CHAPTER- II

REVIEW OF RELATED LITERATURE

2.0 Introductions

The most important early steps in a research work is the conducting of the literature review. It is designed to identify related research, to set the current research work within a conceptual and theoretical context. According to Mouly (1964), “Review of related literature is a crucial step which invariably minimizes the risk of dead ends, rejected topics, rejected studies, wasted effort, trial and error activity oriented towards approaches already discarded by previous investigators and—even more important—erroneous findings based on a faulty research design”

According to (Best, 1995), “effective research must be based on past knowledge. This step helps to eliminate the duplicate of what has been done already and provides useful hypotheses and helpful suggestions for significant investigation”

The review of literature promotes a greater understanding of the problem under consideration. It paves way to improve the quality of research. In the following pages the studies conducted in India and abroad related to the present study have been presented under following headings.

Studies related to Academic Achievement

Studies related to Emotional Intelligence

Studies related to Goal Orientation

Studies related to Learning Styles

Review of related literature guides, regulates and helps to concentrate on the needed research activates such as the
selection of variables, methods of study, use of sample techniques, construction of research tools, use of appropriate statistical techniques and presentation of the research finding

Chronological order has been maintained in the presentation of review of related literature.

2.1. Studies related to Academic Achievement

Selvaraj Gnanaguru (1991) studied some factors related to reading achievement in Tamil in secondary schools of Tamilnadu. Grammar, Vocabulary, Language interest, Study habits, parental Educational level, Parental income level and parental occupation are found to have significant correlation with the pupils reading achievement in Tamil. Among the correlated variables with reading achievement in Tamil, Vocabulary has the highest correlation and a language interest has the least. Since Multiple Correlation is $\hat{\rho} = 0.21731$, it is concluded about 22% of the variance in the pupils’ achievement in reading in Tamil is to be attributed to factors such as Grammar, Vocabulary, Language interest, Study habits, their parent’s educational status, income and occupations.

Muthumanickam (1992) studied Academic Achievement of students of Higher Secondary Commerce Group in relation to their Reasoning ability, Socio-Economic status and interest in Commerce. The main findings were: The mean Commerce achievement score of boys group is higher than that of girls group, but this difference is not statistically significant. The commerce achievement mean score of the subjects belonging to the government schools is found to be comparatively greater than that of the private schools and this difference in means between the two groups of students is found to be statistically significant. Subjects belonging to rural schools have secured comparatively greater commerce achievement mean score than those from urban schools.
and this difference in means between these two groups is found to be statistically significant.

**Thilagavathy (1995)** studied Academic Achievement of Adolescents in Relation to their cognitive styles, locus of control, self-esteem and mental health. There is a positive and significant relationship between academic achievement and cognitive style. This is true in the case of both field dependent and field – independent cognitive styles. Boys and girls significantly differ in their levels of academic achievement. Girls have secured a great mean score than that of boys. Students belonging to rural and urban schools significantly differ in their levels of academic achievement and urban students have secured a higher mean score than that of their rural counterparts.

**Meera (2000)** conducted a study on language aptitude, select attitudinal and motivational variables as correlates of achievement in English of secondary school students. The investigator had selected 750 secondary students by using stratified random sampling. She had used language aptitude test to collect the data. And also she had applied Skewness, Kurtosis, ANOVA, ‘t’mean-test and correlation for statistical work. The investigator found that attitude towards English teachers and teaching had significant relationship with achievement in English and achievement motivation.

**Venita Singh (2003)** conducted a study on “Achievement motivation and parental background as the determinants of students’ academic achievement. The sample consisted of 100 students of class X from four English medium schools of Abonar and Malour (Punjab) . The findings of the study were:(i) Academic achievement and achievement motivations are positively correlated. (ii). Children of both parents working group have better academic achievement. (iii) There is no difference in the
achievement motivation of children due to working parents. (iv) Academic achievement of students is not affected by parents’ education. (v) Parents education does not affect achievement motivation of students.

**Aseema and Gakhar (2004)** conducted a study on “Social stress, locality and gender affecting academic achievement and reasoning ability. The sample constituted 769 students both male and female studying in Xth class in high/higher secondary schools of Jammu (Jammu and Kashmir), ANOVA and descriptive statistics of mean were used for analyzing the data. The major findings were: (i) Locality was affecting the reasoning ability of the students significantly at 0.01 level. (ii) The student with low social stress scored higher than the students having high or average social stress and (iii) rural students scored higher on reasoning ability test than urban students.

**Arockiadoss (2005)** studied the study habits and academic performance of the college students. The study was carried out to find out the level of study habits prevalent among the college students, the influence of personal and institutional background on study habits and the correlation between study habits and academic performance of college students. A stratified sample of 925 undergraduate final year students were selected from 25 arts and science colleges affiliated to Madurai Kamaraj University in TamilNadu. A study habits inventory was used for the study. The statistical techniques employed for the analysis were ANOVA and t-test. The major findings were: (1) Majority of the students are having only average level of study habits. (2) Women and art students have better study habits. (3) Private college and women’s college students are having better study habits. (4) The academic performance of the college students are influenced by study habits.
Manivannan (2006) conducted a study on cognitive strategies and academic achievement of the students at secondary level. The sample consisted of 320 secondary level students in Erode district, Tamilnadu. T-test, ANOVA and correlation coefficient were the statistical techniques used to analyse the data. The results showed that girls obtained higher attitude scores than boys with regard to cognitive strategies and there was no significant relationship between the scores of cognitive strategies and academic achievement.

Nirmala (2006) studied on the optimization of Academic Achievement in Mathematics by Linear Programming Approach. Normative method is employed for this study. 36 schools have been selected from Chennai district. In this study 9000 students from Higher Secondary class to the student-related variables such as subject group, sex, Community, Parental Education, etc. The data were collected in two sessions. The Achievement Test in Mathematics was given in the forenoon session and a booklet consisting of a personal data sheet including three tools were given in the afternoon. The statistical techniques used such as Linear programming simplex method to analyze the data. Many factors influence the academic achievement of the students in mathematics at the higher secondary school level. In the present study, it is observed that Mathematics information processing skills, decision making and attitude towards mathematics have made a significant contribution towards the academic achievement in mathematics.

Dakshinamurthy (2007) studied an interaction Effect of Teachers’ Teaching Effectiveness, Teachers’ Personality and Teachers’ Attitude on Achievement in Social Science among Students Studying in Secondary Schools. Through stratified random sampling technique 94 male are 56 female teachers, in total 150 secondary school social science teachers were selected. In order to
find the teaching effectiveness of these teachers’, 450 students, including 237 boys and 213 girls, studying in class IX were also selected by random sampling. Findings: (1) The teachers with introversion personality type influenced higher on the academic achievement of students in Social Science than the teachers with extroversion personality type. (2) The teachers with favorable attitudes towards profession influenced more on the academic achievement of students in Social Science than the teachers with unfavorable attitudes towards profession. (3) The teachers with effective teaching influenced higher on the academic achievement of students in Social Science than the teachers with ineffective teaching.

**Roy, Manidipa (2007)** studied the Relationship between Competition in Academic Achievement and Moral and Social Development of Secondary School Students. It is a survey type research. The population of the study consisted of 473 students, including 241 girls and 232 boys, in the age group of 12-16 years studying in classes VI-X of secondary schools from Calcutta. The findings were: (1) Competitive students are better at moral judgment, altruism and social maturity than non-Competitive students. (2) This same trend is prevalent among girls and boys studied separately. (3) The significant lead in altruism and interpersonal adequacy of competitive students vanished in the higher classes. (4) Gender comparisons revealed that competitive girls are better at moral judgment and social maturity than competitive boys.

**Jayanthi (2008)** studied Achievement of the higher secondary school students in English in relation to study habits, study involvement, text anxiety and classroom climate. The achievement in English of higher secondary students is high. The male and female students differ (0.327, 0.01) significantly, in their achievement in English. The rural and urban school students
(8.99) differ significantly in their achievement. There is no significant difference in the (1.82) achievement of the students studying in government schools and students studying in private schools.

**Sarika (2008)** conducted a study “Locus of Control in Relation to Academic Achievement and Adjustment. The study was conducted on 120 boys and 120 girls of high schools of Patna town. The Academic Achievement was measured on the basis of academic records of the last two successive examinations of the respondents. Scatter diagram method of correlation was employed for the analysis of the data. In the light of results, a significant and positive correlation was found between endogenous locus of control and academic achievement and also between endogenous locus of control and overall adjustments of the respondents. Similarly, a significant, negative correlation was reported between exogenous locus of control and academic achievement and also between exogenous locus of control and overall adjustment of the results. It was concluded that endogenous locus of control is conducive to academic achievement on the one hand and adjustment pattern on the other whereas exogenous locus of control hinders both in cases of academic achievement and overall adjustment.

**Surekha (2008)** analyzed the on relationship between students’ Adjustment and Academic Achievement. A sample of 115 students of Warangal city in Andhra Pradesh was selected by simple random sampling technique. A normative survey method was used for the study. The study revealed that boys and girls from private schools are well adjusted and academically performed better than boys and girls form Government schools. The co-efficient of correlation between the students’ adjustment and academic achievement is found to be -0.29, which is significant at 0.01 levels. It indicates
that low scores in adjustment tend to accompany with high scores in academic achievement.

**Thilagavathi (2008)** conducted a study on academic achievement of adolescents in relation to their self-esteem. This study revealed that the academic achievement of first year higher secondary students was average. Students of high, average and low achievement group significantly differed among themselves with respect to their self-esteem scores. Girls seemed to have comparatively higher self-esteem than boys. Students belonging to private schools had a higher self-esteem than those of government schools. Urban school students had higher self-esteem than rural students. Academic achievement and self-esteem were found to be positively and significantly related.

**Gurubasappa (2009)** conducted a study on “Intelligence and Self-Concept as correlates of Academic Achievement of secondary school students. The stratified proportionate random sample technique was followed. The major findings were: (i) there was a high significant correlation between academic achievement with intelligence and self-concept. (ii) There was a significant difference in the academic achievement of students with different levels of intelligence and self-concept. (iii) There was a significant main and interactive effect of intelligence and self-concept on academic achievement. (iv) There was a significant main and interactive effect of sex with intelligence and self-concept of academic achievement. (v) There was a significant difference in the academic achievement of students’ sex, type of school, medium of instruction, locality and socio-economic status.

**Meenakshi Metha (2009)** conducted a study on “Personality needs and academic achievement of senior secondary students” The population for this study has been designed as all class XI students of public schools of Ghaziabad city. The investigator
selected 50 high achievement students and 70 low achievement students. Thus 120 students were selected out of 1200 students. The study had revealed that need achievement, need-dominance, need-nurturance, and need-endurance were positively and significantly related to students’ academic achievement while needs-succulence, affiliation, abasement and aggression were significantly, but negatively related to academic achievement.

**Micheal Leo and Venkatesh (2009)** conducted a study on “Relationship between multiple intelligence and academic achievement in Biology of XI standard students. Achievement test was self made. ‘t’, test chi square test, correlation and ANOVA were the statistics used to analyze the data. Findings of the study were:

(i) There was no significant difference in gender, medium of instruction, locality, type of school and religion and community in their multiple intelligence. (ii) There was a significant difference in gender, medium, and locality, type of school and community of academic achievement. (iii) There was no relationship between multiple intelligence and achievement of total sample and female; but there was a relationship between multiple intelligence and achievement of the whole sample.

**Natarajan (2009)** conducted a study on “Mental Health and Academic Achievement in English of Higher Secondary Students, through Survey method. 250 students studying XI standard were taken as the sample. The findings were: (i) 17.60% of the students had low achievement, 70.41% of the students have medium achievement and 12.00% of the students have high achievement in English. (ii) There was no significant difference in the academic achievement of higher secondary students with reference to variables, gender of the students, language of instruction, locality of the institutions and family income. (iii) There was no significant difference in the academic achievement in English of the higher secondary students belonging to different religions. (iv) There was
significant relationship between the academic achievement of higher secondary students in English and their mental health.

**Mahmood Alam (2009)** investigated the Academic Achievement in Relation to Creativity and Achievement Motivation. A sample of students studying in class X was drawn from different government schools of Darbhanga district in Bihar. Survey method of research was employed. The findings revealed a significant positive relationship between (i) creativity and Academic achievement and (ii) Achievement Motivation and Academic Achievement.

**Noorjehan Ganihar and Wajiha (2009)** studied the factors affecting Academic Achievement of IX standard students in Mathematics, using stratified random sample technique. 800 boys and girls were selected from 20 secondary schools. In this study the investigators concluded that many factors like mathematical creativity, attitude towards mathematics, achievement motivation and a low level of anxiety influence the academic achievement in mathematics at secondary stage and recommended the inclusion of curricular and co-curricular programmes to improve performance in mathematics.

**Ponnalagappan (2009)** studied factors relating to under achievement of reading in Tamil of higher secondary school pupils. The sample of the study consists of six hundred pupils in Cuddalore and Nagapatinam districts. The findings were: there was average achievement in reading comprehension in Tamil. All the sub samples of under-achievers namely gender, medium of study, family, type of management, Parental education, Parental occupation, and religion do not differ significantly with respect to their achievement of reading comprehension in Tamil.

**Shobhna Joshi and Rekha Srivastava (2009)** investigated the relationship between self-esteem and academic achievement of urban and rural adolescents. The sample of this study consisted of
400 adolescents (200 urban and 200 rural) from Varanasi District. The boys and girls (aged 12 to 14) were equally distributed among the urban and rural sample. The findings indicated that there was no significant difference with regard to self-esteem of rural and urban adolescents. There was a significant difference with regard to academic achievement of rural and urban adolescents. Urban adolescents scored higher in academic achievement as compared to rural adolescents. Boys would score significantly higher on self-esteem as compared to girls. Significant gender difference was found in academic achievement. Girls were significantly higher on academic achievement as compared to boys.

