CHAPTER – 2

Review of Related Literature

2.1 Studies on Teaching Effectiveness
2.2 Studies on Emotional maturity
2.3 Studies on Hardiness of Teachers
2.4 Studies on Job Satisfaction of Teachers
2.5 Critical Appraisal of Related Literature
CHAPTER - 2

REVIEW OF RELATED LITERATURE

A literature review, an essential aspect of research study, is a systematic, explicit and reproducible method for identifying, evaluating and interpreting the existing body of recorded work produced by researchers, scholars and practitioners. Literature review forms a focussed and carefully structured outline of what others have done in the area that has been shaped to set you own research agenda. Spending significant amount of time in reading literature relevant to the research topic prevent the researcher from repeating previous errors or redoing the work that has already been done. The objective of literature review is to identify the gap in the area. Further research is being done to fill this gap.

The present chapter is devoted to the review of research studies that bear direct or indirect relation with the present problem. In order to develop deep insight and to evaluate the methodological practices emerging, the researcher made survey of the available literature and reviewed the researches in the field of teaching effectiveness, emotional maturity, hardiness and job satisfaction and selected those studies that were thought to be significantly related to the topic under investigation. In organising these studies an attempt has been made first to report those studies that have investigated teaching effectiveness, the dependent variable in the present study in relation to different variables. They were followed by those researches that investigated the emotions in teaching, hardiness of teachers and relations between job satisfaction with teaching performance. All the studies have been arranged in chronological order. Accordingly the chapter is divided into the following sections:

2.1) Studies on Teaching Effectiveness.
2.2) Studies on Emotional Maturity.
2.3) Studies on Hardiness of Teachers.
2.4) Studies on Job Satisfaction of Teachers.
2.5) Critical Appraisal of the Related Literature.
2.1) Studies on Teaching Effectiveness

Reddy (1990) in an independent study tried to find out whether sex, age, caste, level of education, marital status, occupation, extent of landholding, income, exposure to mass media, urban pull, attitude towards adult education, achievement motivation and personality characteristics have any influence on instructors’ effectiveness. The sample covered 240 adult education instructors equally distributed between two sexes, selected at random from four adult education projects from the four districts of Rayalaseema of Andhra Pradesh. 1200 learners (240×5), 1200 (240×5) community representatives and 40 supervisors rated 240 instructors. Mean, S.D., t-test, ANOVA, and multiple regression analysis revealed that 1) Male and female instructors did not differ in their effectiveness. 2) The younger instructors were more effective according to LR but not according to other four types of ratings. 3) There was significant difference between the other caste, backward castes, SC/ST according to LR. The F ratios were not significant for other types of ratings. 4) There was a significant difference between the effectiveness of instructors with low, middle and high education according to learners’ ratings. 5) Instructors who were coolies, agriculturalists and those belonging to other professions differed significantly in their effectiveness as measured by LR and PR. 6) Low, middle and achievement motivation groups differed significantly in their effectiveness as measured by TR. 7) Low, middle and attitude groups differed in the effectiveness according to LR and SR. 8) Marital status, extent of land holding, level of income, exposure to mass media and urban pull did not have any influence on the effectiveness of instructors. 9) 19.7 % of variance in the effectiveness as measured by TR was predicted by the different independent variables.

Bruening and Hoover (1991) tried to determine if factors Pajak and Blase (1989) identified can be used to explain the effectiveness and job satisfaction of secondary agricultural instructors. 363 secondary agricultural education teachers in the United States were taken as sample. An instrument was developed which consisted of three scales to measure teacher effectiveness, job satisfaction and the teachers’ perception of how the Pajak and Blase personal life factors influenced their performance as teachers. The important finding was that the agricultural teachers who were satisfied with their positions perceived themselves to be more effective as classroom teachers.
Edwin (1991) conducted a study to determine the relationship between teacher effectiveness and stage of the teachers’ career on 100 California elementary principals. The findings revealed that there was a relationship between being perceived as an effective or ineffective teacher and years at current site and also that performance of a teacher perceived as effective increased at a steady rate until mid-career and then performance drops during late phase of career.

Singh (1991) tried to determine the relationships of teaching effectiveness with creativity and intelligence on teaching effectiveness in 150 male and 150 female secondary school teachers of Punjab, selected through the multistage stratified random sampling technique. Results indicated that among male and female teachers, teaching effectiveness was positively related with fluency, flexibility, originality, composite creativity and intelligence i.e. creativity and intelligence taken jointly were considered better predictors of teaching effectiveness than separately.

Vyas (1991) studied the effectiveness of performance of teachers trained under the programme of mass orientation of school teachers (PMOST). The sample of 30 male and 20 female teachers trained under the PMOST were given a questionnaire, an interview schedule, a classroom teaching observation schedule. The major finding of the study was so far as comprehensive and continuous evaluation was concerned the performance of the teachers trained under the PMOST was found to be lower than that of those who were not trained under PMOST.

Cloer and Alexander (1992) examined whether a significant relationship existed between invited characteristics of teachers and the effectiveness of these teachers as rated by their principals. They also examined the difference between the effectiveness of humanistic or inviting teachers versus the effectiveness of custodial or disinviting teachers. The method of observation for the disinviting and inviting characteristics of teachers, was a pupil control ideology form (Willower, Hoy & Eidell, 1967) and teacher effectiveness was a principal rating form consisted of eight different indicators. A total of 235 teachers and their principals from the nine schools of South Carolina participated in the study. Pearson product moment coefficient correlation revealed positive significant relationship between humanistic, inviting teacher characteristics and teacher effectiveness when all subjects were analysed. Results of t-test for uncorrelated means indicated that humanistic, inviting teachers were more effective than their disinviting, custodial counterparts and there was a positive and
significant correlation between pupil control ideology and teacher effectiveness in the four secondary schools and two middle schools. The relationship at the elementary level was not statistically significant.

Nautiyal (1992) attempted to study efficiency of teaching performance as related to their values, effectiveness, and morale and teacher characteristics as perceived by students. Nearly 200 teachers were selected from the high schools and intermediate colleges of five districts of Garhwal. The study reported significant differences between the teachers performing skills and his effectiveness; between the female teachers of government and private colleges and there were differences of morale between the high performance skill and the low performance skill of government schools.

Bose (1993) studied the correlates of teacher effectiveness of 160 student teachers and found that positive significant relationship exists between teacher effectiveness and each of the predictor variables like intelligence, teaching attitude, self-confidence and previous academic achievement.

Dave (1993) investigated the professional attitude of the teachers in the context of teachers’ effectiveness and responsibility and its impact on the achievement of the pupils. The sample consisted of 710 teachers drawn from two districts, Mehsana and Banaskantha of Gujarat state. The adapted teacher effectiveness scale (Kumar and Mutha), teacher attitude scale (Ahluwalia) and responsibility of student achievement questionnaire (Guskey) were used. The average percentage of marks obtained in annual exams was taken as the achievement. The data were analysed by fixed effect model ANOVA and Neumankeul’s Sequential Range Test. Components of variance were also computed. Major findings were 1) effectiveness with the contribution of 51.17% was the most predominant factor affecting teacher’s attitude. The high effective teacher expressed the higher attitude, (2) area, effectiveness and sex interacted with one another in producing teachers’ attitude scores. Urban female teachers with high effectiveness scored highest, while rural female teachers with low effectiveness scored the least on the teachers’ attitude scale.

Patel and Deshmukh (1993) examined the relationship between teaching aptitude and teaching efficiency among pupil teachers in 238 pupil teachers enrolled in three training colleges affiliated to Amravati University. S.D., critical ratio and coefficient
of correlation revealed that aptitude scores and teacher efficacy scores were positively and significantly correlated.

**Anyalewechi (1994)** attempted to identify characteristics traits of effective teachers and factors that teachers and principals consider influential in teacher effectiveness on a sample of 30 secondary school teachers and 7 principals. The findings revealed that there was an agreement on 7 of the 13 categories identified as either characteristics/traits, if effective teachers or factors influencing in teaching effectiveness. These are the characteristics of the teacher, influential understanding students, managerial skills, planning education, background administrative support and instructional methods etc.

**McCaffrey and David, (1994)** assumed that instructors have a set of stable personality traits and that while teaching, those traits, mediated by course type, give instructor a tendency to engage in behaviours which are either conducive to or detrimental to teaching effectiveness. The sample for this study consisted of 235 courses which were taught by male, full time instructors at a medium sized U.S. University. The results supported the overall model of teaching effectiveness and instructor personality assumed by the study.

**Biswas and De (1995)** surveyed the effectiveness of secondary school teachers in Tripura and found that only male and female teachers differed significantly on teacher effectiveness and the female teachers were comparatively much effective than their counterparts.

**Rao (1995)** studied relationship between teacher effectiveness, creativity and inter-personal relationship of teachers. The findings revealed that no significant relation was found between teacher effectiveness and the income or years of service of the teachers. However, significant relationship was found between teacher effectiveness, creativity and inter-personal relationships of teachers and significant differences existed between rural and urban teachers with reference to inter-personal relationships.

**Renaud and Murray (1996)** investigated the extent to which personality traits associated with teaching effectiveness changed with aging, mediating the relationship between age and teaching. Peer ratings of 29 personality traits and student evaluations of teaching for 33 full-time psychology faculties, ages 33-64, were examined. Results
showed that teaching effectiveness was found to be inversely related to age and to correlate significantly with several personality traits.

Tisclale (1996) determined that self-perceived teacher effectiveness is congruent with teacher effectiveness as measured by three areas; teaching plans and materials, position skills and interpersonal skills. Conclusions from analysis of data indicated that the evaluation of career teachers using the teacher assessment instrument does not discriminate between levels of teacher effectiveness. The majority of teachers were rated at extremely high levels, both by teachers and administrators.

Indira (1997) tried to establish the relationship between teacher effectiveness, work orientation and stress of college teachers on a sample of 220 lecturers working in degree and junior colleges situated in Vizianagaram district and found that the general level of teacher effectiveness prevailing among college teachers was far greater than the mid-point of the scale.

Meadows (1997) explored the relationship between teacher leadership style and teacher effectiveness in a sample of 134 instructors and 2,141 students. The findings, through a post hoc analysis, revealed a significant relationship between instructor effectiveness and instructor leadership. Socio-independent instructors received the highest student grades and students’ views as enthusiastic mentors.

Reddy and Srinivas (1997) investigated the impact of gender and stress on teacher effectiveness in a sample of 120 secondary school teachers selected from two districts of Andhra Pradesh. The study on the basis of t test revealed that there was no significant relationship between gender and teacher effectiveness and between intensity of stress and teacher effectiveness.

Sikora (1997) conducted a study to examine relationship between personality types and teacher effectiveness of secondary and consumer science teachers. The findings indicated that the teacher’s personality may play a significant although limited role in teacher effectiveness.

Vasanthi and Anandhi (1997) explored some factors affecting teacher effectiveness of B. Ed students with the objective to examine the role of intelligence, anxiety, self concept, attitude towards teaching and achievement motivation on teaching effectiveness of B. Ed student. Sample consisted of 417 B. Ed student teachers both male and female. Multiple Regression Analysis and F-ratio revealed that intelligence had high positive relation with teacher effectiveness and contributed about 40%
variance as compared to negligible contribution of achievement motivation, self
concept, attitude towards teaching and anxiety.

Hamann et al. (1998) attempted to determine whether there were any relationships
between adjudicated teaching effectiveness scores, assessed by the survey of teaching
effectiveness (Hamann & Baker, 1995), an observation based assessment instrument,
and social skills scores, assessed by the social skills inventory (Riggio, 1989) and a
self report instrument of preservice teachers. Subjects of the study were 138 music
education and elementary/ secondary education students preparing to be teachers at
three universities in Ohio and Oklahoma. From regression analysis it was found that
(a) emotional expressivity (b) emotional sensitivity and (c) social control was related
to teaching effectiveness among preservice teachers.

Harslett et al. (1998) studied the characteristics of effective teachers of Aboriginal
students. 50 teachers identified as effective with Aboriginal students in selected
primary and secondary schools in urban and regional Western Australia were
interviewed to ascertain what they believed to be the characteristics of effective
teachers of Aboriginal students. The research revealed that characteristics of effective
teachers include understanding Aboriginal culture, history, and students’ home
backgrounds; an ability to develop good relationships with students and their families,
a sense of humour, and preparedness to invest time to interact with students out of the
classroom in order to strengthen the relationships.

Mohan (1998) pointed out that teaching effectiveness may be fairly well
characterised by three factors viz., behavioural dimension, attitudinal dimension, and
entry-level competence.

Stanovich and Jordan (1998) predicted the performance of teacher behaviours
associated with effective teaching in heterogeneous classrooms from a set of variables
identified in the literature as important contributors to effective classroom practice.
The variables-teacher beliefs and attitudes, principal beliefs and school norms, and
teacher efficacy-were selected to represent the determinants of behavioural intention
in Ajzen's widely used model of planned behaviour. Data were collected in 33
classrooms (grades 2-8) from 12 schools. Teachers and principals provided
questionnaire data for several measures of attitudes and beliefs about students with
special needs and their inclusion in general education classrooms. Teachers also
provided interview data and were observed using an instrument designed to measure
effective teaching behaviours. Zero-order correlations and hierarchical regression analyses indicated that the strongest predictor of effective teaching behaviour was the subjective school norm as operationalized by the principal's attitudes and beliefs about heterogeneous classrooms and his or her report of the school's pathognomonic-interventionist orientation. This variable had a direct effect on the classroom observation measure of effective teaching (i.e., it was not mediated by teachers' attitudes). The second important predictor of effective teaching behaviour was the teachers' responses on the pathognomonic interventionist interview scale.

Gordon and Yocke (1999) made an attempt to examine the relationship between personality types, as measured by the Myers-Briggs Type Indicator form G, and teaching effectiveness as measured by classroom observation keyed for effectiveness research of selected beginning industrial and health occupations education teachers. Nine of the sixteen personality types represented in this study. A majority of the respondents reported a preference for extraversion-sensing-thinking-judging. Overall, the data indicate that only 41% of the respondents were effective teachers. Eight of the eighteen teaching effectiveness competency statements had significant and positive relationships with the sensing intuition temperament type. The sensing intuition temperament type was the best predictor of teaching effectiveness when compared with extraversion-introversion, thinking feeling and judgement perception temperament types.

Kumar (1999) studied teacher effectiveness among scheduled caste and non-scheduled caste teachers in relation to their teaching aptitude and self-concept in a sample of 502 school teachers (206 SC and 296 NSC teachers) selected from government/high/senior secondary school of 8 districts of Punjab by employing multistage stratified randomization technique. $2 \times 3 \times 3$ ANOVA revealed that 1) caste has no significant effect upon teacher effectiveness irrespective of teaching aptitude and ideal self concept, 2) significant difference exists in the teachers belonging to different levels of teaching aptitude, 3) teachers having high teaching aptitude as well as ideal self concept are more effective, 4) there is no significant interaction among the variables of caste, teaching aptitude and social concept on teachers’ effectiveness.

Munro (1999) examined the possibility that teacher knowledge about learning may have an impact on the effectiveness of a school. Thirty-two secondary qualified
teachers engaged in a professional development program that provided a framework for reflective study of the learning process, analysis of key aspects of learning in their classes, and identification of the implications for teaching. Changes in teacher effectiveness were monitored in several ways: (1) changes in the display of effective teacher behaviours consistent with a social-constructivist model of learning, (2) changes in perceived ability to facilitate learning in classes, and (3) changes in student performance. The findings support the prediction that involvement in a systematic exploration of the learning process, with teachers explicating their knowledge of learning, has a direct impact, on the display of effective teaching behaviours and on teachers’ personal explicit theory of learning.

_Pandey and Maikhuri (1999)_ explored the attitude of effective and ineffective teachers towards teaching profession. The major findings included 1) there was no significant difference between effective teachers having high or low experience in terms of their attitude towards their profession, 2) high experienced effective teachers’ attitude was positive towards teaching profession than low experienced ineffective teachers, 3) age of effective teachers was not a differentiating factor in their attitude towards teaching profession, 4) young ineffective teachers had a negative attitude towards teaching than ineffective old teachers.

