

## Chapter - II

### Review of Related Literature

This chapter included the broader prospective of understanding the present theme under study from international and national backgrounds. The review of related literature is the basic part of research work. A critical review of related literature leads the investigator to avoid unintentional replication of well established findings. It is necessary to review the important literature related to the study in order to obtain relevant information. A reasonably comprehensive study of the previous research studies provided a background for the development of present study. In this chapter, the investigator has reviewed different research journals, books, dissertations, thesis, periodicals etc. A review of the available research studies are categorized into six sections depending up on the variables under the study. The present chapter consists of the related studies on family environment, stress, anxiety and academic achievement. Apart from this, some other related studies also included in this chapter i.e. Parent's Education and academic achievement, Parent's Occupation and student's academic achievement and Family Income and Student's academic achievement, Mass media and student's academic achievement etc.

## **Classification of related studies**

The related studies are classified under the following headings-

1. Studies related to Family Environment and Academic Achievement
2. Studies related to Stress and Academic Achievement
3. Studies related to Anxiety and Academic Achievement
4. Studies related to Family Environment, Stress and Academic Achievement
5. Studies related to Stress, Anxiety and Academic Achievement
6. Studies related to Academic Achievement and other variables

### **2.1 Studies related to Family Environment and Academic Achievement**

**Salunke (1979)** studied the home environment, socio-economic status and economic management in relation to the academic achievement of the first year undergraduate students of M. S. University, Baroda. The major objectives of the study were i) to study the home environment, educational climate in the home, socio-economic status, economic management and academic achievement of the first year undergraduate students of the M. S. University and to find out the relationship of home environment, socio-economic status and economic management with academic achievement. The sample consisted of 693 first year undergraduate students (Science, Commerce, Arts and Home Science) of the MSU of Boroda. To measure SES, the modified version of Kuppuswamy's SES Scale was used and for measuring other variables

Home Environment Questionnaire and Economic Management Questionnaire were used. The findings of the study revealed that the academic achievement of the students was positively related to their home environment. Similarly, educational climate and emotional climate were positively related with academic achievement of the students. The investigator observed that educational facilities and emotional happiness in the home contributed positively to the academic achievement of the students. The author further reported that the male and female students differed so far as their home environment was concerned but they did not differ with regard to their socio-economic status and economic management.

**Sarkar (1983)** studied the contributions of some Home Factors on children's scholastic achievement. The main objective of the study was to find out the difference between high achievers and low achievers with respect to home factors like educational environment, income, property, spatial environment, social background, provision of facilities, parent-child relationship, home making role, punitive control and intelligence. The sample consisted of 192 students of Class-II to Class-VII in the age group of 7 to 12 years. Sample were selected from eight schools in Calcutta. The stratified random sampling design was used to frame the sample. In the sample, 96 students were high achievers and 96 students were low achievers. Tools used for the present study were Cattell's Culture-Fair Intelligence Test and Schacfer & Bell's Parental Attitude Research Instrument (Bengali Version). An Interview Schedule was also used to collect information on home environment and examination. The findings of the study revealed that there is a significant difference between high and low achievers in the area of home variables such as educational environment, income, spatial environment, social background, provision of facilities and parent-child relationship. The

author also reported that the mothers of the two groups possessed different attitudes regarding child rearing practices.

**Sultana (1988)** carried out a study on school achievement of adolescents' of working and non-working mothers. The objectives of the study were (i) to find out the academic achievement in English, Social Studies, Mathematics, Natural Sciences and Languages among children of working and non- working mothers, (ii) ) to find out the differences in academic achievement of children belonging to working and non-working mothers of English and Hindi medium Schools. A sample of 250 students studying in class X from Lady Fatima Secondary School, A.M.U. City High School, and ST High School, Aligarh were selected. Efforts were made to have equal number of students in each maternal (working and non- working) group, test of English, Mathematics, Social Studies, language and natural sciences were given or administered. The study revealed that there was no difference in academic achievement in English, Social Studies and Language among children belonging to working and non- working mothers, But a significant difference prevailed in academic achievement in Mathematics and Natural Sciences among the children belonging to working and non-working mothers. Sultana further reported that there was no difference in academic achievement among children belonging to working and non- working mothers of English and Hindi medium schools.

**Samal (1990)** studied the problems of home environment variables on the relationship between planning and academic achievement of boys and girls. The main objectives of the study were (i) to examine the relationship between planning, sex and academic achievement of IX grade students (ii) to examine whether home variables can explain the observed relationship between planning, sex and

academic achievement of these students. The study consisted of 60 students of grade IX. The respondents were selected from University High School of Bhubaneswar. Trial Making Test of Armitage and Home Environment Questionnaire of Jachuck and Khandai were used for collecting the data and the academic achievement was measured through last examination i.e., class X marks. The study revealed that academic achievement of high planners was better than that of low planners. It was also found that the children belonging to high planning ability enjoyed a more cognitively stimulating home environment than the children from low planning ability.

**Sahay (1991)** conducted study on relationship between parental variables and scholastic achievement of Hindu school students of Lahordage District residing in rural areas. The major objectives of the study were to examine the relative effectiveness of intelligence and parental support on the academic achievement of the students and secondly, to find out the degree of relative effectiveness of intelligence, income, mother's parental support, father's parental support and the parental support of mother and father on academic achievement. The study was conducted on 300 students and 120 parents. The Scholastic Achievement Test, Porteus Maze Test, Parental Attitude Scale and a Questionnaire were used for the purpose of collecting data. The author controlled the IQ of the students and observed that the students with higher level of parental support achieved more in academics than the students with lower level of parental support. It was also observed that mother's contribution was more effective than father's. Sahay further reported that parental support is the most powerful correlate of academic achievement.

**Unger, et al. (2000)** studied the role of family support in interparental conflict and adolescents' academic achievement. The author examined the family support as a mediator of the relation between interparental conflict and adolescents' academic achievement. The sample consisted of 115 adolescents in the age group of 12-18 years old from four schools located in four nearby countries in the Mid-Atlantic region of the United States. The sample consisted of 47 male and 68 female students. The adolescents were belonging to divorced or separated and single parent (not remarried) or both parents married (never divorced) families. Out of 115 sample, 97 youth were white, 15 were African-American; 1 youth was Asian and 2 youth were Asian-Indian. Interparental Conflict Questionnaire developed by Forehand & McCombs's (1989); Family Cohesion Scale developed by Olson (1982) and Kerr's (1985) Perceived parents-school involvement and interest were used for collection of data. Cumulative grade point averages (GPA) were collected from school records and were used as an indicator of adolescents' academic achievement. The result revealed that two dimensions of family support, family cohesion and parent-school involvement, mediated the relationship between interparental conflict and academic achievement. It was found that family support was more likely to function as a mediator for girls than boys. Finally, the authors reported that interparental conflict was also directly related to low academic achievement.

**Casanova, et al. (2005)** conducted a study on influence of family and socio-demographic variables on students' low academic achievement. The major objectives of the present study were (i) to compare and analyse various family and socio-demographic characteristics in adolescents with low and normal academic achievement, (ii) to examine the relationship between family and socio-

demographic variables and students' achievement (iii) to determine which type of variables better predict the academic achievement of the students with low and normal academic achievement. In the study, sample consisted of 310 students studying in XI and XII standards. They were selected from five different centres from a Spanish province which covered a wide range of socio-demographic levels. The investigator selected 105 students from normal achievement and 205 students from low achievement group. Tools used for the present study were Acceptance and Control Scales, Involvement Scale, Parental Expectation of Success Scale and Socio-demographic Measurements. To assess the academic achievement of the students the investigators interviewed them with five questions and the measurements were classified into two variables i.e. real score and expected score. The findings of the study revealed that there were differences in the distribution of parental style in the two groups for the majority of the variables analysed. Likewise, it was also observed that a differential pattern in the prediction of academic success. The researchers further reported that in the group of adolescents with normal academic achievement, socio-demographic variables better predict achievement, while for the students with low achievement; family variables play a more important role in predicting academic achievement.

**Mohanraj, et al. (2005)** carried out a study on perceived family environment in relation to adjustment and academic achievement of adolescents in South of Chennai. The study aimed to investigate the relationship between family environment, home adjustment and academic achievement of adolescents. The sample comprised of 109 adolescents in the age group of 14-16 studying in class IX, X and XI. It also included both male and female students in the sample. The sample consisted of middle and higher socio-economic class respondents with

homogeneous age group and homogeneous family background. Family Environment Scale developed by Moos and Moos (1986) and Bell's Adjustment Inventory Revised (1962) were used to get the requisite data. Academic achievement scores were taken from the school records. The result showed that family environment appeared to influence home adjustment as well as academic performance. The findings also revealed a significant relationship between specific family environment factors on home adjustment and academic achievement. The investigators concluded in their study that family factors play an important role in adolescent's adjustment and academic performance.

