



**IMPACT OF FAMILY CLIMATE, ACADEMIC
MOTIVATION AND ADJUSTMENT ON
ACADEMIC ACHIEVEMENT OF
ADOLESCENTS**

THESIS

SUBMITTED FOR THE AWARD OF THE DEGREE OF

Doctor of Philosophy

IN

Education

By

AKASHY KUMAR

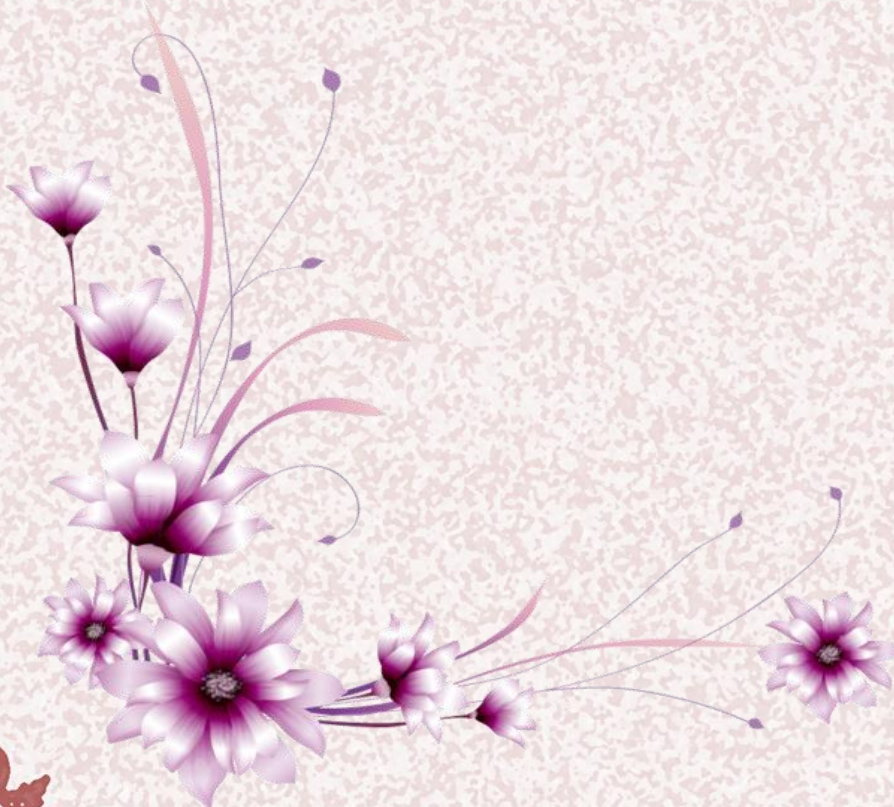
Under the Supervision of

PROF. GUNJAN DUBEY

**DEPARTMENT OF EDUCATION
ALIGARH MUSLIM UNIVERSITY
ALIGARH (INDIA)**

2016

*Dedicated
To
My Beloved Parents*



Dr. Gunjan Dubey
Professor



Department of Education
Aligarh Muslim University,
Aligarh, U.P-202002(India)

CERTIFICATE

This is to certify that **Mr. Akashy Kumar** has carried out his Ph.D. research work entitled, **“Impact of Family Climate, Academic Motivation and Adjustment on Academic Achievement of Adolescents”** under my supervision and guidance. To the best of my knowledge and belief, the research work embodied in this thesis is the original work by the investigator and is suitable for submission for the award of the degree of Doctor of Philosophy (Ph.D) in Education in the Department of Education, Aligarh Muslim University.

Dr. Gunjan Dubey
(Supervisor)

Phone { External: 0571-2721332
Internal: 3045 &3046



DEPARTMENT OF EDUCATION
ALIGARH MUSLIM UNIVERSITY
ALIGARH- 202002 (INDIA)

Ref. No. _____

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Akashy Kumar
Enrolment No- GE2540

.....

CERTIFICATE FROM THE SUPERVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Dr. Gunjan Dubey
Professor
Department of Education
A.M.U, Aligarh- India

(Signature of the Chairman of the Department with seal)

Phone { External: 0571-2721332
Internal: 3045 &3046



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January 21, 2016

(Akashy Kumar)

A.M.U, Aligarh

PREFACE

In our Indian society academic achievement is considered as a significant criterion to judge one's potentialities and possibilities. Hence, academic achievement occupies a very crucial place in education as well as in learning process. So the investigator was motivated to undertake this study to provide empirical answers to few questions that determine academic achievement of the adolescents. There are so many factors that affect the academic achievement. The investigator was interested to take up this study and to investigate the impact of family climate, academic motivation and adjustment on academic achievement of adolescents. This study is based on a sample of 920 students. They were enrolled in secondary schools of district Agra during the session 2012-2013. Out of the total 1050 questionnaires administered to students only 920 were got filled by the students and they were found to be usable. In this way the response rate of 87.61 was obtained.

The scored data was analyzed empirically to study the impact of family climate, academic motivation and adjustment on academic achievement of adolescents. The thesis in the hand reports the results of the above study in five chapters. The chapter I is introductory chapter and theoretical back ground. In the second chapter 'Review of previous Researches' related to this study is reported at National and International level. The chapter III presents the method and procedure of the presents study. Chapter IV presents the 'Analysis and Interpretation of obtained results. The final Chapter V presents the summary, conclusion, discussion and their implication for better academic achievement of adolescents.