**Umadevi (2009)** conducted a study on the “relationship between Problem Solving Ability and Academic Achievement of Secondary School Students. The sample comprises of 200 ninth standard students of which 100 boys and 100 girls were selected randomly from both private and government secondary schools of Devanagere city, Karnataka. There was a significant difference in academic achievement of students with high, moderate and low problem solving ability. There was a positive relationship between problem solving ability and academic achievement of IX standard students.

**Vijayakumari (2009)** conducted a study on some correlates of academic achievement of secondary school students. The study was conducted on a sample of 400 students of standard IX selected through stratified sampling technique from various schools of Kerala. Findings of the study reveal that academic achievement is negatively related to academic anxiety and positively related to academic motivation. The main effects of the three variables, academic anxiety, academic motivation and sex on academic achievement is significant and the interaction effect of academic anxiety and sex as well as academic motivation and sex are significant.
Amuthasree and Krishnamurthy (2010) in their article on academic achievement of commerce students in relation to their study habits found out that higher secondary students of Cuddalore District have high achievement m=(70.75) and their study habits are at average level. There exists significant relationship between achievement in commerce and study habits of higher secondary students of Cuddalore District. Significant difference is found between government and private school students’ achievement in commerce. No significant difference is noticed between boys and girls of government and private school students with respect to their study habits.

Annie Isabella (2010) studied Academic Achievement of the B.Ed Student teachers in relation to their socio economic status. A sample of 158 student teachers of Lady Willingdon Institute of Advanced study in Education was selected. The results revealed that there was no significant relationship between Academic Achievement and Socioeconomic status of B.Ed student teachers

Sharma (2010) conducted a study on the relationship of creativity with academic achievement, achievement motivation, self-concept and levels of adjustment among adolescents. The different levels of all independent variables were found and by taking three variables at a time, it was found that, i) there was no significant interaction effect of creativity, achievement motivation, self concept, index of brightness and adjustment on mean performance of academic achievement of adolescents, ii) there was significant contribution of creativity, achievement motivation and index of brightness in predicting academic achievement of adolescents, whereas self concept and adjustment did not contribute in predicting academic achievement of adolescents and iii) index of brightness and adjustment were negatively correlated to creativity, achievement motivation, self concept and academic achievement among
adolescents. However, both these variables were positively correlated to each other.

**Dwevaki and Mary Lily Pushpam (2011)** studied the Metacognitive Ability and Academic Achievement in Chemistry among XI standard students. A sample of 244 students belonging to science group form Coimbatore district was selected as the subjects. The survey method was used for the study. It was found that there was significant association between Metacognitive ability and Academic Achievement in Chemistry.

**Sandanam and Lourdusamy (2011)** investigated the parental influence on Academic Achievement of Higher secondary students. The study was conducted on a sample of 300 higher secondary students in Thirunelveli and Tuticorin Educational Districts in Tamilnadu. The findings were: there was a significant relationship between scholastic performance of students and parental influence though there was no significant relationship between scholastic performance of students and their parenting, family and school relationship.

**Ansari (2012)** examined the relationship between academic achievement and selected adjustment factors of urban and rural adolescent students in Pune district. The sample for the study comprised 1119 urban and rural students. The study has revealed that there is a significant correlation between academic achievement and adjustment factors of urban and rural adolescent students. It has also been found that there is no significant gender difference among urban students whereas there is a significant gender difference among rural students.

**Arputhanayagam (2012)** examined the relationship between selected value patterns of students of the fishing community in relation to their academic achievement. The sample consists of 922 students of whom 393 are boys and 529 are girls. The tools viz
value pattern scale and academic achievement test were developed by the investigator and validated. It is found that there is significant relationship between economic value and the English, Maths and Science scores of the fishing community students. It also found that there is significant relationship between social values and the Tamil, English, Maths and social science scores of the fishing community students. Students who have more social values can do well in Tamil, English, Maths and Social science.

**Jebasheela (2012)** investigated Impact of Expectations on the academic achievement of twelfth standard students in Kanyakumari district. The study has been carried out on a stratified random sample of 1100 twelfth standard students. The findings of the study show higher expectations of female students truly excel the male students. Parents’ expectations of female students are positively correlated with their academic achievement; where as it is negatively correlated with the academic achievement of female students.

**Kalaivani and Babu (2012)** investigated higher secondary students achievement in chemistry as related to certain selected variables. The sample consists of 565 higher secondary students from Cuddalore district. Random sample technique has been used in the selection of the sample. Normative survey method was used for the study. The findings were: 1) The students significantly differ in their achievement in chemistry on the basis of type of school and location of the school. Students do not significantly differ in their achievement in chemistry on the basis of gender. 2) The students significantly differ in their emotional intelligence on the basis of type of school and location of the school. Students do not significantly differ in their emotional intelligence on the basis of gender. 3) There is a positive and significant correlation between achievement in chemistry and emotional intelligence. 4) The study
habits, emotional intelligence, and self-concept are having impact on the achievement in chemistry.

*Lal Kumar and Muthumaickam (2012)* report the relationship between self-control and academic achievement of 400 B.Ed., Teacher trainees. The teacher trainees were randomly selected for the study. The results revealed that there is a significant, positive and low relationship between self-control and academic achievement.

*Randeep Pannu (2012)* examined the influence of Cognitive Style (CS) on Academic Achievement (AA) of adolescent students in relation to location and gender. A sample of 1246 students of class 10+1 (585 males, and 661 females) from different rural (647) and urban (572) senior secondary schools of Ameristar district (Punjab, India) affiliated to P.S.E.B; Mohali was selected for the study. Results on analysis of variance revealed that there was no influence of interaction between location and cognitive style, location and systematic cognitive style, location and intuitive cognitive style, gender and cognitive style, and gender and systematic cognitive style on academic achievement of adolescents; there was significant influence of interaction between gender and intuitive cognitive style on academic achievement of adolescents. At low, medium and high levels of intuitive cognitive style, the academic achievement of females was higher than that of male adolescents whereas at medium and high levels of intuitive cognitive style, the academic achievement of males was higher than that of female adolescents.

*Selvarajand Gnanadevan (2012)* studied the relationship between Achievement in Biology and Stress of higher secondary students. The tool has been administered to a random selected sample of 620 higher secondary students studying in Cuddalore District of Tamilnadu. The survey method has been followed for the present
study. The result of the analysis reveals that there is a significant and negative relationship between achievements in biology and different dimensions of stress such as, academic stress, interpersonal stress, intrapersonal stress and environmental stress.

Shabana Azmi and Shamima Ansari (2012) studied Academic performance as a function of perceived school environment. The study was conducted on 400 high school students from Aligarh District. The results revealed that ‘teacher caring attitude for students’, ‘home work’, ‘students’ attitude towards school and total school environment have significant predictive influence on academic performance.

Sivaram (2012) studied the effectiveness of cooperative learning strategy on the achievement of various categories of students in English at the higher secondary level. Two matched groups of students were constituted for the purpose of this experiment. Each group consisted of ten above average students, ten average students and ten below average students. The control group was taught through the traditional lecture method while the experimental group learnt through the cooperative learning strategy. The obtained results show that the cooperative learning strategy was more effective than the traditional lecture method in teaching and learning English at the higher secondary level and it enabled the below average students to cope with the average students and the above average students to a considerable extent.

Thilagavathy (2012) analysed the achievement of adolescents in relation to their cognitive style. In this study, 500 first year higher secondary students were sampled as subjects. The mark secured in the half-yearly examination was considered as achievement. The Group Embedded Figures test was used to quantify the cognitive
style. It is concluded that the different level of achievers differ significantly in their cognitive style in favour of high achievers

Vijalakshmi and Minnelkodi (2012) conducted a study on Achievement in Tamil among college students in Salem district. Random sampling technique was used in the selection of the sample. In the present investigation a sample of 1000 college students from Salem District were selected. Results showed that the level of achievement in Tamil is average and there is no significant different between mean achievement scores in Tamil among the college students with regard to gender and location of colleges. It is also found that there is a significant difference between mean achievement scores in Tamil among the college students with regard to the type of management.

Vishal Sood (2012) studied need for achievement (n-achievement) among high school students in relation to their academic achievement and certain socio-demographic factors like gender, family type and residential background. A sample of 300 high school students (studying in class IX) was selected from 15 high/senior secondary school of Kullu and Mandi districts of Himachal Pradesh by following systematic random sampling technique. The results revealed that n-achievement positively and significantly affected academic achievement. The students with high n-achievement possessed significantly higher academic achievement as compared to students with average or low n-achievement. Girls were found to have significantly higher n-achievement in comparison to boys. However no significant differences in n-achievement were found among rural and urban students as well as students belonging to nuclear and joint type of families. Although, the students residing in urban areas and those belonging to joint type of families have shown higher n-achievement than their counterparts, the respective mean differences were not statistically significant.
Vijayapriya and Nellaiyapan (2012) examined emotional intelligence in relation to achievement in mathematics among XI standard students in Puducherry. This study consisted of 10 factors such as, Self awareness, empathy, self motivation, emotional stability, managing relations, integrity, self development, value orientation, commitment and altruistic behavior. In this study a common measure of emotional intelligence (EI) was administered to 264 students to examine how different groups score on the test of EI. Differences were compared for gender, locality of school and residence, medium of Instruction and type of management. Results indicated that females scored slightly higher than males. Group differences existed for locality but favoured rural.

Joseph Succour Jolly (2013) investigated the higher secondary students’ academic confidence as related to their family environment and academic achievement studying in higher secondary schools situated in Trichy District, Tamilnadu and used the few demographic variables namely, sex, locality of the school, residence, mode of stay, medium of study, family type, management type and school type of the higher secondary students. Random sampling technique was used in the selection of the sample of 400 higher secondary students. The descriptive and differential analyses were carried out for the data obtained. The study has revealed that majority of the higher secondary students show the average level of the academic confidence and the students were also living in the conductive family environment which in turns gives the high level of academic achievement.

ArchanaKumari (2013) studied Self-Concept and Academic Achievement of Students at the Higher Secondary Level. A sample of 321 students in different categories of schools following different systems of education at the higher secondary level was chosen. The findings of the study conducted revealed that students
belonging to central board schools were better in their self-concept and academic achievement when compared to students from other boards. There is also a significant and positive relationship between self-concept and academic achievement of students at the higher secondary level.

TamizhselvanandBabu (2013) examined achievement in Tamil language subject of school students study experimental. This method studies, describes and interprets what will exist in future. A tool for the assessment of Tamil language among school students was prepared with a sample of 100 students in a pilot study. The tool consisted of 50 items, based on the item analysis technique. This tool was used for the pre test. Findings revealed that male and female students are having average level of achievement in Tamil Subject. The rural and urban residing students are having average level of achievement in Tamil subject. The male and female students differ significantly in their achievement score in Tamil. The rural and urban residing students do not differ significantly in their achievement score in Tamil of different student

Vijayalakshmi (2013) studied college students’ achievement in Tamil in relation to their Self-concept. Simple random sampling technique was used in the selection of sample. A sample of 1000 college students from Salem District was selected. Result showed that there is a positive and significant correlation between achievement in Tamil and self concept.

2.2 STUDIES RELATED TO EMOTIONAL INTELLIGENCE

Mayer et al. (2000) analyzed the “Models of Emotional Intelligence” and reviewed some of the literature being presented as emotional intelligence. The major findings from a study of their MEIS test are: General emotional intelligence correlated with measures of verbal intelligence, with measures of self-reported empathy; and with parental warmth. “Ability at emotional
intelligence was age dependent, increasing between young adolescence and early adulthood”.

**Madonna and Kathy (2001)** conducted a study on Emotional intelligence and Empathy: their relation to multicultural counseling, knowledge and awareness. Their results revealed no statistically significantly sex differences. School counselor’s multicultural education, emotional intelligence scores, and personal distress empathy scores accounted for significant variance in their self – perceived multicultural counseling knowledge. However, prior multicultural education, emotional intelligence, and empathy were not significantly predictive of school counselors’ self – reported multicultural counseling awareness.

**Mishra and Dhar (2001)** investigated the relationship between thinking orientation and emotional intelligence among future managers and reported that students with whole brain thinking orientation possess significantly higher emotional intelligence in comparison to the ones with right and left brain thinking orientation. Students with right thinking orientation did not differ from students with left brain thinking orientation. Finally, age and emotional intelligence significantly correlated with thinking orientation, irrespective of right brain or left brain thinking orientation.

**Bruno et al. (2002)** studied the effectiveness of implementing a social and emotional learning programme for elementary school students. A year – long programme consisting of five units (listening, feeling, anger management, decision making and perspective taking) was designed to enhance their emotional and social intelligence. The programme was found effective by pre – test and post- test analysis.
Kajal (2002) researched on “Emotional Intelligence: An Investigation of Construct Independence from Personality and Social Intelligence”. This research is classified as descriptive research and incorporates the use of a survey technique. The sample consisted of 286 subjects in the age range of 19.5 to 23.5 years. The subjects were drawn randomly from various undergraduate and postgraduate classes in Government College, Gurgaon; Government College, Bhiwani; University College, and University Teaching Departments, Kurukshetra University, Kurukshetra. The data were analyzed with the help of product-moment correlation and regression analysis. The main findings were: (1) In general the findings are in conformity with most of the hypotheses proposed in the light of earlier researches and existing theories in the field. 2) Some of the measures of emotional intelligence showed significant association with the measures of social intelligence. 3) Some of the measures of emotional intelligence were found to correlate significantly with big-five personality factors. 4) Some of the measures of emotional intelligence were found to correlate significantly with the measures of temperament. 5) The correlations among the measures of emotional intelligence were positive and generally substantial.

Roberts and Mathews (2002) conducted a study on “Can emotional intelligence be schooled? They pointed out that several issues that need to be addressed prior to developing and implementing emotional intelligence programme and provide specific guidelines for the development, implementation and evaluation of future emotional programme.

