CHAPTER 3
CHAPTER – III

REVIEW OF RELATED LITERATURE AND HYPOTHESES

A review of related literature is an important pre-requisite to actual planning and the execution of any research work. Best (1962) says, “…… a familiarity with the literature in any problem area helps the students to discover what is already known, what others have attempted to find out, what methods have been promising and what problems remained to be solved”. To make our research effective, adequate familiarity with all the works done upto the time in that field is very essential. The real purpose of the review of the related research is the fitness of a particular project into a broader scheme enabling one to see its importance and to relate it to many studies. The review of related literature helps the investigator:

1. To define the limits of his field. It helps the researcher to delimit and define his problem.
2. To avoid unfruitful and useless problem areas.
3. To avoid unintentional duplication of well established findings.
4. To know about the tools and instruments which proved to be useful and promising in the previous research.

5. To know about the recommendations of previous researchers for further research.

6. In speculating useful hypotheses and provides helpful suggestions for significant investigation.

7. To make aware of the status of the problem.

8. To formulate an appropriate research design.

9. To locate the sources of data and to collect the pertinent data useful in the interpretation of results.

The review of related literature involves locating, reacting and evaluating of research as well as the reports of casual observations and the opinions that are related to the individual’s planned research project. The general purpose of the review is to help the research worker to develop a thorough understanding and insight into work already done in the area left untouched or unexplained. Survey of related studies avoids the risk of duplication, provided theories, explanations or hypothesis valuable in formulating the problem and contributes to the general scholarship of the investigator.

To review the literature, for conducting research, is must for every research worker, so as to build the background for the project in hand. A review helps to familiarize the researcher with the work that has been done in the area of interest, and so helps to provide
useful information in planning the study. The literature reviewed is not confined to India only, as stress disorders are common all over the world. Consequently, available research studies which are directly or indirectly related have been reported in proceeding pages.

3.1 EFFECT OF STRESS IN GENERAL

In the 1960’s and 1970’s, there was great interest in exploring and quantifying the relative degree of stress caused by various life changes. Holmes and Rahe (1967) did pioneer research in this area. They asked 394 people from different demographic groups (groups varied by gender, age, marital status, ethnic group membership and other variables) to assess the stressfulness of various changes. They also studied the effects of potentially disturbing situations, which they called major life events. They reasoned that if we faced a large number of major life events, we would have to make major adjustments and in turn, feel increasing levels of stress.

LIFE STYLE AND STRESS

According to Gulthrie (1979) the changing life style of an adolescent has marked effect on his food habits. As he becomes more independent and mobile he eats fewer meals at home and more meals outside the home, with his peers. He learns new food preferences and discards old food habits. He is exposed to periodic food fads, slimming phobias, commercials, advertisements, etc. He skips meals and develops irregular eating habits. Poor food habits
during this stage of life can result in adverse consequences that can be further aggravated by physical stress and emotional problems (Khan et. al., 1982).

Schorr et. Al., (1972) studied some of the factors which affect teenage food habits, including food preferences, nutritive intakes and the relations between food consumption particles and several lifestyle characteristics in 118 adolescents in the USA. Diet complexity was related to neither age, sex nor family size nor interestingly enough to the number of available nutrition information channels.

Mass media is another powerful instrument which influences food habits as viewed by Flock (1976). Many individuals can not resist the glowing descriptions of food on TV, radio, newspapers, etc. and their habits go on changing.

Marian (1977) has pointed that there are many factors, both individual and environmental, which determine when, what and how much we eat. Probably the least influential of these is the nutritive value of the food consumed. The foods an individual chooses, as well as the manner in which they are obtained, prepared, served and eaten are directed by physiological, social, psychological and cultural factors.

Clendennen et.al., (1994) demonstrated that when subjects ate with friends they ate more than when paired with stranger
or alone. Castro (1994) found that females eat significantly more (13\%) when eating with another female, while males eat the same amount regardless of the gender of their companion.