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LIST OF ABBREVIATIONS

AA	Academic Achievement
AMS	Academic Motivation Scale
AISS	Adjustment Inventory for School Students
ADJ	Adjustment
FC	Family Climate
AM	Academic Motivation
SPSS	Statistical Package for Social Science
SD	Standard Deviation
SES	Socio Economic Status
SEM	Standard Error of Mean
MHRD	Ministry of Human Resource Development
MRA	Multiple Regression Analysis
NCERT	National Council of Educational Research and Training
ANOVA	Analysis of Variance
IV	Independent Variable
DV	Dependent Variable
UNESCO	United Nations Educational, Scientific and Cultural Organization

CODING SYSTEM FOR ANALYSIS

FC ₁	Restrictiveness Vs Freedom
FC ₂	Indulgence Vs Avoidance
FC ₃	Partiality Vs Fairness
FC ₄	Attention Vs Negligence
FC ₅	Acceptance Vs Rejection
FC ₆	Warmth Vs cold Relation
FC ₇	Trust Vs Distrust
FC ₈	Dominance Vs Submissiveness
FC ₉	Expectation Vs Hopelessness
FC ₁₀	Open communication Vs Controlled communication
AM ₁	Achievement in Examination
AM ₂	Study Habit
AM ₃	Academic Goal
AM ₄	Interest in Study
AM ₅	Attitude to Study
AM ₆	Regularity in Study
AM ⁷	Extracurricular activity
ADJEM	Adjustment Emotional
ADJSOC	Adjustment Social
ADJEDU	Adjustment Educational

ABSTRACT

Introduction:

Education is an important activity of every society and is regarded as a remedy to many complicated problems of our country. In a world based on science and technology, it is education that determines the level of prosperity, welfare and security of the people and on the quality and number of persons coming out of our schools and colleges, depends national development and the standards of living of people. It is for this reason that **Education Commission (1964)** said that “the destiny of India, is now, being shaped in her classrooms” A Country’s progress, besides other things depends on the educational facilities provided by the country and academic achievement of students. If academic achievement of the students is not up to the mark, any effort of government or society to develop our country will go in vain. Education is the process of human development in a desirable fashion. It is the most effective and powerful instrument of social change. A good quality education makes an individual a right thinker, an independent decision maker, skilled worker and better citizen. It not only promotes the academic development but also explores vocational possibilities, self-motivation and better adjustment of individuals leading them for all round personality development. In this regard education and academic achievement occupies a very important role at adolescent stage.

In the words of A.T. Jersild, “Adolescence is that span of years during which boys and girls move from childhood to adulthood, mentally, emotionally, socially and physically” Interestingly, the importance and significance of adolescence had been recognized right from the ancient times but the scientific study of behaviour of adolescence is very recent. (Chauhan, 2013.p,77). Education of adolescents among Egyptian, Jews and Greeks in pre-christian era carried memories of the rituals of primitive initiation ceremonies; and their expectations of uniform and sudden maturing was re-echoed through many later centuries by writers who had little to say beyond an emphasis on the discreteness of the different periods of childhood. They believed that this was clearly defined and swift transition to adult status as some point at which wise admonition could profitably be directed by a parent to a child or by a teacher to a pupil. (Chauhan, 2013, p.77)

Significance of the study:

Adolescence is a stage of revolutionary change in human life. It is the most important and crucial period of human life. Though, this period is full of challenges, but potential among adolescents is also far greater. This study was undertaken to provide the empirical evidence that could be of some utility to throw light over the problems of adolescent learners related to their adjustment with family, society, school and their academic motivation which ultimately affect their academic achievement at this stage. As the three independent variables family climate, academic motivation and adjustment taken in the present study are based upon the expectation that they affect the academic achievement of adolescents; the relative contribution as well as individual contribution of these independent variables will provide empirical evidence as determinants of academic achievements of adolescents. It is hoped that the results of the present study will be of immense value for teachers and parents for raising the level of academic achievement of adolescents and ultimately their performance in different pursuits of life. The findings of this study are further expected to identify the contribution of these factors in academic achievement of adolescents and provide effective measure to enhance the academic achievement of secondary school students.

Research Questions:

In this specific context the present investigation was undertaken to specifically provide empirical answers to the following questions:

1. What is the role of family climate in academic achievement of adolescents?
2. How academic motivation is related with academic achievement of adolescents?
3. Is adjustment related with academic achievement of adolescents?
4. Whether the academic achievement of adolescents varies with the family climate, academic motivation and adjustment?

Statement of the Problem:

Incorporating the above raised questions the problem for this empirical study was given following formal title-

“Impact of Family Climate, Academic Motivation and Adjustment on Academic Achievement of Adolescents”**Objectives of Study:**

The proposed study is aimed at achieving the following objectives:

1. To study the level of family climate, academic motivation, adjustment and academic achievement of adolescents
2. To study the impact of family climate on the academic achievement of adolescents
3. To study the impact of academic motivation on the academic achievement of adolescents
4. To study the impact of adjustment on the academic achievement of adolescents.
5. To study the relative contribution of family climate, academic motivation and adjustment to academic achievement of adolescents.
6. To study the difference in family climate, academic motivation, adjustment and academic achievement of adolescent in relation to some demographic variable such as –
 - (1) Gender Male/ Female
 - (2) Location Rural/ Urban background.
 - (3) Family Type i. e. Single/Joint family.

Hypotheses of the Study:

Corresponding to objectives of the study following null hypotheses were formulated for empirical verification:

- H1.** The family climate, academic motivation, adjustment and academic achievement level of adolescents will not vary.
- Ho2.** There is no significant impact of family climate on the academic achievement of adolescents.
- Ho3.** There is no significant impact of academic motivation on the academic achievement of adolescents.
- Ho4.** There is no significant impact of adjustment on the academic achievement of adolescents.
- Ho5.** There is no relative contribution of family climate, academic motivation and adjustment on the academic achievement of adolescents.
- Ho6.1** There is no significant difference in family climate, in relation to gender, location and type of family.
- Ho6.2** There is no significant difference in academic motivation, in relation to gender, location and type of family.
- Ho6.3** There is no significant difference in adjustment, in relation to gender, location and type of family.
- Ho6.4** There is no significant difference in academic achievement, in relation to gender, location and type of family.

Method and Procedure:

The present research work has been undertaken to study the Impact of Family Climate, Academic Motivation and Adjustment on Academic Achievement of Adolescents. The descriptive survey method was adopted to complete this study. All the students at secondary school level in Agra district of Uttar Pradesh during the session 2012-13 were defined as the population of this. Since the population defined for this study was very huge, a sample of 920 students at secondary school stage was

selected through simple random sampling technique. For this, out of secondary schools whether government or private, 12 schools were selected and then all the students in the selected schools were taken into sample. The tools were administered personally. Overall response rate of 87.61 % was obtained.