Balasubramanian (2003) studied, ”Emotional Intelligence and Achievement of Teacher Trainees at Primary Level” This research is classified as descriptive research and incorporates, the use of survey technique. The sample comprised of 269 student teachers from three DIETs, one Government TTI and three private TTIs from
Ariyalur, Thanjavur and Thiruvarur districts of Tamilnadu. Emotional Intelligence tool, developed and standardized by the investigator and academic achievement were used for data collection. The data were analyzed by t-test, Pearson Product Moment-Coefficient of Correlation. The findings were: (1) the men and women teacher trainees do not differ in their emotional intelligence. (2) The teacher trainees studying in government and private teacher training institutions differ in their emotional intelligence. The teacher trainees of government institutions are at higher level than those of the private institutions. (3) The teacher trainees studying in co-education and gender-specific education teacher training institutions differ in their emotional intelligence. The teacher trainees of co-education institution are at high level than gender-specific education institutions. (4) There is significant low positive correlation between emotional intelligence and academic achievement of teacher trainees.

Hartley (2003) investigated the instrumentalization of the expressive education. There is a resurgence of matters emotional in education. The concept of emotional intelligence is an example. The effective school seems set to become the affective school. He has made a strong emphasis on both emotions and creativity in schools.

Liau et al. (2003) studied the case for emotional literacy: the influence of emotional intelligence on problem behaviour in school students. Their findings indicated that emotional literacy, measured in terms of emotional intelligence, was linked to internalizing and externalizing problems behaviours. Emotional literacy also served as a moderating factor between parental monitoring and externalizing problem behaviour.

Mathur et al. (2003) made a study on ‘Emotional intelligence and its inter-relationships of attribution, taking responsibility and
scholastic performance in adolescents. Data was collected on a sample of 83 adolescents (boys and girls) from a local public school. The results indicated inter-relationship between factors of attribution, taking responsibility and scholastic performance of subject. Hence, all the causal factors of attribution and taking responsibility have inter-relationship. It can therefore be stated that all the variables have minor impact on scholastic achievement of the adolescents. The data also exhibit that adolescents who have higher level of responsibility do better on scholastic performance, make better adjustments are more confident. Studies revealed that family environment has a significant influence on emotional competence of adolescents. Students in co-education institutions are higher in their emotional intelligence. The men and women teacher trainees do not differ in their Emotional Intelligence (EI).

**Vidnod Kumar Shanwal and Prof. Ghulam Deastgir (2003)**

conducted a study in 3 phases among municipal corporation schools of Delhi. The finding of the study revealed that socio-cultural factors have definitive influence on the degree of emotional intelligence. Environmental influence is visible upon urban and rural student’s emotional intelligence; boys and girls do differ in their emotional intelligence. Learning one component of emotional intelligence nurtured the development of other components.

**Zeidner et al. (2003),** studied the development of emotional intelligence towards a multi-level investment model, proposed a tentative investment model for emotional competencies in children which accommodates the multifaceted nature of emotional intelligence. Lower level competencies may provide a platform for developing more sophisticated emotion-regulation skills, with competencies becoming increasingly differentiated over time.
Amirtha (2004) conducted a study on the personality of teachers in relation to their emotional intelligence using Bar-On’s Emotional Quotient Inventory and found that there is no significant gender difference in overall emotional intelligence, although women teachers have better impulse control and problems solving skills than men teachers. Age also does not influence the emotional intelligence of teachers. In general, educational qualifications do not have a say over the overall emotional intelligence of teachers, albeit significant difference in problem solving, emotional self – awareness and stress tolerance skills where postgraduate teachers are better than graduate teachers. No significant difference is found between arts and science teachers in their study. Experience and type of school do not influence the emotional intelligence of teachers. An important finding of the study is that the personality of teachers has a significant impact on their emotional intelligence.

Arati et al. (2004) conducted a study on the influence of family environment on emotional competence of adolescents; a sample of 120 adolescents in the age group of 13-16 years in VII, IX and X classes was selected from different high schools of Hyderabad and Secundrabad. Family environment scale developed by Bhatia and Chadda and emotional Competence Scale developed by Bharadwaj and Sharma were used to find out family environment and emotional competence of adolescents. Pearson’s product moment correction method was applied to find out the relationship between environment and emotional competence of adolescents. The results revealed that family environment had significant influence on emotional competence of adolescents.

Devi and Mayuri (2004) attempted to examine the relationship between emotional intelligence and personality of adolescents. 200 students studying junior and senior intermediate course constituted the sample. Emotional Intelligence inventory developed
and standardized by Umadevi (2003) was used to find out the emotional intelligence levels of the adolescents. MAP series-Teen age form developed by Psy-Com services (1993) was used to study thirteen personality dimensions of personality. The major findings were: The total emotional intelligence and total personality were significantly and positively related with each other. Most of the dimensions of personality like boldness, enthusiasm, excitability, leadership, maturity and mental health were positively and significantly related to the sub scales of emotional intelligence.

**Mohansundram et al. (2004)** conducted a study on ‘Emotional intelligence and Achievement of Teacher Trainees at Primary Level’. A sample of 296 teachers trainees were selected using stratified random sampling technique. The major findings were that men and women teacher trainees do not differ in their Emotional Intelligence. There is no signification correlation between Emotional intelligence and achievement in social science subject. The teacher trainees of government institutions are at a high level, than the teacher trainees of private institutions in their emotional intelligence. The teacher trainees of co-education institutions are at a high level, than the teacher trainees of non co-education institutions in their Emotional Intelligence

**Pery et al. (2004)** developed a new measure for assessing emotional intelligence of teachers in teaching situation and reported gender differences where female teachers reported greater likelihood of demonstrating emotional intelligence compared to male teachers. There was partial support for the four – branch model of emotional intelligence in their findings.

**Marc et al. (2004)** studied the emotional intelligence and its relation to everyday behaviour. Women scored significantly higher in emotional intelligence than men. Emotional intelligence, however, was more predictive of the life space criteria for men than
of women. Low emotional intelligence was significantly associated with maladjustment and negative behaviors for college-aged males, but not for females.

**Parker et al. (2004)**, in an influential study, observed that the academic success was strongly associated with several dimensions of emotional intelligence particularly in the context of emotional and social competencies during the transition from high school to university.

**Shenwal (2004)** studied the emotional intelligence of 200 children of fourth and fifth standards from two urban and two rural schools using an adopted version of the Multifactor Emotional Intelligence Scale (MEIS) and found that rural girls are much better on emotional intelligence than their urban and gender counterparts.

**Annaraja and Jose (2005)**, in their study on the emotional intelligence of 300 B.Ed. teacher trainees in Kerala State, observed that eighteen per cent of the trainees have low level, 66% of them moderate level and 16% of them high level of emotional intelligence. No significant difference exists between rural and urban trainees in their self-awareness, self-control, social skills and emotional intelligence except in two dimensions namely motivation and sympathy where the difference is found to be significant. Trainees with different optional of study such as English, Physical Science, Social Science, Natural Science and Mathematics showed significant difference in their emotional intelligence in general but such difference does not exist in selected two dimensions namely self-awareness and self-control.

**Gakhar and Manhas (2005)** conducted a study on “Cognitive correlates of emotional intelligence of adolescents. The study was carried out as a descriptive survey method. It was conducted on 400 students of Class XI studying in various private and government schools in both urban and rural areas of three
districts’ of Jammu and Kashmir namely, Udhampur, Kathua and Jammu. The major findings were: i) significant and positive correlations were found between emotional intelligence and all the cognitive variables namely, intelligence, creativity and academic achievement, ii) no significant differences were observed between boys and girls with respect to emotional intelligence, and iii) a significant difference was observed in the emotional intelligence of adolescents studying in private and government schools with the private school students scoring higher.

Suresh and Rajalakshmi (2005) studied the emotional intelligence of schoolteachers revealed no significant gender difference and also there was no rural urban divide. However, teachers from government schools had significantly higher emotional intelligence than those of private schools. Similarly, language teachers exhibited higher performance in their emotional intelligence score than other subject teachers.

Latha et al. (2005) studied the effect of emotional intelligence on teaching effectiveness in private school teachers and found that emotional intelligence in general, does not differentiate teaching effectiveness of school teachers. Its impact is very minimal except in two specific dimensions like teachers’ sense of humour and mastery in the subject. Another study on the relationship between teacher effectiveness and emotional intelligence was conducted by Dash and Behera (2004) on a sample of 100 junior college teachers. They found that there is a significant positive relationship between teacher effectiveness and emotional intelligence. Dimension wise analysis reveals that many dimensions of teacher effectiveness namely information source, motivation, advisor and guide relationship with pupils, fellow teachers, principals and parents, teaching skills, professional knowledge and classroom management have significant positive relationship with emotional intelligence whereas the relationship in
dimensions of teacher effectiveness such as disciplinarian, general appearances and habits in relation to classroom, co-curricular activities, and personal characteristics with emotional intelligence is insignificant. The study also reveals that the high emotional intelligence teachers have higher teacher effectiveness as compared to low emotional intelligence teachers.

**Alavandar (2006)** investigated the emotional intelligence of elementary school teachers working in Cuddalore District of Tamilnadu. He conducted the study on a sample of 300 teachers working in primary, middle, high and higher secondary schools using Proportionately Stratified Random Sampling technique. Its findings were; the emotional intelligence of elementary school teachers is rather high; men and women teachers do not differ significantly in their emotional intelligence; Age has a significant bearing in their emotional competence; emotional intelligence increases with age until the fifth decade of their life; educational qualification, teaching experience, level of school and type of management do not significantly differentiate teachers in their emotional intelligence.

**Manhas and S.C.Gakhar (2006)** conducted a study of Non-cognitive correlates of Emotional Intelligence of adolescents. Findings revealed that significant difference in the emotional intelligence of male and female government school – private school, scheduled caste – non schedule caste, rural and urban adolescents as well as students of arts and science streams. Results represent that there is insignificant difference in the emotional intelligence of adolescents belonging to urban and rural areas.

**Patil, B. and Kumar, A. (2006)** investigated the emotional intelligence among students teachers in relation to sex, faculty and academic achievement. A sample of 302 student teachers studying in four colleges of education in Kolnapur district, using simple
random sampling. Descriptive survey method was employed. Emotional Intelligence Test (EIT) and academic achievement scores were used as research tools in the study. Data were tabulated and analyzed using appropriate statistical techniques such t-ratio and product moment coefficient of correlation. Findings:

1. There is no significant difference between emotional intelligence of male and female student teachers.
2. There is no significant difference in the emotional intelligence of student teachers of arts and science faculty.
3. There is no significant difference between the emotional intelligence and academic achievement of student teachers.

**Biju (2007)** explored the emotional intelligence and teaching competency of teacher trainees of secondary education. Survey method was followed in the study. The sample for the study was selected by random sampling technique, covering nine colleges of Education, three from each district. Emotional intelligence inventory of AnukoolKyde, SanjyotPethe and UpinderDhar and General Teaching Competency Inventory of Variance and chi-square test were employed. The study reveals the following results: There is no significant difference between male and female teacher trainees at secondary level in their emotional intelligence. Aided colleges B.Ed., students have higher level of emotional intelligence.

**Catherine (2007)** conducted a study on “Values and emotional intelligence among XI standard students in Trichy District”. The sample comprised 450 school students from various parts of Trichy District. The tools used were: Value oriented scale by UdaiParak and VenkateshwaraRao and Emotional Intelligence Test by AnukoolKyde and SanjyotPethe. The major finding was that there was a significant difference between boys and girls in their emotional intelligence. There was significant association between emotional intelligence and types of school.
Done, Ujwala Mandhukar (2007) studied the effect of Emotional Intelligence Development Programme on Higher Secondary Students. Survey method was used in this study to collect data about the present condition of emotional intelligence of higher school students. For investigation total 1,577 students of Arts, Science and Commerce faculties from 11 junior colleges were selected as sample through random sampling. **Findings:** (1) The Emotional Intelligence between Arts, Science and Commerce students in all junior colleges was the same. (2) The Emotional intelligence between boys and girls was the same in almost all junior colleges. (3) The Emotional Intelligence between urban and rural girls was the same in all junior colleges. (4) Emotional Intelligence Development Programme was effective for the development of the component of empathy in emotional intelligence of Arts, Science and Commerce students.

Nidhi, Srivastava (2007) conducted a study on emotional intelligence in relation to achievement in environmental studies. In the study the correlation survey and casual comparative methods of research were used. 77 students of ninth class from an institution of Allahabad have been taken as a sample. Mean, S.D., ‘t’ test and correlation were calculated. The study revealed that there was a significant positive correlation between emotional intelligence and academic achievement in environmental studies. There was a significant difference in emotional intelligence of high and low achievers in environmental studies. Low achievers in this subject exhibited less emotional intelligence. Emotionally intelligent students were identified emotionally more stable and sensitive to their environmental issues than their less emotionally intelligence counterparts.

Siba Charan Subuhi (2007) analyzed the relationship between Emotional Intelligence and Academic Achievement of Post Graduate Students. The population of this study was the Post
Graduate students of NEHU, Tura Campus, and Meghalaya. The sample was 50 both boys and girls together. The sample was given the Bar-on Emotional Quotient Inventory, which is the first scientifically developed and validated measure of emotional intelligence. The Baron EQ-I consist of 133 items and take approximately 30 minutes to complete. For this study, researcher has taken students’ last semester examination marks as achievement score. Here, the researcher calculated the mean and standard deviation of all the 50 students of both variables. Afterwards researcher compared the Emotional Intelligence level of each student, to see whether there is a relationship or not between emotional intelligence and academic achievement as well as to see the emotional score differences between high and low achievers.

Sridhar and Hamid Reza Badiei (2007) investigated Teacher efficacy (TE) and Emotional Intelligence (EI) of Primary School teachers. From the population of all teachers from one cluster of urban district in south Mysore, simple random sampling was used to select 100 out of 480 teachers of the selected schools. The relationship between the obtained scores, both on emotional intelligence and teaching efficacy and t test to investigate significant difference between the means. The mean accounted for TE was 35 on Teaching efficacy and 25 on personal efficacy both fall under “Moderate” category of Teacher efficacy. There is no, however, significant difference between the means of TE and EI with reference to two of independent variables which are considered in this study (gender, educational level). In respect of the third independent variable, (age) a significant difference has been observed.

