working in govt., private and public schools of U.T. Chandigarh. He found significant difference between Physical Education
teachers working in govt. and public schools in their job stress and job satisfaction. Physical Education teachers working in govt. and private schools were also found to be significantly different in their job stress and job satisfaction.

Brown and Uehare (1999) investigated the negative effects of teacher stress, with particular attention to teachers in the U.S.-affiliated Pacific, described techniques for reducing these detrimental effects and also discussed the relevance of such techniques within the cultures of the Pacific region. The review permitted the following conclusions to be drawn.

1. Workplace stress and burnout could lead to teacher absenteeism and attrition.

2. High rates of teacher turnover and absenteeism negatively associated with student achievement.

3. Teacher absenteeism was higher in Pacific region than across the continental United States.

4. In the Pacific region, teacher stress was significantly correlated with the number of days that teachers were away from school.

5. Difficulties due to geography and limited access to higher education opportunities in the Pacific region make teacher retention a critical concern.


7. Perceptions of workplace stress, as well as strategies for coping with it, could vary due to cultural factors.
8. Cultural context (e.g. the society in which a school is located, cultural backgrounds of teachers) should be considered before designing stress-management programmes in culturally diverse locations.

Adams (1999) studied the sources of teacher stress that were harmful to them and affected their teaching, personal lives and most importantly, their students. The study analyzed six internally related characteristics namely: role preparedness, job satisfaction, life satisfaction, illness symptoms, locus of control and self esteem. Data were collected from 182 teachers from seven vocational areas in a south eastern state and a multiple regression model was used to examine the role of these internal characteristics in explaining vocational teacher stress. This regression model was successful in explaining approximately 55.75% of the variance in vocational teacher stress. The most important internal characteristics in explaining vocational teacher stress were found to be illness symptoms, self esteem and role preparedness.

Abel and Sewell (1999) investigated differences in the sources of stress between rural and urban schools. Ninety eight secondary school teachers in two states of America completed the Sources of Stress Questionnaire, which specifically measures sources of school based stress and the Maslach Burnout Inventory to assess levels of stress and burnout. Significantly greater stress was found for urban versus rural schools from, (1) poor working conditions, including inadequate resources, (2) lack of recognition and advancement prospects, and (3) poor staff relations, including an unfriendly atmosphere and lack of support from both colleagues and school administrators. For both urban and rural schools, student misbehaviour and time pressures were the leading sources of stress, with no
significant differences between groups, Overall, different relationships were found between the sources of stress and dimensions of burnout; for example student misbehaviour and poor working conditions predicted burnout in urban schools compared to time pressures and poor working conditions for rural schools.

Dick and Wagner (2000) used standardized questionnaires measuring workload and mobbing as stressors on a sample of 356 school teachers. Physical symptoms as stress reactions and social support and self-efficacy as moderating variables were also measured through standardized questionnaire in their study I whereas coping strategies, burnout and absenteeism were assessed in study II. The structural equation modeling in study I, revealed that the predications of the stress model hold true, workload and mobbing lead to stress reactions whereas principal support reduces the perception of workload and mobbing. These results were confirmed in study II and the model was enlarged by burnout and coping strategies. Coping attempts help to deal with stressful situations, that is, to reduce the perceived threat of those situations. If coping mechanisms are inappropriate, stress occurs, and leads to physiological and biochemical charges accompanied by psychosomatic and even chronic symptoms. Finally, characteristics of the individual teacher influenced the process, it was concluded.

Drago, Caplan and Lynn (2000) in their study linked teachers' work to societal trends. They provided evidence by collecting data from 312 elementary school teachers and commented that the nature of work and society had changed and that education had mirrored commercial demands to "do more with less" placing higher expectations and higher stress on
employees. The authors described the concept of "dual-income families" which has greatly increased pressure on women to manage work responsibilities and household tasks. 78% of all U.S. married couples were in what the authors called "dual-income families". Perhaps such families might be more appropriately considered to be "dual work-load families". Secondly, in order to be competitive in modern world, "high commitment work systems" had become the norm. These systems involved increased levels of teamwork, training, meetings and involvement in the job, all these increased demands on employees. The work intensification and stress were factors in many employees' lives and that teachers were not unique in stress and workload issues concluded the study.

Troman (2000) in his study entitled "Teacher Stress in Low-Trust Society" noted that unsatisfactory social relationships with adults e.g., colleagues, principals, parents and inspectors elicited hostile emotions from teachers and appeared to be a source of stress in teaching. The author examined why this should be the case. Using data from 148 school teachers, it was observed that intensification of work and government policies promoting managerialism in schools were the roots of the problem. While intensifications of teachers' work was certainly involved in eroding positive staff relationships, it was also the changing trust relations in high modernity that were shaping the social relations of low-trust schooling and impacting negatively on teachers' physical and emotional well-being and their professional relations.

Bremer and Marie (2002) examined the gender-related causes of stress in trainee teachers on training practice in the School of Education,
University of Manchester. A questionnaire was administered to trainee teachers in order to identify their stressors. The means and standard deviations of each item were calculated separately for males and females. In only 12 of the 61 items did the males have a higher mean (indicating higher anxiety) than the females, which means that the females were more stressed than the males. However, of the 12 items the males found more stressful than the females, the two, which were significant, centered on issues of support of friends, family and partner. The study suggested including some stress identification and management courses in teacher training.

Yoon (2002) conducted a study with the purpose to investigate whether or not teacher stress, negative effect and self efficacy predict the quality of student teacher relationships. Participants included 113 school teachers in a metropolitan area in the United States. A survey method was used to measure teacher perceptions in working with difficult students and their relationships with students. Negative teacher-student relationships were predicted by teacher stress. Significant correlations were found among negative effect, teacher stress and negative relationships.

Tatar and Horenczyk (2003) put out 'Diversity related burnout' as a concept that can add to the understanding of the negative impact of the daily coping with culturally diverse students on teachers. A Principal Component Analysis, based on the responses of 280 teachers working at 30 Israeli schools, showed that diversity-related burnout is empirically distinguishable from, even though correlated with, the more traditional notion of teacher burnout. Results also revealed that diversity-related burnout is predicted by variables related to teacher’s background, to the degree of school cultural
heterogeneity and to the aspects of the school organizational culture related to multiculturalism as perceived by the teacher. The highest levels of diversity related burnout were found among teachers categorized as assimilationists and who worked in schools perceived by them also to be assimilations.

Leung and Spector (2004) aimed at identifying the sources of stress and investigating their effects on job satisfaction and psychological distress among 106 university teachers (86 males and 20 females) from four tertiary institutes in Hong Kong. Another purpose of the study was to examine the moderating effect of locus of control on stressor-strain relationships. A factor analysis of the faculty stressors revealed six factors: recognition, perceived organizational practices, factors intrinsic to teaching, financial inadequacy, home/work interface and new challenge. A source of step-wise multiple regressions demonstrated that the first four were best predictors of job satisfaction and the last two factors were the best predictors of psychological distress. Further, external locus of control was associated with low job satisfaction and psychological distress.

