CHAPTER-II

REVIEW OF RELATED LITERATURE

Review of related research is a vital pre-requisite to actual planning and for the execution of any research work before embarking on making a fresh study. Information about the findings of various research studies get accumulated over a period of time in the form of books, encyclopedias, generals, abstracts, thesis and other form of records. When a new investigation is started, the investigator gets new ideas and directions from this huge mass of research findings. Realising the importance of review Best (2008) says, "A familiarity with the literature in any problem area helps the students to discover what is already known and what is still unknown and untested".

Survey of related literature helps in avoiding duplication, guides in carrying out the investigation successfully and makes the researcher familiar with the steps involved in it. It enables him to know the means of getting to the frontiers in the field of his research. Unless one has learnt what others have done and what still remains to be done, one can not develop a research project. It will contribute something to the knowledge existing in this field. It provides ideas, theories, explanations or useful hypotheses available for formulating problem and valuable suggestions for significant investigation like methods, tried techniques and comparative data useful in the interpretation of results. It stimulates and encourages the investigator to go deep into various aspects of the problem. It is the basis of most of the research projects in basic and social sciences. It forms the foundation upon which all future work will be build.

Billey (1971) held that in the inception of any kind of research, it is essential that the researcher surveys the literature for research studies and authoritative writings related to the problems under investigation. Infact, the
A researcher, who undertakes a research project without systematically reviewing other studies and writings related to the problem is not only derelict in his personality as a researcher, but also endangers the successful completion and evaluation of his research. Identification of a problem, development of a research design and determination of size and scope of a problem, all depends upon to a great extent on the care and intensity with which a researcher has examined the literature related to the intended research.

In this chapter an effort has been made to present the relevant studies which appear to have direct bearing on the present investigation. The variables involved in this study are, general mental ability, anxiety, emotional maturity and social maturity. The theoretical view points of the variables under consideration are presented in details so as to get the complete understanding of these variables and the rationale of the relationship of these variables with the academic achievement. Thus, this chapter is split into four sections on the basis of the review of the studies showing:

**Section-1:** Relationship of General mental ability with Academic achievement.

**Section-2:** Relationship of Anxiety with Academic achievement.

**Section-3:** Relationship of Emotional maturity with Academic achievement.

**Section-4:** Relationship of Social maturity with Academic achievement. This chapter also includes those studies which show the gender and locale-wise differences on the basis of General mental ability, Anxiety, Emotional maturity, Social maturity and Academic achievement.

### 2.1 GENERAL MENTAL ABILITY AND ACADEMIC ACHIEVEMENT

**Mohan, Rajinder & Amarjit (1975)** in their study on high school science achievement as a function of personality and intelligence reported that intelligence as measured by progressive matrix scale was positively related to their total educational attainment. Same results were supported by the studies conducted by **Kumari (1979), Basu (1982), Maqsud (1983), Defrain (1983), Rajput (1984), Kaur (1983), Kaile (1985), Okafor (1989), Chadha and**

Chaudhary (1971), Petechand (1972), Dhaliwal and Prakash (1972), Mohan (1972), Gupta (1976) concluded that academic achievement and intelligence were not related significantly and positively to each other. While Joshi and Bajwa (1975) found no significant correlation between intelligence and achievement in Physics, Chemistry and Mathematics and Sibia (1989) in a study of the degree of prediction of achievement by field dependence, test anxiety and intelligence found no relationship between intelligence and achievement in mathematics for females. Brighum (1994) studied the effect of mobility, intelligence and interaction of two variables of sixth grader’s achievement test scores in the area of mathematics and reading languages and found no significant relationship of intelligence with achievement in any of the areas. Russomano (2000) investigated to determine if participation in the social decision-making and problem solving programme would promote the acquisition of pro-social skill and if there was a relationship between student academic achievement levels and the ability to develop pro-social abilities (intelligence)
for students with and without disabilities. The sample (N= 51) was comprised of middle class students. Results indicate that there was little or no relationship found between IQ and pro-social ability over a 4-month period.

