CHAPTER 2

REVIEW OF RELATED LITERATURE
As it has been mentioned in the previous chapter that there are various variables that influence academic achievement, this chapter will focus on variables of interest of the current study. Earlier only cognitive variable like intelligence was thought to play a role in academic success. Recent years, however, has shown that non-cognitive variables like emotional intelligence, personality etc also play a pivotal role in determining academic success. This chapter will focus on the research work done on variables besides intelligence, which can influence student’s academic successor determining the factors that leads to over and underachievement of students.

Studies related to Intelligence and Achievement.

McCandles et al (1972) studied intelligence in relation to scholastic achievement. They carried out their investigation on 443 8th grade students and tried to obtain intelligence scores through California test of mental maturity. The correlation between intelligence and academic achievement was found to be 0.56. From their study it is clear that intelligence is significantly related to academic achievement.

Chatterji and Mukherjee (1974) investigated the achievement through the differential aptitude test battery scores. The sample consisted of 1042 students of class 8th standard. Significant relationship was found at 0.01 Level of correlation of coefficient range from 0.21 to 0.49. This shows that there is a moderate relationship between intelligence and aptitude.

Robert and Flexer (1981) carried out a study on a relationship between intelligence and scholastic achievement. They found that both reading and Mathematic were correlated with intelligence. Mental ability and scholastic performance both
were interrelated. The correlation of coefficient in their study was found to be 0.58 to 0.61.

Flynn (1991) proposed that students from Asian cultural backgrounds typically achieve at higher levels than non-Asian students with the same IQs. This study investigated relationships between IQ, study time, educational and occupational aspirations, and academic achievement among Australian school children. The size of the sample is 160 from Chinese, Vietnamese and Anglo-Celtic backgrounds. Mathematics grades for Chinese and Vietnamese Australian children were higher. They spent more time studying and were more likely to desire an occupation requiring tertiary qualifications than Anglo-Celtic Australian peers. Consistent with Flynn's Hypothesis, students from Asian background obtained higher mathematics grades than their Anglo-Celtic Australian peers with the same IQ. However, study and occupational aspirations formed only part of a more complex socio-cultural package that contributed to group achievement differences. Parents' support for studying and aspirations may interact with these factors to produce high achievement.

Fisher, Janis (1995) examined the relationship between intelligence as defined by a verbal and nonverbal combined score, obtained on the Otis-Lennon School Ability Test and final grades received in the following six academic subjects: reading, math, spelling, science, English and social studies. The sample for this study consisted of 159 elementary students in grades 3-5. The elementary school from which the sample was taken is located in rural Ohio, and which educates approximately 400 students, predominately white and from varied economic backgrounds. Grades were drawn from students' files and converted to A = 4, B = 3, C = 2, D = 1. Student intelligence quotient, involving a verbal and nonverbal score, was derived from the Otis-Lennon Ability Test administered in the fall of the students' second grade year. The results suggested a positive correspondence of relationship between intelligence and its ability to predict academic achievement. A positive correlation was found between intelligence score and the subject of reading (0.49), English (0.50), social studies (0.44), science (0.51) and
math (0.47). A lesser correlation was found with spelling (0.30). No significant differences were noted in correlations between intelligence of genders and any of the academic categories.

Robert J, Sternberg (2001) investigated that academic and practical intelligence are separable and relatively distinct constructs in villages of western Kenya. Eighty-five children (43 boys and 42 girls) between the ages of 12 and 15 years participated in the study. The main dependent variable of interest was their set of scores on a test of their tacit knowledge for natural herbal medicines used to fight illnesses. This kind of knowledge is viewed by the villagers as important in adaptation to their environment, which is understandable given that the overwhelming majority of the children have, at a given time, parasitic infections that can interfere with their daily functioning. We found that scores on the test of tacit knowledge correlated trivially or significantly negatively with measures of academic intelligence and achievement, even after controlling for socioeconomic status (SES). We suggest that, among these villagers, time spent developing academic skills may be perceived as taking away from time that needs to be spent developing practical skills and vice versa. The result is that academic and practical intelligence can develop independently or even at odds with one another.

Clemens H. Schmitt et al 2004 examined the validity of an Implicit Association Test (Greenwald, McGhee, & Schwartz, 1998) for assessing individual differences in achievement tendencies. Eighty-eight students completed an IAT and explicit self-ratings of achievement orientation, and were then administered a mental concentration test that they performed either in the presence or in the absence of achievement-related feedback. Implicit and explicit measures of achievement orientation were uncorrelated. Under feedback, the IAT uniquely predicted students’ test performance but failed to predict their self-reported task enjoyment. Conversely, explicit self-ratings were unrelated to test performance but uniquely related to subjective accounts of task enjoyment. Without feedback, individual differences in both performance and enjoyment were independent of differences in either of the two achievement orientation measures.
Critical Evaluation

It is evident from the above mentioned studies that intelligence and academic achievement are closely related. Most of the studies showed significant positive correlation between intelligence and academic achievement. There is a need to study other factors that contribute to over or under academic achievement like personality, family climate, peer influence, need achievement, teaching methods and other psychosocial factors also needed to be studied.

Studies related to Emotional Intelligence

Eisenberg, Nancy, Lennon, Randy (1983) reviews the literature on sex differences in empathy (defined as vicarious affective responding to the emotional state of another) and related capacities (affective role taking and decoding of nonverbal cues). The literature is discussed according to method used to assess empathy and affective role taking. Where appropriate, meta-analyses were also computed. In general, sex differences in empathy were found to be a function of the methods used to assess empathy. There was a large sex difference favoring women when the measure of empathy was self-report scales; moderate differences (favoring females) were found for reflexive crying and self-report measures in laboratory situations; and no sex differences were evident when the measure of empathy was either physiological or unobtrusive observations of nonverbal reactions to another's emotional state. Moreover, few sex differences were found for children's affective role taking and decoding abilities.

LePage-Lees, et al (1997) in a mixed methods study, the educational experiences of 21 women who were academically successful and disadvantaged as children were explored. The participants' achievement and development patterns were described, and information about encouraging resiliency among students from disadvantaged backgrounds was provided. It was concluded from this study that resilient women who had endured stress as children often developed a highly advanced level of "emotional intelligence" or "interpersonal and intrapersonal
intelligence." When this emotional intelligence was encouraged, the women's academic performance improved.

**Goleman (1999)** In a review of studies found in one of the studies that primary school boys who had above-average IQ scores but nevertheless were doing poorly in school were found via these neuropsychological tests to have impaired frontal cortex functioning. They also were impulsive and anxious, often disruptive and in trouble suggesting faulty prefrontal control over their limbic urges. Despite their intellectual potential, the children were at highest risk for problems like academic failure, alcoholism, and criminality not because their intellect is deficient, but because their control over their emotional life is impaired. The emotional brain quite separate from those cortical area tapped by IQ tests, controls rage and compassion alike. The study gives importance to the role of emotional intelligence in influencing academic achievement.

**Zeidner, et al (2002)** in their review of the studies of the importance of emotional intelligence in educational and school context, found that most intervention programs were not specially designed to change emotional intelligence and very few systematic interventions meet the canons of internal and external validity. Consequently, they found little objective evidence attesting to the useful role of emotional intelligence as predictor of school success and adjustment.

**Barbara (2002)** studied a sample of 200 XI and XII grade students (Boys = 83, Girls = 117) in South Texas, USA. She found a link between emotional intelligence and academic achievement for the total group and for each of the subgroups.

**Karen, et al (2002)** examined the relationship of self and others' ratings of emotional intelligence with academic achievement and the personality in predicting academic and social success in a sample of 118 students (Boys = 32, Girls = 84) with age range of 18 to 32 years. The students filled in measures for emotional and academic achievement, the Big Five and indicators of social and academic success. Moreover, other ratings were obtained from four different raters of emotional
intelligence and social success. Factor analysis revealed three emotional intelligence dimensions that were labeled as empathy, autonomy and emotional control. The researchers found little evidence for the relationship between emotional and academic achievement. They found that academic achievement was low and inconsistently related to emotional intelligence, revealing both positive and negative interactions. Strong relationships were found between emotional intelligence dimensions with the Big Five, particularly with extraversion and emotional stability. Interestingly, the emotional intelligence dimensions were able to predict both academic and social success above traditional indicators of academic achievement and personality.