**Saini (2005)** attempted to investigate the family environment and academic achievement of adolescent students of working and non-working mothers in Chandigarh city. The main objectives of the study were to find out the difference in the family environment of adolescents of working and non-working mothers and to compare the academic achievement of adolescents of working and non-working mothers. The sample comprised of 415 adolescents, out of which 121 adolescents are the offspring of working mothers and 294 adolescents are the offspring of non-working mothers. Sample were selected randomly from eight government and private senior secondary schools of U.T., Chandigarh. Stratified random sampling technique was used for the selection of the sample. To assess the quality of home environment of the students, the author used Moos and Moos's Family Environment Scale (FES, 1986). Battery of Achievement Tests designed by Anand (1971) was used to assess the academic achievement of the students. To find out the significance of differences between the mean scores of the two groups of adolescents in the areas of family environment and academic achievement, 't' test was employed. The result showed that family environment of adolescents of working and non-working mothers were



significantly different. The author reported that there is a significant difference between the academic achievement of adolescents of working and non-working mothers. It was also found that the adolescents of working mothers were better in academics than non-working mothers.

**Abd-El-Fattah (2006)** studied the relationship between Egyptian adolescents' perception of parental involvement and academic achievement. The study was conducted on 135 male and 120 female students enrolled in a high school in El-Minia city in Egypt during 2005. Galal-El-Deen's (1994) Perception of Parental Involvement Scale (PPIS) and Elliot and Church's (1997) Achievement Goal Questionnaire (AGQ) were used to get the requisit data and information for the study. Academic achievement scores were taken from student's school records. The findings of the study showed that students' performance approach and mastery goals were the most important predictors of students' academic achievement followed by at-home parental involvement, at-school parental involvement and lastly performance-avoidance goal. It was also revealed that at-home parental involvement had an indirect effect on students' academic achievement through mastery goal.

**Daulta (2008)** carried out a study of the impact of home environment on the scholastic achievement of children. The major objectives of the present study were to assess the scholastic achievement and home environment of boys and girl students, and to compare the differences in scholastic achievement of high, medium and low home environment groups of boys and girl students. In the study, sample consisted of 120 respondents studying in class VIII standards and their age group is in between 12-14 years. The sample was collected from two institutions of Panipat City viz. S. D. Vidyamandir and D. A. V. Public School. To assess the quality of home environment, the author

used Misra's Home Environment Inventory Scale (1989). Scholastic achievement performance was recorded from Report Cards of students and school records. Percentage of marks obtained by the students in their examinations was also recorded. The major findings of the study were as follows: home environment had positive impact of scholastic achievement of both boys and girls; good quality of home environment had more significant positive correlation with high level of scholastic achievement in boys than the girls; boys of good home environment group achieved significantly greater mean scores than the boys falling in the group of low home environment.

**Uwaifo (2008)** conducted a study on the effects of family structure and parenthood on the academic performance of Nigerian University students. The objective of the study was to examine the effects of family structure and parenthood on the academic achievement of university students. The study comprised of 240 university students taken randomly from six faculties in Ambrose Alli University, Ekpoma, Edo State. Out of 240 students, 120 students were from single-parent family and 120 were from two-parent family. An adopted form of "Guidance and Counseling Achievement Grade Form (GCAGF)" was used for the collection of data. Uwaifo reported that there is a significant difference between the academic performance of students from single-parent family and those from two-parent family. Similar result was observed in academic performance of male and female students compared on two type's family structures.

**Kamaruddin, et al. (2009)** undertook a study at Universiti Teknologi MARA (UiTM, main campus Shah Alam) and six affiliated colleges of UiTM, Malaysia to examine the quality of learning environment of academic achievement of student's perception. The main

objective of the study was to identify how the learning environment affects students' learning outcomes. The sample consisted of 370 Bumiputera's students. To measure the variables of the study, Likert type scales were used. Academic achievement was measured using Grade Point Average (GPA's) of high school examination. Descriptive statistics and Product Moment Coefficient of Correlation were computed to analyze the data. The findings of the study revealed that housing environment and school environment are positively correlated with students' academic performance.

**Muola, (2010)** studied the relationship between academic achievement motivation and home environment among standard eight pupils. The study attempted to find out whether the differences in academic achievement motivation among pupils can be attributed to differences in their home environments. The author used ex-post-facto correlational method to determine the relationship between these two variables. The sample comprise of 235 (118 boys and 117 girls) eight standard pupils from urban (N= 107) and rural (N= 128) of Machakos district, Kenya. Two questionnaires were used to collect information on the student's level of academic achievement motivation and home environment i.e. Simple Profile (SP) and Home Environment Questionnaire. The result revealed that there is a significant positive relationship between the pupils' scores in academic achievement motivation and six of the home environmental factors, that is, the fathers' occupation, mothers' occupation, fathers' education, mothers' education, family size and learning facilities at home. He also reported that parental encouragement was not significantly related to academic achievement motivation. Further, the author also added that more favourable home environment motivates the child to excel in academic attainment.

**Nyarko (2010)** conducted a study on “Parental home involvement: The missing link in adolescents’ academic achievement”. The objective of the present study was to examine the relationship between parental home involvement and the academic achievement of adolescent students. The study was conducted on 239 students of 15-20 years age. They were selected from three senior secondary schools in the central region of Ghana. Both sex adolescent students (108 males and 131 females) were selected for the study and all of them belong to different family structures i.e. 149 of the students lived in nuclear families, 20 lived with single mothers, 8 resided with single fathers, 14 lived with stepmothers, and 15 resided with stepfathers. In the present study, Nyarko’s (2008) Parental Home Involvement scale (PHI) and Conger et al. (1994) Financial Pressure Scale (FPS) were used for the collection of data. The academic average grades of the students were used to delineate their academic achievement. The investigator reported that there is a positive and significant relationship between mothers and fathers’ home involvement and the academic achievement of the students.

**Schumann (2010)** investigated the parental influence on Mexican-American Students’ academic performance. The major objective of the study was to examine the Mexican-American parents’ influence on their adolescent’s academic achievement. The sample consisted of 11 students in the age group of 12-18 years. They were selected from middle & high schools of Midwestern town, Mexico. The investigator selected four factors of parental influence for the study, i.e. parental ability to help with academics, parental support, parental monitoring and parental education level. Parental Education Attainment Scale (PEAS) developed by Plunkett and Bàmaca-Gómez (2003) was used for collection of data. The investigator also used a modified and similar

version of Plunkett and Bàmaca-Gómez (2003) Scale to measure the parental ability to help with academics. Factors were examined by using questionnaires that were administered through interviews. The interviews were conducted at two different times and locations. The result revealed that Mexican-American parents who are able to provide support, monitoring, and have the ability to help their adolescent students with school work had positively influence their adolescents academically. The author concluded that confidence in parents' ability to help with academic is essential for adolescents.

**Akhtar, et al. (2011)** studied the effect of parent's pressure on academic achievement of the university students. The major objectives of the study were to find out the relationship between parent's pressure and academic achievement of university students, and to find out the relationship between parent's pressure and academic achievement of male and female students. The study comprised of 156 students of International Islamic University, Islamabad. The sample were selected through cluster sampling technique. Out of 156 students, 38 were from Computer Science, 35 were from Economics and 83 were from Business Administration departments. Both male and female students were selected for the study. An adopted form of three point rating scale was used for the collection of data. The total marks of the students in their graduate examination were considered as their academic achievement. The findings of the study revealed that there is a significant positive relationship between parent's pressure and academic achievement of university students; whereas no effect of parent's pressure was found on academic achievement of male students.

**Kazmi, et al. (2011)** carried out a study of parental style and academic achievement of the students in Pakistan. The study attempted

to explore the father-child relationship with special reference to the educational achievement of their children. Sample comprised of 300 students of sixth standard, 300 fathers and 20 class teachers; which was drawn randomly from rural and urban areas of district Mansehra province *Khyber Pakhtun khwa (KPK)*. Two indigenous designed questionnaires were used to collect the requisite data i.e. Father's Questionnaire used to measure the father-child relationship and Teacher's Questionnaire used to measure student's academic performance by the teacher. The result revealed that different parenting styles of dealing at home play a vital role in determining their children's academic achievement at school. The authors also found a significant relationship between the father's style and the class teachers' assessment about their children's academic achievement. They further reported that the authoritarian attitude of father is strongly associated with the higher grades in academic achievement than the children of permissive fathers. The children of the permissive fathers were found to have low in academic achievement.