Tools Used:

The relevance and reliability of any research work depends on appropriateness, reliability and validity of the tools and measures employed in the study. Thus to obtain the meaningful result of any research work, the tools applied should be valid and reliable as well as must see it to the corresponding age and ability levels of the sample involved in the research work. The dependent variable, i.e. academic achievement was measured in terms of the total marks secured by the students in the final exam of the previous class. In order to measure academic motivation, an Academic Motivation Scale was developed by the researcher while family climate and adjustment was measured by the standardized tools. Following tools were used in the present study to collect relevant data-

1. Family Climate Scale developed by Dr. Beena Shah (2006).
2. Academic Motivation Scale (AMS) as developed by the Investigator.
3. Adjustment Inventory for School Students (AISS) constructed and standardized by Dr A.K.P. Singh & R P Singh (2012, reprinted).

Findings:

1. The multiple regression analysis suggests that out of the ten dimensions of family climate four are the most potent predictor of the academic achievement of adolescents, with the predictability strength of (17.6 %). The maximum variance is shared by Indulgences Vs Avoidance (13.1 %) followed by Attention Vs Negligence (3.4%), Acceptance Vs Rejection (0.07 %) and Partiality Vs Fairness (0.04%).
2. The multiple regression analysis suggests that out of seven dimensions of academic motivation four are the most potent predictor of the academic achievement of adolescents, with the predictability strength of (14.9 %). The

maximum variance is shared by extra-curricular activity (9.3 %) followed by academic goal (4.1%), study habit (1.1 %) and attitude to study (0.5%).

3. The multiple regression analysis suggests that out of three dimensions of adjustment one educational adjustment is the most potential predictor of the academic achievement of adolescents, with the predictability strength of (10.5 %).
4. The multiple regression analysis suggests that out of twenty dimensions of all the three predictor variables only, indulgence Vs avoidance is the strongest predictor which explains 13.1% variance in academic achievement. The predictor, educational adjustment emerged as the second and most significant predictor of academic achievement and contributed 5.3% variance in the academic achievement. In the same way, Extra-curricular Activity 2.4%, Attention Vs Negligence 1.9% and Academic goal contributed 0.7% variance in academic achievement.
5. With regard to the relationship of Family Climate to gender difference, it was not found to be significantly related to the Family Climate of Adolescent students. It means adolescents of both sexes have the same kind of family climate.
6. The location or rural/urban background of adolescents was found to be significantly related with family climate. Adolescents belonging to urban family were found to be have better family climate than the adolescents belonging to rural area.
7. The type of family i.e. single and joint family was found to be significantly related with family climate of adolescents. The adolescents belonging to nuclear family (117.75) were having a better family climate then the adolescents who live in joint family (114.46).
8. The interactional effect of gender and location variation on the family climate of adolescents was found to be statistically significant. The further analysis revealed that female students (120.47) belonging to urban area possess better family climate than the female students (111.53) residing in rural area. While

the male students (117.12) of urban area possess better family climate than the male students (112.84) of the rural.

9. The interactional effect of gender and type of family on the family climate score of the total sample was found to be statistically insignificant, indicating that there was no significant interactional effect of gender and type of family on family climate of adolescents.
10. The interactional effect of location and type of family on the family climate score of the total sample was found to be statistically insignificant, indicating that there was no significant interactional effect of location and type of family on family climate of adolescents.
11. The three way interaction, i.e., gender X location X type of family was found to be statistically insignificant, indicating that there is no interactional effect of gender, location and type of family.
12. Gender was not found to be significantly related with Academic Motivation. Adolescent boys and girls have similar levels of academic motivation.
13. Location variation was significantly related with academic motivation of adolescents. Urban students' possess (136) better academic motivation than rural (131.67) counterpart.
14. The main effect of the type of family on academic motivation of adolescents was found to be statistically insignificant, indicating that type of family variation has no significant effect on academic motivation of adolescents.
15. The interactional effect of gender and location variation on the academic motivation of adolescents was found to be statistically significant. The further analysis revealed that female students (137.35) of urban areas possess better academic motivation than the female students (131.30) of the rural areas. While the male students (134.64) of urban area possess better academic motivation than the male students (132.03) of the rural areas.
16. There was no significant interactional effect of gender and type of family on academic motivation of adolescents.

17. The interactional effect of location and type of family on the academic motivation score of the total sample was found to be statistically insignificant, indicating that there was no significant interactional effect of location and type of family on academic motivation of adolescents.
18. The three-way interaction, i.e., gender X location X type of family was found to be statistically insignificant, indicating that there was no interactional effect of gender, location and type of family.
19. With regard to the relationship of adjustment to gender difference, it was not found to be significantly related to the adjustment of adolescent students. It means adolescents of both sexes have the same kind of adjustment.
20. The location or rural/urban background of adolescents was found to be significantly related with adjustment. Adolescents belonging to urban families were found to have better adjustment than the adolescents belonging to rural areas. Urban students' possess (12.91) better adjustment score than rural (15.33). (Low means on adjustment inventory (AISS) shows better adjustment and high mean shows poor adjustment).
21. The main effect of the type of family on adjustment of adolescents was found to be statistically insignificant, indicating that type of family variation has no significant effect on adjustment of adolescents.
22. The interactional effect of gender and location variation on the adjustment of adolescents was found to be statistically significant. Female students (12.10) of urban areas possess better adjustment than the female students (15.41) of the rural areas. While the male students (13.75) of urban areas possess better adjustment than the male students (15.41) of the rural areas.
23. The interactional effect of gender and type of family on the adjustment score of the total sample was found statistically insignificant, indicating that there was no significant interactional effect of gender and type of family on family climate of adolescents.
24. The interactional effect of location and type of family on the adjustment score of the total sample was found statistically insignificant, indicating that there

was insignificant interactional effect of location and type of family on adjustment of adolescents.