Breakfast intake can influence cognitive behaviour in adults as well as in younger individuals. Benton and Sargent (1998) reported that university students who do not eat breakfast did more poorly in memory tests than students who consumed a morning meal. In comparison, Smith et. al., (1992, 1994) using a similar population, found that eating breakfast impaired performance on free call and recognition memory tasks, but did not alter performance on semantic memory or sustained attention tasks, and actually improved effectiveness on a logical-reasoning task. Benton and Parker (1998) found that higher blood glucose level after eating breakfast is one of the key reasons for the improvement in mental performance.

**PHYSIOLOGICAL DEPENDENCE ON DRUG AND STRESS**

Stress can lead to physiological dependence on a drug present in a beverage or other food products.

Caffeine is considered to be producing stimulating effect on central nervous system. The positive effects of caffeine include improvement in motor performance, decreased fatigue, increased alertness and enhanced sensory activity. These positive effects go a long way towards explaining why a large number of adolescents drink teaching and coffee as the first drink of the day.
Negative effects including irritability, nervousness or anxiety, tremors, restlessness in children, headaches, insomnia and withdrawal headaches are reported by Rapport, (1983).

One of the constituents of food known to affect the brain is caffeine. Caffeine appears to activity on adenosine receptors in the brain. The behavioural effects of caffeine are controversial, especially with regard to doses found in single servings of common beverages. However, studies recently conducted by Leathwood and Pollet (1989) indicate that single low doses of caffeine, equivalent to those found in cola beverages, tea and coffee have beneficial effects on human performance and self reported mood state.

Alcohol, drug abuse and smoking among adolescents population has acquired recognition as a major social problem particularly over the last two decades.

Jacob and Aggarwal (1981) in their study, “the incidence and nature of drug abuse in adolescence personality correlated and predictive model”, studied one thousand four hundred and eleven adolescents’ ages between 14 -19. It was found that the overall incidence of drug abuse was about 35% with highest incidence among college boys followed by school boys and college girls. Abuse of bhang was most frequent followed by tobacco and alcohol. Age and parental income were insignificant.
Volbrecht (1981) studies indicate that adolescents' addicts showed higher self-sufficiency and lower conformity. The adolescent addicts were people in temporary revolt. The acceptance of this basic fact that adolescent drug abuses are neither ‘bad characters’ nor intrinsically neurotics but simply youth in revolt.

Brennan and Shaver (1995) in their study on college students found that insecurity attached college students were found to report greater use of alcohol to regulate negative effect.

Stress is also one of the predictors for smoking. Research findings indicate that smokers smoke in order to reduce their tension (Mausner and Platt, 1971; Malmo, 1975; Gilbert, 1979).

According to Krishnamurthy (1984) smokers maintain smoking due to factors such as tension reduction, pleasure, self image stimulant and social affiliation.

3.2 STRESS AMONG SCHOOL STUDENTS

Undergraduate are a stressed population. Frazier and Schauben (1994) investigated the stressful life events and psychological adjustment among adolescents and found that the five most frequently named stresses were test pressures, financial problem, failing a test, being rejected and relationship break-ups. Some of the stresses experienced by college students are discussed below.

During adolescence there is an increased awareness of self, with special focus on weight and appearance
consequently, adolescents often compare their bodies with culturally defined ideal physique. Unfortunately, western culture idealizes thinness for women and few adolescent females possess physiques that match these standards. Because adolescents are sensitive about weight and appearance, they are keenly aware of ways in which their developing bodies do not measure up to the cultural ideals. Thus, most adolescent females are dissatisfied with their body image (Johnson et.al., 1991).

Obesity is the commonest nutritional disorder in adolescence and young people these days can be very sensitive about even mild degree of it.

Goldberg et. al., (1989) in their study eating pattern and weight concerns of college women, studies women aged 18-21 years in a private New England University. they found that women averaged 95% of their ideal weight frame. Despite this 85% of the subjects indicated that they were slightly or seriously overweight and 62% reported that they were currently dieting.