Miller and Travers (2005) presented the findings of a nationwide investigation into the mental well-being of minority ethnic teachers in the U.K. Data were collected through a questionnaire containing both open and closed questions. The sample, totaling 208 participants was derived from the National Union of Teachers (NUT), database of minority ethnic teachers and an advertisement in the NUT's Teacher Magazine. Univariate analysis of the results revealed that this group of teachers, as compared to other groups, was experiencing poorer mental health and lower job satisfaction. Multivariate analysis revealed four reliable factors regarding the 'sources of stress' these
minority ethnic teachers perceived they were experiencing. These were: hierarchy and culture of the school, workload, cultural barriers and the lack of status and promotion. Some teachers reported that ethnic discrimination was a contributory factor in their experience of stress. Multiple regression analysis discovered that "total stress", "total self esteem, "working conditions" and "total discrimination" were the major predictors of mental ill health in the minority ethnic teachers.

Feigin, Talmor and Erlich (2005) examined the relationship between inclusion and burnout in Physical Education teaching. Data collected from a sample of elementary school Physical Education teachers from all the six districts of Israel revealed that the school grounds and sports facilities were not adjusted for students with special needs; it took too much time for these students to be diagnosed and receive special treatment, there were difficulties in assessing these students, maintaining their safety, using special teaching methods to include them in classes and reporting to their parents. Results of the regression analysis did not support the hypothesis that teachers' personal resources and workload were related to burnout, they did, however, support the hypotheses that the number of special education students in class was positively related to burnout; the amount of help the teacher received in treating such students was negatively related to burnout; the more the teachers felt that the structural and the social dimensions at the workplace were incongruent with their work, the more they were burned out.

Rachel, Naomi and Llama (2005) aimed at identifying the environmental factors that relate to the work of regular school teachers who had students with special needs in their classroom, and to find out the correlation between these factors and teacher burnout. A total 330 primary school teachers filled in a questionnaire that had three parts: (1) personal background data; (2) the Friedman's burnout questionnaire; and (3)
environmental features typical of the work of school teachers that include
students with special needs in their classroom, in four areas: psychological
features, organizational, structural and social. Results showed that the
background data that related significantly to burnout was teachers’ attitudes
towards inclusion. The more positive the attitude was, the more the teacher
experienced burnout in the category of self-fulfillment. Two other findings that
were found to correlate with higher burnout rates were the number of students
with special needs in class and very little assistance provided to the teacher.
Three environmental factors were found to have negative correlation with
burnout: the organizational factor, the psychological and the social, with the
latter being the most significantly negatively correlated with burnout - i.e. the
less social support the teacher experienced, the higher was the level of
burnout.

Akindutire (2006) in his study examined the role conflict and stress
among Physical Education teachers working in Nigerian senior secondary
schools. Date were collected through a self structured questionnaire, from
a sample of 300 (190 male and 110 female) Physical Education teachers
handling physical education programmes in their respective schools. As a
part of its objectives, the study examined:

1) The nature of legitimate and unrelated roles performed by the Physical
   Education teachers;

2) Reasons for performing such unrelated roles;

3) The level of conflict exhibited in role performance; and

4) The consequences of role conflict.
The results drawn on the basis of percentages mean scores and t-test revealed that teaching and coaching roles were ranked highest in terms of performance by the secondary school physical education teachers. A high percentage of teachers were performing other roles quite unrelated to physical education role, which could be considered as unhealthy for the improvement of Physical Education programmes in schools. There were significant differences in the level of conflict in their role performance using sex and qualification as determining factors, whereas no significant difference was recorded in case of teaching-experience variable. Among the reasons why the Physical Education teachers had to perform unrelated roles were inadequacies of facilities to run physical education programme and lack of interest on the part of the school principals whose philosophy has always an impact on implementation of physical education programmes. The study further concluded that the consequences of role conflict may be stress and frustrations which may have further far-reaching effects on the behaviour and overall personality of a person, including the physical educator.

Dworkin and Haney (2006) based their study on the data collected by the National Institute of Education's Safe School Study Report which suggested that teachers in American urban public schools were emotionally and physically victimized and this resulted in high level of stress associated with teaching. The study explored the linkages between reported experiences of victimization by 291 urban public school teachers and task - specific stressors in the performance of the teaching role. It was found that the level of reported stress and nature and degree of
victimization differed by the grade level taught and the race of the teacher. Generally, minority teachers (black and brown) were less likely to report being stressed or victimized than white teachers, while elementary school teachers reported their work to be most stressful. There was no evidence of a specific causal ordering between fear of victimization and teacher stress.

**Al-Mohammadi and Capel (2006)** conducted their study with a view to identify the causes of stress among Physical Education teachers in Qatar and also to explain any differences in stress according to: gender, nationality, type of school and experience. Results showed that there were different causes of stress for different groups of teachers which could be related to different backgrounds and experiences and different roles and responsibilities in society as a result of different cultural and social expectations and environmental factors.

**Abeid (2007)** in his study assessed the relationship between demographic and work variables and job stress. The subjects were 472 male teachers working in government schools in Riyadh City. The use of multiple regressions revealed that (i) there was negative relationship between demographic variables and job stress, (ii) there was positive relationship between work variables and job stress and (iii) the work variables affect job stress more than demographic variables.

**Allison (2007)** conducted a study with the purpose to identify the student behaviours associated with teacher stress and determine the types of teacher behaviours that may elicit these stressful student behaviours. Students (n=186) and their teachers (n=77) completed a stressful student
behaviour questionnaire, a teacher behaviour questionnaire and a teacher stress survey. Results showed that student lack of effort in class was most strongly associated with teacher stress. In addition, teacher behaviours were correlated with students' behaviours of coming to class unprepared.

Poloski (2007) elaborated the concept of occupational stress and conducted the study with two objectives, namely (1) to measure occupational stress levels among different categories of employees working in Croatian enterprises and (2) to study and analyze stress in relation to individual differences such as gender, age, marital status, parenthood, number of children, hierarchical level, department and working hours. The stress data were collected from 147 employees by means of the "Occupational Stress Intensity Questionnaire" developed by Radosevic - Vidacek (Institute of Medical Research & Occupational Health, Croatia) which consisted of 20 items and used a Likert-type numerical scale ranging from 1 to 5. Mean values and standard deviations were calculated and one way ANOVA analysis (F-tests) was used to test the relationship between different categories of employees and their perceived levels of job stress. The study results reported presence of moderate stress among Croatian employees. The greatest level of stress was perceived by the respondents who had three or more children, those of age 50 and over, employed in marketing, middle level managers and those in procurement. The lowest level of stress perceived respondents were younger than 30 years of age, those employed in finances and production and parents of one child. Respondents in all other sub groups (18 out of 28 subgroups) expressed average stress between 50.21 and 59.39. Consequently, it was concluded that certain employee
groups perceived higher levels of stress than others. Organizations, therefore, should attach greater importance to demographic and work characteristics of individuals when recruiting, developing and motivating, as those characteristics provide a good starting point for understanding and predicting how people will respond under different types of stress. The results of the study were summarized as follows:

(1) There was no significant difference in stress perceived by men and women. (This finding does not correspond with findings around the globe).