25. The three way interaction, i.e., gender X location X type of family was found statistically insignificant, indicating that there was no interactional effect of gender, location and type of family.
26. With regard to the relationship of academic achievement to gender difference, it was found to be significantly related to the academic achievement of adolescent students. Adolescents girls possess (73.15) better academic achievement score than adolescent males (69.19).
27. The location or rural/urban background of adolescents was found to be significantly related with academic achievement. Adolescents belonging to urban were found to be have better academic achievement than the adolescents belonging to rural area. Urban students' possess (72.90) better academic motivation score than rural (68.22).
28. The types of family i.e. single and joint family were found to be significantly related with academic achievement of adolescents. The students' belonging to nuclear family possess (72.09) better academic achievement than students belonging to joint family (69.85).
29. The interactional effect of gender and location variation on the academic achievement of adolescents was found to be statistically significant. The female students (76.013) of urban areas possess better academic achievement than the female students (68.49) of the rural areas. While the male students (69.561) of urban areas possess better academic achievement than the male students (68.36) of the rural.
30. The interactional effect of gender and type of family on the academic achievement score of the total sample was found to be statistically insignificant, indicating that there was insignificant interactional effect of gender and type of family on academic achievement of adolescents.
31. The interactional effect of location and type of family on the academic achievement score of the total sample was found to be statistically

insignificant, indicating that there was insignificant interactional effect of location and type of family on academic achievement of adolescents.

32. The three way interaction, i.e., gender X location X type of family was found to be statistically insignificant, indicating that there was no interactional effect of gender, location and type of family.

Conclusions

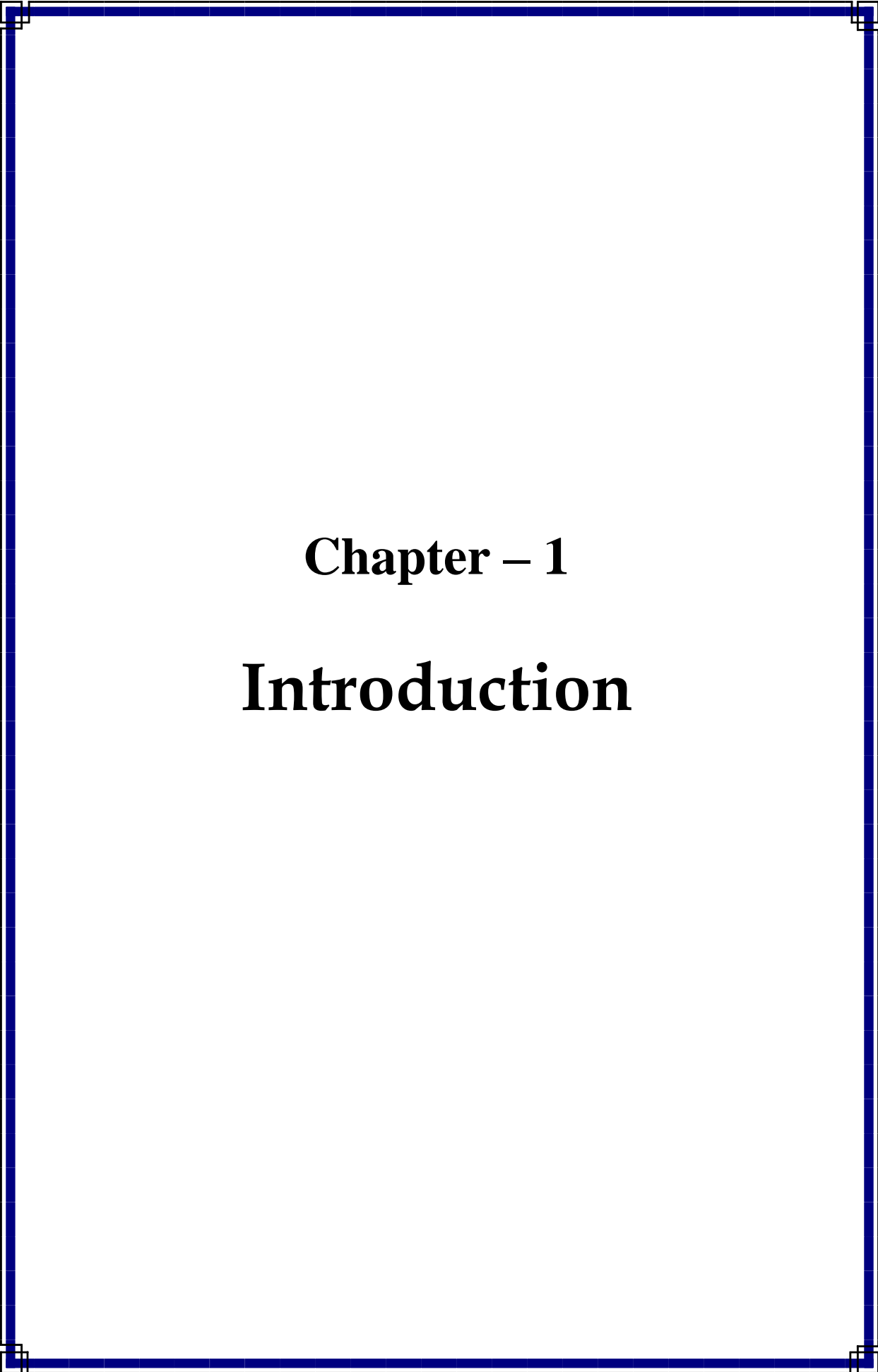
1. “Family climate of adolescents play important role in their academic achievement.”
2. “Academic Motivation given to adolescents helps a lot in increasing their Academic Achievement.”
3. “Educational adjustment is closely related to academic achievement of adolescents”
4. “Family climate, academic motivation and adjustment all contribute to academic achievement of adolescents learners.”
5. “Family climate of urban and nuclear families is better than rural and joint families.”
6. “Adolescents residing in urban area are more academically motivated. Female adolescents belonging to urban areas are academically more motivated than urban male adolescents.”
7. “Urban adolescents in general are better adjusted and female adolescents belonging to urban areas are more adjusted than male counterparts”
8. “Academic Achievement of girls is higher than male adolescents. The adolescents belonging to nuclear family and of urban location have better academic achievement.”

Suggestions for Further Research:

1. This study was limited to the Agra district of Utter Pradesh, thus, can't be generalized to the whole Indian population. So, same study could be taken

with a larger sample in different parts of our country, so as to generalize the major findings.