Afolobi, olukayodeet al (2008) conducted the study which examined emotional Intelligence and its relationship with need for achievement, interpersonal relationship and academic achievement of undergraduate students. The findings revealed that emotional
intelligence has significant influence on interpersonal relationship, need for achievement and high influence on academic achievement. The interaction effect of emotional intelligence also significant upon academic achievement only.

**Sridevi and Lisha Parveen (2008)** studied the relationship of Emotional Intelligence, Adjustment, Self–Concept and Scholastic Achievement of Higher secondary students. The sample for the study was drawn through stratified random sampling technique. The sample comprised 200 students. There exists a positive relationship among Emotional Intelligence, Adjustment, self–concept and achievement of higher secondary students. Female students possess higher emotional intelligence than the male students. There is no significant difference in emotional intelligence of higher secondary students with respect to the type of college in which they are studying.

**Gaurav Singh and Girijesh Kumar (2009)** studied emotional intelligence of secondary school teachers with respect to age. It was carried out on 140 teachers (divided in to two age groups i.e. below 30 years and 30 years and above. Mean, Standard deviation and t-test are used to analyze the data. The research has indicated that emotional intelligence of secondary school teachers differs significantly in relation to their age difference. It has also been observed that on the aspects like Self awareness, Emotional Stability, Managing Relation, Integrity and Self-development, teachers with age group of 30 years and above are much better, whereas on the aspects like Self-motivation, Commitment and Altruistic behavior, the teachers with age group less than 30 years have greater mean value. There is no significant difference on Empathy and Value Orientation aspects of emotional intelligence between teachers of age group less than 30 years and with age group 30 years and above.
Indu (2009) investigated the Emotional Intelligence of secondary teacher trainees. The sample consisted of 502 teacher trainees studying in from different colleges of Education Coimbatore district. Survey method was used for data collection. The findings revealed that majority of the sample possessed average Emotional intelligence and there was no significant difference in the Emotional Intelligence of the sub samples: gender, type of family and type of institution.

SumantaKumar Panda (2009) conducted a study on Emotional Intelligence and personality traits of pupil teachers. A sample of 130 pupil teachers out of nine colleges of Education affiliated to Kurukshetra University, Kurukshetra were selected, using simple random sampling technique. Findings of the study reveal that (i) there was significant positive correlation between Emotional Intelligence and normal behaviour of pupil teachers; (ii) there was significant negative correlation between Emotional Intelligence and neurotic behaviour of pupil teachers (iii) there was significant difference between normal and neurotic behaviour of pupil - teachers in emotional intelligence. (iv) There was no significant gender difference in emotional intelligence and (v) there was no significant difference between rural and urban pupil - teachers in emotional intelligence.

Ruchi Dubey (2009) made a survey on the Emotional Intelligence among Undergraduate Students. The sample for the study comprised 185 Arts stream undergraduate students of university of Allahabad. The data were analyzed for descriptive statistics-test and ANOVA. Findings of the study revealed that females are more emotionally intelligent than male students. Students of general category have high emotional intelligence in comparison with their counterparts belonging to OBC and SC category. The same is true of male students but female students belonging to general OBC
and SC category do not differ from one another on emotional intelligence.

**Umadevi (2009)** investigated the relationship between Emotional Intelligence, Achievement Motivation and Academic Achievement; He conducted the study on a sample of 200 primary school student teachers studying in various DTEd Colleges of Davangere city. Normative survey method was adopted. The results revealed that there is a positive relationship between emotional intelligence and academic achievement motivation and academic achievement. Male and female and arts and science student teachers do no differ in emotional intelligence and achievement motivation.

**Usha, Rekha (2009)** studied the Emotional competence and Mental Health as predictors of Academic Achievement among the secondary school pupils of Kerala. A sample of 530 students of Thrissur and Ernakulum districts of Kerala was selected on the basis of gender, type of management of school and locality. The sample was selected using proportionate stratified sampling technique. The results of the study revealed that both emotional competence and mental health have high correlation with achievement. The results also revealed that among the variables studied, the best predictor of academic achievement is emotional competence.

**SivaKumar and Amalraj (2010)** in their study on Emotional Intelligence of Higher Secondary Biology students in Cuddalore District analyzed sample of 320 higher secondary Biology students. Survey Method of study has been used. Stratified sampling technique was used to select the sample. The results revealed that there is no relationship between emotional intelligence and academic achievement of higher secondary biology students.
Madhavi (2010) conducted a study on Self-Efficacy and Emotional intelligence of PG Students. On a sample of 200 PG students, out of which 100 students were staying at home and 100 PG students staying at hostel. Both groups (consisting of 50 females and 50 males students) are selected from different Department of Karnataka University, Dharwad. General Self-Rated Efficacy Scale (GSE) by Jerusalem and Schwarzer and Self-Rated Emotional Intelligence Scale by Brackett and Rivers were used to collect the data. The data were analyzed and the results revealed that PG students staying at home have significantly higher self-efficacy in overall emotional intelligence compared to hostel students. An incidental analysis also revealed that demographic variables such as age, gender, order of birth and caste have significantly contributed to the self-efficacy and emotional intelligence of PG students at home and hostel.

Nirmala (2010) studied on Emotional Intelligence among college students in Eritrea - Normative survey method of the study has been used. A sample of 116 college students in Eritrea, a Northeast African Country. It was found that the sample had ‘average’ score on Emotional Intelligence in the aggregate as well as components – wise. There was gender difference in Emotional Intelligence on the motivation and empathy components.

Sailaja and Umadevi (2010) analyzed the perceived self – efficacy and emotional intelligence of adolescents. The sample comprised 180 adolescents in the age range of 13 – 16 years studying high schools and junior colleges located in Hyderabad and Secundrabad were selected for the study. The results revealed that adolescents with low self – efficacy, medium self – efficacy and high self – efficacy level fell under below average, average and above average categories of emotional intelligence respectively.
**Vanithakale (2010)** conducted a comparative study of emotional intelligence among the B.Ed. trainees, to study the emotional intelligence among the male and female B.Ed. trainees. The sample comprises of 100 students of which 50 male and 50 female trainees were selected randomly from four colleges of Amaravathy city. The major finding was that no significant gender difference with regards to their emotional intelligence.

**Vandana et al (2010)** conducted a study on "Emotional Intelligence among student teachers in relation to general intelligence and academic achievement. Findings of the revealed that a) there is no significant relationship between emotional intelligence and general intelligence of student teachers b) there is no significant relationship between emotional intelligence and academic achievement of student teachers.

**Vijaya (2010)** conducted a study on gender, emotional intelligence and academic achievement of students in IX standard, A sample of 300 students in Kovipatti schools were compared. It has been found that emotional intelligence is related to academic achievement of students in general. It is essential to find out the relationship between emotional intelligence and academic achievement of girl students.

**HimaniChawla, Randeeppannu and Gursewak singhBhullar (2011)** attempted a study on General Intelligence, Emotional Intelligence and Scholastic Achievement of commerce 10+1 grade from senior secondary schools of Hoshiarpur District. The schools were selected by stratified random sampling technique. It was observed that there were significant positive correlations between General Intelligence and scholastic Achievement, Emotional Intelligence and Scholastic Achievement and the high and low score achievers were equally correlated with General Intelligence and Emotional Intelligence. There was significant negative
correlation between General Intelligence and Emotional Intelligence, among high scores and low scorers.

**Monica Mahajan (2011)** studied Academic Achievement in relation to Emotional Intelligence and Spiritual Intelligence. A sample of 140 students studying in class XI from four schools of District Hoshiarpur. The technique employed was multistage randomization of clusters at school and section level. The findings were: there exists no significant difference between the emotional intelligence of boys and girls. There exists no significant difference between the spiritual intelligence of boys and girls. There exists a positive and significant relationship between academic achievement and emotional Intelligence of boys and girls. Also, the relationship is found positive and significant for boys and girls separately. There exists positive and significant relationship between academic achievement and spiritual Intelligence of boys and girls. Also, the relationship is found positive and significant for boys and girls separately. There exists positive and significant relationship between emotional intelligence and spiritual intelligence of boys and girls.

**Jadhav and Patil (2011)** conducted a study on emotional intelligence among student teachers in relation to general intelligence and academic achievement, with a sample of 141 student teachers studying in the college of education in Satara city (M.S). It was concluded that, there is no significant relationship between emotional intelligence and general intelligence of student teachers. There is also no significant relationship between emotional intelligence and academic achievement of student teachers.

**Umesh and Ajay (2011)** conducted a study on the emotional intelligence as related to optimistic and pessimistic attitudes of B.Ed teacher trainees. It was conducted for 200 B.Ed teacher
trainees of Mandi district in Himachal Pradesh. The result of the study revealed significant gender differences on emotional intelligence; male B.Ed teacher trainees are more emotionally intelligent than female B.Ed teacher trainees. There exists significant mean difference in optimistic and pessimistic attitudes of male and female B.Ed teacher trainees.

Subramanyam (2011) studied the impact of Emotional Intelligence and study skills of High School students; The sample of 60 high school students was randomly selected from class X of a Municipal high school in Thirupati town of Andhra Pradesh. It was concluded that there is no significant difference with regard to the impact of gender on Emotional Intelligence and study skills of high school students.

Mohamed Firose and Asgarali Patel (2012) examined the influence of emotional intelligence and decision making styles of SriLankan and Indian graduates. The sample size comprised of 200 graduates (100 students Srilankan and 100 Indian graduates respectively). Stratified random sampling method was employed. The tools used for data collection were the Emotional Intelligence Scale (Aunkool Hyde. Saniyot Dethe and Upinder Dhar; 2001) and Decision-Making Questionnaire-II (Leon Mann; 1982). Mean, SD and t-test were the statistical analyses done. Results revealed that emotional intelligence of graduates is not influenced on the basis of countries, but Buck passing and Procrastination decision-making styles of graduates are influenced on the basis of two countries.

Rita Saini (2012) examined the relation between emotional intelligence (EI) and Self-Efficacy of the senior secondary school students. The descriptive method has been used. The results obtained from Pearson Product-moment Correlation showed that there was a positive significant correlation between emotional
intelligence (EI) and self-efficacy (r =0.3). It was also found that female students were better than male students with regard to their self efficacy and emotional intelligence.

**SivasakthiRajammal and Muthumanickam (2012)** conducted on Emotional Intelligence of school teachers in Chennai and Thiruvalluvar District, with sample of 900 school teachers. The results revealed that teachers significantly differ in Emotional Intelligence in respect of gender, place of school, level of teaching and they do not differ in Emotional Intelligence in respect of marital status, age, type of management, years of experience and monthly income of teachers.

**Velmurgan and Balakrishnan (2012)** conducted a study on Emotional Intelligence of students. The study was conducted on a random sample of 300 students studying in twelfth grade in the higher secondary schools of Cuddalore District in Tamilnadu. Normative survey method was used. The study revealed that the students had high level of emotional intelligence in terms of self awareness, empathy, self motivation, emotional stability, managing relation integrity, self development, value orientation, commitment and altruistic behavior. Further it is observed that type of school management, structure of family, parental education and academic achievement have no significant effect on emotional intelligence of students.

**Vijay Kumar and Govindaraju (2012)** conducted a study of Creativity and Emotional Intelligence of High School students. The sample of 400 students drawn from Bangalore region during the academic year 2007-2008, Stratified random sample was used to select the required sample. Their findings revealed that there was a significant gender difference in creativity but no significance gender difference in emotional intelligence. Girl students possess significant relationship between creativity and emotional
intelligence. Hence, there is a positive relationship between creativity and emotional intelligence.

**Vijayapriya and Nellaiyapan (2012)** examined emotional intelligence in relation to achievement in mathematics among XI standard students in Puducherry. This study comprises 10 factors such as, self awareness, empathy, self motivation, emotional stability, managing relations, integrity, self development, value orientation, commitment and altruistic behavior. In this study a common measure of emotional intelligence (EI) was administered to 264 students to examine how different groups score on a test of EI. Differences were compared for gender, locality of school and residence, medium of instruction and type of management. Results indicated that females scored slightly higher than males. Group differences existed for locality but favored rural.

**Bharsakhale (2013)** studied the emotional intelligence among Marathi and English medium students by employing a sample of 112 subject in which 56 subjects were Marathi medium, 56 were English medium from Aurangabad city. A 2x2 factorial design was used to analyze the data. It was found that there was no significant difference between Marathi medium and English medium students on emotional intelligence and female students have more emotional intelligence than male students in both media.

**Farah Malik and Sultan Shujja (2013)** studied the relationship Emotional Intelligence and Academic Achievement of children and implications for Children’s Performance in Schools. The study assessed relationship of emotional intelligence with academic achievement in children of 4 to 8th grades with age 9 through 13 years (M=11.48, SD = 1.43). Sample comprised of 204 children; 107 high and 97 low achievers were drawn from eight public and private schools in two cities of Pakistan. Children’s percentage of
mark obtained in the final promotion examination of previous grades was used as indicator of academic achievement. Measures used were Urdu version of BarOnEQ-i; YV and a demographic information form. Data were collected in small groups of 10-15 consented children with the help of class teacher. The results indicated a significant positive correlation between academic achievement and emotional intelligence. High and low achievers showed significant differences on overall emotional intelligence; no gender differences were found in both groups for total EQ score but on interpersonal and stress management scales; gender difference within groups were significant. Children from public schools were high on EQ than private school but low on academic achievement.