O'Connor et al (2002) examined the relationship between emotional intelligence (EI) and academic achievement in college students, using both self-report and ability-based measures of EI. Specifically, the Mayer Salovey, Caruso Emotional Intelligence Test (MSCEIT, an ability-based measure) and the Bar-On Emotional Quotient Inventory (EQ-I, a self-report measure) were used to predict academic achievement. Achievement was operationalised as the respondents' cumulative GPA. Results indicated that EI is not a strong predictor of academic achievement regardless of the type of instrument used to measure it. However, a construct validity examination revealed that the MSCEIT correlated highly with indices of cognitive ability but minimally with personality dimensions. In contrast, the EQ-I failed to correlate with indices of cognitive ability but correlated substantially with numerous personality dimensions.

Barchard (2003) studied a sample of undergraduate psychology students to examine the ability of emotional intelligence to predict achievement using Year Grades as the criterion. The predictive validity of emotional intelligence was compared with the predictive validity of traditional cognitive abilities and the big five dimensions of personality. In addition, the incremental predictive validity of each of these three domains was assessed. The study found that only some measures of emotional intelligence predicted academic success and none of these measures showed incremental predictive validity for academic success over and
above cognitive and personality variables. It may be that the overlap between many emotional intelligence measures and traditional measures of intelligence and personality limits their incremental predictive validity.

Vinod Kumar (2003) conducted a study on 200 children studying in the 4th standard of the Municipal Corporation of Delhi (MCD) schools. The main objective of the study was to develop a measure of Emotional Intelligence for primary school children, to examine the differences in Emotional Intelligence in different eco-cultural groups, to study the relationship between Emotional Intelligence and academic achievement, social performance and attentive abilities. The final objective of the study was to nurture Emotional Intelligence in a selected group of children. The study was conducted in three phases. In first phase, the original electronic English version of MEIS, developed by Mayer & Salovey (1997) was adapted into a paper pencil Hindi version. During the second phase, Emotional Intelligence of these children was assessed, analyzed and correlated with the social performance, attentive abilities and academic achievement. In the third phase, nurturance tools were devised and applied on a selected group of 25 children. Results revealed that all the four components of Emotional Intelligence, namely Identification, Assimilation, Understanding and Regulation of emotions correlate with each other and the overall Emotional Intelligence score. The present study points toward a possibility of two-factor structure of Emotional Intelligence. The first factor components show correlation with socio-cultural and environmental variables. The second factor components show association with variables indirectly representing general intelligence, like, academic achievement. Among the different eco-cultural groups, rural children have higher Emotional Intelligence and rural boys have highest Emotional Intelligence scores, while urban boys are poorest among all the children. Girls, have higher Emotional intelligence in comparison to boys, rural girls are better at understanding and regulating emotions while urban girls are best at identification of emotions. Better regulators of emotions were also good at academics. Emotional Intelligence did not show any relationship with social performance or deftness and attentive abilities. The study delineates that nurturing Emotional Intelligence has definitive positive influence on the overall
Emotional Intelligence of the child. The positive influence of nurturance is not only component specific but also shows spill over effect on the other Emotional Intelligence factors. It was concluded from the study that socio-cultural factors have definitive influence on the degree of Emotional Intelligence. The environmental influence is visible in rural and urban population among the different components of Emotional Intelligence also. Girls have higher Emotional Intelligence than the boys. Two factors constituting Emotional Intelligence correlate differentially, with variables, which are innate, and the one's which are environmental. Emotional Intelligence seems to be independent of the social performance and attentional abilities of children. Finally, Emotional Intelligence can be nurtured by easy to develop methods and learning on one component of Emotional Intelligence may help in enhancing capacities on other components.

Pau et al (2003) examined the relationship between emotional intelligence (EI) and perceived stress (PS) in dental undergraduates. All dental undergraduates attending a UK dental school were invited to complete a questionnaire on age, gender, year of study, EI, and PS. Two hundred and thirteen students (48% male) participated, a response rate of 70%. The mean score for EI was 117.54 (S.D. 14.90) and PS was 17.73 (S.D. 6.49). Factor analysis confirmed four factors previously identified in the literature as comprising emotional intelligence: optimism/mood regulation, utilization of emotions, appraisal of emotions, and social skills. T-tests indicated that females had significantly higher EI scores than males. Mean PS scores were significantly higher for students aged over twenty-one years compared with those aged twenty-one years or less (p < 0.001), female compared to male students (p < 0.05), and those in higher years compared to those in lower years of study (p < 0.001). Co-relational analysis showed an inverse relationship between EI and PS. Multiple regression analysis identified year of study, optimism/mood regulation, and gender as independent, significant predictors of PS. In conclusion, low EI scorers report more PS. Future research should investigate the relationships of EI and PS with impact on lifestyle behaviors, academic and clinical performance, and health outcomes.
Ritu Singhal, Rachna Singh and Ira Das (2003) studied the effect of anxiety upon emotional competence of school students of different educational boards. The sample consisted of 120 students who were selected randomly. Comprehensive anxiety test and emotional competence scale were used to collect data. Out of which 60 students were selected from school affiliated to UP board and other 60 from school affiliated to ICSE Board. A 2x3 factorial design was used. The result indicated that students of ICSE board were more emotionally competent than those from UP Board. Result also showed that emotional competence was affected by anxiety. Students with low anxiety were more emotionally competent whereas students with high anxiety showed low emotional competence. The interaction effect of anxiety and educational board was not found to be significant.

Chauhan V.L. & Bhatnagar, Tithi (2003) studied to find out the emotional quotient among adolescent male & female students. The sample consisted of 120 male and female adolescent who were randomly assigned to all experimental group. Emotional maturity scale and self-prepared emotional expression scale were administrated to the sample of adolescent. The results indicate that post adolescent male have higher emotional maturity than female and the stage of adolescent play a significant role upon emotional maturity. With regard to the emotional expression it was found that post adolescent have greater skill for emotional expression than the pre adolescent. Female have higher skill for emotional expression than their male counterpart and both stage of adolescent and type of gender play a significant role in determining the skill for emotional expression. The study reveals that post adolescent possess a higher degree of emotional quotient than their counterpart and female have a higher degree of emotional quotient than their male counterparts. The finding envisages the rationale to channelise emotional expression skill of adolescent for their effective mental health and personality development in the 21st century.

Brackett, et al (2004) assessed the discriminate, criterion and incremental validity of an ability of emotional intelligence in a sample of 330 college students (Boys = 89, Girls = 241) with the age range between 17 and 20 years. The students
took an ability test of emotional intelligence, a measure of Big Five personality traits and provided information on life space success that assessed an array of self-care behaviors, leisure pursuits, academic activities and interpersonal relations. The researchers found that girls scored significantly higher in emotional intelligence than boys. Emotional intelligence, however, was more predictive of life success criteria for boys than for girls. Lower emotional intelligence in boys, principally the inability to perceive motions and to use emotions to facilitate thought, was associated with negative outcomes, including illegal drugs and alcohol use, deviant behaviors and poor relations with friends. The findings remain significant even after statistically controlling, for scores on the Big Five and academic achievement. In this sample, emotional intelligence was significantly associated with maladjustment and negative behaviors for college-aged boys, but not for girls.

Drago et al (2004) examined the relationship between emotional intelligence and academic achievement in nontraditional college students. Because students differ in cognitive ability, with some students being better prepared for the collegiate environment than others, the role of emotional intelligence in academic achievement must be better understood. Non-cognitive factors such as emotional intelligence may supplement or enhance student cognitive ability. In this study, emotional intelligence, achievement motivation, anxiety, and cognitive ability were predictor variables. The criterion variable was academic achievement as measured by student GPA. Data were collected using the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), the State-Trait Anxiety Inventory (STAI), the Achievement Motivation Profile (AMP), the Wonderlic Personnel Test (WPT), and the Student Demographic Survey (SDS). Bivariate and multivariate correlation and regression analyses were used to test the study’s statistical hypotheses. Results demonstrated that emotional intelligence is significantly related to student GPA scores, student cognitive ability scores, and student age. Additionally, student anxiety was related to certain emotional intelligence abilities. No significant relationship, however, was found between emotional intelligence and achievement motivation. Overall, the results suggest that academic achievement is related to students’ ability to recognize, use, and manage their emotions. This suggests the
need to incorporate emotional intelligence curriculum into college degree programs to help students increase their emotional intelligence.