Shew (1991) in his study on “body image among adolescent women role of sports & physically active leisure”, studied high school students (n = 1079) in Nova Scotia, Canada. He found out that adolescent women have more negative body image than adolescent men and are much more likely want to lose weight. Despite claims about potential value of exercise, though data indicative virtually no
relationship between overall participation in physical activities and body image for either males or females, moreover, participation in individual aerobic ‘Fitness’ activities is shown to have negative relationship with body images for females, in that those who participate more tend to have lower body image. An adolescent women particularly concerned about their body weight may be more likely than others to participate in fitness activities and the fitness subculture may be exacerbating rather than alleviating body image problem.

Moore (1993) in his study on body image and eating behaviour in adolescents girls, found that at any age girls are dissatisfied with their weight, the proportion increasing with actual weight slightly more than half of all females are dissatisfied with shape of their bodies, an attitude which also is positively correlated with body weight. Females, who are dissatisfied with their bodies, are more likely to engage in potentially harmful weight control behaviour. Body consciousness and altered body image are widespread among adolescents, and may be associated with potentially harmful eating practices in both sexes, but more so in females.

Mooney, Tore and Malloy (1994) found that both male and female raters reported more favourable impressions of the female who ate the more fat restrictive diet compared to the female college students who preferred higher fat diet, the fat restricted eater
was rated as being more attractive, intelligent, conscientious and calmer.

Stice and Shaw (1994) in their study on female undergraduates exposed them to one of three conditions representing different levels of the media's portrayal of thin ideal (thin ideal models vs. overweight models vs. no model control). They found that women exposed to thin ideal condition reported increased feelings of unhappiness, shame, guilt, stress, body dissatisfaction and decreased levels of confidence in comparison to women exposed to the other two conditions.

Comparisons are made between content of men's and women's magazines, it becomes evident that females receive more message to diet and be slim than males (Andersen and Domenico, 1992; Nemeroff et al., 1995).

Beth and Robin (1995) in their study, "women and men are what they eat", studied 120 females and 80 male undergraduate students attending small private university in New England. Subjects were presented with brief description of a fictitious male or female "target" that included a food diary describing either a small, medium or large breakfast or lunch. Targets were perceived as being less feminine and more masculine as meal size increased. Attractiveness ratings showed an interaction between meal size and gender. Female targets were judged to be more concerned with
appearance and more attractive as meal size decreased. However, male targets whose diet had been size adjusted were rated in a pattern similar to ratings of female targets.

Davis and Katzman (1997) in their study examined the relationship of body esteem, weight satisfaction, self-esteem and depression among 309 (186 females and 123 males) Chinese University students in Hong Kong. Females were found to have significantly lower body esteem.

3.3 STRESS AND ACADEMIC ACHIEVEMENT

There is a group of investigators (Briggs, 1959; Lurdin and Swayer, 1965) who have reported a positive relationship between anxiety and academic achievement. On the other hand, in a number of studies conducted in India and outside the country (Blumberg and Schmidt, 1970; Singal, 1974), either energetic or an insignificant relationship between the anxiety and academic achievement has been recorded.

Joshi and Gakhar (1979) in their study on 408 boys of VIII class students of Chandigarh concluded that variable of anxiety was not found to be significantly influencing acquisition of algebraic concepts. The same findings were reported by Hogan (1970) who reported that the performance of the high anxiety group on learning a table was essentially the same as the performance of both the low and medium anxiety groups.
Mookerjee, Singh and Sinha (1992) conducted a study with the aim to examine the relationship between anxiety and academic achievement. It was found that there existed negative relationship between anxiety and academic achievement of college students.