**Mahmood Ahmad Khan and Ishfaq Ahmad Dar (2013)** studied the emotional intelligence of 9th grade students with high and low socio-economic status. The sample of the study comprised 100 students (50 high socio-economic status students and 50 low socio-economic status students) selected randomly from all Government High and Higher Secondary Schools of the educational zone Dryigam. The results of the study highlight that high socio-economic status students are more emotionally intelligent than low socio-economic status students. High and low socio-economic status students show significant difference in self-awareness, self-motivation, emotional stability, managing relations, integrity, self-development and commitment. High socio-economic status students have been found clear in their priorities, pay more attention to the worries and concerns of others. They are found to be friendly, sociable, helpful and skillful in dealing with people. They are found to be more responsible, more comfortable to novel ideas and new information. They face boldly good and bad situations. They are more aware of their weaknesses, are more co-operative, helpful, outgoing and democratic. They are found to be able to meet commitments and keep promises and are organized
and careful in their work. No significant difference was found in empathy, value orientation and altruistic behavior between high and low socio-economic status students.

**Vineethkumar, Manju Mehta and NidhiMaheshwari (2013)** investigated the effect of emotional intelligence (EI) on the achievement motivation, psychological adjustment and scholastic performance of secondary school students with a sample of 450 urban male students of the tenth standard form Jaipur district, Rajasthan. Results revealed a significant effect of EI on the achievement motivation and educational adjustment of students. However, EI did not have a significant effect on the emotional adjustment, social adjustment and scholastic performance of students.

### 2.3 Studies related to Goal Orientation

**Chris et al (2000)** explored how some aspects of achievement goals theory can be integrated into the education of gifted and/or academically talented students. Specifically, the study addressed (i) whether teachers of gifted students utilized task-focused instructional practices more often than performance-focused instructional practices, (iii) whether teachers of gifted students perceived differential achievement goal pursuit between high achieving and low achieving gifted students, and (iii) whether teachers of gifted students perceived within-group differences in goal pursuit for both high achieving and low achieving gifted students. Forty-nine teachers of gifted elementary students completed the “Approaches to Teaching and Learning” scale from the Patterns of Adaptive Learning Survey and a modified version of the “Personal Goal Orientation” student scale. Results indicated that teachers of gifted students reported significantly more use of task-focused instruction compared to performance-focused instruction. Teachers perceived high achieving gifted students to
pursue task and performance-approach goals significantly more often than low achieving gifted students. High achieving gifted students were also perceived to pursue task and performance-approach achievement goals significantly more often compared to their pursuit of performance-avoidance goals. No relative difference in achievement goal pursuit was perceived for low achieving gifted students.

**Helen et al (2001)** investigated the explicit and implicit ways in which fifth-grade teachers communicated and emphasis on mastery and performance goal orientations to their students and found that teachers perceived as having a high mastery focus spoke about learning as an active process, and this was reflected in their practices, which emphasized formal assessments, grades, and students’ relative performance.

**Katherine McWhaw (2001)** studied in relationship between Student Goal Orientation and Interest and its effects on Students’ Use of Self-Regulated Learning Strategies. Ninety-three Grade XI students participated in this study. This study was between-groups factorial using a post-test-only control group design. There were two independent variables, Goal orientation and Interest. There were three dependent variables: Total Main Ideas, Use of Other Cognitive Strategies, and Metacognition. There were significant main effects for Interest and Goal Orientation on the main-idea selection measure: high-interest students selected more main ideas than low-interest students, and rewarded students outperformed learning goal-oriented students. There was a main effect for Interest on Metacognition: high-interest students reported using more metacognitive strategies than low interest students.
Roland (2001) outlined 10 areas requiring teacher leadership in schools and discussed benefits for students, teachers, the school, and the principal; and listed impediments (workload, time, testing constraints, colleagues’ disapprobation, and unsupportive principals). He concluded that determined goal-driven teachers have the power to unlock one another’s leadership potential and foster its growth.

Anna et al (2002) explored relationship between motivational goal orientation and self-concept ability as preservice elementary teachers (n=45) participated in a science learning cycle during methods course instruction. This study emphasizes inquiry-based teaching procedures in teacher education programs to promote positive motivational and affective disposition in new teachers.

Jessie et al (2003) conducted a study involving 566 Singaporean high-achieving sixth-graders and 32 teachers, found that students reported higher on task and ego oriented goal orientations and less on work avoidance tendencies; the more ego-oriented the students, the better they performed academically; and teachers’ classroom task goal orientation had positive influences on students’ ego goal orientations.

Ling et al (2003) explored how vicarious learning experiences and goal setting influence Preservice teachers’ self-efficacy for integrating technology into the classroom. Twenty undergraduate students who were enrolled in an introductory educational technology course at a large Midwestern university participated and were assigned into four conditions (three experimental and one control). Vicarious experiences for technology integration were presented to the students using an instructional CD-ROM, Vision Quest. Students were grouped into vicarious experience with or without learning goals, learning goals only presented, and a control group of neither vicarious experiences nor learning goals.
Results showed significant treatment effects of vicarious experience and goal setting on participants’ judgments of self-efficacy for technology integration. A significant interaction effect was not observed, possibly due to small sample sizes.

**George Botsas (2004)** conducted a study on Goal orientation and reading comprehension strategy use among students with and without reading difficulties. The aim of this study was to provide an analysis of goal orientation parameters with respect to reading comprehension strategy use for students with and without reading difficulties (RD). Non-RD students appeared to be more mastery oriented and less performance avoidant compared to RD ones. Also, non-RD students used, more, deeper, more sophisticated and complex ones compared to those of RD students (who used fewer and more surface strategies). Non-RD children appeared to metacognitively monitor their comprehension process while their RD classmates were either ignorant of the existing comprehension problems or bridged meaning gaps in inappropriate ways.

**Jan (2004)** studied how goal setting with students increases the academic student achievement in Burleigh Elementary School. Teachers and students of the school are empowered to share responsibility for learning, using a goal-setting and monitoring process deemed the SMART (Specific and Strategic, Measurable, Attainable, Results-based, and Time-bound) Goals process. When staff added goal-setting, they began to see significant changes in achievement, particularly in reading. The group became convinced that increasing students’ responsibility using the goal-setting process they were already familiar with would empower students and increase achievement levels. They translated the district’s SMART acronym into more kid-friendly language-specific, measurable, achievable, real, and timeline. The author also discusses the factors teachers must consider in helping students.
set SMART goals. Positive outcomes of the process are also discussed

**Sandra (2004)** used educational psychology research on achievement goal theory and the target conceptual framework, originally proposed by Ames (1992) and Epstein (1988), to model how research in these areas can help teachers create classroom environments that are focused on meaningful learning. By briefly considering the relevant research and the examples that illustrate the application of the research, teachers should be able to create learning environments that focus on mastery goals.

**Kwok-wai et al (2005)** identified two achievement goals and three perceived parenting styles in a sample of Hong Kong teacher education students. Significant correlations exist within the perceived parenting styles and the achievement goals. Parental authoritativeness was significantly and positively related to learning goals, and parental authoritarianism was significantly and positively related to performance goal. In terms of gender, it was found that the positive relationship between authoritarian parenting style and performance orientation was significant in male but not in female students. On the contrary, the positive relationship between authoritative parenting and learning goal was significant only in female but not in male students. Analysis of the paternal and maternal influence showed there was no significant relation between paternal parenting styles and goal orientation but maternal authoritativeness was significantly related to learning goal. Further investigation with a larger sample, more male students and paternal influence would help confirm the paternal versus maternal influence on students’ goal orientations.

**Rebecca A. (2005)** studied Mattern College Students’ Goal Orientations and Achievement patterns. This study compared the achievement patterns of students who held both goals (mastery
goals and performance goals) simultaneously to students who held either mastery or performance goals only. Data was collected within a foundational teacher education course from 143 students, a portion of whom were found to hold high mastery goals (mastery oriented), high performance-approach goals (performance-approach oriented), and high mastery and high performance goals (multiple goal orientation). Using course grades as an indicator of achievement, a one-way ANOVA showed no significant difference between the multiple goal group and the single goal group. However, a significant difference was found between the high mastery group and the high performance group.

**William L. Cron (2005)** studied Goal Orientation on Negative Emotions and Goal Setting when initial performance falls short of one’s performance goal. This longitudinal field study examined the influence of goal orientation on both negative emotional reactions to performance feedback and subsequent self-set goal level. After completing an initial performance event and receiving negative performance feedback, learning and proving goal orientations had non-significant relations with the intensity of negative emotional reactions to feedback. In contrast, an avoiding goal, negative emotional reactions mediated the relation of an avoiding goal orientation with goal setting; and, a learning goal orientation moderated the relation of negative emotional reactions with goal setting. Specifically, it was found that a negative relation between the intensity of negative emotional reactions and goal level for individuals with a low learning goal orientation. For individuals with a high learning goal orientation, however, the relation was non-significant. Overall, the study findings provide insights on how goal orientation influences initial emotional reactions and subsequent self-regulation in the case of negative performance feedback.
**Chi-hung-Ng (2006)** studied the role of achievement goals in completing a course assignment examining the effects of performance achievement, the effects of performance approach and multiple goals and pointed out that there is a significant relationship between achievement in language and student’s mastery goals, work avoidance goals and multiple goals.

**Lars-Erik (2006)** investigated the relationship between goal-orientation, intrinsic/extrinsic motivation for the teaching profession, previous achievement and entrance scores among teacher applicants (Study 1; N=230), and student teachers (Study 2; N=114). Utilizing path-analyses the following relationships were found in both studies, between: (a) mastery goals and intrinsic motivation, (b) avoidance goals and extrinsic motivation, (c) previous achievement and performance goals, and (d) intrinsic motivation and entrance scores. Findings suggested that goal-orientation was instrumental for long-term teacher motivation and that teacher motivation, in turn, formed a basis for goal-orientation during teacher studies.

**Ling Xiao (2006)** examined how goal orientations, perceived competence, and strategy training affect college students’ use of self-regulated learning strategies and achievement in learning foreign languages. One hundred seventeen undergraduate has participated in the study, the students came from 8 introductory Arabic, Chinese, German, and Japanese classes, with 2 classes from each language. Students were categorized as either having task involved goal orientation or ego-involved goal orientation. A median split method was used to categorize students into either with high-perceived competence or with low perceived competence. One of the two classes of the same foreign language was randomly selected to receive self-regulated language learning strategy training. Students’ use of self-regulated learning strategies was measured by inventory for foreign language learning. Students’
achievement was measured by course-related tests. The results showed that students with task involved goal orientation scored significantly higher than students with ego-involved goal orientation on self-regulated strategy use, but there was no significant difference in achievement. No interaction effect was found with student ego-involved goal orientation and perceived competence. The results showed no significant difference between students who received training and those who did not.

Heinke Roebken (2007) examined the relationship between student goal orientation and student satisfaction, academic engagement, and achievement. Using data on 2309 college students from the University of California Undergraduate Experience Survey (UCUES), this study analyzes the relationship between different types of goal orientations and student behavior and academic outcomes. The results support the notion that students pursuing both mastery and performance goals are more satisfied with their academic experience, showed a higher degree of academic engagement, and achieve better grades than students who pursue a mastery orientation alone or a work-avoidance/performance orientation. One practical implication of the study of goal orientation is that student applicants could be screened on the basis of both a high mastery as well as a high performance orientation.

Hetta Tuominen-Soini (2007) studied achievement goal orientations and subjective well-being: (i.e., self-esteem, depressive symptoms, school-related burnout, and educational goal appraisals). Six groups of students with unique motivational profiles were identified. Observed differences in subjective well-being indicated that goals related to self-improvement and growth were positively associated with various indices of well-being, whereas avoidance tendencies and concerns with validating or demonstrating one’s competence were linked with different types of
adjustment problems. Findings demonstrated the importance of including measures of well-being when evaluating the role of achievement goal orientations in learning and achievement.

Jeanne et al (2007) examined children’s perceptions of the achievement goals, parents’ and teachers’ emphasis for them in mathematics, and the relation of these goals to children’s personal achievement goals, self-efficacy beliefs, and coping strategies. Results indicated that child’s perceptions of both parent and teacher mastery and performance goal emphasis predicted children’s personal goals. Further, children’s personal goals mediated the relation between perceived parent and teacher goal emphasis and children’s efficacy beliefs and coping strategies. Children’s perceptions of parent and teacher emphasis on performance goals varied slightly by gender but not ethnic background, whereas variance across groups in perceptions of mastery emphasis did not reach practical significance. Relations between goal perception, personal goals, efficacy and coping strategies also did not vary by gender or ethnic background. Implications for future research regarding the goals children perceive to be emphasized in home and school contexts, and their importance for children’s adaptive beliefs and behaviors in mathematics, were discussed.

Ruth (2007) proposed that achievement goal theory can be applied to conceptualizing motivation not only for learning but also for teaching. As predicted, responses of 320 teachers to a new self-report measure of goal orientations for teaching yielded 4 factors reflecting distinct mastery, ability–approach, ability–avoidance, and work–avoidance goals. Data from 212 teachers who also completed measures of help seeking, confirmed that mastery goals predicted positive perceptions of help seeking, preferences for receiving autonomous help, and frequency of help seeking; ability avoidance predicted negative perceptions and help avoidance; and
work avoidance predicted expedient help seeking. Results validate the proposed structure and measure of teacher goal orientations and open new directions for research on teacher cognitions and behaviors, teachers’ influences on students, and school influences on teachers.

**Scarlette et al (2007)** explored the relationship between teachers’ own learning behaviors and their teaching practices. Experienced teachers taking graduate courses responded to an instrument measuring their self-regulated learning as students and their teaching practices as indicated by how they conveyed the purpose of engaging in academic work (i.e., goal orientation) and their approach toward discipline (i.e., control ideology). The data were analyzed using structural equation modeling. The results indicated that teachers’ self-regulated learning behaviors influence the extent to which teachers convey a mastery goal orientation, which in turn leads to a more humanistic control ideology.