Lawrence (1979) attempted to test the theory of fluid and crystallized intelligence through the prediction of achievement. As expected, crystallized intelligence significantly correlated with fluid intelligence ($r=.52$) and with course test performance ($r=.27$). Even where the fluid intelligence was partialled out. Crystalized intelligence still correlated with achievement ($r=.21$).

Gakhar (1986) in his study came to the conclusion that intelligence and achievement in mathematics free from creativity, remain significantly correlated.

Kohli (1988) conducted a study on 1000 higher secondary students of class XI and class XII of Jammu State. He revealed that students who were from high intelligence group possessed high scores as compared to those of low intelligence group. Batra (1992) revealed that students belonging to high intelligence group developed better conjuncture concepts than that of students falling in low intelligence group. Mehar (1992), Chopra (1994) and Kumari (1994) in their independent studies found that mean achievement score of high intelligence group was higher than that of the low intelligence group in Geography. Sawhney (1993) conducted a study on a sample of 300 class IX students and found that high intelligent students scored significantly high scores than the low intelligent group.

Kashyap (1989) conducted a study on problems and assessed the degree of anxiety, frustration, security-insecurity, emotional maturity, intelligence and scholastic achievement of rural, urban, boys and girls studying in class XI and XII. The study was conducted on a sample of 1000 adolescent students studying in different institutions of Aligarh district and found that adolescent problems were highly and positively related to anxiety, frustration, feeling of insecurity and emotional immaturity. Adolescent problems were highly and negatively correlated with feeling of security and emotional maturity, moderately and
negatively correlated with intelligence and scholastic achievement. No significant difference in adolescent boys and girls was found in case of youth problems, frustration and emotional maturity but difference was found in anxiety, intelligence and scholastic achievement.

**Kaile and Sharma (1990)** in their study on verbal and non-verbal intelligence as predictors of achievement in mathematics concluded the following results: i) Verbal and non-verbal intelligence are significantly and positively correlated with achievement in mathematics and ii) The prediction of achievement in mathematics on the basis of conjoint effect of verbal and non-verbal intelligence is significantly greater than the prediction on the basis of either verbal or non-verbal intelligence.

**Shan (1990)** found no significant difference in the academic achievement of pupils of standard X. **Thilagavathi,T.(1990)** studied the relationship between academic achievement and intelligence, creativity and anxiety of higher secondary boys and girls, and concluded that the high, average and low achievers differ significantly among themselves in their intelligence.

**Schieke and Fagan (1994)** conducted a study on self-concept and intelligence as predictors of academic achievement among grade IV, VI and VIII students. Results from regression analysis suggested that intelligence account for the maximum variance in achievement.

**Kaur, Parminder and Bajwa (1995)** conducted a study on intelligence (verbal and non-verbal) as a correlate of academic achievement of grade X boys and girls. They found that verbal intelligence had positive and significant relationship with Hindi, Punjabi and English while non-verbal intelligence had positive and significant relationship with science, mathematics and social studies.

**Ranhotra (1996)** in his study on career decision making and its relationship with career maturity, intelligence, self-concept, family environment and academic achievement at +2 stage found that girls are more intelligent than boys.
**Simpson (1999)** studied to describe the relationship between academic achievement and intelligence, creativity, motivation and gender role identity of gifted children. The results of the study revealed that intelligence was a significant predictor of achievement in mathematics and reading.

**Dhunna (2000)** conducted a study on sample of 550 tenth class students and found that intelligence affect significantly on achievement in algebraic concept.

**Stevens (2000)** studied a longitudinal analysis of an educational intervention that was predicted on a reading of Piagets theory consistent with the dynamic systems paradigm. Statistically significant higher academic achievement and IQ scores were associated with this educational intervention. These higher scores appeared to indicate better performance in mathematics and non-verbal types of abilities, although almost all outcomes areas were associated with higher relative scores.