_Bhargava (2000)_ examined the teacher effectiveness of prospective teachers with respect to sex, marital status, educational qualifications and educational background during teaching practice in a sample of 99 students which were selected from 100 student teachers registered in department of education of Aligarh Muslim University, Aligarh during the session 1999-2000. Instructor rating questionnaire for the assessment of teacher effectiveness of student teachers developed by Hayes (1963) was administered to collect the data which were analysed by mean, S.D. and t-Test. The study revealed that 1) females are more effective than prospective male teachers, 2) motivating reasons to teach effectively were found to be same for science and arts prospective teachers.

_Kulkarni (2000)_ tried to compare male and female secondary school teachers with respect to their personality traits, competency, and teaching effectiveness. The sample included randomly selected 1000 higher secondary school teachers and 1000 students from Bijapur district (Karnataka state). Data were collected with the help of tests and inventories which were then analysed using S.D., percentile and correlation. The
findings of the study were: 1) male teachers were effective whereas female teachers were average in teaching, 2) male teachers showed negative relationship between temperament and teaching effectiveness whereas female teachers showed low positive relationship, 3) there was slight positive relationship between adjustment and teaching effectiveness of male and female teachers, 4) there was a significant positive relationship between competency and teaching effectiveness of both male and female teachers, 5) the rural male teachers were more effective in teaching than the urban male teachers, 6) the male married teachers and female unmarried teachers were found to be more effective teachers than the male unmarried and female married teachers.

**Marsland (2000)** conducted a study to evaluate selected teacher effectiveness research for elements of multiple intelligence (MI) theory. The results indicated a large discrepancy between the intelligence and their representation in teacher effectiveness research. Interpretation of the results revealed that no clear balance in what is being measured or in what has emerged as themes in teacher effectiveness research.

**Yadagiri (2000)** investigated the professional attitudes and teacher effectiveness among physical science teachers of Ranga Reddy and Medak districts of Andhra Pradesh. The findings of the study were: 1) significant relations existed between the professional attitudes towards teaching profession and teaching effectiveness, 2) teaching effectiveness of female teachers was significantly higher than male teachers, 3) the female teachers were ahead than the male teachers of both the districts on both professional attitudes towards teaching profession and teacher effectiveness, 4) there was no significant difference in teaching effectiveness between rural and urban dwelling, 5) on teacher effectiveness, the trained and untrained teachers do not differ, 6) below 10 years service teachers had higher teacher effectiveness than their counterparts, 7) the urban school teachers of government aided and private schools had better teacher effectiveness than the rural school teachers under different management of schools.

**Jayaramanna (2001)** studied teacher effectiveness in relation to work orientation and achievement of students in a sample of 250 primary school teachers and 750 students of class V from 160 selected school of Vizianagarm district. Tools used were Indirasen’s work orientation Inventory, teacher effectiveness scale and student’s
academic achievement tool developed by investigator. Critical ratio and correlation statistical techniques were used to analyse data. The findings of the study were: 1) regarding teacher effectiveness and work orientation among teachers and achievement of students, rural locality scored significantly higher than urban and tribal localities, 2) Except for locality, sex, age, professional cadre and teaching experience did not make a mark on entire teacher effectiveness as well as personal aspect of teacher effectiveness, 3) There was no influence at all to any of demographic and professional variables on intellectual aspect of teacher effectiveness, 4) Under graduates possessed more perception than graduate teachers with respect to social aspect of teacher effectiveness, 4) Substantial positive relation prevailed between achievement orientation of students and teacher effectiveness, 5) Values of correlation between teacher effectiveness and both the subscales of work orientation among teachers revealed that achievement orientation than affiliation orientation vitally influenced teacher effectiveness.

**Miller (2001)** compared the teaching effectiveness in the United States, China and South Africa. Instructors and students from universities in the United States, South Africa and China completed a survey concerning effective teaching. A high degree of similarity in views of teaching effectiveness was found between instructors and students on items concerning preparation, evaluation, presentation and opportunities for students’ inquiry, suggesting that instructors and students use the same criteria for rating teaching effectiveness. However, differences among respondents from the three countries were found, suggesting the need for cross-cultural research in definition and evaluation of effective teaching.

**Ansari (2002)** explored the pre and post training teachers’ effectiveness of B. Ed students of department of education, T. R. Degree College, Aligarh. The sample comprised of 70 student teachers on which Dr. M. N. Wali’s teaching effectiveness scale was administered. Mean S.D. and t –test revealed that there is a significant difference in the overall teaching effectiveness of B.Ed students in pre and post teachers’ training.

**Ford (2002)** attempted to determine the relationship among teachers induction programme variable, namely content, personnel and delivery modes employed and the perceived effectiveness and satisfaction of first year teachers of the 279 surveys sent to beginning teachers in twenty six randomly selected public school system.

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throughout the state of Alabama and 63 subjects responded to most or all of the question is the survey. The findings revealed that there is a positive correlation between new teacher induction content addressed during teachers' first years and their levels of self-perceived effectiveness. Next, direct input on a specific task was the most common way new teachers were supported and produced a strong correlation with effectiveness and satisfaction while lectures, although used seldom, produced the least effect on teacher effectiveness and satisfaction. Finally, principals were most frequently involved in the induction of new teachers, while other teachers were also highly involved. The principals' involvement produced the strongest relationship with effectiveness and satisfaction.

Kagathala (2002) made an effort to determine the effectiveness of teachers in relation to their educational qualifications and personality characteristics. The sample comprised of 1800 school teachers from secondary schools of Gujarat. Data were analysed with the help of mean, S.D. and t-ratio. Findings revealed that the effectiveness of teachers of secondary schools in Gujarat found to be of average. The sex of the teacher does not affect the teacher effectiveness and significant effect of qualification was found on the teacher effectiveness, the teachers with the master’s degree possess more teacher effectiveness than the teachers with the bachelor degree.

Marsh and Hattie (2002) tried to establish the relation between research productivity and teaching effectiveness, whether it was complementary, antagonistic or independent constructs. The sample comprised of 182 academics from Australia. Teaching effectiveness was assessed with students’ evaluations of teaching effectiveness based on the standard University form. It was found that the relation between the overall teacher rating and total number of publications was close to zero and clearly not statistically significant. The initial multiple analyses indicated that the near zero teaching-research relation did not differ from department to department. They also explored a wide variety of potential moderators of the teaching research relation to determine if there were some subgroups for which the relation was positive. The critical tests were non significant for all 20 potential moderating variables that were considered.

Minor et al. (2002) examined preservice teachers' perceptions of characteristics of effective teachers, as well as to investigate whether these perceptions are related to educational beliefs (i.e., progressive vs. transmissive). Data for this study were
collected from 134 preservice teachers enrolled in several sections of an introductory level education class for education majors at a large university in southern Georgia. During the 1st week of classes, the authors gave students (a) a questionnaire asking them to identify, rank, and define characteristics that they believed excellent teachers possess or demonstrate and (b) a published survey that identified participants' educational beliefs as either progressive or transmissive. A phenomenological analysis of responses revealed several characteristics that many of the preservice teachers considered to reflect effective teaching. In order of endorsement level, the following 7 themes emerged from these characteristics: 1) student centred (55.2%), 2) effective classroom and behaviour manager (33.6%), 3) competent instructor (33.6%), 4) ethical (29.9%), 5) enthusiastic about teaching (23.9%), 6) knowledgeable about subject (19.4%), and 7) professional (15.7%). With the Bonferroni adjustment, a series of chi-square analyses revealed no relationship between the 7 perception categories of effective teachers and preservice teachers' year of study, preferred grade level for teaching, and educational belief. However, significantly more men than women endorsed teacher characteristics that were associated with being an effective classroom and behaviour manager.

Muijs and Reynolds (2002) tried to explore the contribution of teacher behaviour, belief, self efficacy and knowledge for the differences in teacher effectiveness in a sample of 103 British primary school teachers. The results of structural equation modelling analysis indicate that teacher behaviour has the most significant effect on teacher effectiveness.

Walls et al. (2002) investigated the perception of novice student teachers, post student teaching beginning teachers, and experienced teachers regarding the characteristics of effective and ineffective teachers. There were 90 participants: 30 prospective teachers, 30 novice teachers and 30 experienced teachers. The independent variables were teaching experience group and effectiveness dimension. Themes emerging from respondents’ description were: ability to create an appropriate emotional environment, skills in creating an effective learning environment, teacher motivation, emphasis on activities that actively involved students and classroom techniques and grading.

Agrawal (2003) compared the social intelligence and teacher effectiveness of the teachers in relation to their sex, age, educational qualification, marital status, category, teaching experience, discipline, administrative setup, locale and board of
education. The sample selected through accidental method comprised of 557 teachers of secondary schools of Banda district. Social Intelligence Scale and Teacher Effectiveness Scale were used for data collection. The data were analysed by measure of central tendency, variation, relationship and ANOVA. The findings of the study were: 1) female teachers were found efficient in comparison to male teachers in respect of academic, professional, emotional and moral dimensions of teacher effectiveness as well as in respect of global teacher effectiveness, 2) teachers upto 25 years of age were found high in academic, and emotional dimension of teacher effectiveness, 3) unmarried teachers were better in comparison married teachers in respect of academic, professional and emotional dimensions of teacher effectiveness as well as in respect of global teacher effectiveness, 4) secondary school teachers of different caste group did not differ in teacher effectiveness, 5) rural teachers were better in comparison to urban teachers in respect of academic, professional, social, moral and personality dimensions of teacher effectiveness as well as in respect of global teacher effectiveness, 6) there existed no discipline wise difference in relation to teacher effectiveness of secondary school teachers, 7) post graduate teachers were high in academic, professional, emotional, moral and personality dimensions of teacher effectiveness as well as in respect of global teacher effectiveness, 8) the teachers having 5 and 6 – 10 years of teaching experience were high in academic and emotional dimension of teacher effectiveness, 9) junior class teachers were high in academic, professional, emotional and personality dimensions of teacher effectiveness. Senior secondary teachers were found highly social and moral, 10) the teachers in pay range upto 2000 rupees were high in academic, professional, emotional and personality dimensions of teacher effectiveness as well as in composite teacher effectiveness. The teachers in the pay range of 2001 – 4000 rupees were high in academic, professional, emotional and moral dimensions of teacher effectiveness as well as composite teacher effectiveness, 11) temporary teachers were better in comparison to permanent teachers in respect of academic, professional, emotional and personality dimensions of teacher effectiveness as well as in composite teacher effectiveness, 12) private school teachers were high in academic, professional, emotional and personality dimensions of teacher effectiveness as well as in composite teacher effectiveness. The missionary school teachers were high in academic, professional and moral dimensions of teacher effectiveness as well as composite
teacher effectiveness, 13) the teachers of CBSE board were more effective in comparison to teachers of U.P. board, 14) social intelligence was found as not a good predictor of teacher effectiveness of teachers.

**Chu and Emily (2003)** conducted a study with the purpose to determine the relationship between teachers’ personality traits and teaching effectiveness in reward and non reward kindergartens in Taiwan. The sample of this study included kindergarten teachers (n = 130) and their principals (n =21) from 21 different schools in Taipei and Kaohsiung. The findings are that all Kindergarten teachers in this study whether in Reward or in Non reward were high in creativity, would be a good predictor for identifying effective teachers. The older teachers and those with more teaching experience tended to be calm, stable and decisive showing resilience. Resilience and achievement led to teaching effectiveness. The results indicated that teachers’ personality traits play a significant role in teaching effectiveness and have implication for identifying education, students and teachers with the potential of being effective teachers.

**Giovannelli (2003)** demonstrated that a reflective disposition toward teaching was related to effective teaching especially in the domains of instructional behaviour, classroom organization, and teacher expectation. Data used to test the hypothesis were composed of reflective disposition scores earned by teacher candidates (N = 55) and effective teaching scores given to teacher candidates by their field instructors. Reflective disposition consisted of 6 components: the composite of reflective disposition and the composite of effective teaching, reflection on what teachers should know and be able to do, reflection on teaching, reflection on learning, reflection on the relationship between learning and teaching, and reflection on what it would be like to be a teacher in the classroom. Effective teaching consisted of 5 components: the composite of effective teaching, classroom management, instructional behaviour, and classroom organization and teacher expectations.

**Knobloch and Whittington (2003)** carried out an exploratory descriptive study to investigate the difference between teacher efficacy of novice teachers based on relatively low and high levels of commitment. The population was 91 novice teachers in their first, second and third years of teaching in agricultural education in Ohio. The teachers were split into two groups based on their median scores of career commitment. Although the two groups had the same teacher efficacy at the beginning
of the school year, teachers with higher career commitment were more efficacious after the first ten weeks of the school year than the teachers with lower career commitment. Moreover, teachers with lower career commitment experienced a decline in their teacher efficacy while teachers with higher career commitment did not change in their teacher efficacy from week 1 to week 10. There was a small relationship between career commitment and tenth week teacher efficacy.

Paul and Kumarvel (2003) in a study revealed that teachers differ in their effectiveness with respect to teaching experience, community, type of management and locale. It was also pointed out that rural teachers are more effective than urban teachers.

Schneider (2003) documented how a large sample of teachers in Chicago and Washington D. C. rate the working conditions in their schools and how they perceive these conditions affecting their job performance and teaching effectiveness. Teachers were asked to evaluate their surroundings, including the degree of overcrowding, the availability and adequacy of such specialized facilities as science labs and music rooms and physiological factors including indoor air quality, thermal comfort, classroom lighting, and noise levels. It was found that school facilities had a direct effect on teaching and learning. Poor school conditions make it more difficult for teachers to deliver an adequate education to their students, adversely affect teacher’s health, and increase the likelihood that teachers will have their school and teaching profession.

Ofoegbu (2004) addressed the issue of teacher motivation as an essential factor for classroom effectiveness and school improvement. 772 public primary and secondary school teachers were selected through stratified random sampling technique for data collection using a survey instrument designed by the investigator. Analyses of data revealed that the participating teachers almost unanimously agreed that teacher motivation was a vital factor for classroom effectiveness and school improvement.

Vijaylakshmi and Mythill (2004) studied the influence of personal variables (age, marital status, sex) and professional variables (experience, qualification, subject of teaching, designation, level of college type of college management) on the teacher effectiveness and work orientation of 220 teachers working in junior colleges, degree colleges, and professional colleges of Viziangaram district of Andhra Pradesh. Results showed that there was significant difference between teachers upto 35 years and
above 35 years of age, married and unmarried, teachers with different designation and working in junior and degree colleges with regard to their teaching effectiveness. Regarding their work orientation, significant difference existed between married and unmarried, male and female teachers, teachers of different caders, between junior and degree college staff and government and private college teachers. Positive and moderate relationship was present between teacher effectiveness and their work orientation. Teachers of above 35 years age, married teachers, female teachers, assistant professors and degree college teacher are more effective than their counterparts.

Amandeep and Gurpreet (2005) concluded that female teachers are more effective in their teaching than male teachers; male and female teachers do not differ significantly as far as their teaching competency is concerned; and variable of teaching competency plays significant role in teacher effectiveness of teachers.

Darling-Hammond et al. (2005) examined whether certified teachers were in general, more effective than those who have not met the testing and teaching requirements for certification, and whether some candidates with strong liberal arts as effective teacher education graduates. The researchers took a large student-level data set from Houston, Texas that links students’ characteristics and achievement with data about their teachers’ certification status, experience and degree levels from 1995–2002 in a series of multiple regression analyses looking at 4th and 5th grade student achievement gains than do other groups controlling for teachers’ experience, degrees and student characteristics, were less effective than certified teachers, and perform as well as other uncertified teachers. Teachers’ effectiveness appears strongly related to the preparation they have received for teaching.

Sugathakumar (2005) in a study revealed that self concept and achievement motivation have significant relationship with teacher effectiveness. It was also found that self concept and achievement motivation are capable of predicting teacher effectiveness.

Swars (2005) investigated perceptions of mathematics teaching effectiveness among elementary pre-service teachers with high and low levels of mathematics teacher efficacy. Participants in this study included four elementary pre-service teachers at a midsized university in the south eastern United States who had just completed a mathematics methods course. Data sources were the Mathematics Teaching Efficacy
Beliefs Instrument and interviews. The interviews indicated that mathematics instructional strategies as well as past experiences with mathematics and their influences upon perceptions of teaching effectiveness are associated with mathematics teacher efficacy.