Usaporn (2004) examined the relationship among a set of variables that might influence students' level of achievement in the English subject. The investigator used a cross-sectional design and studied 233 lower secondary school students from Thailand. The primary purpose of the study was to examine the influence of emotional intelligence on achievement. The study also examined the role of family encouragement for English learning, study habits, levels of engagement and attitude towards studying English. Structural equation modeling was used to analyse the data. Results revealed that emotional intelligence had a direct effect on Thai student's achievement in English. In addition, the researcher suggested that emotional intelligence affects achievement indirectly, through family encouragement, study habits and levels of engagements. The study provided a useful contribution to the understanding of teaching English as a foreign language. The findings of the study have implications for the Ministry of Education in Thailand who develop education policy and provide English-learning curriculum.

Scott, et al (2004) studied a sample of 39 gifted 11th and 12th grade adolescents (Boys=16, Girls=23) with the mean age of 16.5 years. The purpose of the study was to measure emotional intelligence in an attempt to understand how emotional intelligence can contribute to the success of gifted and talented adolescents. Measures of interpersonal-relations, social stress and grade point average were utilized to gauge success. The Multifactor Emotional Intelligence Scale-Adolescent version (MEIS-A) was used to assess emotional intelligence, Behavior Assessment system for Children (BASC) was used to assess emotional difficulties, behavioral difficulties and adaptive skills, while the Test of Cognitive Skills-second edition (TSC/2) was used to assess general intelligence. Hierarchical regression analyses were used to analyze the data. The results revealed that emotional intelligence did not significantly contribute to the social and academic success of these students. In the light of these findings, the view that emotional
intelligence is a critical component of academic and overall life success could not be supported by this study.

**Parker, et al (2005)** examined the impact of EI on the successful transition from high school to university. The authors studied a sample of 1426 first year undergraduate students. They administered the short form of the Emotional Quotient (EQ) Inventory. The students' cumulative GPA was used to assess academic success. Results revealed that academically successfully students had significantly higher levels of different emotional and social competencies. These findings suggest that EI plays an important role in the successful transition from high school to university.

**Nicholas et al (2005)** examined the relationships between the total EI scores and the demographic characteristics. The primary objectives of this study were: to determine if relationships exist between EI and the demographic characteristics, to examine if differences were present between EI based upon demographic variables, and to find predictors of adolescent EI based upon the demographic information gathered from the participants. This study begins to reveal the demographic characteristics of adolescent EI through an exploration of the relationship of specific demographic variables with adolescent EI. Participants in this study were 200 students 16-19 years of age from three Midwestern high schools. The sample consisted of 91 females and 109 males, and the mean age of the respondents was 17.24. A two-part assessment designed to collect EI and demographic information was administered to the students in an introductory or homeroom type class to ensure a more widespread sampling of the student body. The EI section of the assessment was analyzed based on the methods and procedures set forth by Bar-On (2000). After all of the information was collected and data entered, a total EI score was computed for each participant. Adolescent EI was measured with the Bar-On Emotional Quotient Inventory Youth Short Version (Bar-On EQ-i:YV(S)), a specific EI testing device designed by Bar-On (2000). Correlations were first conducted in order to determine if these relationships existed. A Pearson's correlation (ratio by ratio) was used for age with mean EI scores. Kendall's tau-b
correlations (ordinal by ratio) were used to determine relationships of EI with sex, residence, father's and mother's education, and household income. The variables of sex, age, household income, location of residence, and parents' level of education were used as independent variables in a regression model with EI as the dependent variable. Correlation tests showed no significant relationship between EI and age or location of residence. A Kendall's tau-b correlation test illustrated a negative correlation coefficient (tau-b = -0.128), with a significance of 0.031, linking EI and sex. Therefore, EI levels were significantly higher for females (coded "1") than for males (coded "2"). A significant positive relationship was found for EI with mother's education (tau-b = 0.205) and father's education (tau-b = 0.296); therefore the higher the level of mother's and father's education, the higher the reported EI. A Kendall's tau-b correlation test revealed a positive correlation coefficient (tau-b = 0.242) between EI and household income. The results imply that as household income increases, so do EI scores. Linear regression was used to determine which independent variables were predictive of adolescent EI. Knowing that the variables are inter-correlated, part of the analysis examined the relation between the independent variables (sex, age, location of residence, mother's education, father's education, and household income) within the context of each of the other variables and used EI as the dependent variable. An analysis of the multi-collinearity showed that none of the variables were correlated greater than 0.70. "Mother's Education" and "Father's Education" were the most related (r = .58) of the independent variables in the study. The regression model explained a minimal amount of variance (.148 adjusted R square), and two independent variables (sex and father's education) remained significantly predictive of adolescent EI after collinearity and regression analysis were performed.

Bastian et al (2005) examined the relationships among academic achievement, life satisfaction, coping, problem-solving ability, anxiety and EI. The relationships were assessed in two diverse populations (University Sample: N - 246; mean age - 19.9, Older community sample: N - 212; mean age - 51.6). The magnitude and direction of findings in both studies were found to be remarkably similar. As expected, older adults (community sample) were found to score significantly higher
on EI than younger adults (University sample). Few gender differences in EI however were apparent, but those that were significantly favored females. Previous identified relationships suggesting that self-report EI measures are moderately to highly correlate to personality, whereas ability EI is reasonably distinct from other constructs, were also upheld. Inconsistent with previous research however, differential associations between EI and verbal and abstract reasoning ability were not observed. Fitting theoretical expectations, in both studies EI was low - to - moderately correlated with higher life satisfaction, problem and emotion focused coping and perceived problem solving ability and with lower avoidance coping and anxiety. However, the correlations for academic achievement were not significant. These correlations were found to be higher for self - report EI than they were ability EI, perhaps due to method variance with the life skills. Nevertheless, despite these low - to - moderate correlations, hierarchical regression analyses controlling for personality and cognitive abilities revealed that the incremental predictive validity of EI was 7% at most. This finding was found for all life skills regardless of the EI measure involved. This raises some implications for the field of EI and highlights that personality and cognitive abilities should be taken into account when making assertions about EI' s predictive power.

**Katyal et al (2005)** examined gender differences in emotional intelligence in a sample of 150 tenth grade students studying in different government schools in Chandigarh. The students were randomly selected for the study. The data was collected through standardized “Emotional Intelligence Test”. The findings revealed that majority of boys, girls and the total sample had good followed by low emotional intelligence. Girls were found to have higher emotional intelligence than boys.

**Marquez, et al (2006)** studied a sample of 77 Spanish High School students (Boys=39, Girls=38) whose mean age was around 15 years. The purpose of the study was to examine whether emotional intelligence predicts pro-social and maladaptive behavior and final academic grades. The students took the Mayer-Salovey Caruso Emotional Intelligence Test (MSCEIT), a measure of Big Five
personality traits, a general intelligence test and a social competence inventory. Students' academic grades were used as academic achievement. The investigator carried out the analysis in three phases. In the first phase, discriminate validity of emotional intelligence in comparison to the Big Five personality traits and verbal intelligence was assessed. In the second phase, zero-order correlations between the MSCEIT, social competencies and academic grades were computed. In the final set of analysis, partial correlations (Holding the Big Five and verbal intelligence constant) was carried out to test whether MSCEIT is incrementally validated. The study found that the MSCEIT was discriminable from well-established measures of personality and intelligence. The test was also moderately related to social competence and predicted students' final grades. The study found that students with high emotional intelligence tended to be more pro-social and performed better in school. The implications of the study have been that integrating lessons on socio-emotional learning in schools might improve student's performance, decrease maladaptive behavior and increase pro-social behavior.

MacCann, et al (2006) suggested new scoring and test construction methods for emotional intelligence (EI) suggested as alternatives for current practice, where most tests are scored by group judgment and are in ratings-based format. Both the ratings-based format and the proportion-based scores resulting from group judgments may act as method effects, obscuring relationships between EI tests, and between EI and intelligence. In addition, scoring based on standards rather than group judgments add clarity to the meaning of test scores. For these reasons, two new measures of emotional intelligence (EI) are constructed: The Situational Test of Emotional Understanding (STEU, The Situational Test of Emotion Management (STEM). Following test construction, validity evidence is collected from four multi-variate studies. The STEU's items and a standards-based scoring system are developed according to empirically derived appraisal theory concerning the structure of emotion. The STEM is developed as a Situational Judgment Test (SJT) with situations representing sadness, fear and anger in work life and personal life settings. Two qualitative studies form the basis for the Stem's item development:
• Content analysis of responses to semi-structured interviews with 31 psychology undergraduates and 19 community volunteers.