**Babo (2001)** studied on a sample of 178 eighth grade middle school students (93 students enrolled in instrumental music and 85 students in non-instrumental music programme) during the 1998-99 academic year. The research design analysed testing data from the California Achievement Test and New Jersey Grade Eight Proficiency Assessment. The result determined that intelligence quotient (I.Q.) and socio-economic status had the greatest impact on academic achievement.

**Kaur,J. (2002)** in her study found significant difference between boys and girls and results are in favour of girls on both intelligence and academic achievement.

**Devi Sarita and Mayuri (2003)** studied the affect of family and school factors on the academic achievement of residential school children of classes’ IX and X and found that girls were academically superior to boys.

**Devi (2003)** has reported positive and significant relationship of intelligence with mathematics and language achievement of secondary school
students. She also found that though there was no significant gender difference in intelligence, Boys had higher mean score in mathematics than girls whereas girls were better achievers in language.

Ahmad and Raheem (2003) investigated the relationship of the criterion variable academic achievement with the three predictor variables intelligence, social economic status and adjustment of adolescents. It is found that intelligence is the most important factor that contributes in the field of academic achievement. But the contribution of socio-economic status and adjustment can be neglected.

Ajawani and Rungta (2004) in their study discussed intelligence as the variance of achievement. Result revealed that intelligence is not a variance in under/over achievement. The findings suggest that search for other variables than the intelligence as the cause of under/over achievement.

Gakhar and Aseema (2004) assessed the influence of self-concept, stress, locality and gender on the academic achievement and reasoning ability on a sample of 769 male and female adolescents by employing 3x2x2 factorial design and revealed that rural adolescents had greater academic achievement than urban ones and interaction also existed between sex and area.

Bidlan (2004) studied gender differences in self-esteem, global attribution, extraversion, neuroticism, intelligence and achievement. It also studied the role of attribution style, personality, intelligence and academic achievement in predicting self-esteem of school students (N=300). He found boys and girls differed significantly on self-esteem, global attribution, extraversion, neuroticism, intelligence and academic achievement.

Begum and Phukan (2005) undertook the study in English medium schools at Jorhal district of Assam following the syllabus of C.B.S.E., New Delhi. The sample was consisted of 180 students of class IX, out of which 118 were males and 62 were females. Significant positive correlation (r= .70) was observed between academic achievement and intelligence of the students.
Significant differences were observed between the students of high and the low academic achievers in respect to their intelligence scores obtained in the intelligence test.

**Rani Mohanraj et. al. (2005)** reported that boys and girls did not differ significantly in their academic achievement. **Singh, B. (2006)** in his study on fine arts students revealed that significant differences exist between boys and girls in their achievement in fine arts as the t-ratio was found to be significant at .05 level. Girls scored higher as compared to boys in the subject of fine arts.

**Rajendran, S. et. al. (2007)** in their study concluded that locality (Rural/urban) of students has no influence on the chemistry achievement scores of students at college level.

**Swarna Latha, G. (2008) and Janaki (2008)** in their respective studies found no significant difference in the academic achievement of boys and girls.

From the above studies it is clear that there exists a positive and significant correlation between intelligence and achievement in a single subject or combination of subjects. However, there are a few studies which fail to show any significant relationship between these two variables. Significant as well as non-significant gender and locale-wise differences are also shown on these variables.

So, the extent and nature of relationship between intelligence and academic achievement were better understood by further establishing its relationship in Indian conditions.

### 2.2 ANXIETY AND ACADEMIC ACHIEVEMENT

**Sarason (1963)** suggested that there was a more significant negative correlation between test anxiety and achievement than between general anxiety and achievement. Negative correlation was stronger for females than males.

**Lunneborg (1964)** also found a negative correlation between anxiety and achievement measures. Further the negative correlation tended to be larger for boys than for girls. Similar results have been reported for elementary school


Frost (1968) studied the relationship between anxiety and achievement and concluded that in boys, there was significant co-relation between anxiety and achievement but in girls, the co-relation was non-significant.