**Chawla, (2012)** conducted study on relationship between family environment and academic achievement of IX standard students of Nasik. The main objective of the study was to examine the relationship between family environment and academic achievement of IX standard students. The sample consisted of 200 students of IX standard. Out of 200 students, 100 were boys and 100 were girls. They were randomly selected from Marathi medium schools of Nasik City, Maharashtra. Family Environment Scale (FES) developed by Dr. Harpreet Bhatia and Dr. N. K. Chadha (1993) was used to measure the family environment of the students. Academic achievement was measured from second semester marks of IX standard students. The result of the study

revealed that family environment scores were positively correlated to academic achievement of the students.

**Heidary, et al. (2012)** attempted to examine the relationship between family functioning and ego identity status with academic achievement of secondary students. The sample consisted of 250 high school students of Iran. Random sampling technique was used to select the sample. Students' Average Grade was considered as their academic achievement. The findings of the study showed that there is a negative relationship between disorders in family functioning and academic achievement of the students. They also reported that relationship, problem solving and the family's general performance are the best predictors of decline in academic performance.

**Mishra, et al. (2012)** studied the impact of family environment on academic achievement of secondary school students of Kurukshetra district, Haryana. The study aimed to highlight the impact of family environment on academic achievement and the relationship between family environment and academic achievement of secondary school students. The sample consisted of all the students studying in XI standard in four DAV Public Schools and all the parents of these students. To measure family environment of the students, Family Environment Scale (For Students) was developed by the authors. The result of the study revealed that there is a significant positive relationship between student's perception of overall family environment and their academic achievement. The author also reported that students with enriched overall family environment have better academic achievement than those who belongs to overall low family environment group.

**Kaur (2013)** conducted a study on parental encouragement and academic achievement of college students in Punjab. The main objectives of the study were to study the parental encouragement among the college students and to find out the academic achievement of college students having high and low parental encouragement. The sample comprised of 100 undergraduate students. They were selected from two districts of Punjab i.e. Patiala and Fatehgrah Sahib. Agarwal's Parental Encouragement Scale developed by Kusum Agarwal (1999) and Deo-Mohan's Achievement Motivation Scale developed by Deo-Mohan (1986) were adopted. The result revealed that there is a significant difference between the academic achievement of the students receiving high and low parental encouragement. The author reported that the students who are receiving high parental encouragement have better academic achievement than the students receiving low parental encouragement.

**Singh (2013)** studied the impact of family environment on academic achievement of science students of secondary schools in Dehradun, Uttarakhand. The major objectives of the study were to find out the relationship between family environment and academic achievement of secondary school students; and to examine the impact of family environment on academic achievement of secondary school students in science subjects. The population of the study consisted of class IX students of Public Schools and their parents in Dehradun district of Uttarakhand. To assess the family environment of the students as well as parents, Family Environment Scale (FES) for students, Family Environment Scale (FES) for parents and Socio-economic Status Inventory were developed by the researcher and administered. The author reported that there is a significant positive relationship between students' perception of overall family environment and their academic achievement; and students with enriched overall



family environment have better academic achievement than the students of moderate and unfavourable family environment.

## **2.2 Studies related to Stress and Academic Achievement**

**Ranganathan (1988)** examined the level of stress among eight different school children in Delhi. The study aimed to understand the phenomenon of children's stress. The main objectives of the study were (i) to examine the nature and magnitude of the relationship between stress and academic performance, (ii) to examine whether stress and academic performance are affected by variables such as type of school, gender and class, and (iii) to find out the relationship between stress and academic performance with the school organizational climate. The sample consisted of I and II standard boys and girls. They were drawn from eight different schools. An adopted form of Behaviour Check List was used to measure the level of stress of the children and School Organizational Climate Description Questionnaire (SOCDQ) developed by M. L. Sharma was also used to get the requisite data. The investigator reported that the children studying in government run schools have a higher degree of stress than the children studying in other schools. The author also reported that the boys have higher degree of stress than the girls; and stress was negatively related to academic performance varied as a function of type of school. The author found that stress was positively and significantly correlated with the organizational climate of the school.

**Padmasri (1992)** carried out a study on stressful life events in school system and educational development of students residing in Tirupati urban area. The study aimed to examine the interrelationship between educational status, general health, family support, and

intellectual achievement. The study was conducted on 125 boys and 125 girls of VIII and IX standards. Five English medium schools were selected for study by using purposive sampling method. All the students who secured the ranks below 20 in their classes were selected for the study. General Information Scheduled, Family Support System Questionnaire (FSSQ), Health Questionnaire (HQ) and Intellectual Achievement Responsibility (IAR) Scales were used to collect the data. The result revealed that stress among boys and girls differ significantly. Boys show high level of stress on the stress scores. The investigator further reported that the sex and family support; stress and family support; stress and general health; stress and locus of control; family stress and locus of control; stress and academic achievement were significantly related to each other.

**Ryan (2004)** attempted to examine the relationship among 'stress of living situation', health and academic performance of undergraduate students of Loyola University, Chicago, United States. The objective of the study was to find out the interrelationships of 'stress of living situations', health and academic performance of college students. The study was restricted to 120 undergraduate psychology students 18 years age group. Out of which, 28 were male and 92 were female. A standardized tool developed by Cohen *et al.* (1983) was used to measure the level of 'stress' and another tool, i.e. 'health related variables survey' developed by Trockel *et al.* (2000) was used for the study. The academic performance was measured through the Grade Point Average, Credit hours enrolled, and hours worked per week for the previous semester. The result revealed that 'stress of the living situation' of a student is weekly & negatively related to GPA (Academic Performance) and nutrition is positively related to academic performance. Drug and alcohol used by a student is negatively related to academic performance.

It was also observed that the stress and the health are related to each other. The type of house is related to students' academic performance.

**Zajacova, et al. (2005)** conducted a study on Self-efficacy, Stress and Academic Success of College students. The purpose of the study was to examine the joint effects of academic self-efficacy and stress on the academic performance of non-traditional, largely immigrant and minority college students. The study was conducted on 107 first-semester students of City University, New York campuses. Both sex students were included in the sample. To measure academic self-efficacy and stress of the students, the authors developed a new instrument with respect to 27 identical college-related tasks. Primary Informations of the students also recorded by the authors viz. age, sex, ethnic identification, language most often spoken at home, country of birth etc. High School Grade Point Average (GPA) was considered as academic achievement of the students. The findings of the study revealed that academic self-efficacy and stress are negatively related to each other. Full-time students earn higher grades and more likely to remain enrolled compared to part-time students. The author observed a negative but insignificant relationship with students' stress and GPA. No relationship was found with stress and college Credits; but socio-demographic variables have feeble relationship with students' academic achievement.

**Malik, et al. (2006)** conducted a study on 120 adolescent students of 15-17 years age group of Haryana State. The sample comprised of 120 adolescent students studying in four schools of Hisar. The students with 110 and above IQ were comprised in the sample. Wechsler Intelligence Scale (1974) was used to measure the level of intelligence and Bisht Battery of Stress Scale (1987) was used for the collection of requisite data. Academic achievement was assessed on the

basis of aggregate percentage of marks obtained by the students in last three examinations. The result of the study revealed that there is a negative relationship between academic achievement and psychological stress of adolescent students.

**Smith, et al. (2007)** examined the potential predictors of the academic related stress experienced by college students. The study aimed to examine the coping strategies of college students, social support, parenting style, anxiety and academic-related stress. The sample consisted of 93 undergraduate Psychology Course students of Southeastern University, Florida. Out of which 75.3% were female and 24.7% were male. Academic Stress Scale (ASS, 1986); COPE Scales (1989); Multidimensional Scale of Perceived Social Support (MSPSS, 1998); Manifest Anxiety Scale (MAS, 1953); and Parental Authority Questionnaire (PAQ) were used. The major findings of the study were as follows: Anxiety, problem-focused coping and support may serve as potentially important predictors of academic-related stress experienced by college students. Academic-related stress was significantly related to anxiety of male and female students. The author reported that parental support was not related to college students' academic-related stress; and the types of social support received by college students were significantly related to their academic-related stress.