Talbott (2005) surveyed 51 middle school volunteers in an urban, Midwestern school district to determine their personality and temperament type using Myers–Briggs Type Indicator (MBTI) self scorable Form M. Percentages and modes were determined for personality types and means and standard deviations were calculated to determine teaching effectiveness. Chi square test of independence were calculated to determine if there was statistically significant relationship between teacher personality types and years of experience and core versus noncore teaching. The one way analysis of variance (ANOVA) was used to determine if there was a statistically significant relationship between teachers’ effectiveness scores and years of teaching experience (current and overall) as well as the relationship between teaching effectiveness and teachers’ personality temperament types. There was a statistically significant relationship in the leadership skills category of teaching effectiveness and current years of teaching experience. Teachers with 11-15 years of current teaching experience (M = 3.72, S.D. = 0.28) were rated significantly higher teachers with 1-5 years of current teaching experience (M = 2.30, S.D. = 0.88). Although no other statistically significant relationship was found, the data provided information regarding the need for staff development to improve teacher effectiveness.

Wu (2005) examined the relationship between teachers' teaching effectiveness and school effectiveness. The major findings were: (1) The levels of teaching effectiveness measures of comprehensive high school teachers are moderately high, with good teacher student relationship, being the highest, and "teaching self efficacy" being the lowest (2) The higher the teachers' teaching effectiveness, the higher the school effectiveness. Gender, type of school, "teaching self efficacy," systematical presentation of instructional materials and good classroom climate were the five best predictors for school effectiveness.

Ding (2006) studied the relationship between teacher effectiveness and student's achievement as measured by test scores. A strong belief among policy makers and public as well as private funding agencies is that test scores are directly related to the quality of teaching effectiveness. This relationship implies that there could be a direct
causality among teacher preparation, teacher quality and student achievement. Fundamental research issues and concerns as well as an alternative conceptual framework for studying the relationship of achievement and teaching are highlighted. **Opdenakker and Damme (2006)** examined effects of teacher characteristics (gender, teacher education and certification, class management skills and job satisfaction) and teaching styles on indicators of good classroom practice in mathematics classes in secondary education by means of multilevel analysis. The study revealed that the presence of effective classroom practices can be explained by a learner-centred teaching style and by good class management skills. Furthermore, it was found that teachers with a high level of job satisfaction give more instructional support to their classes, especially to classes from a low-ability range, than teachers with a low level of job satisfaction.

**Day and Gu (2007)** in a longitudinal, multi-site, mixed methods project found that commitment and resilience are fundamental to teachers' effectiveness, and that variations in professional, personal and workplace conditions in different professional life phases affect these. It was also found that teachers do not necessarily learn through experience; that expertise is not acquired in an even, incremental way; and that teachers are at greater risk of being less effective in later phases of their professional lives. Their capacity to exercise these effectively relates to their ability to manage positive and negative 'scenarios' in different professional life phases.

**Douglas and Routledge (2007)** compared research on the theoretical models and predictors of teacher effectiveness with those of other occupations, focusing on three specific predictors of worker effectiveness: cognitive ability, personality and education. The comparison of the teachers and other workers studies yields a variety of ways in which research on teacher effectiveness might be improved and expanded: First, the worker literature illustrates specific theoretical models, such as job organization fit, that complement existing models regarding the work of teachers. The potential value of extending worker models to teaching in this way is reinforced by the fact that the three teacher characteristics mentioned above predict effectiveness in similar ways among teachers and other workers. Second, by outlining multiple models of effectiveness, it is possible to identify the important dimensions on which they vary, such as the unit of analysis and the assumed roles of the individual worker in relation to the organization. Third, research on other workers highlights some ways to
improve the measurement of the three predictors and teacher effectiveness, going beyond the use of test scores.

Jain (2007) compared the teaching effectiveness of teachers and their attitudes towards teaching profession with respect to sex, type of school, and teaching experience. The teaching effectiveness observation scale developed by the investigator and attitude scale developed by Goyal was administered on 75 teachers teaching in secondary classes of Delhi schools to collect data. The study revealed that the teaching effectiveness and attitudes of teachers towards teaching profession with respect to sex, type of school and teaching experienced female teacher teaching in private school exhibited better classroom teaching. A significant negative relationship was found to exist between the attitudes and teaching effectiveness of teachers.

Stronge et al. (2007) examined what constitutes effective teaching as defined by measured increases in student learning with a focus on the instructional behaviours and practices. Ordinary least squares regression analyses and hierarchical linear modelling were used to identify teacher effectiveness levels while controlling grade students in 85 classrooms on the Virginia Standards of Learning (SOL) Assessment results in an indicator of teacher effectiveness. Key findings indicate that effective teachers scored higher across the four domains. Additionally, effective teachers tended to ask a greater number of higher levels (e.g. analysis) questions and had fewer incidences of off-task behaviour than ineffective teachers. The exploratory study identified instructional behaviours and practices of teachers that result in higher student learning gains.

Zhi-guo (2007) studied the impact of information entropy on teaching effectiveness. According to the author to improve teaching effectiveness is virtually to increase the transmission of effective information in teaching. Modern teaching theory demands teachers to transfer a large amount of effective information to their students within the limited time by means of any modern technique available. To increase teaching effectiveness, first of all, the effectiveness of teachers’ training should be improved, and in the second place, the learning effectiveness of student should be enhanced, teachers should emphasize “student-centeredness” and bring the activeness, initiative and pioneering spirits of students into full play to ensure that correct information in teaching process can be absorbed, transformed, stored and used by every student. To improve the transmission of effective information in teaching process, the following
problems should be solved: 1) improve the quality of information sent out by teachers, 2) reduce the inference in information transfer, and 3) enhance the effectiveness of received information on students.

*Kane et al. (2008)* evaluated the effectiveness of certified, uncertified and alternatively certified teachers in the New York City public schools using six years of data on student test performance. The results of the study revealed that on an average, the certification status of teachers has at most small impacts on student test performance. The belief that there were large differences in effectiveness between traditionally certified teachers and uncertified or alternatively certified teachers is to be discarded. However, among those with the same certification status, there were large and persistent differences in teacher effectiveness. It was found that classroom performance during the first two years, rather than certification status, was a more reliable indicator of a teachers’ future effectiveness.

*Mohalik (2008)* intended to compare the teacher effectiveness of secondary school English teachers with in service teacher education and without, and students; achievement in English taught by these teachers. The researcher has selected 200 secondary school teachers teaching English with and without having in service teacher education in English organised by Board of Secondary Education, Orissa during 2001, 2006 and 800 students of class IX taught by these teachers. Chi square test and t – test revealed that teacher effectiveness of secondary school English teachers was related to their participation in in-service teacher education programmes, and students’ achievement in English is also influenced by teachers’ participation in such programme.

*Ondery and Croll (2008)* in a paper reported a study of the perceptions of teachers in secondary schools in Gucha district of Kenya of their effectiveness, the structure of their self perceptions, variations in self perceived effectiveness and the relationship between self perceptions of effectiveness and the examination performance of their students. Data were based on questionnaires completed by 109 English and Mathematics teachers from a random sample of 30 schools in the Gucha district of Kenya. Pupil examination results were also collected from the schools. The study revealed three dimensions of self perceived effectiveness emerged from a factor analysis. 1) pedagogic process, 2) personal and affective aspects of teaching, and 3) effectiveness with regard to pupil performance. Teachers tended to rate themselves
relatively high with regard to first two, process-oriented dimensions but less highly on the third, outcome-oriented dimension. Self rating for pupil outcomes correlated with pupil examination performance at school level. Further it was concluded that the teachers in the present study can have a sense of themselves as competent classroom performance and educational professionals without necessarily having a strong sense of efficacy with regard to pupil outcome.

Teddlie and Liu (2008) conducted a study with the objective to advance the understanding of educational effectiveness process within contexts where they have seldom been studied before: rural and urban areas of China. Data were collected on the basis of classroom observations. The research design called for 2 levels of effectiveness status (more effective and less effective) and 2 levels of community type (rural and urban). Stratified sampling was utilised to select the 12 primary schools from Jilin province to participate in the study. Multivariate Analyses of Variance (MANOVA) with traditional teacher effectiveness variables as dependent indices yielded significant differences between more effective and less effective schools and between urban and rural schools. Qualitative results complemented the classroom observations by identifying unique characteristics of classroom teaching in the People’s Republic of China.

Duckworth et al. (2009) proposed positive predictor of teacher effectiveness in a prospective study. He suggested that some teachers are dramatically more effective than others but traditional indicators of competence (e.g. certification) explained minimal variance in performance. The rigors of teaching suggest that positive traits that buffer against adversity might contribute to teacher effectiveness. The study was conducted on 390 novice teachers placed in under resourced public schools. Complete measures of optimistic explanatory style, grit and life satisfaction prior to school year. At the conclusion of school year teacher effectiveness was measured in terms of academic gains of students. All three positive traits individually predicted teacher performance when entered simultaneously, however only grit and life satisfaction remained significant predictors.

Fauziah Binthi Othman (2009) attempted to examine the relationship between personality and teaching effectiveness. Personality traits are measured by five dimensions: extrovert, agreeableness, conscientiousness, neuroticism and openness. The sample size of respondents was 391 of permanent teachers from Secondary
Schools in Northern Region of Malaysia, Perlis, Kedah, Pulau Pinang and Perak. All the respondents were given the questionnaire and their responses are analyzed. The finding revealed that there were significant relationship between extrovert, agreeableness and conscientiousness with teaching effectiveness, while the neuroticism and openness had no significant relationship. Even there were relationship between personality and teaching effectiveness, but the other results show that personality only had a small effect on teaching effectiveness which means that there were several other factors that influence the teaching effectiveness.

Khatal (2009) investigated the intelligence and anxiety in teacher effectiveness in secondary school. The survey method was used for the study with a sample of 300 teachers selected from secondary schools of Nanded district. The study revealed that the effective teachers tend to be more intelligent, than the non effective teachers and the teachers who possess neither a too low nor too high anxiety would more effectively perform his job as a teacher than others.

Gupta (2010) made an attempt to study the adjusted and maladjusted teachers in relation to their teacher competency. The investigator used descriptive survey method and selected 1560 teachers working in government and private schools of Jammu region by simple random technique. Quartile deviation and three way analysis of variance revealed (1) teachers working in government schools have shown significantly higher levels of job satisfaction and teacher effectiveness as compared to private school teachers, (2) there is no significant gender differences among school teachers in their mental health, job satisfaction, teacher effectiveness and attitude towards teaching, (3) the adjusted teachers are more effective than maladjusted teachers only in case of government schools but teacher effectiveness does not differentiate among adjusted and maladjusted teachers working in private schools.

Hameed and Manjusha (2010) tried to explain teacher efficacy as a correlate of teaching styles and organizational culture and it was reported that school culture has a significant bearing on teacher efficacy.

Harris and Routledge (2010) synthesized and analysed past discussion of the nature of teaching and empirical analysis of the predictors of teacher effectiveness. They synthesized four models of teaching – labour, profession, craft, and art each with its own objectives and theories how learning takes place and it was shown that clear theories and models of teacher effectiveness can be developed and tested for each of
the four models of teaching. Further they concluded that cognitive ability and experience predict effectiveness for both the groups, whereas personality and education are not predictive.

Ishali (2010) conducted a study on secondary level school teachers with the purpose of assessing the relationship between attitudes towards information technology, work motivation and teaching effectiveness in general and also in respect to different demographic factors in a sample of 482 teachers of which 237 were females and 245 were males. Data were analysed by t – test, regression analysis and multiple correlation. The findings of the study were: 1) there was no significant difference in the teaching effectiveness of male and female teachers in secondary schools, 2) Trained teachers were more effective than untrained teachers, 3) location of school whether rural or urban had no influence on teaching effectiveness of secondary school teachers, 4) medium of instruction did not influence the teaching effectiveness of school teachers, 5) marital status had a significant influence on teaching effectiveness of secondary school teachers with higher teaching effectiveness in unmarried teachers in comparison to married teachers, 6) attitude towards information technology was positively and significantly related to teaching effectiveness of secondary school teachers. Teachers having negative attitude show the least teaching effectiveness while teachers having highly positive attitude exhibited highest teaching effectiveness, 7) a positive and significant relationship was found between teaching effectiveness and work motivation. Taking into account the two types of motivation i.e. intrinsic motivation and extrinsic motivation, it was found that very strong relationship existed between teaching effectiveness and intrinsic work motivation whereas extrinsic work motivation exhibited a very weak relationship with teaching effectiveness, 8) attitude towards information technology and work motivation, in combination exhibited a positive and significant effect on teaching effectiveness of secondary school teachers.

Khatoon (2010) attempted to study teacher effectiveness of secondary school teachers in relation to gender, religion and teaching experience in a sample of 200 secondary school teachers selected from 12 secondary schools of government and private institutions from Kasimpur powerhouse and Aligarh district. Data were collected by administering Teacher Effectiveness Scale (Kumar and Mutha, 1974) and analysed by mean, S.D., and t–test. The findings of the study were: 1) there is no
significant difference in the effectiveness of teachers on the basis of their gender, 2) religion had a significant effect on teacher effectiveness revealing that Non Muslim teachers are more effective than Muslim teachers, 3) teaching experience also had a significant influence on teacher effectiveness. It was found that teachers having low experience (0-10 years) are more effective than those of having medium experience (11-20 years) although there was no significant difference in the teaching effectiveness of medium experienced and highly experienced (21-30 years) teachers, 4) government school teachers were less effective than private school teachers.

**Sharma (2010)** in a similar way tried to find out the relations of academic background, gender and teaching experience in a sample of 190 teachers (95 males and 95 females) selected randomly from 15 schools of Aligarh district. Data were analysed by Pearson Product Moment Correlation coefficient and t- test. Findings of the study were: 1) teaching effectiveness was significantly related to academic background, gender and teaching experience for the total sample. In case of male sample the relationship between academic background and teaching experience with teacher effectiveness was not found significant. However, in female sample, the relation of teaching effectiveness with academic background is not significant but significant with teaching experience. The relationship between academic background and teaching effectiveness was negative and significant indicating that young teachers were having high academic background and older teachers possess less academic background, 2) secondary school teachers having high academic background were comparatively more effective than teachers with low academic background, 3) male teachers having high academic background were found to be more effective than male teachers of low academic background while there was no significant between the female teachers of these two groups, 4) teachers with higher teaching experience are more effective for total sample. In case of male teachers, teaching experience had not emerged as a deciding factor whereas in case of females, teachers with higher teaching experience were more effective than female teachers with low teaching experience.

**Sodhi (2010)** conducted a study with the objectives to study teacher effectiveness among secondary school teachers of Punjab in relation to their school organizational climate, gender, location, teaching experience and stream (science, social science and languages). A sample of 75 senior secondary schools (45 rural and 30 urban) were
selected. Further all the teachers’ newline (totally 450) working in these schools were administered research tools, namely school organizational climate, teacher effectiveness scale, teacher attitude inventory and job new line satisfaction scale. It was concluded that the secondary school teachers perceiving autonomous and familiar type of school new line organizational climate have exhibited significantly higher level of teacher effectiveness as compared to those perceiving school climate to be of closed type. There is no significant difference in teacher effectiveness of secondary school teachers across gender, location, stream and teaching experience groups.

Goldhaber et al. (2011) have tried to examine the mobility of early-career teachers of varying quality, measured using value-added estimates of teacher performance with focus on the variation in these effects across the effectiveness distribution. They found that, on average, more effective teachers tend to stay in their initial schools and in the teaching profession. But there also appears to be heterogeneity in mobility behaviour across the performance distribution and evidence that teacher mobility is affected by student demographics and achievement levels.

Henry et al. (2011) in their study of novice teachers in North Carolina public schools, the investigated the development of teachers’ effectiveness during their first five years in the classroom and contrasted the effectiveness of teachers who stayed with that of those who left. Across grade levels, teachers’ effectiveness increased significantly in their second year of teaching but flattened after three years. The teachers who left the profession were less effective, on average, than those who stayed at least five years.