Sharma (1970) investigated the nature of relationship between general anxiety and school achievement of Indian adolescents. The coefficients of correlation for the whole group and for boys were significant at .01 level while the coefficient for the girls was significant at .05 level. The conclusion was that the relationship between the two variables is curvilinear and this relationship holds for both males and females.

Prell (1973) studied influence of anxiety on three measures of examination, term papers, essay type and multiple choice tests. The correlation between the debilitating anxiety score and total achievement was significant for the whole group. The total scores based on all three measures were most strongly correlated with achievement in the multiple choice test, less strongly with term achievement. Anxiety especially in females was reported to have significantly lower for essay type tests.

Shanmugasundaram, R. (1983), Singh, B.K. (1984), Shikari, A.G. (1986) quoted in their respective studies that rural students were found to have a
higher level of anxiety than the urban students whereas the results of bi-variant study of Singh (1985) on sex and area of residence showed that urban boys and rural girls were significantly more anxious than the urban girls and rural boys respectively.

Yadav, P.L. (1989) reported that rural students who did better in high school examination experienced greater anxiety than urban students, whereas urban failures have shown more frustration scores. Highly successful rural children felt more anxious than urban ones.

Khanna, Anuradha (1999) reported a negative and significant relationship between academic achievement and anxiety. She also found no significant differences between boys and girls on the basis of their mean anxiety and intelligence scores.

Venkatesha Murthy, C.G. and Renu Kulshreshtha (1999) have attempted to study the influence of academic anxiety on academic achievement of students studying in two management systems on a sample of 199 class IX students comprising boys and girls. The sample was drawn randomly. The academic results showed that 1. Academic anxiety was found correlated negatively and significantly with academic achievement. 2. Students belonging to different levels of academic anxiety differed significantly on their academic achievement. 3. Boys and girls belonging to government and private schools differed significantly on their academic achievement. 4. The boys and girls irrespective of their management schools did not differ significantly.

Ellakka Kumar, B. and Elanka Thirselvan (2000) investigate test anxiety and academic achievement of students in Physics. Sample of this study comprise 530 higher secondary students studying Physics. Sharma's test anxiety scale was used in this study. The results revealed that 1. The test anxiety was higher for the girls than that of boys. 2. The mean scores of achievement in Physics was higher for the girls than that of boys, the students of A groups was
higher than that of the students of B group, the students studying in English medium was higher than that of the students in Tamil medium. 3. The relationship between the test anxiety and achievement marks in Physics in respect of all the sub samples are not significant.

Murthy, Krishna (2000) attempted to find out the nature of relationship existing between test anxiety and achievement in history and if there is any significant difference between any two categories of students taken at a time in respect of test anxiety and achievement in history. The test anxiety scale constructed and standardized by Sharma (1978) was used. The sample consists of 455, XII standard students of Pondichery by cluster sampling technique in Karikkal region. Among them 222 are urban and 233 are rural and 176 are boys and 279 are girls. Results indicate that there is a negative relationship between test anxiety and achievements in history. Further, there is no significant difference between any two pairs of sub samples taken at a time in respect of test anxiety and achievement in history.


Kumar, C.V.V.R.S. Phani (2003) reported that there is no significant difference in anxiety and fear level of boys and girls as well as urban and rural junior college students.

Barnes (2005) predicted that high trait anxiety males would show the greatest decrease in performance in all the three evaluative conditions assigned to the subjects. It was also predicted that males would achieve significantly lower scores than females and females would show a higher level of state anxiety in the
anxiety inhibits performance condition and anxiety no instructions condition when compared with males.

**Lourea-Waddell, Brittany (2007)** in a study suggested that an anxiety disorder children exhibited poorer academic performance relative to non-anxious community control children and also treatment responders did not perform better on the achievement test at the post-treatment assessment compared to treatment non-responders.

**Pantel (2008)** in his study to examine the role and function of anxiety, self-efficacy and resource management strategies on academic achievement in students found no significant differences for males and females on anxiety, self-efficacy and academic achievement.