**Abraham, et al. (2009)** undertook a study to determine the prevalence and sources of stress among Malaysian students of Indian Medical School. The sample comprised of 125 first year medical students. They were selected from Melaka Manipal Medical College, Manipal Campus, India. General Health Questionnaire (GHQ) was used for the study. The result of the study revealed that academic problems are greater sources of stress among first year medical students

compared to non-academic problems. Frequent examinations and information overload were found to be the greatest sources of stress among academic problems.

**Rafidah, et al. (2009)** studied the relationship between stress factors and academic achievement of 242 Pre-Diploma Science students of University of Technology MARA (UiTM), Negeri Sembilan Campus, Malaysia. The study aimed to examine the relationship between stress factors and the level of perceived stress at three different periods of semester (beginning, middle, and end) and their impact on the students' academic performance. A structured questionnaire was administered. GPAs were considered to assess academic achievement of the students. Students' GPAs were obtained by the researchers from the Academic Affairs Department of Malaysia. The major findings of the study were as follows: none of the stress factors significantly affect the academic achievement of students; there is a significant difference in the level of perceived stress between the beginning and middle of the semester but not significant between the middle and end of the semester. In the context of academic achievement, they found a insignificant relationship in the level of perceived stress between beginner and middle semester students. However, a significant correlation is found between the level of perceived stress and academic achievement of the end semester students.

**Shah, et al. (2010)** studied on perceived stress, sources and severity of stress among Pakistani medical undergraduate students. The main objectives of the study were to assess perceived stress, sources of stress and their severity; and another objective was to assess the determinants of stressed cases. The sample comprised of 200 medical undergraduate students of first and second year MBBS batches of CMH

Lahore Medical College. A cross-sectional, questionnaire-based survey was carried out. Student's perceived stress was measured through Perceived Stress Scale (PSS). An adopted form of 33-item Questionnaire was used to assess the sources of stress and their severity of the students. Student's self reported UHS Professional Examination Score was used as an indicator of academic achievement. The result of the study revealed that stressed cases were associated with occurrence of psycho-social and academic related stressors. Further the investigators reported that there is a negative but insignificant relationship between perceived stress and academic performance.

**Yusoff, (2010)** conducted a study on stress, stressors and coping strategies among Government Secondary School students in Malaysia. The main objective of the study was to find out the level of stress, stressors and coping strategies among the students. The sample comprised of 100 secondary school students. They were selected from a Malaysian Government Secondary School located in Kota Bharu, Kelantan. Sample were selected by using convenient sampling method. General Health Questionnaire (GHQ-12), Soalselidik Stressor Sekolah Menengah (SSSM) and Malay version of Brief COPE were used to get the requisite data and information for the study. The major findings of the study showed that the prevalence of stress among secondary school students in Malaysian Government School was high and academic related problems were the major stressor among the secondary students. The most frequent coping strategies being used by the students were positive coping strategies.

**Elias, et al. (2011)** examined the level of stress and academic achievement of undergraduate students in University Putra Malaysia. The main objectives of the study were to investigate the level of stress

among undergraduate students; and to examine the relationship between stress and academic achievement of undergraduate students. The study was conducted on 376 undergraduate students of University Putra Malaysia (UPM), Serdang Campus and they were taken from different faculty (Degree Programme) by using cluster sampling method. Out of which, 30.3% were first year undergraduate students, 48.7% were intermediate students and 21% were final year students. The College Undergraduate Stress Scale (CUSS) prepared by Renner and Mackin (1998) was used to measure the level of stress of the students. Grade Point Average (GPA) of previous semester was considered to measure academic achievement of the undergraduate students. The overall result of the study revealed that majority of the students experienced moderate level of stress. First year students had low level of stress and medical students had the highest level of stress. A significant, but weak and negative relationship was observed between stress and academic achievement.

**Gupta, et al. (2011)** examined the relationship between academic stress and academic achievement of secondary level students of Meerut City. The major objective of the study was to find out the level of academic stress and educational achievement of secondary school students. The study was conducted on 200 IX standard students. Both the sex students were included in the sample, out of which 100 each were boys and girls. They were selected from various schools of Meerut, Uttar Pradesh. Academic Stress Inventory (ASI) developed by Abha Rani Bist (1972) was used to get the requisite data for the study. Academic achievement was assessed by using aggregate marks obtained by the students in their annual examination. The result shows that the boys were more frustrated than the girls. Both boys and girls were equally experienced mental conflict in their academic situations. The girl

students perceived more pressure than boys. The girls were comparatively more anxious in their academic situation than boys.

**Sharma, et al. (2011)** carried out a study on academic stress and its effect on vital parameters during academic examination in final year medical students. The study was conducted on 68 MBBS students of Sri Aurobindo Institute of Medical Sciences, Indore, Madhya Pradesh. Zung's scale was used to assess the level of stress of the students. The findings of the study revealed that there is a significant difference in vital parameters (Pulse rate, Systolic Blood Pressure and Diastolic Blood Pressure) due to academic examination and consequently the level of stress was high. The investigators reported that the girls have more stress than the boys. It was also observed that academic examinations are stressful and bring changes in vital parameters which affect their academic performance. Academics and examinations are considered to be the most powerful stressors for medical students.

**Kumari, et al. (2012)** jointly conducted study on relationship between stress and academic achievement of senior secondary school students. The main objectives of the study were to find out the relationship between stress and academic achievement of senior secondary school students; second, to compare the stress levels of male and female students; third, to compare the academic achievement of male and female students and finally, to compare the academic achievement of students having less, moderate and high level of stress. The sample comprised of 120 senior secondary school students of North-western Delhi. Out of 120 students, 60 were male and 60 were female. The stratified random sampling technique was employed in selecting the sample. Stress Inventory (SI) designed and standardized by Dr. Suman Nangia (1990) was used. Academic achievement was assessed from the



students' annual examinations of +1 and pre-board examination of +2 classes. The findings of the study showed a positive relationship between stress and academic achievement of the senior secondary school students. While, no significant difference was found in the academic achievement of students having high, moderate and less stress. The students with high and moderate stress performed better in academics than the students with less stress. Finally, the stress and academic achievement were not mediated by gender.

**Schraml, *et al.* (2012)** carried out a study on implications of chronic stress on adolescent students' academic achievement. The study aimed to investigate the chronic stress and its implications on adolescent student's academic achievement. The sample comprised of 273 high school students of Stockholm. Both sex students were selected for the study. Shirom Melamed Burnout Measure (SMBM), Rosenberg's Self-esteem Scale (RSE-Scale) and Performance-Based Self-esteem Scale (PBS-Scale) by Hallsten *et al.*, 2005 were used to get the requisite data and information for the study. The student's final Grade Points were considered as the indicator of academic achievement. The result of the study showed a negative consequence of chronic stress on adolescent students' academic achievement. It was also found that adolescent students who had low global self-esteem, high demands, and sleep deprivation showed a higher risk for developing chronic stress and poor academic achievement.

**Womble (n.d.)** attempted to find out the impact of stress factors of college student's on academic performance. The aim of the study was to find out the relationship between perceived stress and academic achievement of the students. The sample comprised of 25 undergraduate college students. Out of which, 7 were male and 18 were

female. They were taken from University of North Carolina, Charlotte. In order to evaluate the level of stress, the author used Perceived Stress Scale (PSS) developed by Cohen and Mermeistein; 1983. The author also recorded the primary information of the students i.e. age, gender, race, class in reading etc. The Grade Point Average (GPA) obtained by the students in their semester (Fall of 2001) examination used as an indicator of academic achievement. The result showed no relationship between perceived stress and academic achievement of the students.

### **2.3 Studies related to Anxiety and Academic Achievement**

**Hussain (1977)** studied on academic attainment in relation to level of aspiration and anxiety of undergraduate and pre-university students of Aligarh Muslim University. The major aim of the investigation was to study the academic attainment of university students in relation to the level of aspiration and anxiety. The sample comprised of 45 students of the undergraduate and pre-university classes for collection of data. The Level of Aspiration Coding Test developed by Ansari and Ansari; and Sinha's Anxiety Scale were used. For academic achievement, the aggregate marks obtained by the students in their end semester examinations were considered. The findings of the study were as follows: Academic performance of the group with moderate anxiety was significantly better than that of both the high and low anxiety groups; anxiety bore a curvilinear relationship with academic attainment; but high anxiety had adverse effect on academic performance; low anxiety also showed a lack of drive and motivation of the students; and interaction effect of anxiety and aspiration had no significant effect on the academic performance.