Katoch (2011) made an attempt to understand the relationship between teacher effectiveness and temperament. Descriptive survey method of research was used for this study in a sample of randomly selected 427 secondary school teachers using descriptive survey method. Teacher Effectiveness and Gender constituted the independent classificatory variables while Temperament was criterion variable. Teacher Effectiveness Scale (TES) prepared by Kumar and Mutha (1974) and Dimensions of Temperament Scale (DTS) by Chadha and Chandana (1984) were used to collect data from the teachers. two-way-analysis of variance technique revealed that most effective teachers were found to be higher on three traits of temperament i.e. Ascendant, Accepting and Tolerance than least effective teachers. Gender differences were found on two temperaments viz. Cooperative and Warmth.
Rao (2011) conducted a study of teacher effectiveness in relation to their value domain in a sample of 200 teachers (100 males, 100 females). Data were collected by using standardised tests and analysed by mean, S.D., correlation and t-test. Findings of the study revealed that 1) there is no significant relationship between teaching effectiveness and value domain among the teachers, 2) there is no significant difference between teaching effectiveness of male and female teachers, 3) there is no significant difference in teaching effectiveness of private and government school teachers, 4) there is no significant difference in the value domain of male and female teachers.

Rehman et al. (2011) examined the ways in which teacher training was related to effective teaching in terms of student achievement. Sample of teachers comprised of 80 female teachers with 180 girl students of grade X. The instrument of the study was questionnaire for both the target groups. Examination score of grade IX was taken as student achievement. It was found that teachers had a positive attitude towards teacher training and its effectiveness in classroom situation including actual instruction/academic work, classroom management, evaluation procedures, assignments, and developing human relationships with students, principal, and society in general. It was concluded that teacher training was positively related to effective teaching. The results of the study also indicated that there is a significant co-relation between teachers training and student test result.

Authier (2012) tried to identify whether demographics, experience, assignment method or any combination of the three may be seen as predicting occasional teacher effectiveness and/or satisfaction in their daily placements. A more developed understanding of such predictive relationships may lead to an increase in perceived effectiveness from both the view point of the occasional teachers themselves and the classroom teachers whom they replace. The three most important findings from this study were: the significant relationship the average number of days worked per week had with effectiveness, the significant relationship that the number of years worked as an occasional teacher had with effectiveness and the significant relationship age had with satisfaction.

Goyal and Duggal (2012) aimed to study teacher effectiveness in relation to locus of control and burnout and to find out the interrelation of teacher effectiveness, locus of control and burnout. To achieve the objectives of the study Teacher effectiveness
scale by Dr. Parmod Kumar and D.N. Mutha, Rotter’s locus of control scale, & Burnout inventory by Dr. Maslach were used to measure the teacher effectiveness, locus of control & burnout of senior secondary school teachers. A sample of 250 Teachers was selected on the basis of random sampling method. The t-value indicated a significant difference between teacher effectiveness of senior secondary school teachers according to gender and type of the institution, significant difference between locus of control of senior secondary school teachers according to gender and type of the institution. However, no significant difference existed between burnout of senior secondary school teachers according to gender and type of the institution and a negative relation existed between teacher effectiveness and locus of control, teacher effectiveness and burnout & locus of control and burnout.

Himani, Shailedra and Goutami (2012) surveyed 60 teachers to relate teacher effectiveness with enthusiastic and non-enthusiastic personality traits. Personality factors were studied by administering Dimensional Personality Inventory (DPI) developed by Dr. Mahesh Bhargava. Teaching Effectiveness was studied by using Teacher Effectiveness Scale developed by Dr. Pramod Kumar and Dr. D. N. Mutha. Results showed that teachers with enthusiastic trait had more teacher effectiveness, whereas, teachers with non-enthusiastic trait had low teacher effectiveness. Teaching Effectiveness depends upon the individuality, methods of teaching, person’s intelligence, skills, devotions, faith, attitudes, overall personality and its traits.

Kumar and Awati (2012) conducted an investigation to study the teaching effectiveness of women student teachers in relation to their creativity. The sample consisted of 500 female student teachers of colleges of education (B.Ed) affiliated to Karnataka State Women's University Bijapur. The teacher effectiveness scale developed by Ummekulsum and the creativity test (verbal and Non verbal) prepared and standardized by Baquer Mehdi were used. The results show that the student teachers with high creativity had higher teaching effectiveness scores as compared to female student with low creativity. The rural female student teachers had significant higher creativity scores compared to urban female student teachers. The science female student teachers had higher scores as compared to arts female student teachers. The other caste female student teachers showed higher creativity scores as compared to SC/ST caste female student teachers.
Mueller (2012) in his study compared the levels of teacher efficacy, job performance and job satisfaction of teachers between Alternative Certification AC (N = 164) and Traditional teacher Certification TC (N = 960) in 32 school districts in south central and western Kentucky. Teachers self assessed on items related to teacher efficacy, job performance, and job satisfaction. Additionally, this study compared principals’ (N = 106) ratings of teachers’ job performance based on teachers’ selected route to certification.

Results from the teacher responses indicated no difference in the levels of teacher efficacy, job performance, and job satisfaction between the two teacher groups. The demographic data of teacher age and teaching experience did produce some predictive value on job performance and satisfaction. However, the principals’ ratings of teacher job performance produced significant levels of difference between teachers with alternative and traditional certification, especially in the areas of classroom management skills and instructional planning.

Sivasakthi Rajammal and Muthumanickam (2012) tried to study the teacher effectiveness of school teachers in Chennai and Thiruvallur districts. Data were collected from a sample of 900 teachers using Teacher Effectiveness Scale (Kumar & Mutha, 1974). T-test and F test revealed that teachers significantly differ in teacher effectiveness in respect of gender, place of school, level of teaching and they do not differ in teacher effectiveness in respect of marital status, age, type of management, years of experience and monthly income of teachers.

Thakur (2012) examined the relationship between burnout and effectiveness of primary school teachers. The sample consisted of 218 subjects and the data were collected by administering two tools - (i) Primary School Teacher Burnout Scale and (ii) Teacher Effectiveness Scale. The data analysis yielded that there was a significant negative relationship between teacher burnout and effectiveness. Further, significant differences in mean scores of effectiveness of primary school teachers emerged as a function of level of burnout.

Kumar (2013) investigated the professional commitment in relation to thinking style and teachers effectiveness of teachers working in teachers training institutions of Haryana. For the purpose, a sample of 350 teachers, teaching in teacher’s training institutions of four districts namely Panipat and Kurukshetra (Ambala Division), Rewari and Gurgaon (Gurgoan Division), Jind and Bhiwani (Hisar Division) and
Rohtak and Jhajjar (Rohtak Division) of Haryana was randomly selected. Professional Commitment Scale (PCS) by Kanchan Kohli, Job Value Questionnaire (JVQ) by Seema Sanghi, Teachers Effectiveness Scale (TES) by Dr. Pramod Kumar and Dr. D.N. Mutha and Thinking Style Questionnaire (TSQ) made by Investigator himself were used to collect the data. The major findings of the study were: It has been found that out of 100, 33 percent teachers of teacher training institutions are highly committed to their profession while 38 percent has been found to be moderately committed and small number of them i.e. 29 percent are less committed. It has been found that out of 100, 46 percent teachers of self finance teacher training institutions were highly committed to their profession while 36 percent has been found to be moderately committed and small number of them i.e. 18 percent are less committed. It has been found that out of 100, 16 percent teachers of Govt. /Govt. aided teacher training institution were highly committed to their profession while 43 percent has been found to be moderately committed and 41 percent of them were less committed. There was significant positive correlation exists between the professional commitment and teacher s effectiveness of the teachers working in teacher training institutions.

2.2) Studies on Emotional Maturity

Vashistha and Verma (1991) attempted to study and identify specific qualities and characteristics of effective and ineffective teachers as revealed by 18 Rorschach components and draw psychograms to depict the personality structure of effective and ineffective teachers. The primary sample comprised 200 teachers covering both male and female from various schools of Agra city. Percentage mean, median test and chi square were used to treat the data. It was found that effective and ineffective teachers had sharp distinction in relation to the personality traits of emotional construction, marked inhibition of sexuality, dependency, difficulty in establishing close personal relationship and introspection with effective teachers having superior emotional construction, marked inhibition of sexuality, dependent personality and good type of introspection as compared to ineffective teachers.

Sidhu (1992) tried to explore the professional competence of the physical education school teachers in relation to their intelligence, emotional maturity, self esteem and environmental facilities in a sample of 300 physical education school teachers
including male and female, working in rural/urban, private/government, higher/senior secondary schools selected through the incidental-cum-purposive sampling technique. Also 1200 students were taken to obtain ratings about the teachers. Mean, S.D, t-test, coefficient of correlation and linear regression analyses were employed to analyse the collected data. Results were computed for different dimensions of emotional maturity which revealed that emotional adjustment was related to pupils’ ratings and with attitude. The sub measures of emotional unstability exhibited significant positive correlation with pupil’s ratings and with attitude. Emotional regression was positively related with pupils’ ratings and with total attitude score. Social maladjustment was positively related to pupils’ ratings and total attitude score. Personality disintegration was positively related to pupils’ ratings and teaching attitude. Lack of independence was related with pupils’ ratings and teaching attitude.

**Finnegan (1998),** the senior editor of educational leadership stated in an article that emotional well being is a predictor of success in academic achievement and job success.

**Judge et al. (2001)** in an article presented the meta-analytic results of the relationship of four traits- self esteem, generalized self efficacy, locus of control, and emotional stability (low neuroticism) with job satisfaction and job performance. With respect to job satisfaction the estimated true score correlations were 0.26 for self esteem, 0.45 for generalized self efficacy, 0.32 for internal locus of control, and 0.24 for emotional stability. With respect to job performance, the correlations were 0.26 for self esteem, 0.232 for generalized self efficacy, 0.22 for internal locus of control, and 0.19 for emotional stability. In total the results based on 274 correlations suggested that these traits were best among the dispositional predictors of job satisfaction and job performance.

**Shakunthala (2001)** conducted a study of the Adjustment of Secondary School Teachers in relation to their Teaching Competency, Emotional Maturity and Mental Health. Sample consisted of 1000 secondary school teachers of randomly selected 100 schools belonged to government, private aided and private unaided managements of Bangalore urban district. Tools used were Teacher Adjustment inventory by S.K. Mangal, Teaching Competency Scale by B. G. Sudha and Satyanarayana, Emotional Maturity Scale by Yashvir Singh and Mahesh Bhargav and Mental Health by Jagadeesh and A. S. Shrivastava. Descriptive statistics such as, percentages, standard
deviation and coefficient of variation, correlation and t-test were used for data analysis. The findings were: 1) there was a high, positive and significant correlation between gender, adjustment, teaching competency, emotional maturity, mental health among teachers in secondary schools in Bangalore Urban district, 2) there was a high, positive and significant correlation between teaching competency and adjustment of teachers working in government and private secondary schools in Bangalore Urban district, 3) significant differences were found for teaching competency of male and female teachers but not for emotional maturity, adjustment and mental health, 4) there was a significant difference in emotional maturity, mental health, teaching competency and adjustment of teachers working in government and private secondary schools in Bangalore Urban district, 5) no significant relationships of adjustment with emotional maturity, teaching competency and mental health were found for secondary school male and female teachers in Bangalore Urban district, 6) there were significant relationships of adjustment and emotional maturity, teaching competency, mental health of teachers working in government and private secondary schools in Bangalore Urban district but the relationship between adjustment and mental health of teachers working in government and private secondary schools in Bangalore Urban district was significant, 7) there was a significant difference in age, adjustment and emotional maturity of secondary school male and female teachers and also for government and private school teachers in Bangalore Urban district, 8) there was a significant difference in age, adjustment and teaching competency of secondary school male and female teachers and between government and private school teachers in Bangalore Urban district, 9) there was a significant difference in age, adjustment and mental health of secondary school male and female teachers and for government and private school teachers in Bangalore Urban district, 10) there was a significant difference in teaching experience, adjustment and teaching competency of secondary school male and female teachers and for government and private school teachers in Bangalore urban district, 11) there was a significant difference in teaching experience and emotional maturity of secondary school male and female and for government and private school teachers in Bangalore Urban district, 12) there was a significant difference in teaching experience and mental health of secondary school male and female teachers and for government and private school teachers in Bangalore Urban district.
Abraham (2004) examined the emotional competence as antecedent to performance and contingency framework and found that emotional honesty and self confidence and emotional residence can promote superior performance if positive feedback is delivered in an informative manner.

Dash and Behera (2004) attempted to examine the effect of emotional intelligence on teacher effectiveness at senior secondary level of education in a sample of 100 teachers of senior secondary schools of Balsore district of Orissa were drawn as the sample. The study revealed that there was a positive effect of emotional intelligence on teacher effectiveness.

Bansibihari and Surwade (2006) in their study revealed that teaching carried out by emotionally matured teachers would be more stable than that of emotionally immature or unstable teachers.

Date (2006) designed a study for investigating emotional maturity of male and female secondary school teachers of Dhule district. The sample consisted of 141 male and 136 female teachers. Emotional maturity scale was used for the study. Findings indicated significant variation between the two groups in terms of emotional maturity.

Fie-Fei (2007) tried to determine the relationship between emotional intelligence and teaching effectiveness in a quantitative correlational research using two instruments for the sources of data. One instrument was used to measure teachers’ emotional intelligence skills, the Emotional Skills Assessment Process (ESAP). The other instrument was a measure of teaching effectiveness, The Teaching Effectiveness Evaluation (TEE). The sample for the study consisted of teachers at an institute of technology in Taiwan. The statistical methods of univariate descriptive statistics, ANOVA, and Pearson Product Moment coefficient of correlation were used for data analysis and to answer the research questions. Findings indicated that institutions may need to provide lifelong learning programs on emotional intelligence skills that facilitate the development of a harmonious learning environment.

Anderson (2008) explored the Personal Adjustment of Jamaican teacher trainees and its relationship with other Personality variables (self concept, self esteem, emotional maturity, anxiety, age, sex and academic qualification). Data were collected from a sample of 170 second year student teachers attending one of the five teachers’ colleges of different types- primary and secondary, both Mixed and Unmixed. Results of the study revealed that for the total sample academic self concept correlated
significantly with self esteem and emotional maturity, and both surfaced as negative correlates of personal adjustment and anxiety. Among male students self esteem related positively to academic self concept, emotional maturity and age; while low anxiety was associated with sound personal adjustment, and relatively lower academic qualifications.

**Patricia A Jenning and Mark T. Green (2008)** studied teacher social and emotional competence in relation to students and class room outcome at Ph.D. level and concluded that many teachers deal with highly stressful emotion situation in ways that compromise their ability to develop and sustain healthy relationship with their students, effectively managed their class room and support students learning.

**Malik (2009)** studied the teaching effectiveness of secondary school teacher in relation to their emotional intelligence in a sample of 300 teachers selected from schools of Rohtak district. Mean, t-test and correlational analysis revealed that gender and locality had no influence on teaching effectiveness and emotional intelligence but a significant positive relationship existed between emotional intelligence and teaching effectiveness.

**Sutton et al. (2009)** in an article described a series of studies on teachers’ attempts to modify the intensity and duration of their emotions, and how their emotions are expressed in the classroom. The main finding was that teachers practice emotion regulation because they believed it makes them more effective in management, discipline and their relationships with students. Further teachers were more confident that they can communicate their positive emotions than negative emotions, and they use a variety of emotion regulation strategies including preventive and reactive methods.

**Brackett et al. (2010)** examined the relationship between emotion-regulation ability (ERA), as assessed by the Mayer–Salovey–Caruso Emotional Intelligence Test (MSCEIT), and both job satisfaction and burnout among secondary-school teachers ($N=123$). It also examined the mediating effects of affect and principal support on these outcomes. ERA was associated positively with positive affect, principal support, job satisfaction, and one component of burnout, personal accomplishment. Two path models demonstrated that both positive affect and principal support mediated independently the associations between ERA and both personal accomplishment and job satisfaction.
David and Roy (2010) examined the effect of emotional intelligence on teacher competencies at secondary school level of education. The study was conducted on 80 secondary school teachers of Secunderabad city. The analysis revealed a moderate relationship between emotional intelligence and teacher competencies at secondary school level. The differential study of teacher competencies among high and low emotional intelligence teachers is also found to be positive.

Hameed and Tahira (2010) examined the emotional maturity and social adjustment of student teachers. 600 student teachers were selected from different teacher training institutes of Malappuram district of Kerala. The results revealed that male student teachers were more emotionally matured and socially adjusted than female student teachers. There was a positive relationship between emotional maturity and social adjustment of student teachers.