**Kahan (2009)** in a study showed that test anxiety did not correlate to final exam scores whereas **Sultania, M.K. et.al. (2009)** in their study of anxiety, hostility and depression among college students found that females were significantly higher on these variables than male counterparts.

**Larmore (2010)** in his study on ‘General anxiety and academic indicators as predictors of test anxiety in adolescents’ found no significant gender differences on the basis of general anxiety and achievement scores.

From the above studies it is clear that there exists a negative and significant correlation between the two variables i.e. anxiety and academic achievement. However, there are a few studies which fail to show any significant relationship between these two variables and there are some others which showed even a positive correlation between the two. Linear as well as curvilinear relationship is gauged between anxiety and achievement on different subjects. A few studies also showed significant relationship between anxiety and intelligence as well as significant differences between boys and girls on the basis of their anxiety and academic achievement.
The above review of researches were conducted to relate anxiety with academic achievement, though does not provide a clear and conclusive picture. But it helps to guide a future plan with a deeper insight.

2.3 EMOTIONAL MATURITY AND ACADEMIC ACHIEVEMENT

Dhami (1974) investigated the intelligence, emotional maturity and socio-economic status as factors indicative of success in scholastic achievement of IX and X class students of age group 14+ and 15+ of different categories of students of Punjab and reported a high significant relationship between emotional maturity, intelligence and scholastic achievement of high schools students. The study also reported parent’s education, type of house in which family lives, family income and type of reading material has a positive effect on the emotional maturity of the children.

Arya (1984) conducted a study to measure the relationship between intelligence and emotional maturity of boys and girls separately. The major findings were that superior girls and boys did well on the emotional maturity tests. Intelligence showed high relationship with emotional maturity.

Kaur, S. (1984) in her study entitled, "The effect of intelligence and emotional level on students” concluded that there is a significant difference among science and arts students with respect to emotional maturity.

Sabapathy (1986) examined the relationship between the variables anxiety, emotional-social maturity, socio-economic status and academic achievement of students. He found emotional maturity was positively and significantly related to achievement in individual subjects and total academic achievement.

Anshu (1988) found that family climate is an effective determinant of home adjustment, school adjustment and emotional maturity of the students.

It was found by Singh and Broota (1992) that girls were more test anxious, worrisome and emotional than boys.
Chaudhary et.al. (1993) compared the emotional maturity of adolescents studying at home and at orphanages. Adolescents staying at home with parents were found to have high level of emotional maturity as compared to their counterparts at orphanages.

Sharma and Singh (1997) indicated that male and female undergraduates of urban areas scored higher than their counterparts from rural areas in all areas on emotional maturity scale viz. emotional stress, emotional depression, social distance, personality disorder and lack of ascendancy.

Harleen (1998) conducted a comparative study on the emotional maturity of rural and urban adolescents. The analysis of the data revealed that most of the rural and urban respondents were found to be moderately mature. No significant difference was found in emotional maturity of rural and urban adolescents. Significant sex differences were found in emotional maturity. Males were found to score higher in their level of emotional maturity.

Anju (2000) found that there exists a positive and significant relationship between emotional maturity and intelligence of students which implies that more intelligent the person is, more emotionally mature he is. The relationship between emotional maturity and intelligence of girls came out to be non-significant.

Kaur, J. (2000) found significant relationship between emotional maturity and school, home and psychological environment. However, no significant relationship was found between emotional maturity and physical environment. Girls and rural students were found to be more emotionally mature than boys and urban students.

Kaur, M. (2001) conducted study on ‘Emotional maturity of adolescents in relation to intelligence, academic achievement and environmental catalysts’ on a sample of 356 adolescents. The findings revealed; (a) Emotional maturity and intelligence were found to be closely related (b) No significant relationship was found between emotional maturity and academic achievement; (c) No significant
difference was found in emotional maturity due to area, sex and type of school; 
(d) Students of government schools were found to be more emotionally mature 
than those of private schools.

**Kaur, D. (2001)** found significant relationship between emotional 
maturity and parental encouragement. The relationship between various factors 
of emotional maturity i.e. emotional unstability, emotional regression, lack of 
independence and parental encouragement was found to be significant and negative in adolescents. Boys and girls did not differ in their emotional maturity.