**Cheung, et al. (1984)** conducted a study on anxiety and academic performance of secondary school students of Hong Kong. The objectives of the present study were to assess the degree and the pattern of manifestation of anxiety among secondary school students in Hong Kong; to investigate the relationship between trait and situation anxiety of the students; to examine the facilitating and debilitating relationship between anxiety and academic achievement of the students. The sample were collected in two phase for the study. In the first stage, sample comprised of 384 students of 10<sup>th</sup> standard selected from three English medium secondary schools. Out of 384 students, 186 were boys and 198 were girls. Second stage, sample comprised of 1,022 students of class IX selected from seven secondary schools in Hong Kong. Among them, 604 were boys and 418 were girls. Taylor Manifest Anxiety Scale (MAS., 1953), Alpert and Haber's (1960) Achievement Anxiety Test (AAT), and S-R Inventory of Anxiousness by Endler, Hunt and Resenstein (1962) were used for collection of data. The result of the study revealed that level of anxiety among X standard students was higher than that of IX standard students and anxiety towards examination was stronger among boys than the girl students. The result revealed that academic performance was mildly related to each other. Such a relationship may be both facilitative as well as debilitating in nature. The findings also showed that the different measures of anxiety were moderately correlated and the generic anxiety traits had less direct relevance to academic performance.

**Gupta (1987)** examined the relationship between locus of control, anxiety, level of aspiration and academic achievement of secondary students of Hindi medium schools of Allahabad City. The main objective of the study was to assess the magnitude and direction of relationship of locus of control, anxiety, level of aspiration and socio-economic status

with academic achievement of the students. The sample consisted of 670 students of XI standard Hindi medium schools of Allahabad City. Both the sex students were selected for the study. Test of General Mental Ability developed by M. C. Joshi; Rotter's I. E. Scale; L. A. Coding Test by Ansari and G. A. Ansari; Socio-economic Status Index by R. P. Verma and P. C. Saxena were used. Academic performance scores were taken from the aggregate marks of the high school examination conducted by the U. P. Board. The result of the study revealed that there is a significant negative relationship between anxiety and academic achievement of the students. The investigator further reported that all the four variables viz. Locus of control, anxiety, level of aspiration and socio-economic status predicted academic achievement; but socio-economic status and locus of control were found to be the best predictors.

**Mohan (1988)** conducted a study on graduate and post-graduate students of Jhansi, Uttar Pradesh. The study was concerned with the relationship between scholastic achievements and certain selected psychological variables. The variables under study were self-esteem, feelings of security, depression and test anxiety. The objective of the study was to find out the relationship between self-esteem, feeling of security, test anxiety and scholastic achievement of the students. The sample consisted of 300 graduate and post graduate students, out of which, 150 were boys and 150 were girls. They were purposively selected for the study. Dymond's Self-concept Scale translated in Hindi by S. P. Sinha, Maslow's Security Insecurity Inventory, V. P. Sharma's Test Anxiety Scale, and Sinha's Anxiety Scale were used for collection of data. The author reported that the scholastic achievement and test anxiety were related to each others.

**Saxena (1988)** undertook a study to find out the impact of family relationship on adjustment, anxiety, achievement-motivation, self-concept and academic achievement of the students. The aim of the study was to compare the students from different types of family of relationship with regard to adjustment, anxiety, achievement-motivation, self-concept and academic achievement of the students. The study was conducted on 600 students studying in class XI of Agra City, out of which, 300 each were boys and girls. The tools used for the study were Parental Acceptance-Rejection Questionnaire, Adjustment Inventory, Anxiety Scale, Achievement Motivation Test and Self-Concept Test. The marks obtain by the students in High School Examination were considered as their academic achievement. The findings of the study revealed that anxiety and academic-motivation were not significantly influenced by family relationship; while girls were more anxious than boys.

**Sibia (1989)** attempted to find out the degree of prediction of achievement by field dependence, test anxiety and intelligence among female students of Delhi. The major objective of the study was to examine the degree of prediction of achievement from field dependence, test anxiety and intelligence of XI standard girl students. The study comprised of 287 girl students studying in different central schools of Delhi. The requisite data were collected through Socio-economic Status Scale, Group Embedded Figure Test (GEFT), Raven's Progressive Matrices (RPM), Hundal's General Mental Ability Test (GMAT) and Hindi version of Test Anxiety Inventory of Sharma, Sud and Speilberger. The total marks obtained by the students in last annual examination were used as an indicator of academic achievement. The result of the study revealed that test anxiety was the most important predictor followed by verbal intelligence.

**Ramachandran (1990)** studied the relationship between academic performance and other psychological variables of secondary students. The variables under study were reasoning, anxiety and adjustment. The objectives of the study were to explore the relationship between academic performance and reasoning, anxiety and adjustment of the students; and to find out the variables influence on students' academic performance, reasoning, anxiety and adjustment. The sample consisted of 500 students of XI class. They were selected from eight schools of Chidambaram Town of Tamil Nadu state. Taylor's Manifest Anxiety Scale, Verbal and Adjustment Inventory of Tiwari and Srivastava's were used to get the data and information for the study. The marks obtained by the students in their school examination were used as an indicator of academic achievement. The author reported a low negative relationship between anxiety and academic achievement. Ramachandran also found that the girls are better in academic achievement than the boys. The educated parent's girls were better in academic performance than that of uneducated parent's girls. The children of forward communities did better in academic performance than the children of backward communities.

**Thilagavathi (1990)** conducted a study on academic achievement in relation to intelligence, Creativity and anxiety of XI class students. The study aimed to find out the relationship between academic achievement and intelligence, creativity and anxiety; and to find out the intelligence, creativity and anxiety of high, average and low achievers. The study was conducted on 400 higher secondary students. Both sex students were comprised in the study. The sample were selected from 20 Higher Secondary Schools of Kanyakumari Revenue District, Tamil Nadu. The tools used for the study were Ahuja's Group Test of Intelligence (13-17), Mehdi's Verbal Test of Creativity Thinking and

Spielberger, Garsuch & Lushen's State Anxiety Test. The author reported that the higher achievers belonged to the low level anxiety group and low level achievers belonged to high level anxiety group. It was also observed that anxiety had only a negative influence on academic achievement of the students.

**Kaur (1991)** studied the effects of test anxiety, belief in control of reinforcement and intelligence on intellectual achievement of students. The main objective of the study was to find out the separate and interactive effects of test anxiety, belief in control of reinforcement, and intelligence on academic achievement of 850 students of 12-14 years age group studying in Public and Government schools. Out of 850 students, 178 boys and 214 girls were from public schools and 165 boys and 293 girls were from government schools. Test Anxiety Scale for Children (TASC) by Sarason *et al.*, The Raven's Standard Progressive Matrices (SPM) and Crandall's Intellectual Achievement Responsibility Scale (IARS) were used to get the requisite data. The result revealed that test anxiety, intelligence and belief in control of reinforcement showed a significant relationship with academic achievement. The researcher reported that all the groups under the study did not differ significantly on anxiety test and the academic achievement of various school subjects, but the exceptions was observed in case of English and Mathematics, and English and Social Studies for the females studying in government schools. The author also added that there are significant differences in academic achievement scores of boys and girls of public schools.

**Cassady, et al. (2002)** conducted a study on "Cognitive Test Anxiety and Academic Performance". The main objective of the study was to examine the relationship between cognitive test anxiety and

students' academic achievements. The study comprised of 168 undergraduate students, out of which, 114 were female and 53 were male studying in undergraduate educational psychology course at a large Midwestern University. Cognitive Test Anxiety Scale was developed by the investigators. They also prepared Test Procrastination Questionnaire and Self Report Sheet to get requisite data. To assess the academic performance of the students, the authors conducted three multiple-choice exams in their educational psychology course. The findings of the study revealed that cognitive test anxiety influences a significant stable and negative impact on student's academic performance. High levels of cognitive test anxiety also significantly associated with lower academic performance. The investigators also recorded the gender differences in cognitive test anxiety of the students and reported that those differences were related to academic performance on the course examination.