Singh and Kumar (1977) and Bhushan and Ahuja (1977), while inquiring into the relationship of anxiety and achievement, came to the same conclusion. The former carried out their study on male graduate students measuring anxiety during their graduation and considering the previous examination marks as the index of achievement. The latter carried out their study on in-service teachers with a minimum of three years of experience, all pursuing M.Ed. through correspondence course. Both the studies found anxiety to have a negative relationship with achievement. Using the multivariate covariance adjustment method, Mukherjee (1969) demonstrated the importance of controlling the differences between the anxiety groups with regard to a number of ability and self-evaluation variables when prediction of academic achievement was to be made from non-intellectual factors. Ravinder (1977) used a variety of tools in his attempt to find out the effects of state-trait anxiety, psychological stress and intelligence of learning and academic achievement. The data were analysed using the statistical techniques of analysis of variance and factor analysis. The study found that general anxiety by itself had
relatively little effect on academic achievement and that a combination of anxiety with intelligence considerably increased the accuracy of predicting academic performance. In his study involving pre-university students drawn from all colleges of Mizoram, Hom Chaudhuri (1980) inferred that three factors – self-concept, anxiety and socio-economic status – came out as correlates of achievement. In yet another study using college students as sample, Hussain (1977) concluded that anxiety was found to bear a curvilinear relationship with academic achievement.

Soman (1977) investigated the overlap of fourteen affective variables belonging to the basic personality dimension of adjustment with achievement in mathematics. Along with other statistical techniques the study employed factor analysis in treating the data. The study revealed that personal adjustment variables had a considerable influence on achievement in mathematics with some exceptions for certain sub-samples. The dominant personality factor identified for the over-achievers was individual adjustment factor.

The study entitled Factors Affecting the Academic Achievement of High School Pupils by Shivappa (1980) revealed the potential of intelligence quotient, n-achievement, manifest anxiety, educational aspiration and study habits taken together in predicting academic achievement, the intelligence quotient contributing the
maximum while n-achievement making considerably good contribution to the prediction.

There is a single study, by Kumar (1981), which considered the achievement of students through programmed instruction. The study was an experimental one. The researcher has suggested the suitability of different programming styles to have the optimal achievement in relation to the variables – general anxiety, extra version, intelligence and creativity.

Since we know that the increased level of stress leads to psychosomatic problem, perhaps facing many life events would be associated with illness. Holmes and Rahe (1967) and many others did find a modest correlation (0.2 to 0.03) between number of major life events and a subsequent physical or psychological illness.

Sarason (1984) and his colleagues argued that it is not the accumulation of life events but rather our appraisal of events as desirable or undesirable that is important. They found that undesirable life events are more important predictors of developing an illness than the desirable events. These studies tell us that experiencing many major life events, especially undesirable ones may ultimately contribute to our becoming ill.

One other important source turns out to be hassles, which are those small, irritating, frustrating events of every day life. Hassles include getting stuck in traffic, noise, running out of time,
looking for a parking spot, having too many things to do, car problems, waiting and so on. Researchers found that the number of hassles we face is a better predictor of our daily mood than are major life events (Eckenrode, 1984).

Cohen and Hoberman (1983) who has studied on stress mediating factors that might dampen the impact of stressors on the immune system have focused largely on the benefits of social support. For example, immune system functioning among students who can get emotional help from friends during stress appears better than among those with less adequate social support.

**Academic Stress**

Academic Stress has become a source of immediate concern and contributes to various psychosomatic illnesses. For example constipation, vomiting, fever and so are psycho physiological symptoms like chest pain, abdominal pain, dizziness (Smith, 1986).

A number of studies were done on college students to investigate sources of stress due to academics. These researchers link anxiety and stress to academic achievements. Kagan and Squires (1984) developed and administered three sub-scales assessing sources of stress to 723 colleges students in two studies. In experiment 1 (423) subjects, analysis of data from an anxiety, stress and eating behaviour
indicated that the most important sources of stress related to grades, finances, self-confidence and carries.

Tolar and Murphy (1985) administered a High School Readjustment Scale and the Centre for Epidemiological Studies Depression Scale to 158 females and 127 males, 13-17 years old thrice over a 6 month interval. On both test administrations a significant relationship between stress and depression was found in females.