**Mahajan (2001)** studied the emotional maturity of high school students of 
Jammu city and found no significant difference in emotional maturity of male 
and female students. **Slathia (2002)** also obtained similar results.

**Muley Patnam and Vasekar (2003)** studied the emotional maturity of school going children of slum and urban areas and the influencing factors. The slum children differ in their emotional maturity from the urban children, which 
was tested in this study. The sample consists of 120 children, of which 60 were 
from slum and 60 from urban areas. Significant positive relationship was found 
between urban children's emotional maturity and their academic performance, 
chronological age, ordinal position abilities, size and type of family, parenting, 
general mental ability number of friends as well as their parental age, education 
and employment while no significant correlation was found between slum 
children’s emotional maturity and their background variables.

**Katyal (2003)** conducted a study on self-confidence as related to 
emotional maturity and concluded that there exists no significant gender 
difference in self confidence and emotional maturity.

secondary students in relation to intelligence and family climate’ obtained 
following results; i) Students studying in government and private schools 
differed significantly in different components of emotional maturity; ii) No 
significant difference was found in the emotional maturity of males and females.
She found negative and significant correlation between intelligence and emotional maturity.

**Valluri Indira (2003)** in her study on effect of parent–child relationship on emotional maturity of senior secondary students reported these findings; i) Gender differences do exist in emotional maturity of students; ii) There is significant effect of ‘protecting and loving’ behaviour of both father and mother on emotional maturity of adolescents.

**Chouhan and Bhatnager (2003)** studied i) The effect of stages of adolescence on emotional maturity and emotional expressions ii) To measure the effect of gender on emotional maturity and emotional expressions iii) To measure the emotional quotient of the stages of adolescence and type of gender. The study was based on a sample of 120 male and female adolescents. The major findings were; i) Post-adolescent males have higher emotional maturity than females and the stages of adolescence play a significant role upon emotional maturity ii) Females have higher skills for emotional expression than their male counterparts iii) Female have a higher degree of emotional quotient than their male counterparts iv) Post-adolescents have greater skill for emotional expression than the pre-adolescents.

**Kaur, H. (2004)** in her study found non-significant correlation between emotional maturity and self-confidence of adolescents. No significant difference was found in emotional maturity of boys and girls. However, study reported significant differences in the emotional maturity of adolescents of rural and urban areas.

**Lekhi (2005)** in her study on a sample of 939 (male and female) from govt. and private schools of Punjab, found that there is no significant difference in the emotional maturity and emotional intelligence of boys and girls as t-ratio is found to be non-significant. However, on comparing their mean scores, it is observed that boys scored little low (hence more emotionally mature) as compared to girls. But significant differences were found between rural and
urban adolescents in their emotional maturity. She also concluded that emotional maturity correlated negative and significantly with intelligence and academic achievement.

**Hangel Suneetha et.al. (2007)** observed that children of employed mothers have high emotional maturity than the children of unemployed mothers and female children of employed mothers are highly achievement oriented.

From the above studies it is clear that there exists a positive and significant correlation between Emotional maturity and Academic achievement. However, there are a few studies which fail to show any significant relationship between these two variables and there are some others which showed even a negative correlation between the two. A few studies also showed significant relationship between emotional maturity and intelligence as well as significant differences between boys and girls on the basis of their emotional maturity and academic achievement. There is a dire need to explore it further so as to draw some new and meaningful inferences.

### 2.4 SOCIAL MATURITY AND ACADEMIC ACHIEVEMENT

**Rao (1978)** tested the following hypotheses 1) There is no relationship between sex and social maturity of children 2) Between social class and social maturity of children 3) between original position in the family and social maturity of children 4) between social maturity and intelligence. A total of 1020 students from grade VIII, IX and X distributed equally over grades and sexes selected from fifty secondary schools of Bangalore city on stratified random basis formed the sample for the study. Major findings were 1) There was significant positive relationship between social maturity and intelligence 2) Social maturity showed a positive and significant relationship with self-esteem 3) The first borns were lower in social maturity than the latter born children 4) Girls generally scored higher than boys on social maturity 5) There were class differences in social maturity among the children in lower grades 6) The
children from private schools scored more on social maturity than the children from government/corporate schools.