Kauts and Saroj (2010) conducted a study that is based on the assumption that application of emotional intelligence can increase teacher effectiveness and reduce occupational stress among teachers at secondary school stage. 600 secondary school teachers were selected as sample for the study. Emotioibal Intelligence Scale by Anukool Hyde, Sanjyot Pether, Upinder Dhar was used to measure the emotional intelligence of teachers, Teacher Effectiveness Scale by Pramod Kumar and D. N Mutha was used to measure the effectiveness among teachers and Occupational Stress Index by A. K. Srivastava and A. P. Singh was used to measure the stress among teachers. Analysis revealed teachers with emotional intelligence have less occupational stress and more teaching effectiveness than their lower counterparts.

Gupta, Kaur and Raina (2011) conducted a study on leadership behaviour and emotional maturity of prospective teachers in relation to their teacher competencies with the following objectives: 1) to study the leadership behaviour, emotional maturity and teaching competencies of prospective teachers, 2) to study the effect of leadership behaviour on teaching competencies of prospective teachers, 3) to study the effect of emotional maturity and teaching competencies of prospective teachers, 4) to study the interactional effects of leadership behaviour and emotional maturity and teaching competencies of prospective teachers. The main findings of the study were: 1) the prospective teachers having high leadership behaviour were significantly more competent in teaching than prospective teachers having low leadership behaviour, 2) the prospective teachers having high emotional maturity were significantly more
competent in teaching than prospective teachers having low emotional maturity, 3) The interaction of different levels of leadership behaviour and emotional maturity of prospective teachers yielded significant result on their teaching competencies.

**Hassan, Ishak and Bokhari (2011)** aimed to identify whether emotional intelligence influences work values among educators in high schools. The seven domains of emotional intelligence being measured in this study were self-awareness, self-regulation, self-motivation, empathy, social skills, maturity and spirituality. A survey was done by selecting 338 high school educators from various boarding schools in Malaysia. They responded to the Malaysian Emotional Intelligence Inventory (IKEM-MEQI) questionnaire and Work Values Questionnaires. Data were analyzed using SPSS. Result from the study shows that there were four domains that significantly influence work values among educators: self motivation, empathy, social skills and spirituality.

**Kinman et al. (2011)** examined relationships between "emotional labour", burnout (emotional exhaustion, depersonalisation and personal accomplishment) and job satisfaction in a sample of UK teachers. They also examined whether workplace social support moderated any relationships found between emotional labour and strain. The relationship between job experience and emotional labour was also investigated. 628 teachers working in secondary schools in the UK completed questionnaires. Significant associations were observed between emotional labour and all outcomes, with a positive relationship between emotional labour and personal accomplishment. Some evidence was found that social support mitigates the negative impact of emotional demands on emotional exhaustion, feelings of personal accomplishment and job satisfaction. More experienced teachers reported higher levels of emotional labour.

**Patil (2011)** conducted a study exploring the effect of emotional maturity of primary teachers on their attitude. 140 primary teachers were selected by stratified random sampling method from Jilha Parishad school of Amalner taluka. Emotional Maturity Scale of Yashveer Singh & Dr. Mahesh Bhargava and Attitude test of Dr. Jayprakash & Dr. Shrivastava were used to collect the information. The descriptive and inferential statistical analysis was used. It was concluded that emotional maturity of primary teachers affects their teaching attitude and this effect of emotional maturity on teachers’ attitude of primary teachers is positive.
Vibha (2011) tried to relate emotional maturity and self esteem with spiritual intelligence and its dimensions i.e. transcendence, interconnectedness, expansion of self, extra sensory perception and existential enquiry in a sample of 500 B.Ed teacher trainees from the school of education, Lovely professional University, Phagwara. Each independent variable was varied at two levels- Low and High. The results of ANOVA showed that in low emotional maturity group, the differences were found significant on the variables of transcendence, expansion of self, extra sensory perception and total spiritual intelligence and no significant differences were found on the variables of interconnectedness and existential enquiry. In case of low and high self esteem groups, significant differences were found on the variables of transcendence, interconnectedness, expansion of self, extra sensory perception and total spiritual intelligence in favour of high self esteem groups whereas no differences were exhibited between the two groups of low and high self esteem on the variable of existential enquiry. The double interaction effects of the variables emotional maturity and self esteem were not significant on spiritual intelligence and all its dimensions.

Soundar Rajan (2012) conducted a study of emotional maturity and adjustment of B.Ed., trainees in Cuddalore district in a sample of 254 B.Ed trainees employing Adjustment Inventory for college students Singha and Singha (1980) and Emotional Maturity Scale by Yashvir Singh (1990). It was revealed from Mean and S.D values that male trainees have high adjustment in home, health, emotional and in educational adjustment whereas female trainees have high adjustment in social area but on total adjustment scores it was found that there was no significant difference between male and female trainees with regard to adjustment. In emotional maturity and its components female B.Ed., trainees have scores higher than males in emotional regression but male B.Ed., trainees scores higher mean value in personality disintegration but with regard to total emotional maturity it was found that there was insignificant difference in the emotional maturity of male and female B. Ed trainees of Cuddalore district.

Baitukbaeva (2013) presented a reflection on the theoretical approaches and experimental results of researches about the impact of emotions on the professional educators. Based on analytical, logical and scientific methods including observation led the investigator to conclude that psycho-emotional stability of the teacher is a primary condition for the development of positive professional qualities and is an
obstacle for the negative ones. Psycho-emotional stability of the teacher is a necessary condition for the development of professional competence, communicativeness, absence of pronounced professional deformation and emotional burnout.

2.3) Studies on Hardiness of Teachers

**Pierce and Molloy (1990)** studied hardiness in relation to classroom control. They used a sample of 722 teachers in Australia. They hypothesized that hardiness was negatively linked to teacher burnout and positively linked to control ideology. The authors found the commitment dimension alone, as measured by the Hardiness Inventory, to account for almost half of the variance between hardiness and level of burnout. Further investigation was employed in looking at differences in high and low hardiness levels of teachers. They determined that teachers in the high burnout /low hardiness group were more custodial in their dealings with students; teachers also viewed themselves as less able to make significant differences in the lives of their students (low self-efficacy); and these teachers also viewed it more difficult to teach and would leave the profession given the chance.

**Lambert’s (1991)** primary purpose of his descriptive cross-sectional survey of nurse educators, employed full-time by a NLN accredited baccalaureate and higher degree granting school of nursing with both a graduate and an undergraduate program, was to identify if the variables, psychological hardiness, faculty practice involvement, and perceived role stress, were inter-related. Each of 1345 identified nurse educators, whose name had been provided by the deans of 34 randomly selected schools of nursing, was requested to anonymously respond to a mailed, self-administered, pencil and paper questionnaire comprised of three instruments (Demographic Data Questionnaire, Personal Views Survey, and Role Conflict and Role Ambiguity Scale). A 66.5% subject response rate was obtained. Data from 871 of the respondents' questionnaires were analyzed using descriptive statistics and inferential statistics. The nurse educators’ perception of role stress was found to be significantly negatively correlated to the level of psychological hardiness. No significant difference was found between those involved in faculty practice and those not involved in faculty practice with respect to perception of role stress or to level of psychological hardiness.

**Jarvis (1993)** examined the construct hardiness and job satisfaction among teachers at selected elementary schools in Seminole County, Florida. The Personal Views Survey
(PVS) was used to measure hardiness and the short form Minnesota satisfaction Questionnaire (MSQ) to measure job satisfaction. The PVS and MSQ and a demographic survey were disseminated among 425 teachers of which 325 usable questionnaires were returned. Mean, S.D., skewness, kurtosis and standard error of the mean were determined for each subscale of PVS and MQS. Pearson Product moment correlations were derived among and between subscales of the two instruments. One way analysis of variance and a post hoc comparison identified significant differences (p < .05) among hardiness and satisfaction variables when classified by demographic variables. Findings indicated significant relationships between hardiness factors and job satisfaction. Challenge was correlated the most to job satisfaction followed by control and commitment. However, all hardiness components exhibited a negative relationship with job satisfaction. Age, years at present school, years of teaching experience had the greatest effect on teacher job satisfaction. All hardiness components were correlated the most to extrinsic satisfaction.

Thomson and Wendt (1995) studied the relationship between the hardiness personality trait and school climate and the impact of these on student teacher alienation. The sample comprised of 83 female teachers and 23 male teachers with the age ranging between 21 to 50 years. Multiple regression models revealed that the individuals indicating higher levels of hardiness had significantly lower alienation scores across all school climate conditions than their less hardy counterparts did. Further the data indicated that as the school climate becomes more supportive, student teachers who have high levels of hardiness become progressively less alienated. For those low in the hardiness construct, alienation may actually increase as climate conditions become more supportive.

Howard (1996) in a prospective field study on 357 educators received factorially reduced, valid and reliable self-report surveys in two phases within a school semester. Gender and attrition analyses revealed no significant differences due to gender or loss of subjects. The investigator hypothesized and uncovered highly significant associations between stress, burnout, academic hardiness, educator self-efficacy, humanitarianism in discipline, social involvement, and certain psychosocial factors at both stages of the study. The path analyses of Structural Equation Modeling (SEM) revealed certain predictions. Educators' personal efficacy predicted personal
accomplishment, an independent dimension of burnout. Educator burnout and physical illness symptoms predicted increased life stress and diminished physical hardiness. Physical hardiness predicted illness symptoms. Multiple regressions revealed no direct or buffering effects for psychological hardiness among the educators. The data suggested that academic hardiness may be a more continuous influence, more modifiable, vulnerable, and less independent of personal, stress, and health factors than previous research has indicated.

Christopher (1996) examined the relationship of hardiness, efficacy, and locus of control (a personality trait that refers to an individual’s perception of the locus of events as determined internally by his/her own behaviour) on the motivation of 49 trainee teachers (32 males and 17 females). The Hardiness Inventory (Maddi & Kobasa, 1984), the Teacher Efficacy Scale (Gison & Dembo, 1984) and the Internal-Powerful Others Chance Scale (Levenson, 1997) were used for data collection. Results indicated that internal locus of control was found to be significantly positively related to work motivation. Also, personal efficacy, internal locus of control, and hardiness 55% of the variance. Moreover, teacher efficacy, chance, and hardiness negatively accounted for 17% of the variance, and were determined to be external locus of control.

Gonzalez (1997) examined the relationship of stress, burnout, hardiness and social support in urban, secondary school teachers, in particular, whether hardiness and social support (extent of available support and satisfaction) played a mediating role in the stress-burnout process. The role of personal and demographic variables was also examined. Pearson correlation analysis identified significant relationships between, hardiness, stress, social support and burnout. Hardiness did account for a significant amount of variance in total burnout. Stress was also found to have a very significant role in the stress-burnout process. Extent of social support was not found to have a mediating effect on the stress-burnout relationship; however, a significant negative correlation was identified between satisfaction with social support and total burnout. Multiple regression analyses also found hardiness and some aspects of stress as very significant predictors of burnout. Age, level of education, and years married were found to have significant mediating effects; degree of religiousness was a significant mediator and predictor of burnout. However, in spite of the significant relationships identified by univariate and multivariate statistical methods, secondary analysis of the
hardiness data failed to support the initial findings. Factor analysis showed that the hardiness scale used in the study did not exactly measure hardiness as described in the current literature, in effect invalidating the hardiness data. No significant conclusions could be drawn as to the possible mediating effects of hardiness. Students' lack of discipline and motivation was the primary source of teacher stress and the most significant predictor of burnout.

Lease (1999) examined differences in levels of occupational stress and personal strain experienced by new and experienced female and male faculty. Factors affecting the stress-strain relationship were also examined. There were no significant differences on measures of stress or strain between male and female faculty or between new and more experienced faculty members. Role overload and avoidant coping were significant predictors of strain measures with hardiness and responsibility for home-centred tasks accounting for variance in some, but not all, of the strain measures. Results on the negative impact of role overload and avoidant coping on measures of personal strain are consistent with the literature suggesting the need for promoting different coping strategies in the academic workplace as well as working with faculty to help them prioritize and balance their daily workloads.

Azeem (2001) conducted a study on a sample of 300 teachers from various faculties of Aligarh Muslim University, India in order to explore the influence of organizational role stress, job involvement and personality hardiness on employee’s job burnout. The mean scores of different variables revealed that teachers of Aligarh Muslim University feel low level of stress and burnout; they were highly involved with their job, and were found to be high hardy.

Paulik (2001) examined the moderating effect of hardiness, optimism and self-confidence on subjective evaluation of occupational stress among 158 university lecturers in the Czech Republic. Scores were obtained using questionnaires assessing hardiness, teachers' stress evaluation and the taxonomy of stressful situations. The sources of stress found in the present sample of Czech university teachers proved to be similar to those in the comparison work load of teachers at other Czech schools. The results are comparable with research findings from other countries. Hardiness, optimism and self-confidence proved to be effective as buffering factors against the impact of stress among lecturers.
Sayuri (2002) conducted a study to examine the effects of stress, pre-school teacher efficacy, and hardiness on the mental health of kindergarten teachers. Participants in the study were 186 teachers working in public school kindergartens. Factor analysis identified 4 factors: "human relations in the office" "much work and insufficient time," "children's difficulty in understanding and complying," and "difficulties in managing the class." Path analysis showed that "human relations in the office" and "much work and insufficient time" influenced mental health, and were buffered by hardiness.

Chan (2003) conducted a study on hardiness, teacher stress, and burnout. Teachers’ different responses to positively and negatively worded hardiness items suggested positive and negative hardiness reflecting stress resilience and stress vulnerability. Stress, positive hardiness, and negative hardiness all had a key, independent, and significant impact on emotional exhaustion and depersonalization, whereas only positive hardiness had a significant effect on personal accomplishment. There was only some suggestive evidence to support that negative hardiness mediated slightly the impact of stress on emotional exhaustion and depersonalization, and there was no evidence to support that positive hardiness or negative hardiness had stress-buffering effects on teacher burnout.

Steinhardt, Dolbier and McCalister (2003) tested a conceptual model based on research supporting the relationship between the predictors of hardiness, supervisor support, and group cohesion and the criterions of job stress and job satisfaction and between the predictor of job stress and the criterion of job satisfaction. The study employed a cross-sectional research design. Survey data were collected as part of the baseline measures assessed prior to an organizational hardiness intervention. Worksite of Dell Computer Corporation in Austin, Texas. The subjects included 160 full-time Dell employees recruited from a convenience sample representing nine work groups (response rate = 90%). Hardiness was measured using the Dispositional Resilience Scale (DRS), job stress was measured using the Perceived Work Stress Scale (PWSS), and supervisor support, group cohesion, and job satisfaction were measured using a proprietary employee attitude survey. In the proposed model, high hardiness, supervisor support, and group cohesion were related to lower levels of job stress, which in turn was related to higher levels of job satisfaction. The model also proposed direct paths from hardiness, supervisor support, and group cohesion to job
satisfaction. Path analysis was used to examine the goodness of fit of the model. The proposed model was a good fit for the data (chi²[1, N = 160] = 1.85, p = .174) with the exception of the direct path between group cohesion and job satisfaction. Substantial portions of the variances in job stress (R² = .19) and job satisfaction (R² = .44) were accounted for by the predictors.

**Mallar and Capitao (2004)** conducted a study with the objective to verify if teachers who work with students with special needs would show hardiness and, consequently, no burnout, and also to verify the concurrent validity between the dimensions of both instrument Maslach burnout Inventory and Personal Views Survey. 56 teachers, who work only with students with special needs and aged 19-54 years old, participated on this study. Five teachers presented resistant personality to stress and other three, who did not showed hardiness, had burnout. Correlation among the dimensions of the two instruments revealed that only the dimensions control and reduction of the personal realization were positively co-related. Results confirmed the hypothesis that people who have hardiness can attenuate the effects of stress and develop less burnout.

**Lin Churui (2005)** examined the health hardiness and factors relating to levels of hardiness with the Health-Related Hardiness Scale in a sample of 363 elementary and middle school teachers at Zhejiang. The results showed that: (1) the teachers' health-related hardiness was satisfactory on the whole. (2) Work age, gender, marriage status, level of school and level of education were the important factors related to the levels of health-related hardiness.