**Chapell, et al. (2005)** undertook a study on test anxiety and academic performance on Undergraduate and Graduate students of Public University, New Jersey. The study aimed to find out the relationship between test anxiety and academic performance of Undergraduate and Graduate students. The study was conducted on 5,414 students of public university in New Jersey, US. Out of 5,414 students, 4,000 were undergraduates (1,456 male and 2,544 female) and 1,414 were graduate students (358 male and 1,056 female). Socio-economic Status Scale developed by Steinberg *et al.* (1991) and Test Anxiety Inventory (TAI) developed by Spielberger (1980) were used for collection of data. Students' Grade Point Average was considered as their academic achievement. The authors also recorded general information, like, age, sex, year spent in school/college, different ethnic groups etc. The finding reflects a significant but small inverse relationship between



test anxiety and academic performance (GPA) in both graduate and undergraduate groups. The female graduate students were low in test anxiety than boys. There were no significant academic (GPA) differences between low and high anxious male graduate students. In case of undergraduate students, female students had significantly higher test anxiety and higher GPAs than male students; and female graduate students had significantly higher test anxiety and higher GPAs than male graduate students.

**Lashkaripour, et al. (2007)** conducted a study on test anxiety and academic achievement of students in Guidance Schools, Zahedan, Iran. The purpose of the study was to examine the relationship between test anxiety and academic achievement of students. The sample of study contained 935 students, out of which 540 were girls and 395 were boys. The sample were randomly selected from 5 girls' and 4 boys' schools. Sarason's Test Anxiety Questionnaire (TAQ) and Demographic Features Questionnaire were used for collection of data. The investigators also accounted students' average score for consideration of their academic performance. The result of the study revealed that the test anxiety is more prevalent in girls more than boys. It was also found that educational achievement and test anxiety level have a reverse ratio. The authors also point out that when test anxiety level increases, educational achievement decreases.

**Yeh, et al. (2007)** examined the relationship between academic achievement and levels of anxiety and depression in medical students who experiencing curriculum reform. The study aimed to examine the differences in academic achievement and the directions of correlations between academic achievement and anxiety and depression among the medical students of Kaohsiung Medical University, Taiwan. The sample

consisted of 147 grade III students from the undergraduate-entry program and 56 grade 1 students from the graduate-entry program. A standardized scale of Anxiety and Depression was used to assess the levels of depression and anxiety of the students. The results indicated no significant correlation between anxiety or depression and academic achievement.

**Fernandez-Castillo, *et al.* (2009)** conducted a study on selective attention, anxiety, depressive symptomatology and academic performance of adolescents. The main objectives of the study were to confirm the association between anxiety and academic achievement and to describe gender differences in anxiety and academic achievement of adolescent students. The study was conducted on 98 secondary students of 12-16 years. Out of which, 60 were male and 38 were female students. They were randomly selected from two secondary schools in the city of Granada province, Spain. To assess the level of anxiety of the students, the Spanish version of the State-Trait Anxiety Inventory for children and adolescents (STAI-C, Spielberger, 2001) was used. Students' Grade Point Average was considered as, the academic achievement. The findings of the study revealed a significant negative relationship between anxiety and academic performance of the students. It was also reported that there is a significant inverse association between depression and academic performance of the students. The analysis of gender differences showed significant differences between male and female in case of overall Grade Point Average. The result indicated no significant differences in anxiety of male and female students and finally, moderate levels of anxiety are associated with better academic performance of students.

**Ndirangu, et al. (2009)** examined the relationship between test anxiety and academic performance of secondary level school students in Nyeri District, Kenya. The study aimed to determine the relationship between test anxiety and academic performance of students. In the study, sample comprised of 80 students and 12 teachers. Students were randomly selected from two girls' and two boys' provincial schools of two divisions i.e. Tetu and Mukurweini. 20 students were selected from each school. The simple random sampling technique was used to select 12 teachers from a population of 600 teachers in these schools. The Students' Questionnaire and Interview Schedules for students and teachers were prepared by the researchers and administered to get the data. The findings of the study revealed that there is a significant difference between test anxiety level before and after examinations. Moreover, high anxiety is experienced before the examination in all subjects. The result also indicated that both boys and girls are equally affected by the test anxiety. The authors further reported that there is no significant relationship between test anxiety and academic performance of the students.

**Olatunde (2009)** studied mathematics anxiety and academic achievement in some selected senior secondary schools of Southwestern Nigeria. The objective of the study was to examine the relationship between mathematics anxiety and academic achievement of secondary school students'. The sample of the study comprised of 1750 senior secondary school students. Respondents were randomly selected from two secondary schools in each of the Senatorial districts in Southwestern part of Nigeria. Mathematics Achievement Test (MAT) and Testphobia Questionnaire for Students (TQS) were used for data collection. The result revealed that anxiety does not necessarily enhance

performance even though test-taking anxiety and performance are significantly related.

**Rezazadeh, et al. (2009)** studied the relationship between test anxiety and academic achievement of undergraduate students. The sample comprised of 110 undergraduate students. Out of 110 students, 65 were female and 45 were male and they were selected from University of Isfahan, Iran. The Test Anxiety Questionnaire developed by Suinn, 1969; and revised by Summer, 2002 was used to assess test anxiety of the students. The findings of the study revealed that female students have higher level of test anxiety in contrast to male students. A significant negative relationship was reported between test anxiety and academic achievement of the students. The authors also observed that if the level of test anxiety increases than the educational achievement of the students decreases.

**Singh (2009)** carried out a study on level of academic anxiety, self confidence and relation with academic achievement of secondary level students. The main objectives of the study were (i) to study the level of academic anxiety of secondary students (ii) to study the relationship between level of academic anxiety and level of academic achievement of secondary students (iii) to study the difference between academic anxiety level of male and female students. The sample comprised of 400 secondary students studying in class X. The respondents were selected from 10 secondary schools in Akola city of Vidharbha Region, Maharashtra. Level of Academic Anxiety Scale for Children by A. K. Singh and A. S. Gupta (1971); Self Confidence Checklist by M. Busavama were used for the collection of data. Students' aggregate marks were collected from school records, were considered as academic achievement. The result of the study revealed a significant negative relationship between

academic anxiety and academic achievement of the students. The investigator also reported that male and female students significantly differ in their academic anxiety.

**Deb, et al. (2010)** investigated the levels of the anxiety among high school students in India. The main objective of the study was to understand anxiety among adolescent students in Kolkata City. In the study, sample comprised of 460 adolescent students of 13-17 years. Among them, 220 were boys and 240 were girls. The respondents were selected from five Bengali medium and three English medium schools in Kolkata city. Semi-structured Questionnaire developed by Chatterjee (2007) and The State-trait Anxiety Inventory (STAI) developed by Spielberger, et al. (1970) were use to get the data and information for the study. The findings of the study revealed that the level of anxiety was higher in case of adolescent boys than that of adolescent girls and the adolescents attending Bengali medium schools were higher level of anxiety than that of adolescents attending English medium schools. The result also showed that adolescents belonging to average socio-economic background have higher level of anxiety than that of both high and low socio-economic backgrounds. The authors further reported that working mothers' adolescent children were more anxious.

**Mokashi, et al. (2010)** conducted study on relationship between anxiety and academic achievement of adolescent students. The study aimed to explore the relationship between anxiety and scholastic achievement. *Ex-post facto* research design was used for the present study. Sample comprised of 330 adolescent students. Out of which 165 were boys and 165 were girls. They were purposively selected from VIII, IX, and X standard of two residential schools i.e. Kittur Rani Chennamma School of Kittur and Sainik School of Bijapur. Anxiety

Scale Questionnaire developed by Cattell (1963) was used to measure the level of anxiety of the students. Marks obtained in the previous final examination were considered for assessing scholastic achievement of the students. The findings of the study revealed there is a significant negative relationship between anxiety and scholastic achievement of the students. The authors further reported that boys were significantly having higher level of anxiety while girls were high in scholastic achievement.

**Rana, et al. (2010)** studied the relationship between test anxiety and academic achievement of post graduate science students. The main objective of the study was to explore the relationship between test anxiety and academic achievement of post graduate science students. The study was restricted to 414 students of seven science faculty departments of a public sector University in Lahore, Pakistan. Out of 414 students, 116 were male and 298 were female. Test Anxiety Inventory (TAI) developed by Spielberger; 1980 was used for the collection of data. Academic achievement was measured from student's achievement scores in semester examination. The investigator reported that there is a significant negative relationship between test anxiety and academic achievement of the students.

**Yousefi, et al. (2010)** studied the relationship between test-anxiety and academic achievement among Iranian adolescents. The major aim of the study was to determine the relationship between test-anxiety and academic achievement among adolescent students. The study was conducted on 400 students of 15-19 years age group. Out of 400 students, 200 were boys and 200 were girls. They were selected from nine high schools in Sanandaj, Iran. Test-Anxiety Inventory (TAI) developed by Abbolghasemi (1988) was used for collection of data.