• Content analysis of free responses to targeted vignettes created from these semi-structured interviews (N = 99).

The STEM may be scored according to two expert panels of emotions researchers, psychologists, therapists and life coaches (N = 12 and N = 6). In the first multi-variate study (N = 207 psychology undergraduates), both STEU and STEM scores relate strongly to vocabulary test scores and moderately to Agreeableness but no other dimension from the five-factor model of personality. STEU scores predict psychology grade and an emotionally oriented thinking style after controlling vocabulary and personality test scores. STEM scores did not predict academic achievement but did predict emotionally oriented thinking and life satisfaction for emotionally-oriented thinking and 0.04 for life satisfaction. In the second multi-variate study, STEU scores predict lower levels of state anxiety, and STEM scores predict lower levels of state anxiety, depression, and stress among 149 community volunteers from Sydney, Australia. In the third multi-variate study (N = 181 psychology undergraduates), Strategic EI, fluid intelligence (Gf) and crystallized intelligence (Gc) were each measured with three indicators, allowing these constructs to be assessed at the latent variable level. Nested structural equation models show that Strategic EI and Gc form separate latent factors. However, these factors relate very strongly (r = 0.73), indicating that Strategic EI may be a primary mental ability underlying Gc. In this study, STEM scores relate to emotionally oriented thinking but not loneliness, life satisfaction or state stress, and STEU scores do not relate to any of these. STEM scores are significantly and meaningfully higher for females (d = 0.80), irrespective of gender differences in verbal ability or personality, or whether expert scores are derived from male or female experts. The fourth multi-variate study (N = 118 psychology undergraduates) distinguishes an EI latent factor (indicated by scores on the STEU, STEM and two emotion recognition ability measures) from a general cognitive ability factor, although again cognitive ability and EI factors were strongly related (r = 0.66). Again, STEM scores were significantly higher for females and both STEU and STEM relate to Agreeableness but not to any other dimension from the five-factor model of personality. Taken
together, results suggest that: (1) STEU and STEM scores are reasonably reliable and valid tests of EI. (2) EI tests assess slightly different constructs to existing measures of Gc, but more likely form a new primary mental ability within Gc than an entirely separate construct. (3) The female superiority for EI tests may prove useful for addressing adverse impact in applied settings (e.g., selection for employment, promotion or educational opportunities), particularly given that many current assessment tools result in a male advantage.

Bindu et al (2006) investigated the nature and extent of the relationships that exist among two cognitive variables, viz., intelligence and creativity, and two non-cognitive variables, viz., emotional intelligence and maladjustment among a sample of young adults (N = 90). The results revealed that the two gender groups differed significantly in the mean scores on the variables and also in their inter-correlations. Maladjustment was identified as the most important predictor of all the other variables, in the case of the male sample. Emotional intelligence played a significant role in determining overall creativity and maladjustment in the female sample. The relationship between intelligence and creativity was found to be stronger in the female group than in the male group.

Donchue, et al (2006) examined whether emotional intelligence was related to individual advancement and the potential mediating role of transformational leadership in this relationship. The sample comprised 140 adults employed in a range of occupations. Hierarchical regression analysis indicated that emotional intelligence was positively related to career advancement, when the effects of age, gender, education, and tenure were held constant. Additionally, using a series of hierarchical regression analyses, transformational leadership was found to fully mediate the relationship between emotional intelligence and individual advancement.

Shing et al (2006) did a study to develop an emotional intelligence inventory for the adolescents. Pretest scores were obtained from 945 subjects among general high school, industrial high school and business high school students in Taiwan. Data analysis methods, based on methodologies reviewed from relevant literature,
include statistical instruments for content validity, plus exploratory factor analysis, Pearson correlation, an independent t-test and reliability analysis measures. The EII is comprised of six factors: Firstly, facilitating thought is the ability to perceive emotions for thinking, choosing, planning, solving problems, inspiring, and to increasing self maturity. Secondly, emotional management is the ability to use strategies for improving emotional intensity, diminishing negative emotion or maintaining positive emotions. Thirdly, emotional perception is the ability to identify and understand others’ emotions and the true feelings, perceiving of possible emotional status to make correct decisions. Fourthly, emotional awareness is the ability to be open to feelings, understand the truth behind those feelings, and awareness of others’ emotions. Fifth, emotional concern can praise others’ achievements actively and comfort friends’ when experiencing loss. On the other hand, sharing personal happiness and sadness with others is also included. Lastly, emotional control involves regulating personal impulse when facing interpersonal conflict and anger. The coefficients of Cronbach’s alpha were from .69 to .83 for the six factors and 0.89 in the EII. These factors could be explained from 53.8 % of the total variance.

Parker et al (2006) examined the relationship between emotional intelligence and academic retention. Participants were selected from a sample of 1270 young adults (368 men and 902 women) making the transition from high-school to university. Participants were recruited during the first week of classes in their first year at the university and completed a measure of emotional intelligence. Participants’ academic progress was tracked over the course of the year and students were divided into two groups. The first group consisted of students who withdrew from the university before their second year of study (N = 213); the second group consisted of a matched sample (on the basis of age, gender and ethnicity) of students who remained at the university for a second year of study (N = 213). Results revealed that students who persisted in their studies were significantly higher than those who withdrew on a broad range of emotional and social competencies.
Mestre et al (2007) examined in a sample of 127 Spanish adolescents, the ability to understand and manage emotions, assessed by a performance measure of emotional intelligence (the MSCEIT), correlated positively with teacher ratings of academic achievement and adaptation for both males and females. Among girls, these emotional abilities also correlated positively with peer friendship nominations. After controlling for IQ and the Big Five personality traits, the ability to understand and manage emotions remained significantly associated with teacher ratings of academic adaptation among boys and peer friendship nominations among girls. Self-perceived emotional intelligence was unrelated to these criteria. These findings provide partial support for hypotheses that emotional abilities are associated with indicators of social and academic adaptation to school.

Adeyemo (2007) examined the moderating influence of emotional intelligence on the link between academic self-efficacy and achievement among 300 undergraduate students at the University Of Ibadan, Nigeria, with the mean age of 19.4 years. Two valid and reliable instruments were used to assess emotional intelligence and academic self-efficacy while class grades were used as a measure of academic achievement. Descriptive statistics, Pearson product moment correlation and hierarchical regression analysis were used to analyse the data. The results revealed that emotional intelligence and academic self-efficacy significantly correlated with academic achievement. The study also found the moderating effect of emotional intelligence on the relationship between academic self-efficacy and achievement. The study highlighted the importance of emotional intelligence in relation to academic achievement. The study further advocated for the promulgation of educational policy on emotional intelligence and academic self-efficacy.

Qualter, et al (2007) provided a critical review of the research field of emotional intelligence and examined the usefulness of emotional intelligence construct in the debate on education policy and practice. The researchers summarized the evidence linking emotional intelligence to life success and academic achievement. On the whole, the researchers found that emotional intelligence do predict life
success and programmers of socio-emotional learning in schools may usefully contribute to the development of the attributes of emotional intelligence.

**Kumar, et al (2007)** examined the impact of emotional intelligence on organizational learning. Based on a sample size of 280 employees working in one of the Multi National Company in Gurgoun, India. The results depicted emotional intelligence as being positively and significantly related with organizational learning. The findings have implications for management of people towards creating and maintaining organizational learning.

**Habibah, et al (2008)** studied 688 secondary school students with low academic achievement and behavioral problems. The mean age of the sample was 16 years. The study utilized the descriptive survey method. The findings of the study indicated that the mean EQ scores of those having low academic achievement and behavioral problems were found to be low (Mean=57.67, S.D=0.26). Research findings also indicated significant gender differences in EQ scores among at-risk students (Low achievers and those having behavioral problems) with girls obtained a higher mean compared to the boys. In addition results also found positive and significant correlation between, EQ and academic achievement, EQ and Self-Esteemed and achievement motivation, EQ and Mathematics Self-Efficacy and EQ and English Self-Efficacy. The implications of the findings were in terms of educational opportunities for at-risk students.