**Al-Qarout (2006)** aimed at identifying the degree of hardiness behaviour and its relationship with job satisfaction among the headmasters of government schools in the Northern districts of the West Bank from the perspective of headmasters themselves. The study also aimed at identifying the effects of the variables of (gender, education level, experience, salary, school's location, and the level of the school) on the degree of Hardiness behavior among the headmasters of government schools in the Northern districts of the West Bank. The sample consisted of 221 headmasters of the government schools in the Northern districts of the West Bank during the year 2005/2006 by stratified random sampling. Data were collected by self constructed Hardiness behaviour questionnaire and Job satisfaction questionnaire. The study reached to the following conclusions: 1) the degree of Hardiness behaviour among the headmasters of government schools in the Northern districts of the West Bank was
high, that is the total response degree reached (76.2%), 2) the arrangements of the criteria of hardiness behaviour for the headmasters of government schools in the Northern districts of the West Bank were as following: a). Commitment (77.2%), b). Control (76.4%), c). Challenge (74.8%), 3) the degree of job satisfaction among the headmasters of government schools in the Northern districts of the West Bank was moderate, that is, the total response degree reached (68.8%), 4) there was a positive statistical relationship between the hardiness behaviour and job satisfaction among the Headmasters of Government schools in the Northern districts of the West Bank person correlation factor was (0.37), 5) there were no significant differences with respect to the Hardiness behaviour among the headmasters of government schools in the Northern districts of the West Bank due to the (gender, education level, experience, salary, schools' location and the level of the school).

McCalister et al. (2006) tested a theoretically and empirically based model linking potential protective resources (hardiness, coworker and supervisor support) to the outcomes of work stress and job satisfaction and replicating the relationship of work stress to job satisfaction while accounting for the potential influence of negative affectivity. A cross-sectional research design using survey data collected from two convenience samples. Two worksites: 1) a high-tech company and 2) a government agency. High-tech employees (N 5310; response rate, 73.8%) and government agency employees (N 5745; response rate, 49.7%). The Dispositional Resilience Scale measured hardiness and the Positive and Negative Affect Schedule measured negative affectivity. Coworker and supervisor support were measured using the Coworker Support Scale and the Supervisor Support Scale, respectively. The Perceived Work Stress Scale measured work stress, and a single item from the Job Satisfaction Scale assessed overall job satisfaction. A multiple-group path analysis examined the proposed model. Similar patterns of association were found for both samples and suggested a more parsimonious model without the path from negative affectivity to job satisfaction. The model supports the protective nature of hardiness and support at work with regard to work stress and job satisfaction.

Ghamari (2007) tried to compare hardiness and job satisfaction between Members of academic board and school teachers. One of the main goals of this research was to determine the relationship between hardiness and job satisfaction and compare the results of it among members of academic board and school teachers. The sample of
This research was a total of 100, 50 members of academic board and 50 school teachers. The method of sampling was simple randomizing. To measure hardiness Kobasa personal perspective survey was used and to measure job satisfaction, Daives lofcosit and Wais job satisfaction test were used. The hypothesis of research was tested using statistical methods of correlation coefficient and t-test. The results showed that there was a positive and significant relationship between hardiness and job satisfaction in both groups (p < 0.01). There was no significant difference between the job satisfaction of members of academic board and school teachers. There was significant difference between the hardiness of members of academic board and school teachers (p < 0.05). Also result of research showed that there was a significant and positive relationship between components of hardiness (commitment control, challenge) and job satisfaction between members of academic board. But no significant relationship among challenge and job satisfaction was observed between school teachers. To predict job satisfaction based on components of hardiness, step by regression analysis was used and the result showed that the component of commitment explained about 23% of job satisfaction variance.

Lopez et al. (2008) examined from an integrative approach to what extent occupational stressors when in combination with other variables that have accredited their explicative value in accounting for teacher distress in other domains (personal, psychosocial and outside the occupational sphere) contribute to predicting and/or explaining the different components of burnout. The sample comprised of 1386 secondary education teachers. The statistical results obtained confirm for all dimensions in the syndrome the explanatory role of occupational stressors related with student disruptive behaviours/attitudes and disciplinary issues (conflict management and lack of support/consensus). The remaining variables in the study (Type A pattern, optimism, hardiness, friend and family support, life events) also contribute to accounting for burnout, albeit to a lesser extent than occupational factors. Results not only confirm the suitability of the selected variables but also the necessity to design integration studies in which, besides another type of determinants, to include variables from the occupational domain.

Cash (2009) tested the relationship of personality variable hardiness to the organisational outcomes of job satisfaction, performance and intentions to turnover. Employees (N = 297) from a range of large New Zealand organisations completed a
questionnaire on hardiness, appraisal, coping, affect and the three distal outcomes. Bivariate correlations revealed significant relationships between hardiness and job satisfaction, hardiness and performance, and a significant negative relationship with intention to turnover. Structural Equation modelling results revealed that the direct relationship between hardiness and job satisfaction was the strongest path, which indicates that higher an employee level of hardiness the higher their likely level of job satisfaction.

Sezgin (2009) examined the relationships between teachers’ commitment perceptions and their psychological hardiness and some demographic variables. A total of 405 randomly selected teachers working at primary schools in Ankara participated in the study. Personal Views Survey III- R and the Organizational Commitment Scale were used to gather data. It was found that psychological hardiness is a meaningful construct predicting the perceptions of primary school teachers on organizational commitment. Results revealed that psychological hardiness is positively and significantly related to both identification and internalization components of teacher commitment, whereas it is negatively and significantly correlated to the commitment predicated on compliance. Teacher compliance commitment is negatively associated with both identification and internalization. Although gender and years of experience are significant predictors of identification and internalization, the variables of subject specialization and age did not significantly predict all three subscales of teacher commitment.

Azeem (2010) in a research paper examined the influence of personality hardiness, job involvement and job burnout among teachers from one of the central universities in India. The findings of the study reveal that personality hardiness and job involvement resulted from job burnout of teachers. Job involvement are found to be negatively and significantly correlated with depersonalization and positively with personal accomplishment dimensions of burnout. Commitment, challenge, control and total personality hardiness are found to be negatively related with emotional exhaustion. Commitment and total personality hardiness are also found to be negatively related with depersonalization. Stepwise multiple regression analyses summarize that commitment and total personality hardiness are the predictors of burnout among teachers.
Eschelman, Bowling and Alarcon (2010) in a meta-analytic study examined the relationships between the hardiness facets, the relationship between hardiness and other personality variables, as well as the relationships between hardiness and several hypothesized criteria, including stressors, strains, social support, coping, and performance. The analyses suggested that hardiness is: (a) positively related to other personality traits that were expected to protect people from stress, (b) negatively related to personality traits that were expected to exacerbate the effects of stress, (c) negatively related to stressors, strains, and regressive coping, and (d) positively related to social support, active coping, and performance. Regression analyses suggested that hardiness is significantly related to important criteria after the effects of other personality traits (e.g., the Five Factor Model traits) are controlled.

Lopez et al. (2010) tried to identify, from an integrative approach, the main predictors of different manifestations of occupational malaise (stress, burnout and job dissatisfaction) in a sample of 1,386 teachers drawn from compulsory secondary education. The results from statistical analysis (correlation and regression) revealed that support by colleagues, optimism, hardiness, daily hassles and life events are valid predictors of stress, burnout and job dissatisfaction in secondary school teachers.

Miskolciova (2010) presented the results of a factor analysis research relating burnout syndrome with personality factors in a research paper. The sample included 242 teachers of the first and second levels of 13 basic schools in Banska Bystrica and Zvolen. Maslach Burnout Inventory, Kobasa’s Personal Views Survey, NEO-Five Factor Inventory (Costa & McCrae), Burnout Effect questionnaire (Henning & Keller) were used to collect data. Results revealed negative relationships of hardiness with burnout and neuroticism and positive relationship of hardiness with extroversion, openness, agreeableness and conscientiousness. Research also showed that increase in the level of burnout decreased the level of work satisfaction of teachers.

Sharma (2010) aimed to investigate the relationship between personality hardiness, social support, religiosity and loneliness purpose in life and subjective well-being in retirees. The sample comprised 100 retired university teachers from Himachal Pradesh (50 males and 50 females). The analysis revealed that for the total sample, Purpose in Life (32%), Social Support (12%) and Religiosity (5%) have contributed 49% of variance in totality. In Males sample, Hardiness explained the maximum variance (27%) followed by Purpose in Life (14%), Social support (8%) and
Religiosity (4%). In all, these variables have accounted for 53% of variance. In females sample, Religiosity contributed the maximum variance (32%) followed by Social support (18%) and Purpose in life (8%). The results have shown the commonness of three variables viz., social support, and purpose in life and religiosity in predicting the subjective well-being of both the genders. Further, t-test has revealed the superiority of females in subjective well-being, religiosity and social support and male’s superiority on hardiness, and purpose in life.

Wong (2010) tried to study Hardiness and Optimism as Resilient Characteristics of Hong Kong kindergarten teachers. The study had two aims. First, it examined the correlation relationships among variables of hardiness, optimism, self-esteem, and mental health complaints. Second, it testified the mediating effect of hardiness on optimism. Inservice kindergarten teachers were invited to participate in the study as voluntary convenient samplings. They were asked to complete four inventories anonymously to enhance confidentiality and their willingness to participate. Eventually, 64 out of 104 teachers participated and returned the inventories. Results showed that both hardiness and optimism correlated positively with self-esteem but negatively with mental health complaints. While hardiness mediated the effects of optimism, teachers’ commitment (a subscale of hardiness scale) appeared to predict consistently their self-esteem and mental health complaints..

Cash and Gardner (2011) aimed to test the relationship of the personality variable of cognitive hardiness to job satisfaction, performance and intention to turnover. These relationships are to be tested via two alternative models, with a sequential and simultaneous structure for appraisal and coping processes. Employees (n=297) from a range of large New Zealand organisations completed a questionnaire on hardiness, appraisal, coping and affect. Bivariate correlations revealed significant positive relationships between hardiness and job satisfaction, hardiness and performance, and a significant negative relationship with intention to turnover. Structural equation modelling revealed that the direct positive relationship between hardiness and job satisfaction was the strongest path. The simultaneous model provided best fit to the data, revealing a positive path from hardiness through challenge appraisals to positive affect, and a negative path through threat appraisal and emotion-focused coping.

Qadumi (2011) aimed at investigating the influence of selected demographic (gender, marital status, qualifications, teaching experience, class size and salary) variables on
hardiness levels (commitment, control, and challenge) of EFL teachers in Palestine. A sample of 271 of EFL teachers participated in the study. A modified form of Maddi & Kobasa’s (1983) Hardiness Inventory (HI) was used to measure the level of hardiness of English language teachers in Palestine. Results revealed that the total levels of hardiness behaviour of English teachers in Palestine were generally high for all domains of hardiness (commitment, control and challenge). This indicates that English teachers are hardy persons. There were significant differences in EFL teachers’ hardiness between EFL female teachers and EFL male teachers in favour of female teachers. Moreover, significant differences were found on the qualification variable in favour of the diploma. Whereas, there were no significant differences in EFL teachers hardiness on teaching experience, marital status and salary. 

Zelenova et al. (2011) in an article described the results of empirical research of interrelations between resiliency, certain aspects of self-conception and such human health determinants as burnout syndrome and stress level. The Maslach Burnout Inventory (MBI) was used to diagnose the level of burnout; general distress level was determined by the Holmes and Rahe stress scale. In order to identify personal characteristics of teachers psychological questionnaires were used. It was shown that disorder of professional health and symptoms of emotional burnout are connected with low levels of evidence of resilience components, as well as with low general and professional self-evaluation.

Erkutlu (2012) conducted a research study with the purpose to examine the moderating effects of psychological hardiness and self-monitoring on the linkage between organizational politics and teacher burnout. Totally 1344 teachers from 112 high schools chosen by random method in Ankara, Istanbul, Adana, Antalya, Samsun, Kahramanmaras, Adiyaman and Gaziantep in 2010-2011 spring semester, constitute sample of the research. Organizational politics were measured using the Perception of Organizational Politics (POP). Maslach Burnout Inventory, the Personal Views Survey III-R and Self-Monitoring Scale (SMS) were used to assess teacher burnout, psychological hardiness and self-monitoring respectively. In the study, the hypotheses were tested by using moderated hierarchical regression. The results of the study reveal that organizational politics is positively related to teacher burnout within high schools. Furthermore, self-monitoring strengthened the positive relationship between
organizational politics and teacher burnout and psychological hardiness weakened that relationship.

**Ferreira (2012)** empirically investigated the relationship between an individual’s hardiness (measured by the Personal Views Survey II [PVS-II]) and organisational commitment (measured by the Organisational Commitment Scale). A quantitative survey was conducted on a convenience sample of predominantly Black (92.2%) and female (71%) employed adults (N = 355) at managerial and staff levels in the human resource management field. Main findings: Correlational and multiple regression analyses revealed a number of significant relationships between the two variables.

**Rasouli et al. (2012)** investigated the relationship between hardiness and job satisfaction & stress among faculty members and staffs in Islamic Azad University in Mahabad. 200 samples were selected based on simple random sampling. Data were collected in three ways: 1) personal view scale, 2) Davis Job Satisfaction questionnaire, 3) Stress test. Descriptive statistics (frequencies, percentage, average, graphs) and inferential statistics (t-test and regression test conducted by computer processing) were used for data analysis. The results showed a meaningful difference between hardiness of faculty members and staff. There was a meaningful difference between faculty member stress and staff stress. There was a positive and meaningful relationship between hardiness and job satisfaction of staff. There was a positive and meaningful relationship between hardiness and job satisfaction of faculty members. There was no meaningful relationship between hardiness, job satisfaction and stress in among staff. There was a meaningful relationship between hardiness, job satisfaction and stress among faculty members.

**Rogayye et al. (2012)** inquired the relation between the measure of emotional intelligence and hardiness in 214 female teachers of Sarab city using Sheering emotional intelligence questionnaire and Kobassa hardiness questionnaire. Pearson correlation and multiple regression revealed a meaningful relationship between the two and sympathy with b=0.241 and Self-Awareness with b=0.239 had the most proportion on the foretelling of under-survey hardiness.

**2.4) Studies on Job Satisfaction of Teachers**

**Shah (1991)** tried to predict the effect of aptitude, job motivation, job satisfaction, and personality attitude and school climate on teaching effectiveness among the
secondary level teachers. The sample comprised of 2000 secondary level teachers of the Garhwal region selected by multistage random sampling. Only, 1,907 teachers filled the teacher efficiency scale completely out of which 936 were identified as effective and 971 were identified as ineffective teachers. Analysis of data revealed that teacher effectiveness was significantly affected by teaching aptitude, job satisfaction, job attitude, job motivation, personality, value pattern, self concept, intelligence and organizational climate.

Cheri (1992) investigated the relationship between employee satisfaction, other job-related attitudes (commitment, adjustment, and psychological stress), and organizational performance. Organizational performance data were collected for 298 schools; employee satisfaction and attitude data were collected from 13,808 teachers within these schools. Correlation and regression analyses supported the expected relationships between employee satisfaction/attitudes and organizational performance.

Gupta and Kaur (1993) tried to find the relationships of burnout and job satisfaction with teaching competency, 440 trained graduate teachers including both males and females from high and higher secondary schools were randomly selected. Self rating scale for teachers, pupil rating of teachers’ scale, teachers job satisfaction scale, Maslach burnout inventory were employed as measuring tools. Data were analysed with the help of mean, S.D. and test retest reliability. Results showed that pupils rating of their teachers is not much similar to the teachers self rating. The mean value of the job satisfaction leads to the inference that teachers were highly satisfied with their jobs. More competent teachers were less fatigued and tired and exhausted as compared to less competent group and they had better sense of personal accomplishment.

Abraham (1994) conducted a study of job satisfaction and teaching effectiveness on a sample of college teachers with the objective to explore the nature of relationship between level of job satisfaction, teacher effectiveness and length of service tenure among college teachers. 25 lecturers were selected as the sample of the study. Data were collected by administering job satisfaction scale of Mudgil, Muhar and Bhatia and teacher effectiveness scale of Kumar and Mutha. The collected data were treated using Duncans’ Range test. The major finding revealed that the teachers who had a high and medium level of job satisfaction were more effective teachers than those with low level of job satisfaction.
Gupta (1995) examined the relationship between job satisfaction and teacher effectiveness of secondary schools teachers and their teaching effectiveness on a sample of 560 teachers of Uttar Pradesh and found that the coefficients of correlation between overall dimension of job satisfaction of teacher viz. salary and other benefits; community aspect supervision; family life; policies and practices; growth and practices were significantly related with teacher effectiveness.