(2) Opposite to dominant research findings, study revealed that older people perceived significantly higher levels of stress.

(3) Marital status was found to be significantly related to the occupational stress level perceived. Married people, probably because of their home/work conflict experienced higher levels of stress.

(4) People who had children perceived significantly higher levels of stress. The stress level not only increased with the number of children but was found to be significantly higher with every additional child.

(5) Hierarchical level was found to relate significantly with the occupational stress level.

(6) Number of hours respondent worked was not found to be the variable that related significantly to someone's level of occupational stress.

Memeon (2008) conducted his research to identify levels and sources of teacher stress, teachers' job performance and self efficacy among women school teachers. The study was carried out with two independent samples i.e. teachers and students. Sample I comprised of 330 women secondary school
teachers from government and private schools of three cities of Pakistan. Sample II comprised of 990 girl students selected from 9th and 10th classes of the schools selected in Sample I. Results showed that teachers displayed moderate level of stress and the highest scores were displayed on work related stressors. Significant negative correlation was found between teacher stress and job performance and also between teacher stress and teacher efficacy. The findings also showed significant differences between government and private school teachers on levels of teacher stress, job performance and teacher efficacy.

Alam (2009) investigated the relationship between job stress and job satisfaction. The determinants of job stress which were examined under the study included, management role, relationship with others, workload pressure, role ambiguity and performance pressure. The sample of the study consisted of 300 university academicians from Klang Valley area in Malaysia. The results showed that workload pressure, role ambiguity and performance pressure were the predictors of job stress. But managerial role and relationship with others had no significant direct effect on job stress. The results also showed significant negative relationship between job stress and job satisfaction.

Konukman, Agbuga and Erdogan (2010) found stress to be associated with role conflict. The study revealed that teaching and coaching are two different occupational roles, each having specific stress and burnout problems. These two different roles when performed together result into role conflict and thus job stress among Physical Education teachers who also coach.
2.2 STUDIES ON JOB SATISFACTION

Rudd and Wiseman (1962) attempted to discover the sources of dissatisfaction in a sample of 590 teachers. Their sample amounted to 72% of the total number of teachers shuffled in eleven teacher training institutes who began their careers in 1955. The research was undertaken by means of a questionnaire designed to assess the levels of satisfaction and major sources of dissatisfaction in the profession. The authors, through reviewing and re-grouping their results, arrived at a list of 91 categories of dissatisfaction and out of this list they proposed a further list of 19 major categories. These 19 included such items as pupil behaviour characterized by lack of apparent ability and pupil attitudes such as lack of respect for teachers, feelings of inadequacy, teaching load, lack of time, school organization, school buildings and equipment, poor human relations among staff including the head, inspectors and administrators, salaries, status of the profession in society and large classes. The authors discovered differences in degrees of satisfaction and dissatisfaction between infant school teachers and junior and secondary modern school teachers and also between men and women. Later on, the researchers looked more closely at the nineteen major categories of dissatisfaction and produced a list of nine significant responses in rank order which was further shortened to only five significant responses. These were ranked as under:

1. Teachers' salaries
2. Poor human relations among staff
3. Inadequacies of school buildings
4. Status of profession in the society, and feeling of inadequacy as a teacher.

The research showed quite clearly these categories to be the major sources of dissatisfaction that arise from "aspects of the teacher's job".

Brown (1972) was interested in the need satisfaction of administrators in education and chose a stratified random sample of 1000 public school administrators including directors, superintendents, co-coordinators, supervisors and principals. The study indicated that age, gender, community type or organizational size did not have an effect on job satisfaction. Higher order needs were found to be the least satisfied with lower level administrators experiencing less satisfaction. A statistically significant relationship was found between an administrator's need satisfaction and job level, minority composition of a school and between levels of education. It was concluded that reward system in education was geared towards increased status and not to increased output. Brown added that expenditures on curriculum development were unjustified if administrators were motivated by job status and prestige rather than innovative or creative curricula.

Creed and Enns (1979) categorized leadership styles as either directive, achievement oriented or participative and were able to relate leadership style to extrinsic and intrinsic sources of teacher satisfaction. Intrinsic satisfaction comes from the enjoyment of teaching for its own sake and from the achievement of personal goals, while extrinsic satisfaction comes not from teaching itself but from related outcomes such as power, recognition, material rewards and achievements. The investigators found that directive leadership was not related to teacher satisfaction whether intrinsic or
extrinsic. Achievement oriented leadership was strongly related to extrinsic satisfaction but not intrinsic. Participative leadership, it was argued, provides a greater chance in achieving school goals and teachers’ personal goals. It was found to be one of the most important factors influencing teacher satisfaction and morale.

Knoop (1980) conducted a study that focused on the differences in job involvement, satisfaction and motivation between Ontario elementary teachers and secondary teachers. Several personal variables were analyzed including age, sex, marital status, education, overall experience, non teaching experience, present school experience, income and locus of control. Three structural variables also formed part of the analysis and they included size of school, location of school and hierarchical position. The results showed that three variables had a positive effect on job involvement for both groups; job motivation, job satisfaction and marital status. Secondary teachers who were involved in decision making were satisfied with the supervision, were better educated and became more involved in the workplace. For all teachers, satisfaction and motivation were the variables that had a direct positive effect on job involvement. The job or environmental factors had a positive effect, whereas the personal factors did not have a positive effect on satisfaction, motivation and involvement.

Calfee and Pessirilo (1980) took a close look at the state of California’s system of education where during a short period of time, sweeping changes had occurred with regard to educational funding. On site interviews were conducted and information was gathered from a sample of teachers, principals and vice-principals, and administrators from elementary, junior and senior high schools. Both teachers and administrators reported dissatisfaction because they felt that they were working harder than ever, under worsening conditions and for fewer rewards. A decline in the number of physical
resources and human resources were cited as some of the factors which led to the pessimistic view to the future and to feelings of dissatisfaction. Many teachers indicated that they were planning to leave the profession because they found no opportunity in the future to realize the professional and personal goals that motivated them to enter into education in the first place.

Farrar (1981) in his study sought to determine which extrinsic incentives existed in education to motivate teachers to become superior teachers. A questionnaire was distributed to elementary and secondary teachers and administrators from New York state public schools and a 75 percent response rate was determined. Teachers saw job security, interpersonal relations with staff and students, use of professional time and their family or home life as important outcomes from the job. Three performance motivators, where teachers scored the highest and secondary administrators perceived as being the only three considered to be effective for teacher motivation were identified as recognition for superior teaching, insurance and cost of living allowance. Annual salary increments were particularly popular with secondary teachers, however, it was suggested by these teachers that it be related to performance.