**Rouhani (2008)** examined the impact of a cognitive-affective course on emotional intelligence, foreign language anxiety and empathy in a sample of seventy undergraduate Iranian EFL sophomore and junior (forty-six female and twenty-four male) students. These subjects included two intact classes from Shahrekord University that were assigned as control and experimental groups. Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), EQ-Map Questionnaire, Foreign Language Classroom Anxiety Scale (FLCAS) and Multi-Dimensional Emotional Empathy Scale (MDEES) were used to assess the variables. Quasi-experimental design was used during the study. Descriptive statistics, F-test and multivariate and covariate analysis was done to find the results. The emotional intelligence
(MSCEIT and EQ-Map), foreign language anxiety (FLCAS) and empathy (MDEES) mean scores of the subjects in the experimental group changed more from pretest to posttest, compared with emotional intelligence, foreign language anxiety and empathy mean scores of the subjects in the control group. Whereas the emotional intelligence and empathy scores of the experimental group had an increase from the pretest to posttest, the foreign language anxiety score had a decrease from the pretest to posttest. The covariance matrix did not differ significantly across groups, $F = .721$, $p = .539$. In the same line, in the Levene's test, the variance matrices did not differ significantly for both MSCEIT and EQ-Map scores across groups, $F = .508$, $p = .479$ and $F = .000$, $p = .998$, respectively. The treatment of the study for emotional intelligence, in general, was found to be significant. The $F$ value of EQ-Map was not, thus a significant difference in the treatment effect was indicated. The treatment was not found to be significant for both FLCAS and MDEES pretest scores. More important, no significant interaction between the treatment and the pretest scores was found for both anxiety and empathy measures. Therefore, there were not any significant pretreatment differences between the two groups. There was a strong linear relationship between pretest and posttest scores from FLCAS and MDEES measures. The study has pedagogical implications. If empathy can be developed through cognitive-affective courses in which literary readings are used as the basis of second language learning, learners can also gain cultural understanding, which is the fifth skill besides speaking, listening, reading and writing.

Downey, et al (2008) examined the relationship between emotional intelligence and scholastic achievement in Australian adolescents. The sample consisted of 209 secondary school students (Boys=86, Girls=123) and the data was collected from all the subjects from the age of 7 to 11 years. Swinburne University Emotional Intelligence Test (SUEIT) was used to assess emotional intelligence while academic achievement grades were used to measure scholastic performance. Academic success was found to be associated with higher levels of total Emotional Intelligence (EI), via assessment of the EI of different academic levels. Regression analysis also revealed that dimensions of the adolescent SUEIT differentially
predicted secondary school subject grades. Emotional management and control was found to be significantly predicted Moths ($r^2=0.06$) and science ($r^2=0.04$), the Understanding Emotions subscale significantly predicted scores for Art ($r^2=0.12$) and Geography ($r^2=0.08$). It was concluded that the development of EI might offer educators significant opportunities to improve scholastic performance and emotional competence.

Oyeso J. I, et al investigated the relationship among emotional intelligence, parental involvement and academic achievement of 500 Senior Secondary School Students in Ibadan, Nigeria. The participants ranged in age between 14 and 18 years ($M=16.5$, $SD. = 1.7$). Two hypotheses were tested for significance at .05 margin of error, Using Pearson Product Moment Correlation Coefficient and Multiple Regression Statistics. Results showed that both emotional intelligence and parental involvement could predict academic achievement. Similarly, there were significant positive relationship between emotional intelligence and academic achievement; and between parental involvement and academic achievement. These findings have some implications. First; parents could have to note that their interpersonal relationships and direct interest in the academics of their children could bring a better academic performance. Thus effort should be made by them to be positively disposed to academics of their children. Both the home and the school need to cooperate in making the learners to be well adjusted emotionally as this could make or mar academic achievement. It is therefore, recommended that counseling psychologists and school’s counselors should work on the emotional well being of students in the school.

Critical Evaluation

It is quite evident from the above mentioned studies that emotional intelligence plays a significant role in academic achievement. Most of the studies showed positive and significant positive correlation between emotional intelligence and academic success. However, additional emotional intelligence research or related studies may still be useful for understanding variations in the success of students. Rather than study an overall level of emotional intelligence, various personality or
temperamental traits that are related to Goleman's model of emotional intelligence like persistence, optimism etc could be more practical and meaningful. Second suggestion for the future research concerns the setting for studies involving gifted and talented adolescents. It appears likely that future research would be more sensitive to the social and academic needs of the majority of gifted adolescents if conducted in regular settings.

**Studies related to Achievement Motivation**

**Mehta, P. Kumar et-al (1967)** studied the levels of n-ach in high school boys. A sample of 975 students from class IXth was drawn from 32 higher secondary schools of Delhi. Of 32, 15 were identified as High need Achieving Schools (HAS) and 15 identified as Low need Achieving Schools (LAS).

**McLeland (1972)** explained the effect of achievement motivation training in the school and it has been found that the n-ach training enhances the class work and life management talents rather than affecting achievement levels in a direct fashion.

**Christian (1975)** conducted a study on fear of failure hope of success achievement motive anxiety, in relation to there SES and performance. It has been found that need achievement has no relation with age and anxiety. There is positive correlation between need achievement and academic performance and negative correlation between fear of failure and need achievement. However there is positive correlation between the fears of failure hope of success and between performance fears of failure.

**Parikh, P. A. (1976)** studied the achievement motive school performance and educational norms of secondary school pupils of Bombay city. The study was conducted on 1050 pupils of twenty five classes selected on the bases of grade level S.E.S, sex and medium of instruction and community. Mean need-ach score of the Bombay city pupils was higher than that of pupils of madras, Delhi, Baroda, Kaira, U.S.A, Brazil and Germany. Bombay girls had high n-ach score than pupils of middle or lower S.E.S, Sikhs, Christians and Parisis had higher n-ach than
Hindus, Jains and Muslims. Class eights students had higher n-ach than Ninth and Tenth. Pupils of English medium schools had more achievement oriented ideas than pupils of Gujarat medium. School n-Ach was positively related to sex, performance, perception, belief and with all the n-ach components.

Ghuman (1976) examined aptitude, personality traits and achievement motivation of academic over and underachievers in a sample of 1948 higher secondary school students studying in various schools of Raipur, Madhya Pradesh. The purpose of the study was to find out the differences in the aptitude, personality traits and need achievement of overachieving and underachieving students with regard to sex, academic stream and residential background. No significant differences were found between overachievers and overachievers on aptitude, personality traits and achievement motivation.

D.N. Abrol (1977) conducted a study of achievement motivation in relation to intelligence vocational interest achievement gender in SES. The sample consisted of 414 students of class Xth from 6 higher secondary schools from urban area of Delhi. The result revealed that the SES of the family affected the level of achievement motivation that is higher the status the higher was the motivation. The SES of the students affected correlation coefficient between the two variables a significant and positive correlation of moderate value was found between achievement motivation and scholastic achievement.

Gupta (1978) studied a sample of 360 secondary school students (Boys=180, Girls=180) to examine anxiety and achievement motivation in relation to achievement motivation, gender and economic status. Dutta's Personality Inventory was used to assess anxiety and Mukherjee's Sentence Completion test was used to measure achievement motivation. The results revealed that there was negative correlation between anxiety and achievement motivation irrespective of economic status, low socio-economic group having academic achievement, the correlation between anxiety and achievement motivation was negative, low socio-economic group having middle academic achievement, the correlation between anxiety and achievement motivation was positive. Students from higher socio-economic status
had low anxiety. Significant gender differences were also found on the measures of anxiety and achievement motivation. Girls were found to be more anxious than boys and boys had high achievement motivation in comparison to girls. Negative correlation between anxiety and achievement motivation was found in boys.

**Siddique B.B. (1979)** examines the effect of achievement of motivation and personality on academic success. The sample consisted of 450 students drawn randomly from various colleges of Ahmedabad. There was a mutual relationship between intelligence achievement and personality. Personality and need achievement differed in rural urban and overseas students.

**Ojha, Hardev (1979)** in their study showed the extent to which social class family system and family occupation determine achievement motive. It has been found that middle class S.E.S, nuclear family system and entrepreneurial occupation are associated with high achievement motive while upper and lower S.E.S joint family system and bureaucrat occupation are associated with low n-ach.

**Rajeeva (1982)** studied a sample of secondary school students in Bangalore City and examined achievement motivation, its correlates and the students’ performance. The study was aimed to find the difference between the class room trust scores of high and low achievers, perception scores of high and low achievers, anxiety scores of high and low achievers and the difference between the achievement scores of high and low achievement motivated students. The investigator found a significant difference between class room trusts scores of high and low achievers, anxiety scores of high and low achievers, perception scores of high and low achievers and between the achievement scores of high and low achievement motivated students.