Evans and Cronin (1986) in a study found out that Skipping of meals, particularly breakfast is becoming common among school age children due to lack of time or priority of other activities. Other adolescents are more likely to skip meals than children under 11 years.

Friedrich, Reams and Jacobs (1988) examined sex difference in the self report of depression in early adolescence. Results showed that depression in boys was correlated with life stress and low grades, while for girls depression was correlated with several types of social support and lower grades.

Tancks and Robbins (1989) examined the copying response of college students to academic pressure and found that men were more likely than women to seek sexual gratification and use marijuana were as females ruminated, ate constantly and become dysfunctional and irritable.
Adolescence is recognized as a stage in the developmental process. It is associated with stress and storm phenomena in any culture, though these are minimized in industrialized or industrializing societies.

Compass et al., (1985); Goodyear et al., (1986) in their studies have found that female adolescence are vulnerable to adverse consequences of events, and perceived more stress in their lives. Studies in India by Sonpar (1982) have reported gender difference in nature of stresses and intensity.

According to Eme (1979) in beginning of adolescence, females tend to experience more stress than males. Moreover, they seem more disposed to respond to this stress according to their sex stereotypic pattern of internalization, rather than externalization.

Farber (1983) studied that physical, psychological and behavioural stress responses sometimes appear together in patterns known as burn out and post traumatic stress disorder. Burnout is a gradually intensifying pattern of physical psychological and behavioural dysfunction in response to a continuous of stressors.

Stress and Activities

Bhushan and Goraya (1983) in their study explored the relationship of anxiety and academic achievement of tenth class students. A random sample of 200 tenth class students was taken
from Chandigarh. They concluded that there is high negative correlation between anxiety and academic achievement.

In Husnain and Panvar (1987) study, attempt was made to find out the effects of levels of academic achievement and type of school background on the feelings of insecurity among students. A total of 60 students; 30 each from Govt. Intermediate College and Private Intermediate Colleges of Pithoragarh city (UP) were randomly selected. The results indicated that there is no relationship between the feelings of insecurity and academic achievement of students.

The objective of Gupta and Gupta (1985) study as to explore the relationship among teaching efficiency with anxiety and family relationship of high school teachers. The study was conducted on a purposive sample of 100 high school teachers teaching XI and XII classes in the city of Moradabad. It was concluded that anxiety influences the teaching efficiency of male and female teachers. Comparatively the magnitude of influence of anxiety on teaching efficiency is small in case of male teachers.

Gupta (1990) found a negative correlation between frustration and achievement. Emotionally mature students achieve better (Gupta, 1989) than those who are not emotionally mature. Stress is negatively related to Achievement (Namrata, 1992). Anxiety and achievement are reacted (Ramachandran, 1990; Sati, 1991 and Gupta, 1992).
Kaur, D. (1991) investigated the effects of test anxiety, belief in reinforcement, and intelligence on intellectual achievement (responsibility) and found the three together to account for upto 30% of the variance in the government/public school group. Boys and girls showed significant differences in achievement in the public school; all other differences and correlations were very low.

Lekha (1997) conducted a study on sample of 485 children of XIth class belonging to traditional model and Navodaya Schools of Punjab. In her study she found that criterion measures of scientific creativity were found to be significantly positively correlated with the independent variable of anxiety in case of traditional school students at 0.05 level of significance. These results showed that anxiety level of the traditional school children to a considerable extent influence their ability of scientific creativity.

Prakash (2000) in his study on 400 children of VII Class studying in the schools of Chandigarh found positive significant relationship between problem solving ability and mathematical achievement and insignificant relationship between anxiety and mathematical achievement.

It is thus evident that there is a controversy regarding the relationship between anxiety and academic achievement. Moreover, above studies are scarce and have indirect relationship with
the academic achievement of students. Therefore, there is need to explore this field further.