Sweeney (1981) emphasized the importance of understanding the relationship between the phenomena of human needs and teacher satisfaction. They asked a sample of 1300 teachers from 23 secondary schools to indicate the extent to which they desired (ideal) and were receiving (actual) satisfaction in each of the Maslow categories. The difference between the ideal and actual satisfaction scores was regarded as a measure of need deficiency. Need deficiency was greatest for self esteem and self-actualization
needs, suggesting that teachers felt a lack of prestige and accomplishment in their jobs. Need deficiency was least for belonging needs. There was evidence of need deficiency in security feelings for younger teachers (aged 20-24) but not for older groups. It was also found that older, more experienced teachers were more satisfied in their positions than other age groups. Teachers aged 25-34 were the least satisfied. Older teachers’ expectations were higher than their younger colleagues, but their actual satisfaction was also higher. Teacher working with high-ability students were more satisfied than those working with low-ability students. There was no difference between the levels of satisfaction expressed by male and female teachers.

Pastor and Erlandson (1982) contrasted high and low level needs in teachers. High level needs included a desire to be responsible for their own work and to see the outcomes of their efforts, desire for challenge, decision-making opportunities, development of skills, a chance to advance and the opportunity to be creative and innovative. Low level needs included friendly co-worker and teacher/student interactions, better pay, adequate vacations and convenient hours. They found that the needs of the teachers were predominantly high order in nature. Job satisfaction was found to be significantly related to teacher needs. For teachers scoring high on need strength, areas of high satisfaction included seeing student growth, having an influence on students and having positive teacher/student interactions. Areas of low satisfaction included inadequate pay, administrative inefficiency and unresponsive students. Dissatisfaction was expressed with reference to discipline, parental concern and unresponsive students.
Andrew, Parks and Nelson (1985) investigated the characteristics of administrative practices in schools with high morale and their impact on job satisfaction, using case study methodology. Ten school systems were studied and the following factors were found to be important:

- Personal characteristics of the administrator
- Recognition of teachers’ contribution
- Discipline
- Instructional and other support
- Staff development and recruitment

In the schools with better morale, principals were typically described as being outgoing, friendly and good organizers. In schools with poor morale, principals were perceived as disciplinarians, inconsistent, non-supportive, formal and impatient. In the schools with better morale, teacher contributions were regularly recognized in formal and informal ways. Contrasting with schools with low morale, the teachers in schools with high moral were found to be more satisfied with their profession. Clearly written policies about discipline, absenteeism, dress code and conduct were usually found in schools with teachers having high morale and job satisfaction levels.

Evans et. al. (1986) explored the relationship between types of sport coached and coaches’ job satisfaction. They hypothesized that job satisfaction of coaches would be influenced by whether the coach’s sport was revenue or non-revenue producing. Finally, they found that most coaches were dissatisfied with their salary. Significantly, coaches of revenue sports got higher mean scores of job satisfaction than coaches of non-revenue sports did. Wholly, the coaches were satisfied with their jobs.
Subsequently, Hambleton (1989) investigated the nature of job satisfaction among female intercollegiate athletic head coaches. He found that the coaches' marital status, collegiate level of coaching (i.e. Division I, II and III) and type of sport coached did not affect the overall job satisfaction. Only annual income was a good predictor of job satisfaction.

Rosenholtz (1989) linked motivation and how well people perform. He studied psychic rewards, managing student behaviour, task autonomy and discretion, teachers' learning opportunities and teacher certainty and how these factors related to workplace commitment. He found three necessary conditions for professional satisfaction:

1. Teachers' feelings that their efforts caused positive change and their results are a direct result from their actions;
2. Teachers' frustrations were not outweighed by the rewards, especially in their relationship with their students;
3. Teachers had ample opportunities for learning, increasing their own talent, and to feel continuous growth.

Jenkinsons and Chapman (1990) attempted to investigate correlates of job satisfaction among public (N=190) and private (N=100) Jamaican elementary school teachers. Emphasis was on the identification of factors that could be affected through administrative intervention. Results indicated that the quality of school working conditions and respondents' relationships with other teachers were significantly related to satisfaction for both public and private school teachers. School prestige and parental encouragement were also significant predictors for public school teachers; leadership style, organizational structure and the teacher parent relationships predicted job satisfaction for private school teachers.
Tuettemann (1991) in his study focused upon the levels of dissatisfaction and stress among teachers in Education Department of Western Australia. For the purpose, 574 full time secondary teachers were chosen from the initial 789 secondary teachers who responded to the 30 page questionnaire. These teachers consisted of 335 male and 239 female teachers and represented staff of 132 secondary schools. The focus was mainly on the following four questions:

1. Which factors did secondary teachers rate as important to their job satisfaction?
2. To what extent did they report achieving these in their work?
3. What was the incidence of psychological distress among secondary teachers and
4. To what extent was non-achievement of satisfying outcomes to their work related to psychological distress among secondary teachers?

The results of the study revealed that great majority of secondary teachers considered success with students and recognition from both their superiors and students very important to job satisfaction. These factors were more highly rated than salary or promotion, especially among female teachers. While most teachers felt competent with the academic aspect of their work nearly one fifth of them reported dissatisfaction with their relationships and achievement with their students. 19 percent of teachers frequently felt unable to handle disruptive students and 32 percent considered what they taught to be mostly irrelevant to their students. These two factors were significantly related to psychological distress among male and female teachers. Among female secondary teachers, lack of recognition from
superiors or lack of rapport with students, when either or both occurred, was also significantly related to distress.

**Wright (1991)** designed his research study to identify the reasons teachers leave the profession as well as possible solutions to this problem. A questionnaire was developed which listed twelve possible causes of the teacher retention problem and ten possible solutions to the problem. The respondents numbering 58 were asked to rate these factors on a Likert-type, five choice scales. The study concluded that the primary reason that technology teachers left the professions was lack of support by administration. Salaries were also identified as a source of dissatisfaction along with some other reasons like budget restrictions, lack of control over teaching assignments, student apathy, and lack of equipment and facilities. The study identified two main areas of concern that might be possible solutions to the teacher retention problem: administrative practice and professional activities. The study strongly suggested increasing minimum salary levels for teachers and to develop a series of monographs (idea books) specially targeted to teachers with limited facilities and budgets.

**Paster (1993)** explored job satisfaction among female coaches of women's teams in the National Collegiate Athletic Association (NCAA). She found no difference of overall job satisfaction between male and female coaches. Collegiate level of coaching did not show any effect on female coaches' job satisfaction. However, the important finding was that the type of sport coached could affect the supervision facet of job satisfaction. She also found that reasons for the decline in the number of female coaches were a lack of support systems and job satisfaction.