**M.V. Sudhakara Reddy (1983)** examined the relationship of self confidence and achievement motivation in relation to academic achievement. The self confidence inventory and TAT type achievement imagery cards were administered to a group of 200 post-graduate students to measure their level of self confidence and achievement motivation. The aggregate marks obtained by each of those students at
their last University exams were taken as a measure of academic achievement. Correlation coefficient at 0.1 level were found among the three level, -0.39 between self confidence and achievement motivation 0.26 between self confidence and academic confidence and 0.37 between achievement motivation and academic achievement.

SS Chuhan (1984) investigated a comparative study of achievement motivation of SC and ST students of Himachal Pradesh in relation to their intelligence and SES. The study was conducted on 600 students studying in grade Xth. The finding showed SC and ST student did not differ significantly in relational to their achievement motivation; the achievement motivation of the student differs significantly at different level of SES. Gender and SES did not interact significantly in relation to the achievement motivation of the students.

J.S. Gupta (1986) conducted a comparative student of performance of students as related to type of school achievement motivation and intelligence on the sample of 40. She found that performance was highly correlated with type of schools achievement motivation and intelligence

Tripathi, R.C. (1986) studied the motivation and its correlates of high school students of east UP. The study was confined to east UP including 9 districts. Average level of achievement motivation of Boys and Girl was found to be low. Girls average score in intelligence and belong to higher SES (Socio Economic Status).

Konwar (1989) studied personal achievement motivation along with socialization practices at home and at school. He found a significant difference between boys and girls, the urban, rural and different caste groups. The broad socialization factors identified included individual motivation orientation and independence of behavior.
Gupta (1990) in his study found a positive correlation between frustration and achievement motivation. Emotionally mature students achieve better who were not emotionally mature.

Jegede, Joseph O (1990) studied an experimental analysis of the effects of achievement motivation and study habits on Nigerian secondary school students' English language performance was carried out in 1990. The two hypotheses tested were that each of the treatment groups would perform significantly better in English than the control group and that the students treated for the combination of improved study habits and higher achievement motivation would perform better in English than any of the other groups (study habit, achievement).

Fultz (1993) examined relationships between socio-economic advantage achievement motivation and academic performance in an urban elementary school population of 130 minority students. Level of socio-economic advantage (more/less) was determined by school records and eligibility for participation in a compensatory school-lunch program for low-income children. A self-report measure of students' self-efficacy, intrinsic value, and self-regulatory learning orientation was used to determine level of achievement motivation (high/low). Performance data in reading and mathematics were obtained from an individually administered achievement test. Multivariate analyses revealed that socioeconomic advantage and achievement motivation are significant mediators of academic performance in minority children, independent of intellectual ability. The classroom implications of socioeconomic advantage and achievement motivation on individual differences in academic performance of minority children in urban elementary schools are discussed.

Khare (1996) examined the differences in learning environment of home and other personal differences in academic performance of students. The sample consisted of 212 secondary school students studying in different schools in Bhopal City. A data was analyzed with the help of product moment correlation-test and analysis of variance (ANOVA) for unequal cell sizes. The results revealed that significant correlations between home environment and achievement in boys and
The study also revealed significant difference in school achievement of boys and girls. It was also found that the effects of environment, age and sex on school achievement of students.

Eppler, et al (1997) examined the relationship between goal orientations and academic performance in 262 undergraduate students grouped by nontraditional vs. traditional status. Although both groups rated themselves higher on learning goals than on performance goals, non-traditional students endorsed learning goals even more strongly than their traditional peers. Goal orientations were a better predictor of academic success than student status. Consistent with Dweck's model, a learning goal orientation was positively related to successful academic performance for both groups. The relationship between performance goals and academic success was less straightforward, but students who rated both goal orientations as relatively weak had the lowest cumulative GPAs. Traditional and nontraditional students differed on variables that were inversely related to academic performance. Less successful traditional students endorsed irrational beliefs (a possible index of learned helplessness), while less successful nontraditional students worked more hours at a paid job.

James, et al (1999) examined the association between achievement motivation and academic performance in a sample of 124 graduate students (Boys=62, Girls=62) Meharbian achievement scale was used to assess achievement motivation while class grades were used as academic performance. Results indicate that the relationship between level of motivation and academic performance fluctuate throughout the semester.

McEwan L, Goldenberg D. (1999) - Forty-one first semester master level nursing students from three Canadian universities participated in this descriptive correlational study to identify the influence of achievement motivation and anxiety on their academic success. Academic success was determined by their first semester grade point average (GPA). Participants had high achieving tendencies (M = 73.5) and academic ability (M= 81.9), supporting Atkinson's (1957, 1964) achievement motivation theory which was used as the framework. While state
anxiety was negatively correlated, trait anxiety was the only valid predictor of academic success. Academic ability and inherent anxiety had a greater potential for predicting students who would succeed, which has implications for nurse educators, administrators and researchers. However, the need to assess both cognitive and non-cognitive variables to determine master level nursing students' ability to succeed is recommended.

Deshmukh (2000) studied a sample of 832 class 12th students with the range from 16 to 20 years and compared high and low self-concept groups with anxiety, achievement motivation, intelligence, goal discrepancy and academic achievement. Results revealed that high and low self-concept groups of students differ significantly on anxiety, achievement motivation and intelligence. The groups however did not differ significantly on goal discrepancy and academic achievement.

Verkuyten, et al (2001) conducted studies in which Turkish and other adolescents in the Netherlands completed questionnaires that addressed the importance of collectivist cultural values for achievement motivation and educational outcomes. Compared with other minority group students and Dutch students, the Turkish students had stronger family-oriented achievement motivation. In addition, only among the Turks was ethnic identification positively related to family motivation. Furthermore, there were no differences in individual achievement motivation between the Turks and Dutch, and only among the former group was a combination of family motivation and individual motivation found. Also, for the Turks, family motivation was positively related to task-goal orientation, which mediated the relationship between family motivation and academic performance. Individual motivation was an independent predictor of performance. For the other ethnic minority groups and the Dutch, family motivation was not related to task-goal orientation and performance. In addition, for these groups, task-goal orientation mediated the relationship between individual achievement motivation and performance.

Barros et al (2003) examined the psychosocial correlates of academic achievement in a sample of 405 adolescents. The study found significant positive
correlations between internal locus of control and academic achievement, positive stimulation and internal locus of control, attention and external locus of control and self-monitoring was also found to be significantly positively related with locus of control.

Miriam Vock et al (2006) studied the role of need for cognition, achievement motivation, and conscientiousness on academic underachievement was investigated. Forty-seven male and 46 female students in Grades 7 to 10 participated in the study. Student attributes were assessed by self-report measures, school performance by academic grades, and intellectual abilities by a standardized structure of intelligence test. A regression analytic model (prediction of grade point average by general intelligence) was used to operationally define underachievement. A categorical cutoff definition as well as a continuous definition was investigated. All relationships between underachievement scores and need for cognition, achievement motivation scales, and conscientiousness showed linearity. This warranted the use of a continuous definition of underachievement. Results revealed that need for cognition as well as facilitating anxiety contributed the most to the explanation of underachievement.

G C Ilogu (2007) attempted to investigate the effect of achievement motivation on student cognitive activities. In the study, 200 SS II students were selected by stratified random sampling as participants. Achievement Motivation Scale, a 30-item multiple choice questions in chemistry (compiled from past General Certificate Education of Certificate Examination and Senior Secondary School Certificate Examination and a 25-item Attitude Scale for Chemistry were the instruments used to collect data. All the three instruments were validated through pilot study. Three Research Hypotheses were stated to guide the research. Pearson product Moment Correlation Statistics was used to analyze data. It was found that both the Achievement Motivation Scale scores, the attitude scale scores and student perception of the teaching method scores show significant correlation to student’s academic achievement in chemistry. Theories of Achievement Motivation and
behavior modification were used to explain the findings from the study. Based on the findings, recommendation was made.

**Critical Evaluation**

Empirical studies on academic achievement and need for achievement clearly showed that the relationship exist between achievement motivation and academic scores. There is a need, however, to explore how need achievement is related to academic success. We also found that people; having high need to achieve are overachievers and those having low need to achieve are underachievers. It is quite necessary to study factors that lead to high or low need to achieve.