3.4 Studies Related With Vocational Stress

Matone (1986) studied analysis of job stress, manifestations and coping behaviour of head school coaches and the purpose was to identify various log and non-job related situations which contributes significantly to the job stress experienced by head high school coaches. A secondary problem focused on evaluating how job stress manifested itself in regards to health, burn out and behaviour of head high School coaches, in addition, a third problem investigated how head high school coaches coped with their job stress. A total 627 head high school coaches from public high schools in the commonwealth of Virginia participated in the project.

Cumming (1995) made an attempt to explore the correlation of stress and job satisfaction among urban special education teachers. Marlach Burnout inventory, Minnesota job satisfaction questionnaires and demographic profile were used to survey over 292 special need teachers. Results indicate that no significant differences were found among different classification of teachers. Depersonalization was found to be a significant factor in the extrinsic satisfaction, a teacher experienced in his or her job.

Sharma (2000) compared the male college Physical Education teachers of Himachal Pradesh, Punjab and Union
Territory Chandigarh in job stress, job satisfaction and adjustment variables and found that Himachal Pradesh teachers experienced significantly more job stress than the teachers working in Punjab state and U.T. Chandigarh. However, no significant difference was observed in their academic and general adjustment. Social-psycho-physical adjustment of Punjab and Chandigarh teachers was found better than the teachers working in Himachal Pradesh. Significant negative relationship was observed between job stress and job satisfaction. Job stress was also found negatively related to various dimensions of adjustment.

3.5 Stress and Personality

Mason and Blakenship (1987) studied that unemployment, inadequate pay, job dissatisfaction, and other stressors are associated with increased in the rate and severity of domestic violence. Aggression was especially like among those who, as children, saw their own parents’ reaction to stressors with violence towards each other or towards them (Seltzer & Kalmuss, 1988).

Bharathi (1988) probed role-conflict and personality types as stressors of educated working women and concluded the influence of stress on personality of educated working women of Bangalore City.

Makade (1990) compared normally born and caesarian children (150 each, aged up to 5 years) on responses to
environmental stress and found the control group superior as age advanced.

Goyal, C. (1988) was interested in the effects of drive, frustration and adjustment on learning and speed of performance – especially interaction – of female college students. The favourable factors identified included drive, low levels of aggression, resignation and regression and high levels of adjustment and fixation; some interaction effects among drive, frustration and adjustment were also found to be significant.

Srivastava, N. (1988) and Arunima (1989) were concerned with aggression. While the former studied aggression in adolescents in relation to self-concept, motivation and performance, the latter sought to make a ‘socio-psychological appraisal of aggression in children’. Srivastava found no significant correlation, except a curvilinear relationship between aggression and academic and non-academic performance. However, high aggression went with more frustration and behaviour deviation and low aggression with lack of clear goals. Both found boys to be more aggressive than girls. Arunima reported association between high aggression in children and low education/income/occupational status of parents but not their aggression or spousal relations or incongenial childhood. Children of younger parents and larger families tended to be aggressive – without class/caste differences.
Rai (1996) in his study on 450 students drawn from high and higher secondary schools of Chandigarh concluded that interactional effect of anxiety and self-concept was found to be significant on the measures of creativity.

3.6 Sex – Differences and Academic Achievement

Setia (1991) conducted a study on a sample of some socio psychological and educational factors of differential learning rate in modern mathematics. She revealed that male rapid learners perform better on achievement test in mathematics as compared to female rapid learners. However, male-female average and slow learners do not differ significantly with each other on achievement in mathematics.

Sood (1999) in her study investigated the differences in mathematical achievement among students of residential school due to sex differences it was found that although girls achieved somewhat better than boys yet insignificant difference exist in their mathematical achievement due to insignificant t-ratio.

3.7 Sex – Differences and Personality

While no sex-difference was observed in self-concept, family and school contributed to its development in a consistent manner (Kale, 1982). According to Prasad (1982), anxiety, insecurity, self role, incongruence and self-satisfaction were the factors that stabilized self-concept. The relationship between self-concept,
adjustment, values, academic achievement, SES and sex were examined at high school level (Saraswat). A differential pattern of relationship was observed for boys and girls based on multiple regression analysis.