Students' Grade Point Average (GPA) score was considered as their academic achievement. The authors reported that test-anxiety had an impact on adolescent's academic achievement. The result of the study yielded a significant negative relationship between test-anxiety and academic achievement of adolescent students. The result indicated a significant difference between male and female adolescents academic achievement. The female students' scored high in their academic achievement than male.

**Al-Qaisy (2011)** examined the relationship of depression and anxiety with academic achievement of University students, Jordan. The aims of the study were (i) to identify the impact of depression and anxiety on academic achievement of students (ii) to know the difference between gender and the level of depression and anxiety among the students. The study was conducted on 200 undergraduate students of 18-25 years. Out of 200 students, 109 were female and 91 were male. The respondents were selected from Tafila Technical University, Jordan by using Cluster Sampling method. Beck Depression Inventory (BDI) developed by Beck *et al.* (1988) and Trait Anxiety Inventory (TAI) prepared by Spielberger *et al.* (1984) were used for collection of data. The result of the study revealed that there is a positive relationship between anxiety and academic achievement of students; while a negative relationship is found with depression. It was also observed that anxiety among female is higher than males, while the depression is higher among males than females.

**Ergene (2011)** investigated the relationship between test anxiety and academic performance among high school students of Turkey. The objective of the study was to examine the relationship between test anxiety and academic success of Turkish high school students. The

sample comprised of 510 high school students studying in class X. Among them, 267 were female and 243 were male students. The respondents were selected from two state high schools of mid-socio-economic status (SES) regions in Ankara, Turkey. Turkish version Test Anxiety Inventory (TAI) developed by Oner's (1990) and Test Anxiety Inventory (TAI) adapted by Spielberger's (1980) were use for collection of data. Students' Grade Point Average (GPA) was considered as the indicator of their academic achievement. The researcher reported that test anxiety is negatively related to academic achievement of the students. Further, the author confirmed that female students were significantly higher in test anxiety scores than that of male students.

**Nadeem, et al. (2012)** studied the impact of anxiety on the academic achievement of University level students in Bhawalpur, Pakintan. The objectives of the study were to examine the impact of anxiety on the academic achievement of students and to differentiate the impact of anxiety on the academic achievement of male and female students. The study was conducted on 97 male and female students of Islamia University and their IQ level is in between 90-104. Stratified sampling technique was used to select the sample. To ascertain the level of IQ of the students, Otis self-administering test was used and Anxiety measurement Scale was used to find out the level of anxiety of the students. The result of the study revealed that anxiety had negative impact on academic achievement. The authors reported that when anxiety increases academic achievement decreases in case of both male and female students. Further, they stated that there is more impact of anxiety on female students as compared to the male students.

**Jain (2012)** examined the effect of academic anxiety on academic achievement of elementary level students. The objectives of the study



were to find out the relationship between academic anxiety and academic achievement and to find out the effect of gender on academic anxiety and academic achievement of the students. The sample comprised of 128 VIII standard students. Out of which, 91 were boys and 37 were girls. They were selected from 4 schools using by non-probability sampling technique. Academic Anxiety Scale for Children (AASC) developed by A. K. Sinha & A. Sen. Gupta; and Reading Comprehension test by Pramila Ahuja and G. C. Ahuja were used to get the data and information for the study. The result revealed that academic anxiety is negatively correlated with student's academic achievement. The author also found a significant difference between academic anxiety of boys and girls students. Similar result was observed in the area of academic achievement of elementary boys and girls students.

**Ahmad, et al. (2012)** conducted a study on relationship of test anxiety and academic achievement of secondary level students in Lahor. The sample of comprised of 426 tenth standard students of 15-17 age group of four English medium schools (two schools each for boys and girls). Among them, 221 were girls and 205 were boys. Britner and Pajares's (2006) Science Anxiety Scale (SAS) was adapted to measure test anxiety of the students. Marks obtained by the students in their examination were taken as their academic achievement. The result revealed that there is a significant negative relationship between test anxiety and academic achievement of the secondary level students.

**Attri, et al. (2013)** undertook a study on academic anxiety and academic achievement of secondary school students of Mandi district, Himachal Pradesh, India. The objectives of the study were to find out the academic anxiety of male and female secondary school students; and to

find out the academic achievement of male and female secondary school students. The sample comprised of 200 students of class X. Both sex students were included in the sample. Purposive sampling technique was used for selection of schools; and sample selection was made through random sampling method. Academic Anxiety Scale for Children (AASC) developed and standardized by A.K. Singh and A. Sen Gupta was used for measuring academic anxiety of the students. Marks obtained by the students in class IX examination were taken as their academic achievement. The result of the study showed that male and female students are significantly differ in the area of academic anxiety and academic achievement. Further, the investigators stated that female students are better in their academic achievement than that of male students.

**Singh, et al. (2013)** conducted a comparative study on anxiety, optimism and academic achievement of Private Medical and Engineering College students in Uttar Pradesh, India. The study aimed to assess the level of anxiety and its relation with optimism and academic achievement among Medical and Engineering students. The secondary objective of the study was to find out differences in anxiety, optimism and academic achievement across genders. The study was conducted on 346 second and forth semester Medical and Engineering students, out of which, 171 (99 female & 72 male) were Medical and 175 (113 male & 62 female) were Engineering students. They were selected from 3 Medical and 4 Engineering colleges of Uttar Pradesh. Sinha's Comprehensive Anxiety Test (SCAT, 2007) and Learned Optimism Scale (LOS, 2000) were used for collection of data. Academic results of the latest two semesters were considered as academic achievement of the students. The findings of the study revealed that anxiety had a significant negative relationship with optimism and academic achievement. The analysis of

data showed that there is a significant difference between Medical and Engineering students, but the gender differences in the variables under study were insignificant. A high level of anxiety was found among Medical and Engineering students. However, Medical students showed higher anxiety than that of Engineering students.

**Dhyani, et al. (n.d.)** conducted a study on anxiety and academic achievement of adolescent boys and girls of non working women. The major objectives of the study were (i) to assess the anxiety level of adolescent boys and girls of non working women. (ii) to find out the effect of anxiety on academic achievement of adolescent boys and girls of non working women, (iii) to find out the correlation between anxiety and academic achievement. The sample comprised of 160 adolescents of non working women. Out of 160 students, 80 were boys and 80 were girls. They were selected from 32 schools (16 Boys' and 16 girls') of Kanpur City. The researcher used stratified random sampling method. The standardized test (I.P.A.T.) developed by S. D. Kapoor was used to measure the level of anxiety of the students. Student's aggregate marks obtained in the High School Examination were considered as academic achievement. The findings of the study indicate no significant difference in anxiety between boys and girls; and there is a significant negative relationship between anxiety and academic achievement of boys and girls of non working women.

## **2.4 Studies related to Family Environment, Stress and Academic Achievement**

**Bhardwaj (2010)** carried out a study on academic stress and coping among adolescents in relation to their family environment and academic achievement. The main objective of the study was to compare

academic stress of students and their coping in relation to their family environment and academic achievement. The sample consisted of 200 students studying in class XI in Delhi. Students were divided into eight groups each consisting of 25 participants. Two × two factorial design was employed. Student Stress Inventory (SSI) developed by Dobson and Metcalfe and Family Environment Scale (FES) developed by Moos and Moos were adopted and academic stress was measured by a tool developed and standardized by the investigator. The percentage of marks obtained by the students in Class X Board Examination was considered as their academic achievement. The result of the study revealed that students from distressed family environment and students who are high achievers experience more academic stress than their counterparts. In case of coping with academic stress, it was found that the coping is used by all the students in almost equal and moderate degrees. The investigator also reported that the family environment emerged as the most important variable in moderating adolescents' ability to utilize different coping strategies to deal with academic stress.

## **2.5 Studies Related to Stress, Anxiety and Academic Achievement**

**Ravinder (1977)** investigated the effects of State Trait Anxiety and Psychological Stress on student's academic achievement. The sample of the study consisted of 240 girls of IX standard. Hindi Version of State Trait Anxiety Inventory (STAI) of Spielberger translated by Sharma and Singh and Hundal's General Mental Ability Test (Hindi Version) were used. The aggregate marks obtained by the students in the annual examination were used as the indicator of academic achievement of the students. The result of the study indicates that low anxiety student's

performance is significantly better than the high anxiety students; while Ego-Stress and anxiety state effects were similar.