2. This study was confined to only secondary school students. Research could be conducted on the students pursuing primary and tertiary education too.
3. In the present study, the investigator has selected only three independent variables, viz., family climate, academic motivation and adjustment. Researchers can incorporate various other psychological variables in order to discover other predictors of academic achievement.
4. The sample size of this study was confined to 920 because of time and financial constraints, further investigators may extend the area and the size of the sample.
5. In this study academic achievement was taken as the total marks obtained by the students in their previous examination, a standardized test can be used to obtain a standard score of academic achievement.



Chapter – 1

Introduction

CHAPTER 1

Education is an important activity of every society and is regarded as a remedy to many complicated problems of our country. In a world based on science and technology, it is education that determines the level of prosperity, welfare and security of the people and on the quality and number of persons coming out of our schools and colleges, depends national development and the standards of living people. It is for this reason that **Education Commission (1964)** said that “the destiny of India, is now, being shaped in her classrooms” A Country’s progress, besides other things depends on the educational facilities provided by the country and academic achievement of students. If academic achievement of the students is not up to the mark, any effort of government or society to develop our country will go in vain. Education is the process of human development in a desirable fashion. It is the most effective and powerful instrument of social change. A good quality education makes an individual a right thinker, an independent decision maker, skilled worker and better citizen. It not only promotes the academic development but also explores vocational possibilities, self-motivation and better adjustment of individuals leading them for all round personality development.

Adolescence is the most important and crucial period of human life. It may be conceived as a product of interaction of biological, cultural and social factors upon the individual as he move from childhood into adulthood. Mostly, it is thought of as that period of life in which maturity is developed. It is the period of stress, strain and storm. Poets have described it as spring of life of a human being and an important era in the total lifespan. The word ‘adolescence’ came from a Greek word ‘adolescere’ which means ‘to grow towards maturity’. (Chauhan, 2013, p.75)

In the words of A.T. Jersild, “Adolescence is that span of years during which boys and girls move from childhood to adulthood, mentally, emotionally, socially and physically” Interestingly, the importance and significance of adolescence had been recognized right from the ancient times but the scientific study of behaviour of adolescence is very recent. (Chauhan, 2013, p 77). Education of adolescents among Egyptian, Jews and Greeks in pre-christian era carried memories of the rituals of primitive initiation ceremonies; and their expectations of uniform and sudden

maturing was re-echoed through many later centuries by writers who had little to say beyond an emphasis on the discreteness of the different periods of childhood. They believed that this was clearly defined and swift transition to adult status as some point at which wise admonition could profitably be directed by a parent to a child or by a teacher to a pupil (Chauhan, 2013, p.77).

Adolescence is known as a developmental period in which major changes in parents-adolescence, relationship occur and the adolescence partially shifts emotional investment and functions from parents to peers (Blos, 1962; Hazan, Hunt, Sturgeon, & Smollar, 1985). Adolescence involves the accomplishment of a number of critically important developmentally important tasks; adjustment to the changes of puberty that bring adult size appearance as well as reproductive capacity; the development of autonomy from parent and other caretakers, the establishment of effective social and working relationship with same and opposite sex peers, preparation for a vocation, and development of a system of values and a sense of identity, and a personal answer to the age-old question , “Who am I ?” The fact that in today’s world these tasks may be more complex, and that both parents and child have fewer consistent blueprints to guide them in their accomplishment, does not fundamentally alter the situation.

1.1 Personality of Adolescents:

The personality of the adolescents is greatly influenced by the various members of the family. Tense family atmosphere produce emotional instability in the adolescent. Too much strictness by the parents creates an urge of revolt in some adolescents and in some it develops an inferiority complex. On the basis of his researches, L.H. Stott (1939) has concluded that adolescents may be made a fine social being through inspiration, good atmosphere and good guidance by the members of the family. Those homes where members quarrel with each other never help healthy developments of the adolescent’s personality.

Two decades ago, most theorist of adolescent development described adolescence as a period in which the adolescent needs to cut off his or her connection to the family of origin (mostly parents) to assert himself or herself as an independent individual (Blos, 1979; Freud, 1958). However, today it is believed that adolescent and young adult can maintain connectedness (relatedness) to their parents while asserting their individuality and autonomy and that they become healthier and happier adult if they

do so (Campbell, Adoms, & Dobson, 1984; Grotevant & Cooper, 1986; Hoffman, 1984; Monyemayor & Hanson, 1985; Moo, 1987; Ryan & Lynch, 1989; K Sullivan & Sullivan, 1980). Thus, in accordance with the theory of attachment, individualization might be seen not as antithetical but rather as complementary (Ainsworth, 1989; Collins & Repinski, 1994).

Personality reflects the impact of the entire development of the individual. The modes of behaviour may be regarded as a mirror of one's personality. Personality includes all the good and bad traits that an individual possess. It is through his behaviour that these good or bad traits are manifested. The development of personality is the result of interaction between heredity and environment factors.

1.2 Social Behaviour During Adolescence:

The human being is a social animal and possess a born desire to participate in social activities. The most notable phenomenon of adolescence is the emergence of marked importance of peer groups. He desires company and feels gloomy aloof. As he grows, he comes to rely heavily on the peer group for support. During adolescence the pace of development is rapid and the desire to participate in school activities is very strong. At this age the adolescence has an intense emotional tension and he takes comparatively longer time than a child and adult in overcoming it. It is the duty of the parents to properly teach social behaviour to children. An adolescent should not be treated like a child some consideration should be shown to his views. So a new approach is needed bearing in mind that society has great influence over the adolescents.

1.3 Adolescence: A Period of Transformation:

Adolescence is a stage of revolutionary change in human life. Adolescent gives up old habits and acquires new outlooks. He has to shoulder new responsibilities. He has an additional worry of adjusting his personality in a new surroundings. At the end of this age, he is able to establish his own personality, but before he is able to do so, there is a kind of instability in his behaviour. We generally find that an adolescent's life full of extremes.

Adolescence is also a stage when young people extend relationships beyond their parents and family. It is a time of intense influence of peers, and the outside world in

the society. A desire to experiment and explore can manifest in a range of behaviours such as exploring sexual relationships, alcohol, tobacco and other substance abuse. The motivation, anxiety, and stress associated with achievement failure, lack of confidence, etc are likely to lead to depression, anger, violence and other mental health problems. Adolescents as they mature cognitively, the mental functioning process becomes analytic, capable of abstract thinking leading to articulation and independent ideology. These are truly the years of creativity, empathy, idealism and with the bountiful spirit of adventure. Thus, if nurtured properly adolescents' can be mobilized to contribute significantly to national development.