**Senapaty, Panda and Pradhan (1995)** in their study examined the job satisfaction of 102 secondary school teachers (74 male and 28 female.) They
were further categorized as 54 govt. and 48 private school teachers working in 12 secondary schools in the district of Koraput (Orissa). The study aimed at investigating the effects of mental health, age, sex and type of management on teachers’ job satisfaction. The Job Satisfaction Scale by Anand (1992) was used for the purpose of the study. The results revealed (1) no significant difference between secondary school teachers in the level of their job satisfaction, (2) no significant difference between govt. and privately managed secondary school teachers in their job satisfaction and (3) no significant interactive effect of sex and management of school on teachers’ job satisfaction.

McDonald and Kirk (1996) focused on the experiences of beginning Physical Education teachers working in rural area schools with a view to have an understanding on their teachers’ dissatisfaction. It was found that these teachers were subject to a variety of pressures relating to their isolation, beginning professional status and personal lifestyle choices. The work practices, appearance and lifestyle of these teachers were watched closely by their schools and outside community, creating uneasiness and dissatisfaction among them, concluded the study.

Seguin (1997) conducted his study with a purpose to determine whether any significant differences in motivation, job satisfaction, and individual needs existed between teachers and administrators of different levels of experience and gender. The subjects, 39 administrators and 161 teachers, were selected using a cluster random sampling technique. Work Motivation Inventory (WMI) by Jay Hall and Vocational Preference Inventory
(VPI) by J.L. Holland were used alongwith personal data sheet for collection of data. The results indicated that by position, no significant differences existed between teachers and administrators in four of the five need categories. The one exception was for the basic need system. Teachers had significantly higher basic needs than administrators. By age grouping, no significant differences were found in four of five need categories (except for safety need). It was also found that there were no significant differences in the five need categories of educators for the artistic, social, enterprising, conventional, self-confident, status, infrequency and acquiescence personality scores.

Whitener (1997) studied teacher attrition and found that between 1993-1995, 6.6 percent of public school teachers and 11.9 percent of private school teachers left the profession. This rate varied by age and attrition was 10 percent for teachers aged 25-29 and was 30 percent for teachers aged 56-60. The majority of public school teachers cited child rearing, alongwith retirement, as their reasons for leaving the profession. A smaller percentage of teachers cited dissatisfaction with teaching, student indiscipline, poor student motivation and inadequate support from administration as reasons for leaving.

Shann (1998) made an attempt to assess the importance teachers assign to various aspects of their jobs. Interviews and questionnaires from 92 teachers in 4 urban middle schools were used for the purpose. Teacher-pupil relationships ranked highest overall in terms of importance and satisfaction. Parent-teacher relationship commanded respondents' highest concern. Teachers in the lower achieving schools were more dissatisfied with teacher-teacher relationships and their school's curriculum than those in the higher achieving schools, and they reported a greater discrepancy in student
achievement. Principals were advised to act on issues that erode teacher satisfaction by promoting teacher involvement in decision making and simultaneously focusing on education reforms. The study concluded that job satisfaction is a multifaceted construct, critical to teacher retention, teacher commitment and school effectiveness.

**Colin and David (1998)** conducted a survey on long-staying rural teachers and attempted to answer why they were satisfied to stay in locations where others in the profession never agreed. The survey was administered to 427 long-staying rural teachers, teachers who had been in their current school for at least six years and were not planning to move within next twelve months. Information on professional pre and in service education, satisfaction, commitment and community was sought by the researchers and there emerged a profile of a professionally satisfied, community integrated, family-oriented teacher who enjoyed the rural lifestyle and environment. The results carried strong messages for teachers’ education, teachers’ selection processes and incentive.

**Ernest (1999)** examined job satisfaction among post-secondary faculty in the specific field of industrial and technical teacher educators. The study aimed at comparing their level of job satisfaction with normative levels and also finding out the demographic characteristics that predicted differences in levels of job satisfaction among industrial and technical teacher educators. A six point Likert-type scale (Spector, 1997) was used by the researcher in 134 filled up questionnaires collected from respondents. The study revealed that nature of work facet had the highest mean indicating that the respondents were most satisfied with the type of work they do. The lowest mean was
obtained for operating conditions, which signified that the respondents were
the least satisfied with the rules and procedures under which they operated.
No significant predictors were found for the job satisfaction facets of
supervision, co-workers, nature of work and communication. Significant
predictors were found for pay, promotion, benefits, contingent rewards,
operating conditions and overall job satisfaction.

Oshagbemi (2000) conducted a study to investigate the effects of
gender on the job satisfaction of UK teachers. A questionnaire including
several demographic questions such as gender, rank and age was
administered to 1,102 university teachers. A total of 554 responses was
received and analyzed. The results indicated that gender did not affect the job
satisfaction of university teachers directly. However, the interaction effect of
gender and rank was found to be significant. Overall, female academics at
higher ranks namely, senior lecturers, readers and professors, were satisfied
with their jobs than male academics of comparable ranks.

Rocca and Kostanski (2001) conducted their study to explore the
relationship between employment status, job satisfaction and burnout for
secondary teachers in Melbourne. The sample consisted of 105 teachers (64
females and 41 males) out of which 63 were permanent, 23 recently made
permanent and 19 contract teachers. The Job Satisfaction Survey (JSS)
(Spector, 1997) assessed nine facets of job satisfaction with 6 point Likert
Scale. The Maslach Burnout Inventory (MBI) was used by changing the word
"recipient" to "student". The results of the study showed that employment
status was not significantly related to burnout. However, employment status
was found to be significantly associated with particular factors of teachers’
perceptions of job satisfaction. Moreover, job satisfaction was also found to
be affected by sex of the teacher e.g. female teachers who had a permanent
employment status were significantly more satisfied with their fringe benefits
than their contract counterparts whereas males on contract were more
satisfied with their pay than males on permanent basis due to various reasons like being younger, new graduates, having no family commitments or excitement of their first teaching job. The results also indicated that teachers who had more negative perceptions of operating conditions of the school and the nature of their work had higher levels of emotional exhaustion. However, the hypothesis that employment status affected levels of burnout was not supported.

Graca Maria (2002) selected randomly a sample of 752 teachers working in 20 schools. The average age of the teacher was 34-35 years and their average teaching experience was 7-9 years. Most of them had other responsibilities also besides teaching (for instance, group director or level coordinator). The study was conducted with a view to assess the relative contribution of intrinsic and extrinsic factors in teachers' satisfaction. Predictive efficiency of some psychological constructs, personal professional variables in teachers' satisfaction was also assessed. It was found that aspects intrinsic to work as compared to extrinsic factors had more influence on satisfaction in teaching profession. The study also revealed that psychological constructs had greater predictive value than socio-demographic variables in promoting job satisfaction.