**Namrata (1992)** conducted a study on personality trait, situational stress, anxiety and academic achievement of students. The aim of the study was to find out the relationship between anxiety, personality characteristics, four different types of stress and academic achievement. For measuring psychological variables the investigator has used standardized test. The result indicates a significant positive relationship between verbal intelligence and academic achievement of Juvenile delinquents; but a significant difference was found between Juvenile delinquents and normal children regarding verbal intelligence, achievement-motivation, self-concept and intervention-contraversion. It was also reported that psychological variables were significantly related to academic achievement, in case of normal children.

**Ghaderi, et al. (2009)** conducted a study on depression, anxiety and stress among the Indian and Iranian student. The aim of the study was to understand and compare the experiences of depression, anxiety and stress among Indian and Iranian students. The sample comprised of 80 Indian (40 male and 40 female) and 80 Iranian (40 male and 40 female) students studying in different departments of University of Mysore. Depression Anxiety Stress Scale (DASS) developed by Lovibond and Lovibond (1995) was used to get the requisite data for the study. The result revealed that the depression, anxiety and stress level of Indian students are significantly higher than those of Iranian students. There were no gender differences among the students of both countries. The authors reported that male and female students equally experience the depression, anxiety and stress irrespective of the countries.

**Bhasin, et al. (2010)** studied on depression, anxiety and stress among adolescent students belonging to affluent families in Greater Noida, Uttar Pradesh. The main objective of the present study was to examine the levels of depression, anxiety and stress (DAS) among school students. Sample comprised of 242 adolescent students of IX-XII standard. They were purposively selected from public school that had students mostly belonging to affluent families. Depression, Anxiety and Stress Scale (DASS) and a socio-demographic questionnaire were used for collection of data. The result revealed that depression, anxiety and stress were higher among those students who have low academic achievement; and all the three variables have an inverse relationship with the academic performance of the students.

**Yasin, et al. (2011)** conducted a study on differences in depression, anxiety and stress between low and high achieving students of International Islamic University Malaysia (IIUM). The sample of the study comprised of 120 undergraduate students. Out of which, 60 were male and 60 were female. Purposive sampling technique was used for the selection of sample. Respondents were divided into two groups, i.e. low and high achieving groups. Low achieving group refers to those students who obtained CGPA of 2.0 and below; and high-achieving group refers to the students who obtained CGPA of 3.5 and above. The Depression Anxiety Stress Scale (DASS) was used to measure the depression, anxiety, and stress among students. The author reported significant differences in depression, anxiety, and stress amongst the Low and High achieving groups. It was also observed that low achieving students have higher psychological problems compared to high achieving students.

## 2.6 Studies related to Academic Achievement and other variables

**Bala (2011)** conducted a study on influence of parental education and parental occupation on academic achievement of IX grade students of Punjab. The major objectives of the study were to find out the influence of parental qualification on academic achievement of the students and to find out the influence of parental occupation on academic achievement of the students. The study was conducted on 250 students studying in IX class, out of which, 125 were boys and 125 were girls. Students were selected on the basis of randomized technique of sampling from different private schools of Sangrur district. A questionnaire was developed by the author to collect the information regarding school and family factors of the students. The percentage of marks obtained in the middle standard Punjab School Education Board Examination was taken as the indicator of academic achievement. The findings of the study revealed that education and occupation of parents' positively influence the academic achievement of the students.

**Farooq, et al. (2011)** examined the different factors influencing the academic performance of secondary school students in a metropolitan city of Pakistan. The major objective of the study was to find out the effect of socio-economic status, parental education and occupation on quality of students' academic performance. The sample comprised of 600 students studying in class X. Both male and female students were comprised in the sample. Out of 600 respondents, 300 were male and 300 were female. The quality of academic performance was measured by their academic scores of the IX grade annual examination and verified from the Board of Intermediate and Secondary Education, Lahor and School records. The result of the study revealed that socio-economic status (SES) and parents' education have a

significant effect on students' overall academic achievement. The high and average socio-economic level affects the performance more than the lower level; Parents' education influences more than their occupation in relation to children's academic performance at school.

**Juma, et al. (2012)** studied the impact of family's socio-economic status on Girl Students' academic achievement in secondary school of Kisumu East District, Kenya. The main objectives of the study were i) to find out the influence of parental-level of education on academic achievement of Girl Students in secondary education ii) to find out how does the family income affects Girl Students' academic achievement in secondary education and iii) To find out the effect of family size and birth order on Girls Students' academic achievement. The sample of the study comprised of 300 Girl students. They were selected through simple random sampling technique. The tools used for the study were questionnaire, interview schedule and document analysis guide. The major findings of the study were as follows: the girl students from high family income performed better than those who were from low income families; Parents with high level of education greatly enhanced girl students' academic achievement; and moderate family sizes of about four children had high positive influence on girl students' academic achievement.

**Asemah, et al. (2013)** conducted a study on influence of social media on the academic performance of the undergraduate students of Kogi State University, Anyigba, Nigeria. The study aimed to find out the effect of social media on students' academic performance. The sample consisted of 282 undergraduate students. A questionnaire was used to collect the requisite data. The findings of the revealed that exposure to



social media by the undergraduate students of Kogi State University has negative effect on their academic performance.

**Okioga (2013)** studied the impact of students' socio-economic background on academic performance in Kisii University College, Kenya. The major objectives of the study were to evaluate the factors that influenced the student academic performance; and to find out the relationship between the students' socio-economic background and academic achievement. The sample comprised of 186 undergraduate (2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> year) students. They were selected from six faculties of Kisii University College using simple random sampling method. The researcher followed *ex-post facto* research design for the study. For measuring the students' perceptions and attitudes on their socio-economic background, Likert type structured and unstructured questionnaires were used. The Mean, Standard Deviation and ANOVA were calculated by the author as a measure of statistical techniques. The result of the study revealed that family income as the most important factor to consider in the socio-economic background of the students. It was observed that the socio-economic background of the students influence the academic performance.

**Drajea, et al. (2014)** studied the "Influence of Parental Education and Family Income on Children's Education in Rural Uganda". The study aimed to investigate the effects of parents' literacy levels and family income in Uganda on the quality and nature of parents' involvement in their children's primary education. The study was conducted in the rural district of Moyo, located in the north western part of Uganda known as the West Nile Region. A mixed-methods study with an ethnographic element was employed to explore the views and opinions of 21 participants through a qualitative approach. Methods of

data collection were observation of family routines and practices, semi-structured interviews with parents and children, and review of relevant documents. Findings of the study indicated that there is a significant positive relationship between parents' income and literacy levels and the quality of support to their children's education. Household poverty emerged as a major obstacle to educational success for children across the three socio-economic categories of family studied. The authors finally stated that parental illiteracy showed negative associations with children's literacy competence and subsequent success in primary school.

**Egunsola (2014)** conducted a study on influence of parental marital status, family type and size on academic performance of secondary school students in Agricultural Science in Adamawa state Nigeria. The main objectives of the study were i) to determine the influence of marital status on the academic performance of students, ii) to determine the influence of family type on the academic performance of students and iii) to determine the influence of family size on the academic performance of students. The sample consisted of 900 senior secondary school students. Out of which 450 students were from monogamous and 450 students were from polygamous family backgrounds. Home Environment factors and Students' Academic Achievement Test in Agricultural Science (HEFSAATAS) was used to get the requisite data. The findings of the study revealed that parental marital status, family type and family size have significant influence on students' academic performance. The investigator concluded that children from monogamous family are likely to get better attention in terms of prompt provision of school materials such as books and other learning materials than those from polygamous family background.

The related studies reviewed above show varied results regarding the six areas under review viz. i) family environment and academic achievement, ii) stress and academic achievement, iii) anxiety and academic achievement iv) family environment, stress and academic achievement, v) stress, anxiety and academic achievement, vi) academic achievement and other variables. Regarding family environment and academic achievement, almost all the researcher reported that family environment has a positive relationship with academic achievement. In context of stress and academic achievement, majority of the authors found a negative relationship between these two variables. Only few authors have reported a positive relationship between these two variables and very negligible authors found no relationship between stress and academic achievement. Further, it is also observed that almost all the researchers found a negative relationship between anxiety and academic achievement. Studies conducted by some authors regarding academic achievement and other variables showed that socio-economic background of the students also influence the academic achievements.