**Sun et al (2007)** explored pre-kindergarten teachers’ beliefs about the appropriateness of early mathematics education. Thirty pre-kindergarten teachers of four-year-olds, half working with low-SES children at publicly funded pre-kindergartens and the other half with middle-SES children at private pre-kindergarten, were interviewed concerning written vignettes describing two fictitious pre-kindergarten teachers’ contrasting pedagogies concerning key issues in teaching mathematics to young children. The low-SES publicly funded pre-kindergarten teachers tended to support a strong focus on goal–based mathematics teaching at pre-kindergartens and at home to get children ready for kindergarten. The middle-SES private pre-kindergarten teachers tended to endorse flexible mathematics education relying on a child-centered curriculum and child-initiated learning and to oppose the instructional use of computers. Both groups, however, were similarly likely to mention that increased academic demands, pre-
kindergarten teachers needed to provide mathematics education, especially in simple arithmetic, albeit in a fun manner, without triggering stress or anxiety. These findings have significant implications for professional development of teachers.

Svjetlana Kolić-Vehovec (2007) conducted a study to identify dominant goal orientation patterns in university students, and to define their motivational profiles and their reading strategy use. The results of cluster analysis showed that four groups of students could be differentiated according to their goal orientation: mastery, mastery–performance, performance–work-avoidance, and work-avoidance goal orientation groups. Groups with high mastery orientation had more adaptive motivational profile and more adequate reading strategy use than groups with high work-avoidance orientation.

Tara et al (2007) postulated a structural model to investigate the degree of influence that White middle-level teachers who employ mastery goal orientation and academic pressure may have on Hispanic students’ sense of school belongingness. Participants were 434, 5th and 6th grade students and 21 teachers. Initial proposed model estimates fit the data adequately when employing certain fit criteria (Comparative Fix Index = 0.92, standardized root mean squared residual =0.09). Findings indicated that students’ reported feelings of school belonging were positively influenced by White teachers who promoted mastery goal orientation and academic pressure within their classrooms. School belonging, in turn, influenced students’ mastery goal orientation.

Anna Tapola (2008) examined the role of achievement goal orientations in students’ perceptions and preferences for classroom environment. Questionnaires were used as self-report tools and assessed students’ achievement goal orientations, self-esteem, causality beliefs, academic withdrawal and perceptions of
and preferences for the learning environment. The sample consisted of 208 sixth grade elementary school students. Results based on latent class cluster analysis and one-way analyses of variance, it was found that student’ perceptions of and preferences for the learning environment vary depending on differences in students’ motivational tendencies

**Balliett, Timothy (2008)** conducted a study exploring achievement motivation in catholic secondary schools. The relationships of religious beliefs and perceived classroom, context to achievement goal orientation, in catholic secondary schools are explored to determine if achievement goal orientation is a suitable individual characteristic in addition to being situational. The theoretical development measurement, and perceived classroom correlates of mastery – avoidance goal achievement motivation are discussed. Debate over the values inherent in performance approach goal adoption provides the connect for examining the relationship between religious beliefs and motivation in catholic secondary schools. The Grace and Tracy scales and religiosity measure were administered to 1300 catholic secondary school students in 8 schools. Mastery – avoidance motivation was present in this population, Religious beliefs were correlated with mastery approach goal orientation. Multiple regression analysis indicated that classroom perceptions were the strongest predictors of achievement goal orientation.

**Lars-Erik Malmber (2008)** investigated whether student teachers’ achievement goal orientation changed during teacher studies, and how motivational trajectories were related to academically- and teaching-relevant antecedents and outcomes. A total of 170 participants were followed up between two and five time points. Using individual growth models, achievement goal orientations were found to increase over time to peak during the third year of studies. Secondary school grades predicted a higher level of
performance-approach goal orientation and graded performance. Reflective thinking, teacher intrinsic motivation and teacher control-expectancy beliefs were related to increase of mastery goal orientation. Task-irrelevant behavior was related to low graded performance as well as to increase in performance-approach and performance-avoidance goals.

**Jan Retelsdorf (2009)** examined teachers’ goal orientations for teaching: associations with instructional practices, interest in teaching, and burnout. Two studies (one longitudinal) were designed to extend Butler’s model of teachers’ goal orientations for teaching. Results of the first study revealed from 281 teachers in Germany confirmed the predicted four-factor model comprising mastery, ability-approach, ability-avoidance, and work avoidance goal orientations. As expected, mastery orientation and work avoidance emerged as positive and negative predictors, respectively, of adaptive patterns of instruction (mastery-oriented practices and cognitive stimulation) and high interest in teaching and low burnout; associations for both ability orientations were less consistent. In the second study, 69 Israeli teachers completed the measures of instructional practices, interest in teaching and burnout several months after reporting their goal orientations. Results were found similar to those of the first Study. The two studies confirmed that research on teachers’ goal orientation is promising and has implications for understanding how teacher motivation might influence both teachers and their students.

**Ravinder Koul (2009)** studied multiple goal orientations and foreign language anxiety. This investigation examines Thai college students’ motivational goals for learning the English language. Thai student volunteers (N = 1387) from two types of educational institutions participated in this survey which combined measures of goal orientations based on two different goal constructs and motivation models. Results of two-step cluster analysis, correlation
analysis, and analysis of variance of multiple goal orientations with gender and institution showed several significant findings. Females were significantly more “academic” oriented, more instrumental and less socio-cultural than males toward English language learning. Compared to university students, vocational college students were significantly more “superiority” oriented, more performance oriented toward the purpose of achievement and more identification oriented toward emulating an English speaking foreigner. “Academic” and “superiority” orientations were significantly and positively associated with foreign language anxiety whereas socio-cultural orientation was significantly and negative associated with foreign language anxiety. Females indicated significantly higher levels of foreign language anxiety than males. Role socialization theory and self-esteem theory may explain the results of gender and institutional differences in the motivational orientations of Thai college students.

Sam Steen (2009) studied the role of self-regulated strategies and goal orientation in predicting achievement of elementary school children. Eighty one (n = 81) fifth graders were asked to respond to two scales. It was hypothesized that student achievement would be predicted by prior achievement, use of self-regulation strategies and goal orientation. Results showed that prior achievement and use of self-regulation strategies accounted for a significant amount of variance in students’ academic achievement. Overall, goal orientation was not a significant predictor of students’ outcomes across different subject areas. Areas for future research explored and implications for school personnel provided.

Amurty Gupta and Sinha (2010) investigated Self-efficacy, Learning and Performance Goal Orientation as Correlates of Self-Regulation. Among a sample of 150 undergraduates of Agra city, Zero order correlation coefficients among the study variables showed positive correlation coefficient leading to the conclusion
that there is a significant increase in self-regulation with the increase in levels of self-efficacy, learning and performance goal orientation. Multiple regression analysis showed a significant contribution of self-efficacy and learning goal orientation on self-regulation.

**Diseth, Kabbeltand Therese (2010)** conducted a study on mediation Analysis of Achievement motives, Goals Learning’s strategies and Academic Achievement. Participants were 229 undergraduate students (mean age: 21.2 years) of psychology and economics at the university of Bergen. Correlation analysis showed that academic achievement (examination grade) was positively correlated with performance approach goal, mastery goal, and strategic learning strategies, and negatively correlated with performance avoidance goal and surface learning strategy. A path analysis (Structural equation model) showed that achievement goals were mediators between achievement motives and learning strategies, and that strategic learning strategies mediated the relationship between achievement goals and academic achievement.

**Edwards Ordene (2010)** conducted study on the effect of goal orientation on attention learning and metacognitive awareness. An experimental study was conducted to examine whether achievement goals affect attention comprehension and metacognition. One hundred and twenty undergraduate students enrolled in introductory educational psychology classes participated in the study. Students were randomly assigned to one of four goal groups (mastery, performance approach, performance avoidance or control group and one of three question groups. (Emotion, brain, and no questions).The study was conducted in two sessions. First, students were given a reading test and questionnaires to measure their prior knowledge and personal goals, second students read the text on a computer. Then they
completed an interest questionnaire, a manipulation check, a posttest and an interview to assess their metacognition. Results show that the attention was a partial mediating variable between goals and learning metacognition-mediated goals and learning a mastery goal leads to better metacognition.

KoUnEum and Kenneth G. Rice (2010) studied test anxiety, perfectionism, goal orientation, and academic performance. Dimensions of perfectionism and goal orientation have been reported to have differential relationships with test anxiety. Based on data from 134 university students, correlation and regression analyses were conducted to test associations between adaptive and maladaptive perfectionism, four types of goal orientations, cognitive test anxiety, and two indicators of academic performance: proximal cognitive performance on a word list recall test and distal academic performance in terms of grade point average. Cognitive test anxiety was inversely associated with both performance indicators, and positively associated with maladaptive perfectionism and avoidance goal orientations. Adaptive and maladaptive perfectionism accounted for significant variance in cognitive test anxiety after controlling for approach and avoidance goal orientations. Overall, nearly 50% of the variance in cognitive test anxiety could be attributed to gender, goal orientations, and perfectionism. Results suggested that students who are highly test anxious are likely to be women who endorse avoidance goal orientations and are male adaptively perfectionistic.

Mohamedunni Alias Musthafa and Noushad (2010) conducted a study on “The effect of goal orientation on academic achievement of prospective pre-service teachers”. The participants were undergraduate pre-service teacher students, drawn from pre-service teachers studying for undergraduate course in Calicut University (N=296). Samples were drawn from various optional subjects of the Bachelor of Education programme. Out of the total
sample, 257 were female and 39 were male teacher students. The age ranges of the participants were 21 to 29. Students who scored 20 and above on mastery were classified as having high-mastery goals and those who scored below 20 were classified as low-mastery goals. Students who scored 22 and above on performance-approach were classified as high performance goals while students who scored below 22 were classified as low-performance-approach goals.

Åge Diseth (2011) studied Self-efficacy, goal orientations and learning strategies as mediators between preceding and subsequent academic achievement of High school grade point average (HSGPA) for a sample of Norwegian undergraduate psychology students in order to investigate motives and strategies as mediators between preceding and subsequent academic achievement. Correlation analysis showed strong relations between all of the motivational variables (self-efficacy/goal orientations) and deep/surface learning strategies. A path analysis showed a structural relation between these variables, and that preceding academic achievement primarily predicted self-efficacy and subsequent achievement (examination grade).

Maaike Koopman (2011) conducted a study on Learning processes of students in pre-vocational secondary education to find out relations between goal orientations, information processing strategies and development of conceptual knowledge. The purpose of this study was to investigate relations between goal orientations, information processing strategies and development of conceptual knowledge of pre-vocational secondary education students (n=719; 14 schools). Students' preferences for certain types of goals and information processing strategies were examined using questionnaires. Conceptual knowledge was investigated by using concept maps before and after a learning project. Structural analyses showed that student preferences for mastery and
performance goals positively affected their preferences for the use of deep and surface information processing strategies. Preferences for work avoidance goals negatively influenced preferences for deep and surface processing. Use of surface information processing strategies negatively affected the development of conceptual knowledge. Remarkably, no relation was found between students' preferences for deep processing strategies and development of conceptual knowledge.

**Heta Tuominen-Soini (2012)** studied achievement goal orientations and academic well-being across the transition to upper secondary education. The aim of this study was to examine students' (N=579) achievement goal orientation profiles, the temporal stability of these profiles across the transition to upper secondary education, and profile differences in academic well-being (i.e., school value, school burnout, schoolwork engagement, satisfaction with educational choice). By means of latent profile analysis, four groups of students with distinct motivational profiles were identified: indifferent, success-oriented, mastery-oriented, and avoidance-oriented. Motivational profiles were relatively stable across the transition; half of the students displayed identical profiles over time and most of the changes in the group memberships were directed towards neighboring groups. Regarding group differences, indifferent and avoidance-oriented students showed less adaptive patterns of motivation and academic well-being than did mastery- and success-oriented students. Both mastery- and success oriented students were highly engaged in studying and found their schoolwork meaningful, although success-oriented students' stronger concerns with performance seemed to make them more vulnerable to school burnout.

**Irsa Fatima (2012)** studied Impact of Achievement Goals, Sociability and Gender on Academic achievement of university students. The present study was aimed at investigating the
achievement goals and sociability as predictors of academic achievement. Gender difference in academic achievement, achievement goals, and sociability were also explored in the study. The sample drawn through stratified random sampling consisted of 300 undergraduates from different departments of university of Sargodha, including boys (152) and girls (148). Regression analysis showed that only performance-approach goals significantly predicted academic achievement. Independent sample t-test demonstrated that girls are significantly high on academic achievement and performance-approach goal and boys were significantly more sociable.

**Kadhiravan, (2012)** studied Goal orientation and cognitive styles of higher secondary student students; 410 higher secondary students were selected through stratified random sampling and data was collected through survey by using goal orientation measure and personal style inventory. Results revealed that the higher secondary students differ in their goal orientation on the basis of gender, year of study, subject of specialization and type of school they studied. All the three type of goal orientation vis. Learning, performance – approach and performance-avoidance orientation are significantly influenced by the cognitive styles.

**2.4 STUDIES RELATED TO LEARNING STYLES**

**Kopsovich (2001)** studied Correlations between Learning Styles of Students and their Mathematics Scores on the Texas Assessment of Academic Skills Test. The data collected from 500 fifth grade students attending a North Texas Intermediate school. The Learning Style Inventory by Dunn, Dunn and Price were used for data collection. The data was analyzed by the Pearson Product Moment Correlation coefficient and the Point-biserial correlation technique. The study was conducted by survey type research method. The findings of the study were: (1) The learning style preferences of all students in the area of persistence significantly
impacted their math’s achievement scores. (2) Gender and ethnicity were mitigating factors in the findings. These learning style preferences significantly affected the achievement.

Singh and Renu (2001) conducted a study on learning style of high school students as related to some learner’s characteristics. Findings: (i) It was found that high intelligent and average intelligent boys had individualistic and long attention span learning styles, whereas high and average intelligent girls had non-individualistic and short attention span learning styles. (ii) Low intelligent boys and girls were not found different in their preferences. (iii) The boys from high and low, socio-economic status (SES) preferred individualistic learning style, while boys from average SES preferred non-individualistic styles. (iv) The boys of high SES favoured long attention span learning style and low SES boys favoured short attention span style. (v) The girls from high and average SES preferred non-individualistic, field dependent and motivation-centered learning styles, while girls from low SES showed preference for individualistic learning style. (vi) The extrovert boys and girls were not found difference in their preferences. At average extrovert level, boys were found to be individualistic, whereas girls were non-individualistic in their learning styles. (vii) The introvert boys were found to be more individualistic and less environment-oriented than the introvert girls. The introvert boys appeared to have long attention span and introvert girls reflected short attention span learning span. (viii) At neurotic and average neurotic level, the boys were individualistic in learning styles. (ix) Stable girls were found to have short attention span and stable boys have long attention span learning style. Stable girls also appeared higher in visual learning style than the stable boys.