Sabapathy (1986) examined the relationship among the variables-anxiety, social maturity, socio-economic status and academic achievement of students. He found that social maturity was positively and significantly related to achievement in individual subjects and total academic achievement.

Asthana (1989) studied the association of intelligence, socio-economic status, academic achievement, adult dependence and sex of the child with social maturity and found that intelligence, academic achievement and socio-economic status were significantly associated with the social maturity of children although adult dependence had a negative association.

Sarojamma (1990) studied the reading abilities of under, normal and over achiever students based on sex, type of schools and social maturity. The study was conducted on a sample of 1000 standard VII students proportionately representing to categories like sex, government and private schools. The multiple correlation, analysis of variance and t-test were used for testing the hypotheses and found that there was significant difference in the reading ability of normal and under achiever. Girls were found to be more socially mature than boys whereas students studying in private schools were more socially mature than those studying in government schools.

Dishion (1990) conducted a study on school going children of 8-12 years of age and revealed that children who are accepted by their peers or display prosaically and responsible behaviour at school, tend to be high achievers whereas socially rejected and aggressive children appear to be especially at risk for academic failure.

Mulia (1991) conducted a study on higher secondary students. The objectives were to study the stream effect on social maturity, to study the sex effect on social maturity and to study the interaction effect among independent variables on social maturity. He concluded that there was no significant
difference in social maturity among students of the three streams (Arts, commerce and science) and between the sexes (Boys and girls). No interaction effect of streams and sex was found significant on social maturity.

**Diwan (1998)** conducted a study with the objective to find the effect of socio-economic status on the social maturity of higher secondary students. Investigator prepared a 2x2x2 factorial design to study the main effects and interaction of the three independent variables namely, socio-economic status, sex and area. Each variable was divided into two levels. The major conclusions were; i) the students belonging to urban area and rural area are found equal on the scores of social maturity; ii) the students of both sexes are just the same on social maturity scores.

**Gir, Jain and Lodha (2006)** conducted a study- social maturity and locus of control of high achievers and low achievers ‘a comparative study’-on a sample of 160 boys and 160 girls between the age range of 9-10 years and 11-12 years. 40 boys and 40 girls were selected out of which 20 were high achievers and 20 were low achievers. They concluded that there is no significant difference between the social environment as far as the social maturity and locus of control is concerned. Social competence was found independent of academic standing and gender. The socializing agents especially the parents, peer groups and community at large seem to hold an influential hold to decide the important dimension of social maturity in the personality of children.

**Chand (2007)** in his study aimed at studying the social maturity of students in relation to their sex and locality. The study was conducted on a sample of 140 students and 2x2 factorial design involving two levels of sex i.e. male and female and two levels of locality i.e. rural and urban, was made on the scores obtained by students on these different areas. The findings of the study indicate that there is no significant difference between the male and female, rural and urban students on the personal adequacy and inter-personal adequacy. The male and female students differ on the component of social adequacy. The
female students are socially mature in having a feeling of oneness with others, willingness to modify or relinquish personal goals in the interest of social goals, willingness to interact with individuals and groups, willingness to accept changes in social sittings and to adapt to the demands of these changes as compared to male students. There were no significant interaction effects of sex and locality, on personal adequacy, inter-personal adequacy, social adequacy and total social maturity.

**Aggarwal (2007)** In her study on social maturity of adolescents in relation to cognitive and non-cognitive variables reported significant relationship between social maturity and intelligence and no relationship between social maturity and academic achievement. She also found no significant gender differences on the basis of social maturity.

**Rani Swarupa and C.R. Prabha (2008)** in their study conducted on a sample of 180 adolescents comprised of equal number of boys and girls found that majority of the girls were more socially mature than boys.