Mehrotra (2002) in her study investigating the relationship between job satisfaction of teachers and leadership styles of principles, job satisfaction and organizational climate of the schools and also compare the job satisfaction of teachers of govt. and private schools of Delhi. The sample consisted of 1120 teachers from 28 govt. and 28 private senior secondary schools of Delhi. The job satisfaction scale developed by the investigator herself was used. The results showed significant difference in the job
satisfaction of govt. and private school teachers in favour of teachers teaching in govt. schools. The difference was found to be significant in four dimensions of job satisfaction namely, pay, work itself, promotion and supervision. But work group and working conditions revealed no significant difference between the two types of schools.

Rao and Sridhar (2003) attempted to identify the importance of job satisfaction in the life and career of teachers. The sample consisted of 80 teachers working in secondary schools in Guntur district of Andhra Pradesh. A number of variables such as age, sex, experience, qualification, teaching subjects, location of the school and type of management were examined in relation to the job satisfaction of teachers. The Job Satisfaction Scale developed by Pramod Kumar and D.N.Mutha was used to measure the job satisfaction. The results indicated at the good job satisfaction among the sample teachers. No significant influence of age, experience, qualifications and teaching subjects was found on the job satisfaction of teachers. Job satisfaction of teachers was found to be independent of sex, location of school (urban/ rural) and the type of management (govt. /pvt.) also.

Johansson & Heikinaro (2004) investigated specific factors associated with job satisfaction and dissatisfaction of male and female Physical Education teachers working in Finnish schools. Data were collected from 275 Physical Education teachers (176 females and 99 males) through a questionnaire called ‘The Physical Education Curriculum and Teachers Work Questionnaire’. Four sources of job satisfaction were found: interaction with students, professional success, professional autonomy and interaction with colleagues. Sources of dissatisfaction included poor working conditions, work
under pressure of times, student misbehaviour, large class sizes and lack of resources.

Kim Jong-Chae (2004) made an attempt to explore the relationships among four work experiences (i.e. job variety, job autonomy, job stress and job feedback) and coaches' job satisfaction. He also aimed at examining the influence of institutional support on job satisfaction and investigated if the relationship between the type of institutional support and job satisfaction differed or not between revenue generating sport coaches and non-revenue generating sport coaches. 208 coaches (145 male and 63 female) in 7 sports (i.e. football, basketball, baseball, softball, soccer, volleyball and tennis) from NCAA participated in the study. Out of these, 100 coaches were revenue sport coaches (i.e. football and basketball) and the remaining 108 were non-revenue sport coaches. The results indicated that job variety, job stress, job feedback, affective institutional support and financial institutional support were significantly related to job satisfaction. Further, for revenue - generating sport coaches, financial institutional support was a significant indicator of job satisfaction. However, for non-revenue - generating sport coaches, affective institutional support held a stronger relationship to job satisfaction than did financial institutional support. Finally, job feedback emerged as the most important variable in shaping job satisfaction to both types of coaches.

Zembylas and Papanastasion (2004) conducted their study in two phases. In the first phase, the data were collected through a survey sent to elementary and secondary school teachers and administrators in five districts of Cyprus; overall there were 449 respondents who took part in this phase. In the second phase of the study, in-depth interviews were conducted with 52 teachers and administrators. The study aimed at finding the critical factors influencing job satisfaction and dissatisfaction among Cypriot teachers and the impact of these factors on teachers work and their sense of empowerment.
The findings of the study confirmed those documented by many researches in developed countries i.e. that the main sources of teachers job satisfaction are the satisfaction of working with children and seeing them grow and achieve, making a contribution to the society, working collaboratively with colleagues and achieving personal professional growth. The respondents confirmed that the salary, the working hours and holidays associated with this profession were also significant sources of satisfaction yet, not the most important as one might have thought. The sources of dissatisfaction as identified by the study were: lack of autonomy as a result of the education system's centralization, teacher evaluation and promotion prospects, lack of respect and recognition from the society and lack of discipline among the students. It was concluded that there was an urgent need for policy makers to recognize the fact that educational quality is largely related to teacher job satisfaction. Therefore, everything on the part of the government should be done to maximize teacher satisfaction and minimize dissatisfaction not only for the benefit of teachers themselves but for the sake of the students and the society as well.

Koustelios and Theodorakis (2004) examined role conflict, role ambiguity, and job satisfaction among Greek Physical Education teachers, and the extent to which role conflict and role ambiguity predict job satisfaction. All members of the sample of 61 Physical Education teachers were employed in Greek "sports for all" programs. The standard multiple regression analysis showed that role conflict and role ambiguity were significant predictors of job satisfaction. The study concluded with suggestions directed to the General Secretariat of sports in Greece with view to redesigning the work of Physical Education teachers in "sports for all" programs.
Koustelios & Tsigilis (2005) examined the multivariate relationship between job satisfaction and burnout, experienced by Greek Physical Education school teachers. The Maslach Burnout Inventory and the Employees Satisfaction Inventory by Koustelios and Bagiatis were used on a sample of 175 teachers for the purpose. The findings revealed that job satisfaction was primarily affected by 'job itself' followed by 'supervision' and 'working conditions', whereas burnout was affected by 'personal accomplishment' and 'emotional exhaustion'. Intrinsic aspects of job satisfaction were found to correlate stronger to burnout than the extrinsic.

Nobile and McCormick (2005) investigated the relationship between job satisfaction and occupational stress. 356 staff members from 52 primary schools of six catholic school systems were selected through stratified sampling in New South Wales, Australia. Data were collected using a survey and Factor Analyses were used to identify underlying data structures. Nine job satisfaction and four occupational stress factors were identified. Correlation and multiple regression analyses were utilized to investigate the hypothesized relationships. Moderate to strong correlations existed between most of the job satisfaction and occupational stress variables. However, multiple regressions revealed occupational stress to be the best predictor of only two job satisfaction variables. The results held implications for school systems and school administrations.

Bindhu and Sudheesh (2006) carried out their study on job satisfaction and stress coping skills of 500 primary school teachers, (165 male and 335 female) of Kerala state. Proportionate stratified sampling technique was employed. Job satisfaction scale by Kumar & Kumar (2001) and Stress Coping Skills Inventory by Bindhu, Aneesh and Gulati (2005) were used to collect the data. Differential and correlation analyses were used to analyze the data. The study revealed that job satisfaction differentiated male and female primary school teachers and there was a positive correlation between job
satisfaction and stress coping skills. Practical suggestions were offered for the improvement of job satisfaction and stress coping skills for primary school teachers.

Sonmezer and Eryaman (2008) aimed to determine whether differences existed between job satisfaction levels of public school teachers and of teachers who transferred to private schools from public schools due to retirement or resignation. The researchers also attempted to find out the causes of these differences, if any. Quantitative Survey method employed in the study indicated that differences did exist between the job satisfaction levels of the two categories of teachers. The main factors that caused differences were salary, social ranking, reputation, independence, ability utilization, job security and administrator-employee relationship.