Shinde (2002) studied effectiveness of multimedia CAI package with reference to levels of interactivity and learning style. The
sample comprised of 87 pre-service teacher-trainees from colleges of education learning through English medium or graduated through English medium. The sample was selected by Stratified Random Sampling Method. The data was analyzed with the help of analysis of co-variance and t-test.

The findings of study were: (1) HCAI was effective in terms of achievement. (2) LCAI can also bring significant increase in the achievement scores. (3) The two sample groups are not significantly different and are selected from the same population. (4) The learning style plays major role in enhancing the achievement of the learner learning through CAI.

Shrivastava (2002) studied learning styles of secondary school students with scientific attitude and their achievement in science. The sample comprised of 500 Science Students of Class XI from 10 different schools of Lucknow City. It was selected through Purposive Random Sampling Technique. The Research was Ex – Post Facto in nature. The data were analyzed by computing Mean and SD. The findings of study were: (1) The most popular learning style of the students is accommodative learning style and second popular learning style convergent. (2) Most of the students with more scientific attitude prefer the convergent and accommodative learning style. (3) The students following convergent learning style score better in science than the students following other learning styles. The students from high SES following accommodative learning style also score better in science. Other learning style is not found to be suitable for science. (4) The students with more scientific attitude score better in science than the students possessing less scientific attitude. (5) The convergent learning style is most appropriate style whereas assimilative learning style is most inappropriate for learning science. (6) Convergent learning style is most preferred and assimilative is less preferred by the students with high intelligence. Most of the students with low I.Q.
prefer the accommodative learning style. (7) Most of the students with high intelligence possess more scientific attitude. (8) The high SES students facilitate accommodative learning style. Most of the students with low SES preferred convergent learning style. (9) It has been found that SES of the students is not related to the scientific attitude. (10) Most of the girls preferred convergent and accommodative learning style and very few girls preferred divergent and assimilative learning styles. Whereas all the four learning styles are preferred by almost equal number of boys. (11) The girls possess more scientific attitude than boys.

Verma and Mishra (2002) conducted a study on cognitive and meta-cognitive aspects of learning styles of prospective secondary teachers in relation to teaching aptitude and self-esteem. Statistical technique ANOVA was used to analyze the data. Findings: (i) The teaching aptitude and self-esteem do influence some cognitive and meta-cognitive strategies of learning of prospective secondary teachers in an independent manner. (ii) No interaction effect of the two variables was found on any cognitive and meta-cognitive strategy of learning.

Minotti and Jennifer Lauria (2002) conducted a study on effects of learning style based homework prescription on the achievement and attitudes of middle school students. This research was designed to examine the effects of the use of individualized, learning style based homework prescriptions on the achievement and attitudes of middle school students. Sixth, seventh and eighth grade students from an urban, parochial school in New York city were provided either learning style based homework prescriptions or guidelines for traditional study strategies. Multivariate analyses of variance (MANOVA) and pair wise comparisons were employed to examine whether the use of homework prescriptions influence attitudes of middle school students when compared to the use of traditional study strategies. Data evidenced significant differences
in achievement between the experimental and control groups. Findings supported significantly higher gains in knowledge to learning styles, reading, mathematics, science and social studies achievement, attitudes towards homework, and attitudes towards learning styles among students in the experimental treatment conditions. Significance was reported at the P<.001 level and effect sizes indicated moderate to very strong interactions.

**Vyas (2002)** Studied Learning Style, Mental Ability, Academic performance and other Ecological correlates of under graduate Adolescent girls of Rajasthan. A sample of 500 girls from class 12th of 16 Government Senior Secondary Schools of Baran, Bundi, Thalawar and Kota districts in Rajasthan was taken. Under ecological category the investigation has obtained the area (Urban/Rural) and the level of parent’s education. The tools used were Learning Style Inventory by K.K. Rai and K.S. Narual, mental ability test by S. Jatlot and academic performance marks obtained by the students in board examination. The statistical techniques used were mean, standard deviation, t-test and F-test for data analysis. The findings of the study were: (1) the environment, emotional, sociological dimensions of learning style do not affect significantly the academic performance of girls. (2) The environment dimension of learning style performance does not affect the academic performance whereas mental ability influences the academic performance of students. (3) An ecological factor namely residence and its interaction with environmental dimension of learning style has found significant contributing towards the better learning style of academic performance.

**Farks (2003)** tried though an experimental study to measure the Effect of Traditional verses Learning-Styles Instructional method on middle school students. The participants in this study consisted of 105 seventh grade students in an urban K-8 school in New York City average 12 years old. The instruments that the
teachers administered during this investigation were (a) Learning Style Inventory (Dunn et al. 2000) (b) Semantic Differential Scale (c) Balanced Emotional Empathy Scale (d) Moral judgment Inventory (e) post test of content that measured achievement. The experimental design of two group post test design was used for this study. Data were analyzed by mean, SD and t-test statistical technique. The findings of the study were: (1) Learning Styles based approaches to the Holocaust a curriculum of emotionally charged issues result in achievement, attitude, empathy and transfer level significantly greater than those realize with traditional approaches (2)The effectiveness of learning style method for increasing achievement attitudes toward learning and successfully initiate the exploration of the empathy toward people approach and transfer of knowledge using learning style methodology (3) The advantages of learning style instructional resources had a practically and statistically significant influence on seventh-grade student’s achievement, attitudes, empathy and transfer of knowledge

Lamboy (2003) studied the use of technology in English as a second language course to accommodate visual, kinesthetic, and auditory learners to assess students’ self-efficacy about learning the language. One of them was drawn from students attending an Intensive English Program (IEP) at Indiana University, and the other was from literacy learners at two Adult Basic Education (ABE) programs in Indiana were used for experimental work. t-test, ANOVA and MANOVA statistical techniques used for data analysis. The results of the study were: (1) First, the Self Efficiency Questionnaire (SEQ) total score by group was examined. This included examining if there was a significant change from pretest to posttest on SEQ total scores. It also examined if there was a significant difference among the experimental and control groups overall SEQ. It also examined if there was a significant difference between the experimental and control groups at SEQ posttest total
that did not exist at SEQ pretest total. (2) Second, results were used to examine if there were significant differences between the learning style groups on the SEQ total pretests and posttests. It also examined if there was a significant difference between SEQ total pretest and SEQ total posttest. Finally, it also examined if there were larger differences between the learning style groups at one point in time when compared to another.

Mayer et al, (2003) examined three Facets of Visual and Verbal Learners namely Cognitive Ability, Cognitive Style and Learning. The authors examined the hypothesis that some people are verbal learners and some people are visual learners. They presented a battery of 14 cognitive measures related to the visualizer-verbalizer dimension to 95 college students and then conducted correlational, and factor analyses. In a factor analysis, each measure loaded most heavily onto 1 of 4 factors: cognitive style (such as visual-verbal style questionnaires), learning preference (such as behavioral and rating instruments involving visual-verbal preferences in multimedia learning scenarios), spatial ability (such as visualization and spatial relations tests and verbal-spatial ability self-ratings), and general achievement (such as tests of verbal and mathematical achievement). Results have implications on how to conceptualize and measure individual differences in the visualizer-verbalizer dimension and cognitive style in general.

Vamasiri (2003) studied learning styles, teaching styles and students’ achievement in principles of accounting course at university level. 216 students were taken as of accounting course were taken as sample. The study was survey type in nature. Self-developed questionnaire and Kolb’s Learning Style Inventory was used for data collection. Mean, SD, t-test and ANOVA statistical techniques were used for data analysis. The findings of the study were: (1) There was no significant difference on the student’s perception in the overall learning styles in terms of sensory, visual,
There were also no significant differences noted on the students’ perceptions on overall teaching styles in terms of concrete, visual, active and sequential. There were statistically significant differences on the student’s perceptions on sensory learning styles for students aged below 18 and between 23 to 25. Significant differences in mean were also detected on visual, auditory, sequential learning styles and sequential and active teaching styles classified by sex. The results also showed that high, middle-level and low achievers in principles of accounting course had their some learning styles and preferred teaching styles.

**Hill and Jennifer Lynne (2004)** conducted a study on the impact of learning styles and high school learning environments on students’ decisions regarding higher education. The purpose of the study was to identify the learning styles of students at non-traditional college and then to examine whether the match or mismatch between their learning styles and their high school learning environments influenced their decisions regarding higher education. It was also hoped that the results of the study would indicate whether or not students with non-traditional learning styles select non-traditional higher education because of their impression that the learning environment will be different than their traditional high school learning environments, and whether students with non-traditional learning styles and preferences would attend non-traditional colleges, but not traditional colleges.

**Schinn and Marion (2004)** conducted a study on learning styles of teachers who use action centered teaching strategies. Participants who answered ‘yes’ to the question, “Have you ever used action centered teaching strategies?” were placed in the experimental group and participants who answered ‘No’ to the same question were placed in the control group and had an average score of 35% for the accommodator learning style. A ‘t’-test was performed that
compared mean learning mode scores between ACTS and non-ACTS teachers. The results of the study were shown statistically significant at the 0.1 alpha levels.

**Wang and Yu-chun (2004)** conducted a study on an analysis of learning style preferences and their relation to achievement among online and traditional higher education students. The findings from the study indicated there was no significant difference in academic achievement among the four Kolb learning styles and between two instructional modes. No significant interactions were found in post test scores between the learning styles and the instructional modes. The correlation analysis indicated no significant correlation between gender and post test. The qualitative findings indicated that personal reasons were the factors which influence students to drop out or withdraw from the course.

**Chauhan (2004)** studied learning-styles of high school students in the context of their adjustment-extroversion and introversion. A random sample of 900 pupils (300 urban boys, 200 rural boys, 250 urban girls and 150 rural girls) in the age group of 14-15 years of the students of Class X studying in Government colleges of Uttarkashi district in Uttarakhand was selected. The sample represented both rural and urban categories. The normative survey research method was adopted in carrying out this study to collect the data. The Findings of the study were: (1) The urban/rural locality influenced the degree of preferences for various learning styles. The adjustment status has significant impact on the preference for short attention span vs. long-attention span, in case of the urban male, rural male and female except of urban female pupils.(2) There appeared no positive and significant linkage between the learning style preferences of extrovert pupils with their adjustment status in general. There might be a positive linkage between the introvert pupil’s adjustment status and their
preferences for learning style, but it may not be up to the extroversion or introversion personality type of poor adjusted pupils with their various learning style preferences but it is significant.

**Ross and Lukow (2004)** study was “Are Learning Styles a good predictor for Integrating Instructional Technology into a curriculum?” There were 67 students taken as a sample for this study. The Kolb Learning Style Inventory and computer attitudes survey was used for data collection. The study was conducted by survey method. The one-way ANOVA technique was used for data analysis. The results of the study was: (1) The influence of preferred learning styles on the attitudes toward instructional technology was caused by a number of factors (2) In another cases learning style had no significant relationship with attitude toward technology.

**Caspo and Hayen (2006)** studied the role of learning styles in the teaching/leaning process . The total sample of the study was 2,170 from five public schools. Sarasin’s learning style inventory was used for data collection. Survey method was used for conduct this study. F-test statistical technique was used for data analysis. The findings of the study were: (1) A mismatch between student leaning style and teaching style of faculty was observed. (2) There was significant difference between difference in preferred learning style based on academic programme/occupation (3) There was a significant difference in strength of learning style for visual, auditory and kinesthetic learner with reference to gender, race and location (4) There was significant difference which shows that student’s teaching style types change as they progress through their education.

**Davis and Susan (2007)** conducted a study on the effects of motivation, preferred learning styles, and perceptions of classroom
climate on achievement in ninth and tenth grade maths students. One hundred and three ninth and tenth grade algebra students completed self reports of motivation, classroom climate and learning styles preferences. A non-verbal measure of aptitude and an algebra pretest was administered at the beginning of the academic year (August, 2007) and algebra post-test was administered at the midpoint of the academic year (February, 2007). Results indicated self report levels of motivation were not significant predictors for achievement in algebra class. However, for classroom climate students with lower ratings for classroom involvement and higher ratings of task orientation demonstration higher increases in achievement than students with higher ratings of involvement and lower ratings of task orientation. Additionally students displaying thinking preference achieved high scores than student with demonstrating a feeling preference. Results of this study indicate students whose perceptions and preferences are more consistent with instructional style demonstrate higher short-term gains in maths than students with less congruent preferences and perceptions.

Dasari (2006) studied the influence of matching Teaching and Learning Styles on the achievement in science of grade six learners. The sample comprised 87 grade six students between ages of 11-13 years. The data were collected by Learning Style Inventory developed by Connor (2005) and Science Teaching Programme on units Alkynes and Electricity prepared by researcher. The experimental design pre-test, post-test control group design was used in this study. The data was analyzed by t-test. The result of the study were: (1) There is a significant difference in science achievement of 6th grade learners when teaching style and learning style are matched (2) There is no significant difference between the means of the pre-test and post-test scores of the control group with respect to achievement in science.
**Gakhar (2006)** studied academic achievement as determined by their preferred learning, thinking styles and study skills. Study was conducted on a sample of 136 final year BPT students taken from Punjab, Haryana and Delhi. The study was conducted with survey type method. The findings of the study were: (1) there was no significant difference in the academic achievement of students having action and verbal explanation learning style, divergent and convergent learning style, content preference for open ended lessons and structured lessons learning styles. (2) There was no significant difference in the academic achievement of students having preference for logical and fractional thinking styles, divergent and convergent thinking styles, creative and intellectuality thinking styles, optimistic and pessimistic thinking styles, imaginary and analytical thinking styles. (3) There was significant difference in the academic achievement of students having high and low goal orientation study skills, scholarly study skills and overall study skills. (4) There was no significant difference in the academic achievement of students having high and low activity structure study skills, lecture mastery study skills, text-book mastery study skills, examination mastery study skills, self-mastery study skills.