Noorjahan (1997) studied the academic achievement and personality of Muslim students in higher secondary schools in southern districts of Tamil Nadu, V & P.O. Chidambaranar and Kanniya Kumari. The population for the study was Muslim male and female students. The conclusions were drawn that personality traits – introversion and extroversion, self-concept, independence, temperament and adjustment were not influenced by the sex and community of the respondent.

Poulose, P.J. (1988) chose to explore the influence of nine personality variables, and of gender and residence, on process outcomes in physics of university entrants (pre-university stage). Apart from gender and residence (nature of locality), manifest anxiety, personal adjustment, scientific attitude, science interest and attitude to academic work were seen to “exert significant influence”; interaction effects were not generally significant.

3.6 Locality, Academic Achievement & Personality

Studies conducted by Douglas (1964), Karp and Sigel (1965) and Wiseman (1967) have reported that academic achievement is positively associated with social class. In other words
socio-economic status also influences individual’s achievement in school task. Siller (1957) in one of the studies with sixth grade white children observed that children belonging to high SES did better than children belonging to low SES on all tests of conceptual ability. Vane (1967) found a fairly high positive correlation between achievement and SES of 272 Negro and white children. Chopra (1967) studied matched pairs of achieving and under achieving students of high intellectual ability and concluded that parents of the achiever had better SES level.

Socio-economic class differences in the free call of categorized items were studied by Glassman (1968). She demonstrated that middle class children scored about one standard deviation (SD) above than the lower class children on this task. Husten (1967) summarizing the findings of international study of achievement in mathematics concluded that there was a consistent positive ‘r’ between achievement in mathematics and SES. Davis (1947) and Douglas (1964), with their research literature concluded that the educational achievement of children from middle class homes is better than children belonging to the manual working class families. Burt (19370 also showed that poverty, family size, poor health, inadequate general knowledge were the aspects of low social class which seem to prevent children from taking full advantage of educational opportunities. Satyanandan’s (1969) study aimed to find out whether there were
significant differences in the academic achievement of children belonging to various economic and educational backgrounds, whether low economic background caused any setback in the learning process of the subjects, and whether the educational level of parents had any influence upon the achievement levels of pupils. The sample consisted of students belonging to the English medium sections of classes XI and XII. The study yielded the findings that the children of graduate parents performed better than the children of matriculate parents, the children of upper economic strata and lower economic strata differed very significantly, the middle and the lower economic groups did not differ significantly. However, the middle economic group was better than the lower economic group. McArthur (1963) determined that there was a significant relationship between student's achievement and professional level of parents.

It has been reported that family size is significantly correlated with academic achievement (Kathleen, 1975). Adolescents express strong feelings of attachment to their parents, but their striving for independence force them to loosen these ties. The change in their relationships to parents may cause adolescents to feel, ambivalence and even despair.

Parents treat males and females somewhat differently from birth onward, they continue to do so when their children reach adolescence. Kinloch (1970) using the self report of 100
first year students at a large Midwestern University, found significant differences in girls and boys conflict at home. Girls had more of them, and they concerned emotional issues, such as “arguing” and going around with boys and girls”. Boys conflict were on more objective issues, such as “getting to use the car”, “responsibility at home” and “church attendance’ girls were also more likely to report scolding, emotional flares, threats and cussing by their parents.

Coleman’s (1974) in cross-sectional study of 600 English boys and girls of ages 11, 13, 15 and 17 documents the changing and sometimes stressful nature of adolescents relationship with parents. Only at the end of adolescence, at ages 17 and 18 are these unsettled feelings little resolved.

Adolescents and parents most often disagree about matters affection the teenagers’ current social life and behaviour, such as styles of dress, hair length, choices of friends etc. For preferences such as these teenagers agree more with their peers than their parents (Curtis, 1975).