Schulze and Pauline (2009) studied the factors affecting the level of job satisfaction among school teachers. Results demonstrated that the teachers derived most of their job satisfaction from interpersonal relations. Dissatisfaction was found to be caused mainly due to low salaries, low status in the community, poor facilities and lack of security. The authors also reported that most of the teachers were looking for alternative employment and regarded employment in public schools as a much better option.

Yaman (2009) attempted to find out the job satisfaction levels of Physical Education teachers and also determine the factors influential on their job satisfaction. The research comprised of 197 Physical Education teachers (47 males and 150 females) from various provinces of Turkey. A 52-question survey was applied to determine the demographical characteristics and professional status information of the teachers. Based on the findings, the
factors affecting the job satisfaction were determined as- working conditions, social relationships, administration and inspection, personal accomplishment and professional autonomy. Suggestions were offered to minimize job dissatisfaction and help teachers work more effectively.

Fattah (2010) investigated the longitudinal effects of pay increase on Job Satisfaction of 155 school teachers. The results showed that pay increase did not have a significant effect on teachers’ job satisfaction. After pay increase, teachers with high academic attainments were found to be significantly less satisfied with their teaching profession than teachers with low academic attainments. Male teachers were found to be significantly more satisfied with their teaching profession than the female teachers.

2.3 STUDIES ON ADJUSTMENT

Luthar and Edward (1992) examined the levels of psychological adjustment among 51 high achieving, intellectually gifted adolescents with a mean age of 14.1 years. These students were compared with older adolescents matched with them on cognitive maturity (n = 30), and with two groups matched with them on chronological age (CA). One of the CA-matched groups contained children not identified as gifted (n = 47), while the other consisted of athletically younger adolescents (n = 39). All participants belonged to upper middle class families. On multiple indices of adjustment, intellectually gifted adolescents were compared to older adolescents with similar cognitive skills, but differed from both groups of age mates. Differences between the gifted and non-gifted CA-matched groups were stronger than were those between the gifted group and the athletes of the same age. The findings were interpreted in terms of cognitive developmental
and experiential influences on psychological adjustment. The study also revealed gender effects which appeared to be linked with conflicts faced by gifted females between issues of achievement and those of social acceptance.

**Nirmaljit (1992)** selected randomly 320 athletes (160 male and 160 female) from colleges and universities of Haryana and Union Territory of Chandigarh to conduct a study with regards to the adjustment as related to performance and gender in team sports. She used Sinha and Singh's Inventory (1980) to measure all the areas of adjustment. It was found that the university athletes were significantly different from the college athletes on social, emotional and overall adjustment. The male athletes from the studied team sports were found better adjusted than the female athletes from the same sports groups on all the adjustment variables except home adjustment in which the difference between the male and the female athletes was not significant.

**Reynolds and Swan (1995)** aimed to investigate Physical Education teachers' orientation towards teaching on the basis of a theory of organizational socialization. They compared these orientations with lesson objectives and the methods by which teachers coped with their school environments. Ten Physical Education teachers were selected out of which five were identified as innovators and five as custodial or non-innovative teachers. The results of this exploratory study indicated some support from the organizational theory in the career patterns of innovative teachers which significantly differed from the custodial physical educators. For example, the custodial teachers had experienced very stable career histories and had
shown little inclination for study leave or other substantive breaks from teaching. The analysis also indicated links between lesson objectives and coping behaviour, while the custodial teachers tended to adjust their ideas to match those of the schools, the innovators were more determined to change decisions or policies with which they disagreed.

Arvil (1996) administered the Washborne Social Adjustment Inventory to 244 male and female college freshmen enrolled in activity courses at college of the Ozarks M. The mean gains were compared to determine if there was a difference in gains made in social adjustment of co-educational classes over segregated classes. The study concluded that co-educational classes and segregated classes did not differ significantly in contributing to social adjustment of college freshmen. It was also found that in segregated as well as co-educational classes, males and females did not differ significantly in gains made in social adjustment.

Lavallee and Robert (1997) in a study on 48 former athletes from a variety of sports, gathered information about the primary reason for their athletic retirement and the degree of adjustment required. Content analysis of reasons for retirement indicated that this sample of athletes retired from competitive sport for numerous reasons including age, injury, de-selection and voluntary career termination. Subsequent comparisons between athletes who retired for voluntary and involuntary reasons indicated that voluntary retirement was associated with significantly greater emotional and social adjustment on career termination. In addition, the former athletes who experienced the greatest adjustment difficulty perceived the least personal control over the reasons for retirement.
Rosalind and Phillip (1998) collected demographic information along with details regarding stressful life events and psychological well being from 207 randomly selected families for adults, children and adolescents. The students' teachers rated their adjustment to school. Children and adolescents were separately interviewed regarding stressful life events, attitude to school and coping with stress. Results revealed that more difficult temperament, higher number of child's reported stressful life events and child sex (male) were predictive of teachers rating children as poorly adjusted to school. It was also found that a less cohesive family environment, adolescents' reported stressful life events, and their reports of coping directly impacted on poor adjustment to school, while family stress and parent's rating of the adolescents stress coping indirectly influenced adjustment through the child stress variable. The outcomes of the study clarified the links between stressful life events in families and children's and adolescents' adjustment to school.

Griffith and Steptoe (1999) aimed at assessing the association between teacher stress, psychological coping responses and social support with the help of questionnaire survey of 780 primary and secondary school teachers. In stepwise multiple regression, social support at work and the coping responses behavioral disengagement and suppression of competing activities predicted job stress independently of age, gender, class size, occupational grade and negative affectivity. High job stress was associated with low social support at work and greater use of coping by disengagement and suppression of competing activities. It was concluded that behavioural disengagement and suppression of competing activities were maladaptive responses in a teaching environment and may actually contribute to job
stress. Coping and social support not only moderate the impact of stressors on well being but influence the appraisal of environmental demands as stressful.

**Sharma (2000)** conducted a comparative study on 110 male college Physical Education teachers of Himachal Pradesh, Punjab and Union Territory Chandigarh in job stress, job satisfaction and adjustment variables. The study revealed that Physical Education teachers of Himachal Pradesh state experienced more job stress than their counterparts in Punjab state and Union Territory Chandigarh. However, no significant difference was observed in their academic & general environment, professional relationship and personal life adjustments. But socio-psycho-physical and financial adjustment of Physical Education teachers working in Punjab and Chandigarh were found better than teachers working in the colleges of Himachal Pradesh. Teachers of Physical Education working in Punjab and Chandigarh were found overall better adjusted than the teachers working in the state Himachal Pradesh.