**Kutay (2006)** compared Learning Styles Preferences of two Cultures. A non-randomly chosen 100 Turkish and 100 American undergraduate and graduate level students were the sample. 67 % of the sample was male, whereas 33 % of female. To identify individuals’ learning styles the Building Excellence (BE), learning style instrument which is the adult version of The Learning Style Inventory by Dunn and Rundle (1996, 1997, 1998, 1999, and 2000) was used. BE assesses twenty four elements covering each person’s perceptual, psychological, environmental, physiological, emotional, and sociological processing preferences and provides a comprehensive analyzes of the learning conditions for students’ individual processing preferences in these six areas. The study was
survey type in nature. The data was analyzed by mean, median and t-test statistical techniques. The results of the study were: (1) Out of five elements of perceptual stimuli, only the tactile/kinesthetic element was found to be marginally significant. Turkish students were more moderate by means of this element. Tactile and/or kinesthetic learners can learn more effectively when they are actively involved in doing tactile/kinesthetic activities rather than listening or reading. In this regard Turkish students were found to be slightly more tactile and/or kinesthetic compared to American students. (2) There were no differences between Turkish and American students based on their psychological preferences stimuli, which has four elements; analytic or global and reflective or impulsive. (3) Among four elements of environmental stimuli only the seating score was found to be significantly different in two groups. American students prefer more informal seating while Turkish students prefer more formal seating in the classroom. (4) Physiological stimuli has six elements and Turkish and American students were found to be significantly different in four of them; intake, early morning, late afternoon, and evening elements. Turkish students are less likely to have something to eat or drink when they are studying as opposed to American students, who prefer eating and drinking while studying. Preferring study time, Turkish students prefer early morning hours to study. In the next findings, late afternoon and evening elements support this area of time result. American students prefer a late afternoon and evening preferences for study in contrast to Turkish students. (5) There is no significant difference between Turkish and American students in the emotional stimuli. (6) Sociological stimuli has five elements and two of the elements were identified to be different. Turkish and American students both like to study in pairs; however, more Turkish students prefer to study in pairs than American students. In the area of variety; American students prefer less variety while studying subjects compared to Turkish
students who switch from one topic to another. US students tend to finish one subject and then start another one, whereas Turkish students prefer logic finishing a topic. Thus, they are studying different subjects at the same time. Out of twenty-four elements, eight of them were found to be varying between groups. These differences were mostly in physiological and environmental stimulus that seems to be cultural habits or practices.

**Malathi and Malini (2006)** studied the learning styles of higher secondary students of Tamil Nadu. The sample consisted 160 higher secondary students from private and government school. The tools used in study for data collections were Learning Style Inventory by Barbara A. Solomon and Cronbach’s alpha test. t-test was used for data analyses. The study was survey type in nature. The findings of the study were: (1) the learning style of higher secondary students was found to be good and there was no significant difference in the learning style of higher secondary students in terms of their class and type of school (2) There was a significant difference in the learning style between boys and girls studying in higher secondary schools (3) The correlation is higher between learning styles and achievement, which indicates that higher the achievement scores the better the learning style among higher secondary students.

**Mayya and Rao (2006)** studied association between leaning style preference and performance in the examination of medical students. Learning style inventory was used to collect data on learning style. The items of this inventory were grouped into 3 scales; each contained 8 items, to assess individual’s auditory, visual and tactile performances in learning situations. Students response to each item was scored on a 3 point scale (often = 5 points, sometimes = 3 points and seldom = 1 point). The inventory was administered to 130 second year medical science (MBBS) students studying in Kasturba Medical College, Manipal to collect
data on learning style. University examination marks were collected from office of the controller of examinations, Manipal Academy of Higher Education. Data analyzed by correlation method. The Findings of the study were: (1) significant negative correlation between tactile preference score and the percentage mark in the university examination. (2) Traditional teaching methods favour the auditory and visual learning styles. It is the tactile learner who is at a dis-advantage at the university level. In order to provide a compatible educational environment for all students, it is important that teachers understand their own teaching style and adjust their teaching styles.

Visser et al (2006) attempted a comparative study on teaching styles versus learning styles in the accounting sciences in the United Kingdom and South Africa. The sample of the study was 735 undergraduate students of accounting and 46 lecturers from one United Kingdom and one South African university were empirically surveyed, using the Felder-Solomon Index of Learning Styles questionnaire to consider the students’ learning styles, and an adaptation of the questionnaire to analyze the lecturers’ teaching styles. The research was survey type in nature. The data was analyzed by simple statistical techniques mean, median and mode. The results of study were: (1) With regard to the active/reflective dimension, the Accounting students’ learning style preferences reflect that the majority of students at the South African university and those at the UK university’s learning style was balanced and that the remainders’ preferences were skewed towards an active learning style. With regard to the sensing/intuitive dimension, the majority of learners preferred a sensing learning style. A balance between a sensing and intuitive learning style was their second choice. The intuitive learning style was ranked last on both campuses. With regard to the visual/verbal dimension, it would appear that as many students preferred a balance between visual and verbal learning as
preferred a visual approach, and only a few preferred a verbal learning style. With regard to the last group of learning styles, namely a sequential/global learning style, the majority of students preferred a balance between the two learning styles, with a significant number preferring sequential learning and a minority preferring a global learning style. In respect of the ‘B’ categories (reflective, intuitive, verbal and global), it was noted that these were in the minority for all learning styles. (2) In the comparison of the responses of the students of Universities X and Y, none of the effect sizes reached a p-value of 0.3, which indicates that the effect is less than medium; thus there is no significant difference between the learning style preferences of the respective years’ Accounting students at Universities X and Y (3) In the comparison between the responses of the lecturers in the Accounting Sciences at Universities X and Y, little difference was noted (p-values were smaller than 0.3) between the teaching styles of the lecturers at the two universities (4) At the South African university, there were few differences in the match between teaching and learning styles. However, for the sensing/intuitive dimension, lecturers preferred a balanced style, whilst the majority of students preferred a sensing style. Also, while very few students preferred an intuitive style, 16.7% of the lecturers opted for this style. The majority of lecturers preferred a visual approach, but the students were split between a preference for a balance between a verbal and a visual approach and a preference for a visual approach. With regard to the results other than the majority viewpoints, there was a slightly higher preference among lecturers for an active learning style and among students for a more sensing style than in the active/reflective dimension. Likewise, regarding the sequential/global dimension, students preferred a sequential style, while lecturers preferred global learning.

Jemmy (2007) examined the relationships between teaching and learning styles, and the number sense and problem solving ability
of class 7 students. The sample consisted 65 students, in which 26 male and 42 female of 7th standard were selected. Combining Qualitative and Quantitative method was used for this research. 3×2×2 factorial Experimental design was used for this research. Data was analyzed by mean, median, mode and Chi-square statistical techniques. The findings of the study were: (1) Inferences were made about the relationships between the variables elicited from both the quantitative and qualitative data (2) Since the teachers selected to participate in this study were identified as effective teachers of mathematics it was expected that the teaching style they employed would have considerable impact upon the students’ number sense and problem solving performance. (3) The issue of personal and individual learning style differences would be better informed through number sense and problem solving style (4) The teacher’s beliefs were explored through analysis of common issues emerging from the four formal interviews and the twenty-five short informal interviews.

Mishra (2007) studied the correlation between musical memorization styles and perceptual learning modalities. There were 82 instrumentalists (sample) from southern university included in this research. It was selected by purposive sampling method. The Musical Memorization Inventory (MMI) was developed to identify memorization styles preference (aural, visual, and kinesthetic) by researcher, and it was used for data collection. Present study was conducted by survey research method. The results of this study were: (1) The strong correlation resulting between participants preferring visual learning modality and visual memorization strategies (2) The weak correlation resulting between participants preferring kinesthetic and aural learning modality and kinesthetic and aural memorization strategies.

ShabuB.Raj, (2007) studied recall of Visual and Auditory Stimuli as a function of Hemispheric Dominance and Preferred Modality in
learning, Meaningful and meaningless materials are dependent on the levels of hemispheric dominance and preferred modality of 60 males and females. Another twenty post-graduate students were involved during the preparation of materials for auditory presentation. The subjects were visually and aurally presented list of triagrams as well as word, in batches of 2 or 3 and respective recall scores were taken. Three-way analysis of variance found gender differences in the recall of visually presented words, and second order interaction effect in the recall of visually presented triagrams.

**Wesley (2008)** studied the Effects of Interactive Reviews and Learning Styles on Student Learning Outcomes at the Texas State University. The study utilized an experimental design that incorporated four self-defense education classes at the University of North Texas (UNT) during the fall semester 2007 (N = 87). A pre-test was administered during the first week of class to determine prior knowledge of the participants. The Visual Auditory Reading/Kinesthetic Inventory (VARK) was used to assess the learning styles of the students and was completed after the pre-test of knowledge was administered. The treatment group received the interactive lesson and the control received a paper review. The difference between the pre and posttest was used as a measure of improvement of the student's learning outcomes. 2-way ANOVA technique was used for data analysis. The finding of the study is that interactive lessons do make a significant impact on learning outcomes compared to traditional reviews.

**Bernila (2010)** conducted a study on “Multiple intelligence and learning styles of high school students”. The population of this study was IX Standard students in Thuckkaly Educational district of Kanyakumari district. The sample for the present study consists of 300 IX standard students of Thuckkaly Educational district selected by random sampling. Mean, Standard Deviation, ‘t’-test
and correlation were used for analyzing the data. The findings of the study were there was a significant relationship between Auditory learning style, Kinesthetic-learning style, Group-learning styles, Visual Learning Style, Individual Learning Style, Learning Style and multiple intelligence of high school students.

**Murlidhar Mishra (2011)** examined learning styles preferences of Hindi medium school students in relation to their achievement motivation. Sample comprising 236 subjects (92 high and 144 Low Achievement Motivation level) studying in Hindi medium senior secondary schools of Jaipur district was selected through random non-proportional sampling technique. Seven 2x2 contingency tables were organized for the data obtained and chi-square values were calculated. It was found that high achievement motivation students showed significantly different preference from low achievement motivation students with regard to their preference for visual vs. aural, field dependent vs. field independent and environment oriented vs. Environment free learning styles.

**Shefali Pandya (2011)** studied interactive effect of school type and learning styles on self-concept of students. The sample included 1358 students. The study found the school type effect on RES ASCS-PS is moderate. Learning style effect (Independent v/s Dependent) on the RES ASCS-PS is high in magnitude. The interactive effect of school type and learning styles (Independent v/s Dependent) on the RES ASCS-PS is high. Learning Styles Effect (Avoidant v/s Participant) on the RES ASCS-PS is high in magnitude. There is no significant interactive effect of school types and learning styles (Avoidant v/s Participant) on the RES ASCS-PS. Learning Styles Effect (Collaborative v/s Competitive) on the RES ASCS-PS is moderate in magnitude. The interactive effect of school types and learning styles (Collaborative v/s Competitive) on RES ASCS-PS is high.
Kiranjeet Kaur (2011) investigated the achievement in science of school students in relation to study habits and learning styles. The study was made on a random sample of 120 school students (girls, 63; boys, 57) of class IX located in Faridkot district of Punjab. It was also observed that there is no significant relationship between achievement in science and study habits. Of the different learning styles – preference for learning by visual presentation, open ended lesson, learning through main concept creativity, pre – planning, playful- approach in problem solving, divergent learning, interesting something new and imaginative and performance for solving complex problems. Some styles exhibited significant relationship with achievement in science. Thus, partial significant relation between learning styles and achievement in science is inferred.

See Jasmine (2011) studied relationship between learning styles and content based academic achievement among tertiary level students. It identified the different learning styles based on gender and variety field of study. The results also indicated that gender has significant influence on students’ achievements. Students’ academic achievements are highly related with their learning styles.

Rajshree S. Vaishnav (2013) studied learning style and academic achievement of secondary school students. This study is an analysis of learning styles prevalent among secondary school students. It was conducted on three learning styles-visual, auditory and kinesthetic (VAK). A sample of 200 students of class 9th, 10th and 11th standards of Maharashtra state was selected for the study. Findings of the study reveal that, kinesthetic learning style is found to be more prevalent than visual and auditory learning styles among secondary school students. There exist positive, high correlation between kinesthetic learning style and academic achievement. The main effects of the three variables -
visual, auditory and kinesthetic are significant on academic achievement.

**Suresh Aggarwal and Suman Yadav (2013)** studied learning style performance of prospective teacher with regard to their gender and stream. The study investigated the learning style preferences of prospective teachers undergoing teachers training course in two colleges of education of Ambala district, Haryana, India. A 24-item self designed questionnaires was used to collect data regarding learning style. A total of 75 prospective teachers were randomly selected as sample of this study. The study finds applicability in making learning at teacher education level more practical and pragmatic.

**Ravi and Manju (2013)** studied learning style of primary students and addressed the question whether school environment intervenes learning style. This study has been conducted with the purpose of determining whether there are differences in learning styles among the students from various educational environments, i.e., various educational boards. The sample of this research consists of 300 Post Primary (8th standard) students from three educational environments (CBSE, SBSE, Matric.). Learning style preference scale has been chosen as tool to collect the data. The ‘F-Test’ have been used to find the mean score difference in Learning Styles and the findings show that there is significant mean score difference in learning styles among students between the groups based on various educational environments. Hence, it is concluded that different school environments affect the learning styles of Primary Students.
2.5 Conclusion

In this chapter the investigator presented the review of literature related to this study in a logical manner such as that the chapter, followed as per the analysis of data. The logic maintained in this chapter was on the variable wise presentation of related studies