Parents may grant their adolescent sons greater freedom, but they seem to be anxious and have fear about letting go of their daughters. The daughter adolescence appears to be a greater cause of tension and dissatisfaction with in families than a son’s adolescence. Parents worry about their daughter’s safety and her sexual behaviour, especially the possibility of pregnancy (Hoffman and Manis, 1977).
Parents and children share similar attitudes about important issues and decisions about ideas of right and wrong. For example, what the long run value of educational is or what makes a marriage good (Coleman, 1980) where they differ is more on the emphasis or strength of those attitudes. One adolescents and her parent may argue about the comparative importance of a career in medicine versus one in law, but both will agree that getting some sort of education is important.

It is likely that early adolescence who are in the differentiation and practicing sub phases of identity formation with report greater differences with their parents than other adolescents in the rapprochement and sub phases (Lerner and Shea, 1982).

Pandey and Rai (1988) reported that urban students have a superior creative potential in comparison with rural students.

Gakhar (1996) in his study revealed that physical, intellectual, social, emotional and psychological environment affect the achievement and learning of children especially in the field of sciences.

Mohanty (1998) in his study on 100 gifted Xth class children selected from the state of Orissa concluded that gifted boys and girls differ significantly on achievement motivation. It was further revealed that organization of home environment significantly
and positively correlated with achievement in case of over-achievers and under-achievers.

Naik (1988) in his study on a sample of 253 students taken from Surat District of Gujarat state concluded that

(i) Urban students were found higher on creativity score than rural students.
(ii) Score of creativity of urban boys were found higher than rural boys.
(iii) Creativity scores of urban girls were found higher than rural girls.

Towde (1999) concluded that mathematical achievement of rural and Adivasi areas are lagging behind with respect to urban area.

Prakash (2000) in his study on school children concluded that significant mean differences are obtained in the mathematical achievement between the urban and rural children and differences are in favour of urban children.

However, Miller (1970) concluded that factors associated with achievement of the children are generally less associated with social class. Besides, the findings of Reddy (1973) revealed that SES was not significantly related to achievement in any subject or group of subjects. The evidence in support of this argument
has been presented by numerous researches e.g. Gordon (1970), Reddy (1971) and Bansal (1977).

3.9 HYPOTHESES

Hypotheses for the present investigation are laid down as below:

1.

   a. There is no significant effect of academic stress, sex, locality and their various interactions on reasoning ability.
   b. There is no significant effect of academic stress, sex, locality and their various interactions on personality traits.
   c. There is no significant effect of academic stress, sex, locality and their various interactions on academic achievement.

2.

   a. There is no significant effect of self-concept stress, sex, locality and their various interactions on reasoning ability.
   b. There is no significant effect of self-concept stress, sex, locality and their various interactions on personality traits.
   c. There is no significant effect of self-concept stress, sex, locality and their various interactions on academic achievement.

3.

   a. There is no significant effect of physical stress, sex, locality and their various interactions on reasoning ability.
b. There is no significant effect of physical stress, sex, locality and their various interactions on personality traits.

c. There is no significant effect of physical stress, sex, locality and their various interactions on academic achievement.

4.

a. There is no significant effect of social stress, sex, locality and their various interactions on reasoning ability.

b. There is no significant effect of social stress, sex, locality and their various interactions on personality traits.

c. There is no significant effect of social stress, sex, locality and their various interactions on academic achievement.

5.

a. There is no significant effect of financial stress, sex, locality and their various interactions on reasoning ability.

b. There is no significant effect of financial stress, sex, locality and their various interactions on personality traits.

c. There is no significant effect of financial stress, sex, locality and their various interactions on academic achievement.

6.

a. There is no significant effect of family stress, sex, locality and their various interactions on reasoning ability.

b. There is no significant effect of family stress, sex, locality and their various interactions on personality traits.
c. There is no significant effect of family stress, sex, locality and their various interactions on academic achievement.

7.

a. There is no significant effect of vocational stress, sex, locality and their various interactions on reasoning ability.
b. There is no significant effect of vocational stress, sex, locality and their various interactions on personality traits.
c. There is no significant effect of vocational stress, sex, locality and their various interactions on academic achievement.