**Pal (2001)** in his study attempted to examine the job stress, job satisfaction and adjustment among 140 Physical Education teachers (79 male and 61 female). Analysis of variance statistical procedure was used to compare the three categories of Physical Education teachers i.e. working in government, private and public schools. The study concluded that there was a significant difference among Physical Education teachers working in different types of schools in their job stress, job satisfaction and a number of adjustment variables. No significant difference was observed between male and female Physical Education teachers working in government and private schools whereas, this difference was significant in teachers working in public schools in four of the adjustment variables namely socio-psycho, professional,
personal life and overall adjustment variables. He also found significant positive relationship of job stress with job satisfaction and three of adjustment variables. Similarly, significant positive relationship of job satisfaction was also observed with four of the adjustment variables.

Richard and Marilyn (2001) examined whether children's capacity for self-regulation played a spurious role, a mediating role or a moderating role in the relationship between children's socio-economic status and the adjustment to school. They investigated the role of children's self-regulation in the relationship between children's socio-economic status and three adjustment outcomes: (1) Overall problems in children's interpersonal relations in school (2) teachers' assessment of hyperactivity-attention deficiency and (3) teachers' expectations of children's present and future scholastic ability. The results indicated that associations between self-regulation outcomes and the adjustment to school were not spurious; they persisted after children's socio-economic background was controlled. Self-regulation served as a mediator of the association between children's socio-economic status and both interpersonal problems at school and teachers' expectations, and self-regulation served as a moderator of the relationship between children's socio-economic status and teachers' assessment of hyperactivity-attention deficiency.

Elder et.al (2003) focused upon describing and analyzing the induction and integration of three novice Physical Education teachers in their respective schools and explored the emotional and social factors which influenced these processes. It was found that integration of in-system support factors, such as the principal and teaching staff, with support elements from among the students, facilitated a successful induction to teaching. More attention from the school principal and emotional and professional support from the school
faculty may improve novice teachers' integration and adaptation in school, consequently supporting their future professional success. The authors recommended professional and emotional support during the first year of teaching to make adaptation easy and fast.

Michal and Mario (2004) examined the role of attachment based factors (Children's attachment style, children's appraisal of teacher as a secure base and teacher's feelings of closeness to child) in explaining differences in Israeli children's socio-emotional adjustment and academic functioning. The sample comprised 98 children with learning disorders from general education classes in four public elementary schools and 107 typically developing children from the same classes. Significant intergroup differences emerged in socio-emotional and academic adjustment as well as attachment-based factors. Moreover, attachment-based factors were significantly correlated with adjustment measures and significantly mediated the association between learning disorders and socio-emotional adjustment. The researchers emphasized the need for more studies focusing on identifying vulnerability factors that increase maladjustment, as well as protective factors that enhance positive adjustment.

Farn and Ying (2006) based their study on a random cluster sample of 1060 senior high school students in Taiwan and Anhui provinces in China. The tools of the study contained two inventories: students' Emotional Intelligence Inventory (EII) and Life Adjustment Inventory (LAI). Significant differences were found between those students in two provinces concerning emotional intelligence and life adjustment. Also, with different background variables, students in Taiwan did not show significant differences in emotional intelligence, but their parental style revealed significant differences for life adjustment. A positive and modest correlation was found between emotional intelligence and life adjustment scores for students of both Taiwan and Anhui.
The researchers put forth a number of recommendations for schools, students, parents and families to enhance emotional intelligence and life adjustment, which are inter-linked.

**Caskey (2007)** investigated the differences between adolescent boys and girls from divorced families’ adjustment to the middle school transition. A middle school transition survey measured the academic and social transitional experiences of 196 adolescent boys and girls from divorced families. T-test revealed statistically significant differences between the male and female participants’ adjustment to the academic transition and social transition to middle school. The findings showed that girls from divorced families were more adjusted to the academic social characteristics of middle school transition than were boys from divorced families. Overall, the findings indicated that gender could affect the adjustment experiences of adolescents from divorced families.

**Lubker and Etzel (2007)** conducted a study with the purpose of examining the differences in the reported athletic identity and college adjustment patterns of first year college males and females (n = 317) and how disengagement from sports may affect these variables. Three status groups were used in this study: disengaged athletes (n=133), high school senior non-athletes (n=106) and current first year college varsity athletes (n=78). It was found that first-year females had higher academic adjustment to college than males in the total sample. Specifically in the ‘disengaged athletes’ group, significant differences in college adjustment for both gender and level of athletic identity were found. For this group, significant differences in college adjustment were found related to the nature of disengagement and perceived level of social support.

**Mickey (2007)** conducted a study with a view to examine the relationship between race/ethnicity, gender, athletic participation and college
adjustment in 207 freshmen and sophomore college student athletes and non-athletes. All participants completed questionnaires assessing background demographics, athletic status and college adjustment. Findings revealed that gender and athletic status were significantly related to college adjustment. In addition, gender and race/ethnicity significantly interacted and were related to scores on college adjustment, concluded the study.

**Chan (2008)** assessed emotional intelligence (intrapersonal and interpersonal) and general teacher efficacy to represent personal resources facilitating active and passive adjustment in sample of 273 Chinese prospective and in-service teachers in Hong Kong. Intrapersonal emotional intelligence and interpersonal emotional intelligence were found to predict significantly, active adjustment, but teacher self-efficacy did not contribute independently to the prediction of active adjustment even though there was some evidence that teacher self-efficacy might interact with intrapersonal emotional intelligence in the prediction of active adjustment, especially for male teachers. The study emphasized the need to enhance emotional intelligence to combat teacher stress by preventive intervention efforts.

**Sartison (2009)** analyzed the relationship between cultural adjustment and job satisfaction of foreign teachers in Taiwan. Relationship between the individual level variables of personality and demographics and the group level variables of social support and human resources practices were tested. Cultural adjustment was found to be significantly affected by (1) the length of time living in Taiwan and (2) previous time spent in Taiwan prior to the current contact. It was also found that general adjustment and work adjustment have a significant effect on job satisfaction. Group level variables did not have a significant impact on cultural adjustment or job satisfaction. In addition, there was no significant relationship between personality and cultural adjustment.
CONCLUSION

From the review of literature given above regarding studies on job stress, job satisfaction and adjustment among teachers, it may be said that many studies have investigated different aspects of these variables in teaching as well as other types of jobs. Some studies have attempted to find out causes/sources of job stress among teachers in general and Physical Education teachers in particular whereas some studies have clearly mentioned that role conflict, role ambiguity, inadequate relationships, limited promotional opportunities significantly relate to teachers’ stress/dissatisfaction. Some researchers have also studied the impact of job stress/dissatisfaction on health, morale, productivity and efficiency of teachers’ alongwith studying the coping strategies/techniques to combat job stress. The comparative studies on job stress, job satisfaction and adjustment on the basis of gender, age, educational qualifications, teaching experience etc. have also been attempted to be probed by some researchers besides studying the interrelationship among job stress, job satisfaction and various sub-variables of adjustment among teachers.

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