**Studies related to over and Under-achievement.**

**Ridding (1966)** conducted a study to investigate certain personality measure with over and under-achievement in English and Arithmetic Cattell’s HSPQ form A & B and Evsenck MPI were employed to measure the intelligence. He revealed that there was not any significant difference between under-achievement and emotional stability as well as anxiety. Extroversion was found to be associated with overachievement while introversion with under achieving girls in arithmetic were found to be more extroverted than the under achieving boys. The over achieving in arithmetic were found to be more surgent than the under achiever. The over achieving girls in arithmetic were found to have more consignties than the under achieving girls.

**Srivastava (1967)** investigated the factors related to educational under-achievement. The 4 separate groups of under over high and low achievement with 150 pupils in each were formed out of a random sample of 1837 male pupils studying in class Xth & XIIth of 9 secondary schools and higher secondary schools of Patna district. On the basis of there score on verbal and no-verbal test of intelligence serving is predictor variable and average of the examination marks spread over 6 consecutive examinations serving as the criterion variable. Under-achievement was related to poor study habits, poor reading ability which included
poor reading speed, vocabulary and spelling, low academic motivation, poor health, poor social and emotional adjustments, problems concerning family and schools. Under-achievement was related to various backgrounds and personal factors by age, SES father's profession, size of family, number of sibling, birth order, reading, interest, failure in school examination and participation in sport and game. No significant relationship was found to exist between under-achievement intactness of parental stricture, hobbies, interest in games, sports, music and attitude toward schools.

Sinha (1967) employed a number of psychological tools to obtain data that revealed that two groups of over and underachievers differed significantly in intelligence and emotionality and while neuroticism was found to be positively related to academic achievement, manifest anxiety and extraversion were found to be positively related to academic achievement.

Aggarwal (1972) studied a sample of secondary school students and examined psychosocial profile of under achievers. He found that under achievers was emotionally mature, possessing poor ego strength than underachievers. On comparison of values, underachievers were found to have stronger educational, social humanistic values than over achievers. However, on the values of materialistic, personal and religious both the groups were found to be the same.

Sharma K.G. (1972) compared the study of adjustment of over and under achiever. The studied had been carried out in 2 phases, preliminary phase and final phase. The preliminary was based on a small sample of 98 subject of 1 institution while the main study was a on a large sample of 425 subject of several institutions. There were significant differences among the over achiever, average achiever and under achievers, with regard to their adjustment in the school, home, social, religious and other areas. The over achievers had better adjustments then the under achievers in all these areas of adjustments. Those who had more effective adjustments in schools, home, social, religious and other areas were over achiever and those having less effective adjustments in these areas were under achievers. Intelli-
gence was relative to adjustments in all these areas which implied that an adjust-
ment was at least partly dependent upon intelligence.

**Menon S.K. (1973)** compared the personality characteristic of over and under
achievers of high ability. The sample consisted of 1900 students. Over and under
achievers groups were selected through stratified random sampling. Over achieving
group of boys and girls of superior ability as well as general groups were found to
be less extravert and maladjusted while under achieving boys of the general groups
were found to be less sociable and masculine. Overachieving groups of boys and
girls of superior ability as well as general groups were found to show greater
academic interest and endurance, overachieving girls from general groups and
overachieving boys of both the groups were found to have greater general ambi-
tion, overachieving boys and girls from high ability as well as general groups
showed that their persistence was greater. Overachieving girls of the general
groups showed stronger interest than underachievers in aesthetic activity and less
interest in out door work, while high ability overachievers among boys had an
interest in mechanical activities. Overachieving and underachieving were found to
be influenced by socioeconomic and demographic characteristics.

**Kapoor and Malhotra (1973)** were employed as a measure of intelligence
and measure of personality characteristic respectively. Examination marks were
taken as academic achievement. The study revealed that the personality factors
going with over and under-achievement in Hindi, English, Math and Science
among male and female are significantly different and over and under-achievement
is specific phenomena with reference to different school subject.

**Abraham (1974)** who used intelligence and achievement in English as the
bases for classifying the sample into over, normal and under achiever empirically
found that the level was associated with attitude towards English, personal adjust-
ments, social adjustment and socioeconomic status. These studies also showed that
underachievement were more frequent in rural areas while overachiever was a
characteristic of urban schools.
Chaudhri et-al (1975) examined a sample of 3500 students to obtain bright underachievers, bright achievers and dull achievers. The study was aimed to find factors contributing to academic underachievement. The main findings obtained were that achiever’s study habits were different from underachievers’. Achievement motivation of bright achievers was higher than that of bright underachievers. Negative correlation was found between anxiety levels of achiever index. Achievers had high level of need for achievement, had low level of anxiety whereas dull achievers had low level of achievement and had high level of anxiety. Gender differences were found on the factors contributing to academic underachievement. Girls in comparison to boys had high need for achievement. Underachiever girls were found to have low level of achievement and high level of anxiety.

Kohli T.K. (1976) examined characteristics behavioral environmental correlates of academic achievement of different levels of intelligence. The study was conducted on a sample of 264 over achievers, 276 average achievers, 219 under achievers. Although spectrum of the non-intellectual behavior environmental factors was differently related to academic achievement of over and under achievers. Certain factors or factors combination or configuration were common to those groups which differed widely in achievement. These could be named as correlates of academic achievement.

Beedawat, S. S. (1976) studied the academic underachievement among students. Sample was selected randomly. Integrity of incidence of under-achievement was more or less uniform in the urban and rural areas. Incidents of underachievement were higher in science groups. Proportion of underachievers among girls was larger than among boys. Very few of the underachievers were found to be outgoing, warm hearted, easy going, 70% of students among underachiever possessed average emotional stability. About 40% of students were found to be possessing qualities like impulsively, lively and enthusiastic

Kumari (1981) conducted a study to identify the personality characteristic of over and under achieving boys and girls studying in scientific stream she employed Deva’s personality factor inventory as a measure of personality and examination
marks were employed as a measure of academic achievement. T-test was employed to test the difference in the personality characteristic of over and under achieving students. Finding of this study revealed over achieving boys are more shy self-conscious worried and sociable than the under achieving boys. The over achieving girls are more sociable, lively, impulsive and more confident than under achieving girls.

**Najmul Haq (1987)** carried out a study of certain Personality correlated of over and under-achievement in different school subject. A large sample of 437 students was taken from 8th and 9th class of AMU boys and girls high school. ‘Cattells Culture’ fair intelligence test and high school Personality questionnaire was used. It was found from this study that over achievers are more adjusted, more conscientious, and more enthusiastic in different school subject than under achievers.

**Smith and Walker (1988)** in a study of over 15000 students taking the ninth, this paper questions the gender and mathematics problem, and rejects the notion that a unique problem exists. It argues that there is no constant and universal pattern of under-achievement in mathematics by girls and women. It also claims that under-participation in post-compulsory mathematics studies and careers by women is a phenomenon restricted to some countries. It describes a model of ideologies of mathematics education in one area, the United Kingdom, and indicates how five different ideological groupings construct different readings of 'the problem'. Finally it pursues one of these ideological perspectives, that of the 'public educators', to show how distorted perceptions of the problem can create a 'regime of truth' which sustains a false cycle of inequality in the interrelated contexts of society and schooling concerning gender and mathematics.

**Wendy G. Mitchell et al (1991)** academic achievement was studied in 78 children with epilepsy, ages 5 to 13 years, to determine how seizures, treatment of seizures, and socio-cultural factors influence academic achievement. Cognitive abilities were assessed with either the McCarthy Scales of Children's Abilities or the Wechsler Intelligence Scale for Children-Revised. Achievement was measured
with the Peabody Individual Achievement Tests. Achievement scores were corrected for cognitive ability (IQ), and underachievement was defined as achievement score 1/2 standard deviation or more below IQ. Information regarding seizure history (severity, duration) and treatment with anticonvulsant drugs was obtained. In addition, the family was extensively interviewed regarding the child's environment, behavior, and demographic background. The Home Observation for Measurement of the Environment (HOME) scale was completed on a home visit. Underachievement was frequent, ranging from 16% (Reading Recognition) to 50% (General Knowledge), but there was no relationship between severity or duration of seizure disorder or total exposure to anticonvulsant medications and achievement. Major determinants of achievement included subscales of the HOME scale, age (older children more likely to be underachieving), and parental education. An equal proportion of newly diagnosed and/or untreated subjects were underachieving compared to those with longstanding epilepsy and anticonvulsant drug treatment. (J Child Neurol 1991; 6:65-72).