Saxena (1995) attempted to study teacher effectiveness in relation to adjustment, job satisfaction and attitude towards teaching profession. The sample comprised of 545 teachers from 33 secondary schools covering both rural and urban areas from Garhwal region. The study revealed that both effective and ineffective teachers were found to be well adjusted and have favourable attitude towards teaching profession. Postgraduate teachers were found to be more adjusted than graduate teachers.

Stella and Purushottam (1996) investigated the relationship between the classroom behaviour of the teachers and their job satisfaction. Modified versions of Flanders interaction analysis category system and the job satisfaction questionnaire were administered on the sample of 68 teachers selected on the basis of stratified random sampling technique. Data were analysed with the help of simple correlation. It was found that 1) among the inservice teachers there was significant correlation between teacher behaviour and job satisfaction, 2) the rural teachers and government school teachers had a lower job satisfaction.

Shann (1998) examined the professional satisfaction of teachers in urban middle school. Interviews and questionnaires from 92 teachers in 4 urban middle schools were used to assess the importance and satisfaction they assigned to various aspects of their jobs. Teacher–pupil relationships ranked highest overall in terms of importance and satisfaction. Parent– teacher relationships commanded respondent’s 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.

Mishra (1999) conducted a study to find the relationships between teacher effectiveness of elementary school teachers in relation to their attitude towards teaching, level of aspiration and job satisfaction. It was found that: Teacher effectiveness has significant positive correlation with job satisfaction and there exists a significant two-factor interactional effect in teacher’s attitude towards teaching and
their job-satisfaction on teacher effectiveness. Teachers with high attitude towards teaching and low job satisfaction show highest mean scores whereas teachers- with low attitude towards teaching and low job-satisfaction show lowest mean teacher effectiveness score.

Xin and MacMillan (1999) conducted a study on 2,202 teachers taken from the New Brunswick Elementary School Study to examine how teacher professional satisfaction is related to background characteristics and workplace conditions measured through teaching competence, administration control, and organizational culture. Results show that female teachers were more satisfied with their professional role as a teacher than were their male counterparts. Teachers who stayed in the profession longer were less satisfied with their professional role. Workplace conditions positively affected teacher satisfaction; administration control was the most important, followed by teaching competence and organizational culture. Significant interactions between teacher background characteristics and workplace conditions occurred. The gender gap in professional satisfaction grew with increased teaching competence.

Raj (2000) conducted a study on teacher effectiveness of secondary school teachers in relation to motivation to work and job satisfaction. The study was conducted on 100 secondary school teachers from 22 schools (both rural and urban) of Shimla District of Himachal Pradesh. The findings of the study showed that teacher motivation to work has significantly effect upon teacher effectiveness, i.e. those having higher level of motivation to work do effective teaching. The conclusions drawn from the study were that teacher effectiveness was positively correlated with the level of motivation to work and teacher effectiveness was not significantly related to job satisfaction.

DeBruyne (2001) in a research paper tried to explore the relationship between teacher job satisfaction and job performance, and whether teacher attitudes about the job impacted their productivity on the job. This study included a comprehensive review and critical analysis of research and literature concerning teacher attitudes and morale, job satisfaction, and job performance. Research suggested that teacher attitudes have a significant impact on the job performance of teachers and also the academic performance of their students. It also linked job satisfaction to job performance and indicated that administrators have a significant impact on the school environment, and the type of environment that they create is highly predictive of the level of job satisfaction for the teaching staff. Healthy school cultures correlated strongly with
both increased student achievement and with teacher productivity and job satisfaction, while low levels of satisfaction and morale can cause decreased productivity and can ultimately result in teacher burnout.

**Reddy (2001)** studied job satisfaction and teacher effectiveness of primary school teachers. The sample comprised of 258 teachers of primary schools of Visakhapatnam district. Job satisfaction and teacher effectiveness scales were used. The data were analysed by computing correlation. The findings of the study were: (1) High job satisfaction would lead to effectiveness in teaching to initiate desirable learning outcomes. (2) Age of the teachers had no relationship with teacher effectiveness. (3) Teacher effectiveness had no relationship with service experience. (4) Income had a significant positive relationship with teacher effectiveness. (5) Sex, marital status, location of the school, type of management, age, income and in service training programmes influenced the level of teacher effectiveness. (6) General educational qualifications and service experience had no impact on teacher effectiveness. (7) Teachers with high job satisfaction differed significantly from teachers with low job satisfaction in regard to teacher effectiveness. (8) Teachers with high teacher effectiveness differed significantly from teachers with low teacher effectiveness in regard to job satisfaction.

**Singh (2002)** conducted a comparative study of job satisfaction of teacher educators in relation to their values, attitude towards teaching and teacher effectiveness. Results showed that job satisfaction was positively correlated with social value, hedonistic value, and power value. Attitude towards teaching is positively correlated with job satisfaction. Teacher effectiveness was found to be positively and significantly correlated with job satisfaction.

**Dodson (2005)** conducted a study with the purpose to examine through statistical analysis the correlation between school effectiveness and teacher job satisfaction in elementary, middle, and high schools in Northern Mississippi. A random sample of 140 teachers; 53 elementary, 44 middle, and 43 high school teachers from Northern Mississippi participated in the study. Data were collected using two instruments, one measured teacher job satisfaction and the other measured school effectiveness level. Teachers' job satisfaction was measured using the Teacher Job Satisfaction Questionnaire (TJSQ). The seven correlates of effective schools were measured by the School Effectiveness Characteristics and Indicators Questionnaire (SECIQ). Data
were analyzed at the .05 level of significance. A bivariate Pearson correlation was used to determine relationships between school effectiveness and teachers' job satisfaction among teachers at the various school levels. Results of the data analysis showed that there was no significant relationship between school effectiveness and teachers' job satisfaction among teachers at the elementary, middle and high schools that participated in the study.

**Malik (2005)** tried to relate teaching performance of senior secondary school teachers with their job satisfaction and adjustment. The sample consisted of school teachers teaching in government senior secondary schools of Haryana. Data were collected by employing Self Evaluation Teacher Performance Scale (SETPS) by Pandya, Teacher’s Job Satisfaction Questionnaire (TJSQ) developed by Mishara and Teacher Adjustment Inventory (TAI) developed by Mangal. The data were analysed with the help of ANOVA followed by t-test and by computing correlation. The findings of the study were: 1) the overall performance of teachers of Government Senior Secondary schools of Haryana has been found to be highly effective which is consistently upheld among all the performance factors chosen for the study that is by gender, age, training, teaching experience, location. 2) There exists no significant difference between the level of performance of male and female senior secondary school teachers of Haryana. 3) Younger teachers tend perform significantly better than those having age of 45 years or more. 4) Trained teachers performed better than untrained teachers. 5) There exists no significant difference between the levels of performance of senior secondary school teachers having teaching experience of 10 years or more with those having teaching experience less than 10 years. 6) Teachers working rural areas were better than those working in urban areas. 7). The overall job satisfaction of teachers of government senior secondary schools of Haryana is by and large found to be highly satisfactory as per their dimensions of job satisfaction. 8) There exists no significant difference between the levels of job satisfaction with respect to gender, age, training, teaching experience and location of school.

**Ololube (2006)** assessed the differences and relationships between the level of teacher’s job satisfaction, motivation and their teaching performance in Rivers state of Nigeria. A questionnaire was used to correlate data for the study. Data were analysed by mean point value, S.D., variance, t-test of significance and ANOVA. The survey results revealed that teachers’ related sources of job satisfaction seem to have a
greater impact on teaching performance, as teachers were also dissatisfied with the educational policies and administration, pay and fringe benefits, materials rewards and advancement.  

Newa (2007) investigated the relationship between teacher effectiveness, work satisfaction attitude towards media, media utilisation and the attitude towards the use of information and communication technology (ICT) among secondary school teachers of Nepal. 150 teachers from 60 government and private schools each were taken as sample. Tools used were Demographic Characteristics data sheet, Teacher Effectiveness Scale by Kumar and Mutha (1974), Job Satisfaction scale by Singh and Sharma (1999), Attitude towards Media scale by Bhushan and Mehra, Communication Technology scale developed by the investigator. Techniques like mean and standard deviation, ANOVA, coefficients of correlation, t – ratios etc. were employed. It was found that the secondary school teachers belonging to government and private schools including different academic streams viz. Language science and mathematics and social sciences exhibited comparable teacher effectiveness. Teachers’ attitude towards ICT and its areas were not found to be different for teachers with different academic streams as well as government and private schools. For the total sample of the government and private school teachers, teacher effectiveness was found to be positively related with work satisfaction, attitude towards media, media utilisation and attitude towards ICT.  

Chenevey et al. (2008) conducted a study with the purpose to describe the occurrence of burnout and the level at which burnout exists among agricultural education teachers in Ohio. The study was also designed to consider the relationships between job satisfaction, occupational stress, personal strain, personal coping resources, and burnout among agricultural education teachers. A random sample (n = 388) of the population (N = 628) received a mailed questionnaire (37% response, n = 145). Teachers were described predominantly as married, white males with one to two children and less than 10 years of experience in their present positions. The majority of agricultural education teachers in the study possessed high levels of job satisfaction, low levels of occupational stress and personal and high levels of personal coping resources. However, teachers in the study indicated a moderate level of frequency of burnout and a moderate to high level of intensity of burnout. No
significant relationships were found between demographic characteristics and burnout, or between organizational factors and burnout.

**George et al. (2008)** explored the role of extrinsic and intrinsic factors in determining job satisfaction amongst urban secondary-school teachers in Namibia. Biographical variables pertaining to the teachers' gender, age, marital status, school resources, teaching experience, academic qualifications, and rank were investigated to determine whether these had any significant relevance, or made any notable contribution, to the level of job satisfaction experienced. Also, the correlation between burnout and job satisfaction was investigated to determine the extent to which these two factors are related. A sample of 337 secondary-school teachers randomly selected from 17 government schools, in the Windhoek region of Namibia, voluntarily participated in the study. Results showed significant levels of dissatisfaction pertaining to intrinsic factors of work and, more especially, those factors relating to school area and rank. A significant correlation between levels of burnout and job satisfaction was found, particularly in respect of emotional exhaustion and depersonalization, which were shown to correlate with low levels of job satisfaction.

**Kaur (2008)** studied job satisfaction, occupational, stress and value dimensions as correlates of teacher effectiveness. A sample of 1000 teachers was selected from Government secondary school teachers of four districts of Punjab, namely, Ludhiana, Patiala, Mukatsar and Moga. Data were collected by different scales like teacher effectiveness scale by Kumar and Mutha, Job satisfaction scale by Sharma and Singh, study of value scale by Ojha and self constructed occupational stress scale. The result of present study showed that: The government secondary school teachers were average in their effectiveness; highly effective teachers were more satisfied with their jobs than less effective teaches. Further the study has shown that job satisfaction was a positive correlate of teacher effectiveness; Occupational stress was a negative correlate of teacher effectiveness. Also the teachers who were under high occupational stress were less effective; theoretical, aesthetical and social values were found to be positive correlate and economic and political values are found as negative correlates of teacher effectiveness.

**Mau, Ellsworth and Hawley (2008)** attempted to examine career persistence and job satisfaction of beginning teachers. 451 tenth grade students from a nationally representative sample, who aspired to be teachers, were examined over a ten year
period regarding their career choices. Students who persisted in teaching were compared to students who did not persist with regard to job satisfaction. A job satisfaction model was tested using clusters of variables as guided by Social Cognitive Career Theory (SCCT). Students who persisted in teaching were significantly more satisfied than both those who did not persist and those with non-teaching careers. Beginning teachers were more satisfied with their jobs than those in other occupations. Teachers who had teaching licenses also reported being more satisfied than those who did not have licenses. The social-contextual factors, i.e. race, socioeconomic status, teaching license, parents’ education, and occupation were among the best predictors of job satisfaction.

Ngimbudzi (2009) examined the factors that are associated with teachers’ job satisfaction. A study sample of 162 (N=162) teachers was surveyed. The descriptive statistics techniques revealed that teachers were satisfied with aspects under the following dimensions: social benefits, meaningfulness of the job and support from administration. Conversely, the teachers indicated they were least satisfied with the aspects under the job characteristics dimension. Additionally, the independent t-test and MANOVA revealed significant differences in teachers’ job satisfaction in relation to gender, age, school location and school type, but there were no significant differences in relation to marital status, teaching experience, teacher type and promotional position in all the five core job dimensions. Moreover, the stepwise regression model revealed that the meaningfulness of the job and job characteristics dimensions contributed significantly to teachers’ intention to remain in the job. Lastly, the bivariate correlation (Pearson r) revealed that there was a significant relationship between job satisfaction and the five job dimensions: job characteristics, social benefits, meaningfulness of the job, support from administration and intention to remain in the job.

Shukla (2009) attempted to study professional commitment, teaching competency and job satisfaction, their relationship and influence on each other and the results showed a high positive correlation between professional commitment and job satisfaction but the relation between teaching competency and job satisfaction came to be positively very low for most of the dimensions and for some of the dimensions it came out as negative correlation.
Briones, Tabernero and Arenas (2010) conducted a study with the purpose to examine the effects of several demographic and psycho-social factors involved in teachers’ job satisfaction. The sample consisted of 68 secondary school teachers in cultural diversity settings. Their average age was 43.56 years old (SD =10.93); 60.3% were women and 38.2% were men. Path analyses showed that the teachers’ job satisfaction was significantly and positively related to personal achievement and perceived support from colleagues, and significantly and negatively related to emotional exhaustion. The teachers’ self-efficacy was an indirect predictor of job satisfaction, and a direct predictor of personal achievement and perceived support from colleagues.

Klassen and Chiu (2010) sought to examine the relationships among teachers’ years of experience, teacher characteristics (gender and teaching level), three domains of self-efficacy (instructional strategies, classroom management, and student engagement), two types of job stress (workload and classroom stress), and job satisfaction with a sample of 1,430 practicing teachers using factor analysis, item response modeling, systems of equations, and a structural equation model. Teachers’ years of experience showed nonlinear relationships with all three self-efficacy factors, increasing from early career to mid-career and then falling afterwards. Female teachers had greater workload stress, greater classroom stress from student behaviours, and lower classroom management self-efficacy. Teachers with greater workload stress had greater classroom management self-efficacy, whereas teachers with greater classroom stress had lower self-efficacy and lower job satisfaction. Those teaching young children (in elementary grades and kindergarten) had higher levels of self-efficacy for classroom management and student engagement. Lastly, teachers with greater classroom management self-efficacy or greater instructional strategies self-efficacy had greater job satisfaction.

Malik et al. (2010) conducted a study to determine the impact of teachers’ satisfaction with job dimensions on perceived organizational commitment in public sector universities of Pakistan. In addition, the study aimed at exploring to what extent these teachers are committed to their universities and satisfied with different dimensions to their job. A survey-based descriptive research design was used. The study was carried on teaching faculty working in two public sector universities of Pakistan. About 650 survey questionnaires were distributed in October, 2009 by
employing diverse modes of communication such as email, in person and post. Multiple follow ups yielded 331 statistically usable questionnaires. Stepwise regression analysis and one sample t-tests indicated that the satisfaction with work-itself, quality of supervision and pay satisfaction had significant positive influence on organizational commitment of faculty members. They had high degree of organizational commitment and satisfaction with work-itself, supervision, salary, co-workers and opportunities for promotion.

Shahzad et al. (2010) tried to find out the mediating impact of job satisfaction on the relationship of compensation and workload with academic quality in the public sector educational institutions of Pakistan. Data were collected through a questionnaire from 107 faculty members working in the public sector universities of Pakistan. Results showed that job satisfaction had a mediating impact on the relationship of both faculty workload and compensation with academic quality. Academic quality can be achieved through increasing the job satisfaction; moreover job satisfaction can be achieved through effective implementation of compensation plans and managing workload.

Sharma and Tyagi (2010) sought a study to determine the job satisfaction at secondary level of teachers in relation to teacher effectiveness of government and private school teachers. A sample of 100 teachers working in various schools was selected by purposive simple random sampling method for the study. A Standard Teachers’ job satisfaction scale developed by Y., Mudgil, I. S., Muhar and P. Bhatia and a teacher’s effectiveness scale developed by Dr P. Kumar and Dr. D., N. Mutha were used for collection of primary data. The study reported that there was no significant difference of job satisfaction between government and private school teachers and there was no significant difference of teacher effectiveness between government and private school teachers and there was no relation between job satisfaction and teacher effectiveness.