One of the most important commitments that family, school, communities and countries can make is to safeguard the future economic, social, and political progress and stability of adolescents. This can be done only, if we provide sound education to our adolescence. Out of the various factors that affect learning and educational attainment is the family climate of the students.

1.4 Family Climate:

The family is traditionally seen as the basic foundation of society. Generally, family can be seen as a group of people who have biological, emotional or legal ties to each other (Mc. Daniel et al 1990). In different cultures the term "family" may mean different things and a wide variation of families, usually people of two generations and two genders are involved (Lidz 1983, Jallinoja 2000).

The concept of family has changed from the larger extended to smaller units, i.e. the nuclear family or intact family, and nowadays to even smaller single parent family. The variety of form a family may take includes nuclear family or intact parent family, single-parent family, extended family or childless Family. Among these form of family, the intact parents family and single-parents families are more commonly found.

It has been proved through researches that family climate plays very important role in personality development and adjustment of children. If there is feeling of mutual understanding in the family, it contributes significantly in improvement of educational achievement, forward thinking, proper adjustment and other required quality. On the other hand, in a disintegrated and quarrelsome family, negative characteristics like

frustration, depression, anxiety, and tension grow in personality of the children and in this way, it affects adjustment of the children. The adjustment quality of children gives them power to fight against odd things at various fronts of their life. Family provides most of the early environmental influence upon the personality which remains throughout the life. It is the greatest socializing agency in all contemporary cultures (Gaur and Gupta, 2004). In the family, it is the parents who play a major role in the overall development of the child by using different parenting styles. These parenting styles determine the personality development of the children. Thus, family has been the dominating institution both in the life of the individual and in the life of the community (Juyal and Gaur, 2007). In spite of the rapid changes within the modern family the home is still the most potent factors in regulating the behaviour of young people

Family is the socio-biological unit that exerts the greatest influence on the development perpetuation of the individual's behaviour. Various researches have identified the different characteristics of family climate (home environment or parental child rearing practices). The family of an individual is a continuous and universal social setting influencing the learning process of the child directly or indirectly. Family not only provides the primary needs of the individual, but is also an institution that looks after the child's socialization and initial education. It is here, that his basic ideas and ideals are initiated, as well as attitudes towards himself and his associates that determines his later adjustment to school and other out of home situations are developed. In other words it can be said that out of the various aspects of the learning the influence of family upon the child's ability to learn is very crucial. It is an established fact that family and family climate plays a significant and very crucial role in the development as well as educational and vocational attainment. Family serves as an enriching ground for early socialization and personality development, the healthy outcomes of which are the provision of unconditional love and acceptance, understanding, behavioural management and guidance, academic encouragement and assistance (Das gupta and Sanyal, 2008).

Family being the first and major agency of socialization has great influence and bearing on the development of the child. It has been shown by the various studies that most of the children who are successful /great achievers and well-adjusted come from the families where sustaining wholesome relationship exist. So, it is the home which

sets the pattern for the Childs' attitude toward the people and society, aids intellectual growth in the Childs and supports his aspirations and achievements. A significant positive relationship between the variables of academic achievement and family scores has been assessed (Shaha and Sharma, 1984)

Definition of Family Climate:

New **Websters Dictionary (2004)** defines 'Family' as a group of persons, consisting of parents and their children.

Websters Dictionary (2004) defines 'Climate or Environment' as the aggregate of all external and internal conditions affecting the existence, growth, and welfare of organisms.

Family Climate: Family climate usually refers to the environment, both physical and emotional, and the state of the family whether it is good, bad, dysfunctional etc. (Knapp, 1993). Synonyms of family climate: Home environment, familial support, home life, family life, family stability, family living, atmosphere of family, home condition, family environment, living space, personal space, home setting, living conditions, family atmosphere, home atmosphere, family characteristics, family culture (Knapp, 1993).

It is important to understand the means by which learning focus is manifested in learner's life. Some key means by which this is operationalized are planning, monitoring, study management, and persistence (Martin, 1998). In a study of self-regulation and motivation; these constructs have been found to be predictive of achievement and adaptive orientations to academic tasks (Martin, 1998; Martin et al.2001a, 2001b in press). Thus academic motivation is other important factor which affects academic achievementof learners

1.5 Academic Motivation:

Academic motivation is a student's desire (as reflected in the approach, persistence and level of interest) regarding the academic subject when the students' competency is judged against a standard of performance or excellence. Positive academic motivation not only helps a child to succeed in school, but also helps him to see that learning is rewarding and important in all aspects of life—school, work and

community. There are many things that a person concerned can do to increase the student's academic motivation. Motivation is the combination of an internally generated drive to achieve, an emotional commitment, (often called passion) to goals (both your own and the organizations'), a willingness to mobilize yourself and others to action, all the while placing an optimistic "spin" on challenges and setbacks you face.

Academic motivation, according to Pintrich and Zusho (2002), refers to internal processes that instigate and sustain activities aimed at achieving specific academic goals.

Academic motivation is a student's desire (as reflected in the approach, persistence, and level of interest) regarding academic subjects when the student's competence is judged against a standard of performance or excellence (Di Perna & Elliott, 1999; McClelland, 1961; Wigfield & Eccles, 2002).

An Adolescent with a positive academic motivation has a desire to learn, likes learning -related activities, and believes that school is important. Positive academic motivation not only helps a child succeed in school, but also helps the adolescents to see that learning is rewarding and important in all aspects of life – school, work and community. Academic motivation is not important in and of itself, but rather it is important because motivated students tend to engage in activities that help them to learn and achieve high in academic settings.

Motivation plays an important role in students' interest and enjoyment of school and study, Motivation also underpins their achievement (Martin, 2001; Martin & Debus, in press; Martin, Marsh, & Debus, 2001a, 2001b in press; Meece, Wigfield, & Eccles, 1990; Schunk, 1990).