Gustafson, Cigrid. B (1994) studied the influence of parental contribution and long term consequences on the female under-achievement and overachievement. The sample consisted of 485 female of age 13, 16 & 26 from Sweden. Under achievers exhibits higher intelligence but lower achievement, self perceived ability and school adoption than did the over achievers. Parents of underachievers characterized them as incapable of unsuited to academic work while parent of over achievers and under achiever believed there daughter were capable of pursuing advance education in mid adolescent the over achievers related to theory parent more positively and felt more independent of them than did under achievers. In adult hood under achiever had significantly lower level of education and occupation then did over achiever and more under achiever then expected had two or more children when they were 26 year old. Parent values concerning education attainment laid a role inhabiting or promoting their daughters optimal adaptation both in and beyond the academic environment
Pujar et al (2000) conducted a study on 284 students studying in 8th and 9th standards in Dharwad to find out the influence of age and family on self-concept of high and low achieving students. The results revealed that the students advanced in age, their self-concept also increased among both high and low achievers. The type of family did not significantly influence the self-concept of both high and low achieving students.

Young M. Kim (2000) in his research he attempts to determine whether different status consistency and inconsistency types are systematically associated with whites' acceptance of individual and structural factors in explaining blacks' low socioeconomic status. Employing data from the General Social Surveys 1985-1994, I explore this question, separately for males and females, using logistic regression analysis. I find that, compared to status consistent individuals, status inconsistent overachievers are more likely to hold "individualist" explanations while status inconsistent underachievers are more likely to hold "structuralist" explanations. Additionally, although there is a faint suggestion that white females are a bit more sympathetic toward blacks' crippled status than white males; it nevertheless fails to surpass conventional levels of statistical significance. The overall absence of such effects, given the fact that white females have been the subject of sexism themselves, raises a question of UAL nature of "whiteness," i.e., white females as both oppressors and oppressed.

Vicki E Snider et al (2001) investigated the relationship between achievement and IQ in the Learning-Disabled (LD) population; changes in the IQ scores of LD students from the early elementary grades to the high school grades were studied. The inter-correlations among those IQ scores and a variety of achievement scores were then explored for the purpose of ascertaining causal relationships. The results were interpreted as support for the contention that the underachievement of LD students (in particular, reading underachievement) plays a predominant causal role in the achievement-IQ relationship in this population.

Paul H. White, et al (2001) studied underachievement on a task may occur for a variety of reasons. We hypothesized, based on earlier survey findings, that
individuals sometimes perform less than their best out of concern for the feelings of others and a desire to maintain relationships. In two experiments, performance by participants on an anagrams task was worse under conditions that promoted the social motivation to underachieve. In Experiment first participants solved fewer problems when an experimental confederate had failed and was present to observe the participants' performance. In Experiment second participants underachieved when a likable confederate failed, but did not underachieve when the unlikableness of the confederate or the average performance of the likable confederate diminished their social concerns. Implications for understanding the academic difficulties of ethnic minorities in academia are discussed.

Laura Grofer Klinger et al (2002) many children with Attention Deficit Hyperactivity Disorder (ADHD) achieve academically at a lower level than would be predicted given their intellectual abilities. However, the extent to which this is due to behavioral problems versus cognitive deficits associated with the disorder is unclear. In the present study, a group of children with ADHD (with average intellectual abilities) performed significantly below prediction in reading, writing, and mathematics skills and demonstrated a greater discrepancy between actual and predicted achievement than did a group of non-ADHD children. Even when controlling for performance on a measure of executive functioning, severity of ADHD symptoms, based on parent report, significantly predicted academic underachievement in reading, writing, and mathematics. These results indicate that the more severe the behavioral symptomatology of children with ADHD is, the more negatively impacted their school performance may be. Results are discussed in terms of diagnostic and intervention implications.

Albaili, Mohammad A (2003) investigated the differences between intellectually gifted achieving and underachieving secondary school students on certain motivational goal orientations such as effort, task, competition, power, praise, feedback, token, social concern, and social dependency. A total of 144 selected United Arab Emirates secondary school male students (15-19 years of age) participated in the investigation. Participants were classified into the following two
intellectually gifted groups: achieving students (n= 98) and underachieving students (n= 46). The Inventory of School Motivation was used as a measure of the motivational goal orientations. Multivariate analysis of variance results indicated significant differences between the two intellectually gifted groups on Effort, Task, Competition, Feedback, and Social Dependency scales. Further discriminant analysis revealed that Effort, Task, and Competition were the most discriminating variables that separate the intellectually gifted achieving students from their underachieving peers.

David A. Cole et al (2003) a total of 807 third and sixth graders completed questionnaires about their academic competence, feelings of depression, and symptoms of anxiety, every 6 months for 3 years. Teachers provided objective measures of academic competence. Compared to teachers' ratings, boys overestimated and girls underestimated their academic competence. Gender differences first emerged in fourth or fifth grade and increased through eighth grade. Symptoms of depression and anxiety were negatively associated with academic overestimation. Furthermore, controlling for depression and anxiety eliminated most of the gender differences in academic over- and underestimation. Finally, self-reported depression and anxiety predicted changes in the tendency to overestimate academic competence over time. Evidence of the reverse relation was much weaker.

Rebecca M. Wiegers Irene Hanson Frieze (2006) - Differences in ratings of initial expectancy of success, perceived scholastic ability, and causal attributions were assessed for male and female high school students for a simulated academic test. Subjects were also differentiated on their achievement level (i.e., under- and overachievement) and the traditionality of their career aspirations. As predicted, higher expectancies were found for high performance achievers and nontraditional females. Males generally made more attributions to lack of effort for failure, as did low performance achievers. Females and high performance achievers attributed success more to effort. Hypotheses concerning differential usage of luck and ability
attributions were not supported. Although there was an overall trend for females to be more external, traditionality also mediated causal attributions for females.

**Staudt, Beatel; Neubauer, Aljoscha (2006)** - The neural efficiency phenomenon (more efficient brain function in brighter as compared to less intelligent individuals) was investigated regarding differences in intelligence (average vs. above average intelligence) and scholastic achievement (achievers vs. underachievers). The cortical activation (assessed by event related de-synchronisation in the EEG) of 31 male adolescents was measured while performing a verbal and figural version of Posner's letter matching task and two creativity tasks. During the figural Posner task, average intelligent underachievers showed higher frontal activation than similarly intelligent achievers and brighter underachievers, whereas average intelligent achievers showed higher posterior activation. During one creativity task underachievers were frontally less activated than achievers. The results provide first evidence that different achievement levels are also reflected in different levels of cortical activation.

**Singh, Rajeshwar Prasad** examine the relationship between under and over academic achievement and motivational correlates, the sample consisted 700 regular students who passed their B.A. examination as regular student of college situated with in the jurisdiction of Avadh University and studying in MA classes of 3 college affiliated to the University. To factors were derived from correlation matrix of under achiever at 1st level. One factor was named the Motivational Factor; the second factor operative in this group was labeled as the “Self Debasing Factor”. Only one factor was extracted from OAs at 1st level this was called the Self Promoting Motivational Factor. One factor was obtained from UAs at U+1 level, this factor was recognized Aggression Assertion Factor. Two factors were found for OAs at U+1 level. One factor was called the Value Aspiration Factor. Motivation Organization of the two contrasting group were found to be of positive nature, the motivational Organization of UAs was found to be significantly less harmonious than that of OAs.
Critical Evaluation

Studies given above illustrate that under and overachievement leads to academic success or failure. We also found that students' achievement (over and under) also influenced by other factors like personality, social class and, academic adjustment, but underachievement phenomena is necessary to be highlighted in order to resolve the problem prevalent very much in students and try to study the relevant factors that help underachievers to perform better and how it relate to emotional intelligence.

Conclusion

The above studies showed that, there is a need to explore other factors that are also instrumental in influencing academic success. Future research should specifically addresses the emotional intelligence construct must involve improved measurement of this variable. Careful consideration of the research setting, the changing environment options and the model connected to each measurement option will be essential in future studies involving emotional intelligence. When the goal is a more applicable understanding of the variables that contribute to academic success of the students, research should give consideration to analyzing more specific related constructs that may or may not be directly subsumed under a normal model of emotional intelligence. Similar to current concerns involving the measurement of IQ in children and adolescents, the measurement of total emotional intelligence score may be impractical for those who work directly with students.