Gana et al. (2011) examined the relationship between teachers’ job satisfaction and performance in selected Borno State Secondary Schools. The study used a total of 180 as respondents of the three secondary schools. The research study was set to determine the relationship between promotion and teachers’ job performance, pay and teacher’s job performance, teacher’s job satisfaction and job performance in Borno State secondary schools. A questionnaire on teacher job satisfaction was developed in the research while postgraduate teaching practice assessment form from University of
Maiduguri and Kashim Ibrahim College of Education was adopted and used in assessing and scoring live lecturing exercise of the samples as performance indicator. Descriptive statistic was used in analyzing the data using simple frequency distribution and percentages. It was therefore, recommended that based on the above result, teachers should be promoted and pay with high lucrative salary by Borno State government in order to maintain the tempo, and to build up on the present performance so as to live to the expectation of the government and public which has fall short of expectation.

Mishra (2011) studied the teacher effectiveness, job satisfaction and organizational commitment among secondary school teachers. The major objective was to determine whether male and female teachers differed significantly with respect to their teacher effectiveness, job satisfaction and organizational commitment. The results indicated that teacher effectiveness, job satisfaction and organizational commitment were positively correlated with each other. No significant differences were found between the male and female teachers with respect to teacher effectiveness while on job satisfaction and organizational commitment they differed significantly.

Skaalvik and Skaalvik (2011) examined the relations between school context variables and teachers’ feeling of belonging, emotional exhaustion, job satisfaction, and motivation to leave the teaching profession. Six aspects of the school context were measured: value consonance, supervisory support, relations with colleagues, relations with parents, time pressure, and discipline problems. The participants were 2569 Norwegian teachers in elementary school and middle school. The data were analyzed by means of SEM analyses. All six school context variables were related to job satisfaction and motivation to leave the teaching profession. These relations were primarily indirect, mediated through feelings of belonging and emotional exhaustion.

Chaudhari (2012) conducted a study on job satisfaction of teacher educators in relation to their attitude towards teaching in a sample of 50 teacher educators with 25 male and 25 female teachers' educators from 20 Colleges of Education affiliated to Gujarat University, S. N. D. T. University, and Sardar Patel University of Gujarat. Product moment correlations were worked out between job satisfaction and attitude towards teaching which revealed that the job satisfaction of teacher educators was positively but not significantly related to their attitude towards teaching. The job
satisfaction of male and female teacher educators was also positively but not significantly related to their attitude towards teaching.

Gangadharrao (2012) done a comparative study between job satisfaction and effectiveness in teaching of in-service teacher trainees in a sample of 96 teachers pursuing in – service M. Ed. course – 50 from M. Ed. 1st year and 46 from 2nd year were chosen, out of which 34 female teachers and 62 male teachers were chosen by purposive sampling method. Data were analysed by calculating mean, median, S.D, and t- ratio. The main findings were: 1) male and female teachers are satisfied in their job, 2) female teachers are comparatively more satisfied than their male counterparts, 3) teaching effectiveness of female and male teachers is good, 4) teaching effectiveness of female teachers is comparatively better than that of male teachers, 5) age factor affects job satisfaction level and teaching effectiveness, 6) as age progresses, job satisfaction level goes on declining, 7) as age progresses, teaching effectiveness level goes on declining, 8) the job satisfaction level and teaching effectiveness level goes on declining, 9) the job satisfaction level and teaching effectiveness of young teachers between the age group of 25 – 35 years is good / has a higher score, 9) primary, secondary and higher secondary teachers are satisfied in their jobs, 10) the teachers working at teacher training institutions are neither satisfied in their job nor have high teaching effectiveness.

Nahid Naderi Anari (2012) carried out a study was to investigate the relationship between emotional intelligence and job satisfaction, between emotional intelligence and organizational commitment, and between job satisfaction and organizational commitment among high-school English teachers. Furthermore, the study aimed to examine the role of gender and age in emotional intelligence, job satisfaction and organizational commitment. The participants were selected by proportional stratified sampling and simple random selection. This study adopted a survey research design that utilized an ex post facto research type in which the researcher used questionnaires to collect data from the respondents. The results of the study indicate that there was a positive significant relationship between emotional intelligence and job satisfaction, between emotional intelligence and organizational commitment, and between job satisfaction and organizational commitment. It was also found there was no significant difference among high-school English teachers of different genders and ages concerning their job satisfaction and organizational commitment. But concerning emotional intelligence, the findings in this study provide support for gender
differences, with females reporting higher emotional intelligence, but the results show no age differences among the participants.

Shah et al. (2012) conducted a study to know the impact of reward and recognition, satisfaction with supervision and work itself on job satisfaction. Moreover, the relationship between job satisfaction and work motivation was also explored with the help of responses collected from employees working in public educational institutions in Rawalpindi area. Questionnaire as research instrument was used and floated to 379 employees of various hierarchical levels. In total, 294 usable responses were received which were analyzed through SPSS 15.0. Results showed significantly positive relationship between reward and recognition, satisfaction with supervision and the work itself, with job satisfaction as well as a very positive and significant relationship was also observed between job satisfaction and intrinsic motivation.

Waqas et al. (2012) carried out a study with the intention to gauge the role of job satisfaction in increasing the service quality of University Teachers. To empirically validate the claims, a total sample of 206 respondents was taken using convenient sampling technique from the faculty members of different Public and Private Sector universities. Analysis of the study revealed a positive and significant relationship between job satisfaction and teaching quality thus making it clear the imperative and vital role of Job satisfaction in ensuring the Enhanced Service Quality of employees in Higher Education Sector of Pakistan.

Ziegler et al. (2012) based on research regarding the role of attitudinal ambivalence in the validity of attitudes in predicting behaviour, they proposed job ambivalence as a promising concept for job satisfaction research. In particular, they argue that job ambivalence (i.e., coexistence of positive and negative evaluations of one's job) may moderate the relationship between job satisfaction and job performance. Results of a study conducted with managers of an IT company show, as predicted, that job satisfaction is a better predictor of job performance (i.e., higher satisfaction related to higher performance) when individuals experience low job ambivalence, as compared to when individuals experience high job ambivalence.

Gehlawat (2013) tried to study organizational commitment in relation to job satisfaction and work motivation of secondary school teachers working in different types of schools in a sample of 480 secondary school teachers working in Rohtak, Jhajjar and Sonepat cities of Rohtak Division of Haryana selected by multistage
stratified random sampling technique. The Hartley’s Test of Homogeneity of Variance was applied to test the homogeneity of the data obtained and was then analyzed using Balanced Three way ANOVA with $2 \times 2 \times 2$ factorial design. The findings of the study reported significant main effects of type of schools and gender on the organizational commitment of the teachers whereas the triple interaction effect of the variables type of schools.

2.5) Critical Appraisal of Related Literature

A critical analysis of the studies that were reviewed in the above subsections help the investigator to sort out the domains that require further investigation and to decide the methodology and design of the present study. Studies whether conducted in India or abroad, support multiple results and tried to associate a number of variables with teaching effectiveness producing contrary and mixed results. Teaching effectiveness had been often linked with the type of school and school management revealing that these exerted an influence on teaching effectiveness of teachers as reported by Beena (1990), Nautiyal (1992), Reddy (2001), Agrawal (2003), and Jain (2007). Owing to these differences, the investigator has selected teachers from CBSE affiliated schools only in order to maintain the uniformity in terms of type of schools. Another important variable to be associated with teaching effectiveness is the training of school teachers and it was reported by many researchers (Mutha, 1980; Shah, 1991; Reddy, 2001; Islahi, 2010) that training was significantly associated with the teachers’ effectiveness revealing trained teachers to be more effective than untrained teachers. Taking into consideration of this fact, only trained teachers are chosen for the present study.

Relevant to the topic of the present research, the review of literature suggested that teachers’ personality and personal traits played a more prominent role than expected in the area of teaching effectiveness. Efforts have been made by many researchers to relate teaching effectiveness with intelligence (Grewal, 1976; Singh, 1987; More, 1988; Singh, 1991; Lowmann, 1995), creativity (Singh, 1991; Rao, 1995), good sense of humour and playfulness (Lowmann, 1995; Day, 2004), self efficacy (Ashton & webb, 1986), enthusiasm for the topic (Dunne & Wragg, 1994; Robertson, 1996; Borich, 2000; Hay McBer, 2000; Day, 2004), smiling (Harrington, 1955), emotional intelligence (Dash & Behera, 2004; Fei-Fei, 2007; David & Roy,
2010), communication style (Norton, 1977; Roberts & Becker, 1976). However, there has been hardly any serious attempt to study the emotional maturity, hardiness and job satisfaction as impacting factors of teaching effectiveness of school teachers. Since these factors are supposed to influence the effectiveness of a teacher, the present research study which has been taken up by the investigator may thus be considered as novel research endeavour.

With regard to emotional maturity, very few studies were conducted on teachers some of which have tried to associate emotional maturity with teacher adjustment. For instance Shakuntala (2001) reported in a sample of 1000 teachers that emotional maturity helps in teacher adjustment. Later similar results were reported by Anderson (2008), Hamid and Tahira (2010). However very few evidences were found for the relationship between emotional maturity and teaching effectiveness. In this view there were early evidences like Dosajh (1965) who reported very high and positive correlation of .08 between emotional maturity and teaching skill; similar results were obtained by Sethi and Patel (1985). Later about two decades ago, Bansibihari and Surwade (2006) revealed that teaching carried out by emotionally mature teachers was more stable than emotionally immature teachers. More recently, Gupta, Kaur and Raina (2011) in their study on prospective teachers revealed that the prospective teachers having high emotional maturity were significantly more competent in teaching than prospective teachers having low emotional maturity. On account of very little evidences the investigator felt that there is a need to examine the effect of emotional maturity on teaching effectiveness of school teachers in order to further clarify the link between the two.

Being stressful profession, teaching demands good management of stress responses on the part of teachers. Hardiness, a personality disposition helps the individuals in combating these stressful situations. Reviews on hardiness of teachers supported early contentions and tried to relate hardiness with classroom control, decreased burnout, increased commitment and job satisfaction. Pierce and Molloy (1990) studied hardiness in relation to classroom control in a sample of 722 teachers of Australia and found that low hardy teachers viewed themselves as less able to make significant differences in lives of their students and more difficulties to teach students. Later, it was found by Thomson and Wendt (1995) that high hardy teachers have less school alienation than did low hardy teachers. This in turn led to more involvement of
teacher in the school and class activities as cited by Azeem (2001). Further, Sezgin (2009) emphasized that psychological hardiness is positively and significantly related to both identification and internalization components of teacher commitment, whereas it is negatively and significantly correlated to the commitment predicated on compliance. Moreover, it has also been reported that hardiness has a positive effect on job satisfaction (Manning et al., 1988; Fisher, 1985; Judge et al., 1998; Cencirulo, 2001; Cash, 2009). This relation was studied in elementary school teachers by Jarvis (1993) who revealed significant but negative relationship between hardiness factors and job satisfaction. However Al-Qarout (2006) found a positive statistical relationship between the Hardiness behaviour and job satisfaction among the Headmasters of Government schools in the Northern districts of the West Bank. Similar results were obtained by Ghamari (2007). More recently Rasouli et al. (2012) found a meaningful relationship between hardiness, job satisfaction and stress among faculty members of Islamic Azad University, Mahabad. On the basis of these studies it was revealed that hardiness certainly occupies an important place in teachers’ lives but there is no single study which tried to relate hardiness with teaching effectiveness of school teachers directly. So the preset study is quite justifiable on this aspect which tried to unfold the potential role of hardiness in predicting the effectiveness of school teachers.

Studies in the area of job satisfaction are in plenty of number but only most relevant studies are included in the review section. Sharma (1991) in a sample of 2000 secondary level teachers revealed that teaching effectiveness was significantly affected by job satisfaction which is supported by Cheri’s (1992) study on 13,808 teachers. The study conducted by Gupta (1995) reported that overall job satisfaction was significantly related to teaching effectiveness. At the same time, significant correlations were reported between job satisfaction and teaching behaviours by Stella and Purushottam (1996) in a sample of 68 teachers. Later DeBruyne (2001) linked job satisfaction to job performance in a comprehensive review and critical analysis of research and literature concerning teacher attitudes and morale, job satisfaction, and job performance. However these studies have not clarified the nature of relationship between the two variables. Also Raj’s (2000) finding on 100 school teachers of Simla, Himachal Pradesh is contradictory to these results that reported teaching effectiveness was not significantly related to job satisfaction. Abraham’s study (1994) tried to
unfold the nature of relationship between job satisfaction and teaching effectiveness in a sample of 24 lecturers reporting teachers having high and medium level of job satisfaction to be more effective than with lower levels of job satisfaction. This finding is further corroborated by Reddy (2001) on 258 primary school teachers of Vishakhapatnam district. Similarly Singh (2002) revealed that teacher educators’ teaching effectiveness is positively and significantly related to job satisfaction. Later Newa (2007) also reported positive relationship between job satisfaction and teaching effectiveness in 150 government and private school teachers of Nepal. Job satisfaction was reported a positive correlate of teacher effectiveness in a sample of 1000 government school teachers selected from Punjab by Kaur (2008). Recently Shahzad (2010) reported that academic quality in Pakistan universities can be achieved through increasing job satisfaction. Similarly Waqas et al. (2012) revealed a significant and positive relationship between job satisfaction and teaching quality in 206 faculty members of public and private sector universities. Although these studies have provided similar results but these were obtained on different populations which are not comparable and these results are challenged by the findings of Dodson (2005), Shukla (2009), and Sharma and Tyagi (2010). Dodson (2005) revealed no relationship between school effectiveness (dependent on teaching effectiveness) and job satisfaction. Shukla (2009) reported very low positive relationship between teaching competency and job satisfaction for most of the dimensions and even negative for some dimensions. Sharma & Tyagi (2010) on the basis of their study on 100 teachers revealed no relationship between job satisfaction and teaching effectiveness. Also Skaalvik and Skaalvik (2011) using structural equation modelling in a sample of 2569 Norwegian teachers revealed indirect relationship between job satisfaction and school context variables. Chaudhari (2012) confirmed that the relationship between job satisfaction and teaching attitude was not significant. Therefore on the basis of thorough analysis of literature, it was found that most of the studies done were correlational studies and provided mixed and results using varied samples from different levels of education. It implies that there is a need to further test the relationship between these variables and to bring more light in explaining the role of job satisfaction in teaching effectiveness of school teachers.

While going through the literature it was also found that some demographic variables produced varied and mixed results with respect to teaching effectiveness. In
this regard some studies have reported gender to be a significant predictor of teaching effectiveness, some reporting female teachers more effective (Biswa & De, 1995; Yadagiri, 2000; Agarwal, 2003; Vijayalakshmi & Mythill, 2004; Amandeep & Gurpreet, 2005; Arokiodoss, 2005) while some reporting males to be more effective than their female counterparts (Kulkarni, 2000). On the contrary, it was found by Jayaramana (2001), Kagathala (2002), Pradhan, Senapathy and Sahoo (2009), Islahi (2010), Khatoon (2010), Sodhi (2010), and Rao (2011) that gender has no influence on teaching effectiveness. In considering the marital status, it was reported by Reddy (1990) that there is no significant influence of marital status on teaching effectiveness. However Agarwal (2003) and Islahi (2010) found unmarried teachers to be more effective. As against this Vijayalakshmi and Mythill (2004) reported married teachers to be more effective than unmarried teachers. another important variation in findings was observed for teaching experience some reporting teachers below 10 years of service to be having higher teaching effectiveness than their counterparts (Yadagiri, 2000) while Talboot (2005) emphasized that teachers with 11-15 years of current teaching experience were rated significantly higher teachers than with 1-5 years of current teaching experience. Still others reported that that teaching effectiveness increases up to a certain optimum level for a particular years of experience and then a sharp fall was noticed (Khatoon, 2010). As against these Sodhi (2011) found no differences across teaching experience groups with respect to teaching effectiveness. The variation of results and contrary findings obtained with different demographic variables as mentioned above indicated that there is a need of more in depth studies to clarify the role of gender, marital status and teaching experience on teaching effectiveness of school teachers which inspired the investigator to study the effect of these demographic variables also on teaching effectiveness of school teachers along with the three independent variables taken into consideration.