The term motivation is derived from the Latin word mover, meaning "to move" Motivation can be broadly defined as the forces acting on or within a person which cause the arousal, direction, and persistence of goal directed, voluntary effort. Motivation can be conceptualized as students' energy and drive to learn, work effectively, and achieve to their potential at school and the behaviour that follow from this energy and drive. Motivation theories cover a broad area of research. The particular area most relevant for course evaluation appears to be the motivation for

academic learning. Whether from internal sources (self-satisfaction) or external sources' (peer approval, recognition, grades, and money) motivation appears critical to the expression of intelligence and gaining success.

Motivation may be influenced by the students' general expectations towards learning. When a personal goal of studies is primarily vocationally oriented in the sense that the student expect practical knowledge, skill development and a goal preparation for the Job the student is extrinsically motivated. Learner acts because of the desired goals are in the center of interest. Students of such kind of aim to apply acquired knowledge directly to their jobs (e.g. Mutonen, Olkinuora, Tynjala & Lehtinen, 2008)

Intrinsic motivation is the self-desire to seek out new things and new challenges, to analyse one's capacity, to observe and to gain knowledge. Intrinsic motivation is defined in the means and end of action thematically match (Heckhausen, 1991; p.406). It means, if students are scientifically oriented and study because dealing with the topic itself, and thinking because of his own interest, then student is intrinsically motivated. Acting and the action goals are thematically corresponding.

A person with expectations towards vocational training as extrinsically motivated because the academic qualification mainly serves as a means to enter the market. In contrast expectations about dealing with scientific contests and the level of interest which leads to intrinsic motivation. Thus, academic motivation has intrinsic and extrinsic both aspects which do not stand in conflict with each other.

Developing Academic Motivation:

Children are naturally motivated to learn from the time they are born the early signs of motivation to learn can be seen in a baby struggle to reach a toy, learn to walk, or eat without help. Children whose learning and discovery is encouraged when they are infants and preschoolers' will approach school related learning as a challenge, interesting, and rewarding. A learner with positive academic motivation believe that he or she can be successful if they try hard, work in order to master the material, and are motivated to improve their achievement rather than just do better than others. The good things are that there are many things that parents can do to enhance their child's academic motivation. Positive parent-child relationship develop an important climate

for academic motivation. Letting your child know that you think school is important and providing recognition for their effort and success can motivate learning.

Keller (1983) recommended using principles from academic motivation theory to design an instructional strategy that will not only gain, but also sustain, learners' attention throughout instruction, thereby maximizing the likelihood of gains in students' achievement.

Bissonnette (1992) suggested that students who had a higher intrinsic motivation for academic activities persisted longer and finished the course.

Fortier and his Colleagues (1995) conducted a study to suggest that higher academic autonomous motivation, and the combination of intrinsic motivation and identified regulation, correlated to higher grades.

Societal changes brought about as a result of technological advancement have had a dramatic impact on academic achievement of adolescents in both developing and developed countries. This in turn has brought about a radical change in the roles of different members of the family and their role in adjustment and academic motivation to better outcomes. Academic achievement in terms which is largely affected by the individual capacity to adjust with the changing demand of family, school and society.

1.6 Adjustment:

Adjustment to fit, make suitable, adapt, arrange, modify, harmonize or make correspondent. The term adjustment is often used as a synonym for accommodation and adaptation. Adjustment is the process by which a living organism maintains a balance between the needs of the circumstances. It is used to emphasize the individual struggle to survive in his or her social and physical environment. Adjustment regards an individual's adjusting capacity as the ability to meet and cope with stress and problems with a minimum of disruption to the ongoing process of life, considering both the immediate and longer term consequences of the behaviour.

Good (1959) states that- "Adjustment is the process of finding and adopting modes of behaviour suitable to environment".

Shaffer (1961) emphasized that “Adjustment is the process by which a living organism maintains a balance of its needs, circumstances that influence the satisfaction of these needs”.

Generally the process of adjustment continues throughout the whole life. According to **Mc Kinney (1967)** “Everyone alive has troubles and problems, the most important consideration in determining personal effectiveness is not the amount trouble or misfortune (within limits) a person encounters but how he responds or adjusts to the challenges of life”.

In the dictionary of behavioural science by Wolman adjustment is defined as “the harmonious relationship with the environment involving the ability to satisfy most of one’s needs and meet most of the demands both physical and social, which put upon one”.

H. J. Eysenck and others (1972) defined adjustment as “A state in which the needs of the individual on the one hand and the claims of the environment on the other hand, are fully satisfied or the process by which this harmonious relationship can be attained”

There is no organism that requires a longer period of adjustment than man. For nine months the child is in its mother’s womb. After birth it can continue to grow independently, but this independence has been restricted for some time. Of all of our behaviour—conscious or unconscious, voluntary or automatic, planned or unplanned, wise or foolish – represents our attempts to meet our need of the moments, or at least to meet these needs as we understand them. The simplest of our needs is physiological in nature, based upon primary, biological demand such as those for food, water and oxygen. Throughout life, our physiological and psychological demands are continually being aroused, and we engage in behaviour that reduces or satisfies our needs. This process of need arousal and satisfaction, in a broad sense, is the process of adjustment.

One of the most fundamental aspects of the personality of a child is his ability to adjust in any situation or circumstance. Adjustment is a process by which an individual attempts to cope with, master and transcend the challenges of life by utilizing a variety of techniques and strategies. It is a process of behaviour by which

man keeps equilibrium among his various needs and the obstacles. Adjustment implies a state of harmonious relationship between the problem and the individual under specific conditions. Adjustment refers to the adequacy of the behavioural patterns, the individual habitually satisfies his needs.

Piaget (1952) has studied the adjustive process from different angles. He uses the term accommodation and assimilation to represent the alternation of oneself or environment as a means of adjustment. A person who carries his values and standard of conduct without any change and maintains these in spite of major change in social climate, is called Assimilator. The man, who takes his standard from social context and changes his beliefs in accordance with the altered values of the society, is called accommodator.

Factors Determining Adjustment:

The quality of an individual's adjustment is determined not only by the degree to which psychological needs are satisfied, but also by a number of other factors. Included among those factors is the capacity to tolerate delay in having needs satisfied, the degree to which a person continues striving to satisfy needs when they are not immediately satisfied.