**Kalyandevi, T. and C. Prathima (2008)** conducted a study over a sample of 240 adolescents studying 8th, 9th and 10th standards. The results reported no grade and gender differences in the social maturity of adolescents.

**Ramalingam, P. and P. Mani (2009)** studied the social maturity of 404 students and found that there is a significant difference between in the social maturity of boys and girls.

From the above studies it is clear that there exists a positive and significant correlation between social maturity and academic achievement. A few studies also showed significant relationship between social maturity and intelligence as well as significant differences between boys and girls, rural and urban students on the basis of their social maturity and academic achievement.

Guidelines for framing the hypotheses on the basis of inferences drawn after the review of related studies are summed up as under:
1. Most of the studies showed that there existed a significant positive relationship between intelligence and academic achievement but a few studies also depicted no significant relationship between these two variables. Relationship between intelligence and achievement in English, Biology, Mathematics etc. was also found to be significant.

2. Studies also suggested that intelligence among other cognitive variables accounted for the maximum in academic achievement of the students.

3. Many studies also showed significant whereas a few depicted non-significant gender and regional differences on the basis of their mean intelligence and achievement scores.

4. Various studies showed a significant negative relationship between anxiety and academic achievement, and between anxiety and intelligence. The relationship was stronger between test-anxiety and achievement than between general anxiety and achievement. Moreover, it was stronger for girls as compared to boys.

5. Girls were found to be more anxious than boys. A few studies also showed significant difference between rural and urban students.

6. The relationship between anxiety and achievement was curvilinear. High anxiety was theorized as having bad effect when complex tasks were performed whereas a certain level of anxiety assists in various performances.

7. Most of the studies showed a significant negative relationship between emotional maturity and academic achievement, and between emotional maturity and intelligence Whereas a few studies showed non-significant relationship between the above mentioned variables.

8. Some studies depicted that between boys and girls, girls were superior to boys in perceiving, integrating, understanding and managing emotions. Between rural and urban students, rural were found to be more
emotionally mature otherwise in many of the studies no gender and locale-wise differences were presented.

9. Parent’s education, type of house in which family lives, family income, peers, socio-economic status, protecting and loving behaviour and type of reading material had a positive effect on the emotional maturity of the children.

10. All the studies showed significant positive relationship between social maturity and academic achievement, and between social maturity and intelligence. But none of the studies showed negative relationship between these variables.

11. A few studies have also showed that girls generally scored higher on social maturity as compared to boys but in most of the studies rural and urban boys and girls scored equally on the different aspects of social maturity as well as social maturity as a whole.

Although there have been a number of studies showing independently the relationship between intelligence and academic achievement, anxiety and academic achievement, emotional maturity and academic achievement, social maturity and academic achievement and also depicting gender and regional differences with respect to almost all the above mentioned variables. But none of them seems to have been undertaken so far to explore the gender and local-wise differences relating to anxiety, emotional maturity and social maturity with actualization of general mental ability of high school students collectively.

2.5 HYPOTHESES OF THE STUDY

In the light of above literature discussed, following hypotheses were framed for the purpose of present study:

1. There exists no significant relationship between academic achievement and general mental ability of high school students.

2. There exists no significant relationship between academic achievement and anxiety of high school students.
3. There exists no significant relationship between academic achievement and emotional maturity of high school students.

4. There exists no significant relationship between academic achievement and social maturity of high school students.

5. There exists no significant relationship among general mental ability, anxiety, emotional maturity and social maturity of high school students.

6. There is no difference between rural and urban, boys and girls in relation to following variables:
   (a) General mental ability
   (b) Anxiety
   (c) Emotional and Social maturity
   (d) Academic achievement

7. No Significant differences exist among actualizers, par-actualizers and non-actualizers on the basis of their anxiety, emotional maturity and social maturity.

   The method and procedure employed in this study including design of the study, sampling techniques, description of tools, data collection procedure, scoring and statistical techniques used for the analysis of the data are given in the next chapter.