Effectively adjusted individuals are able to tolerate some delay in the satisfaction of their needs. Those people who cannot tolerate delay of rewards, they are poorly adjusted. It is interesting to note that certain religions offer the salvation of heaven as a final reward, thereby stretching human capacity for delay in need gratification to its ultimate limits. It is important to understand that human capacity for delayed gratification, the ability to function according to the reality principle, is learnt as part of the socialization process.

Not only must humans learn to continue striving to have their needs, but they must also learn to continue striving to have their needs gratified. Obviously, if we are to abandon our efforts and give up our goals every time we encounter an obstacle to our striving for need gratification, we would accomplish little.

Effective adjustment is the person's capacity to change or shift the sources of satisfaction. Human psychological needs are quite complex and difficult to catalogue, and we are frequently uncertain what needs are being gratified by different behaviors.

But it is clear that there are many avenues open to us for need gratification in our complex society, and that well-adjusted people flexible in finding to ways to meet their needs.

All need gratification, and particularly the gratification of our psychological needs, occurs within a social context. The people with whom we live and work are closely involved with our needs and the way in which we gratify them, and they continually evaluate the legitimacy of our needs and behaviours, but it is a fact of life that other people continually pass judgment on them. Some needs such as achievement and nurturance (caring), are positively regarded; others, such as narcissism and sadism, are viewed negatively.

Characteristics of a Well-adjusted Person :

A well-adjusted person is supposed to possess the following characteristics:

An emotionally well-adjusted individual demonstrates a well-balanced emotional behavior. He is able to express desirable emotions in a proper amount as per the needs of the situation and his own well-being.

Socially Adjusted: a well-adjusted individual is a socially mature individual. He has the necessary development in terms of social competency and social obligations. He knows his social environment and has a desire and capability to adjust his self to the demands of the social life.

Awareness of One's Own Strengths and Limitations: a well-adjusted person knows his strengths and weakness. He tries to gain from his assets in some areas while accepting limitations in the other.

Respecting One's Self and the Others: disliking one's self is a typical symptom of maladjustment. An adjusted individual has respect for one's self as well as of others.

Adequate Level of Aspiration: his level of aspiration is neither too low nor too high in comparison to his own strengths and abilities. He does not try to reach for the stars and also not repent by selecting an easier course for advancement.

Adjustment as an achievement means how efficiently an individual can perform his responsibility in different circumstances. Business, military, education and other

social activities need efficient and well-adjusted men for the progress of the society. If we interpret adjustment as an achievement, then we will have to set the criteria to judge the quality of adjustment.

1.7 Academic Achievement:

Definition and Meaning

In the present scenario the world is becoming more and more competitive. Quality of outcomes has become the key factor for individual growth. Achievement assessment is the process measuring the terminal behaviour of the learner at the end of instruction. Thus, achievement is defined as “the measure of what and how much an individual has learnt. It may be the quality or quantity of learning attained by an individual in a subject of study after a period of instruction.”

According to **Eysenck & Arnold**, in the **Encyclopaedia of Psychology (1972)**, Achievement is defined as “general term for the successful attainment of goal requiring certain effort”.

The dictionary of Education, **Good (1973)**, defines “Academic achievement as accomplishment or proficiency of performance in a given skill or body of knowledge”.

Academic achievement is the extent to which a student, teacher or institution has achieved their educational goals. It is commonly measured by examination or continuous assessment. However there is no general agreement on how it is the best tested or which aspects are most important –procedural knowledge such as skills or declarative knowledge such as fact. Though it is depends upon various factors and all of them affect in some way or other but in some way are most important and the effect of these cannot be overlooked at any cost. Family climate, academic motivation, adjustment, mental health, school environment etc, are some of the factors which affect academic achievement directly or indirectly.

Factors Influencing Academic Achievement:

In every system there are several factors that are responsible for high and low achievement of the students and these factors can be divided into three broad

categories: (i) psychological factors, (ii) environmental factors and (iii) personal factors.

(i) Psychological Factors: Psychological factors include intelligence, self-efficacy, academic motivation, learning styles, study skills, creativity, level of aspirations, self-concepts, interest learning ability etc.

(ii) Environmental Factors: These factors are related to the surroundings and environment of the individual and include socio-economic status, value system, teachers' efficiency, school situation and environment, educational system, family climate, evaluation system.

(iii) Personal Factors: Under this category age, sex and health may be included as factors influencing academic achievement. These factors may affect the academic achievement both positively as well as negatively.

These Psychological, Environmental and Personal factors may affect the academic achievement both positively and negatively.

1.8 The Problem Context:

In our Indian society, academic achievement is considered as a significant criterion to judge one's potentialities and possibilities. Hence, academic achievement occupies a very crucial place in education as well as in the learning process. Academic achievement is a leading factor in the present socio-economic and cultural context. At secondary school stage, great emphasis is placed on achievement right from the very beginning. Beside this every parent desires that their children climb the ladder of outcomes to as high level of achievement as possible. The desire for high level of achievement puts a lot of pressure on students, teacher, and school and in the general educational system itself. The main focus of the educative process is to improve the performance or learning of the students. The learning outcomes of the students measured with the help of their achievement or performance.

Academic achievement is an end product of learning whose level and performance are affected by various conditions existing at the time of learning and its use.

Adolescents, are called real wealth and future of any nation. They are the real pioneer of knowledgeable, vibrating and intellectual society. Academic achievement of

adolescents is influenced by various factors like family climate, adjustment, motivation, study habit, intelligence and location etc. But among various factors which affect academic achievement, the most important factors are family climate, academic motivation and adjustment.

A review of empirical studies conducted in this area reveals that very few studies have been conducted in India and abroad to enable us to draw any meaningful inferences about family climate, academic motivation and adjustment and other factors affecting academic achievement of adolescents'. Some of the related studies have been mentioned here-

Trivedi (1984) designed an investigation to study the relationship between parental attitude, socio-economic status, feeling of security- insecurity and academic achievement of intermediate students with intelligence held constant. Wentzel, Feldman and Weinbergee (1991) carried out an investigation with a purpose to study the meditational role of socio-emotional adjustment on academic achievement in sixth grade. Anderson (1994) studied the effect of parental involvement on academic achievement. Addington (1997) studied the effect of parental involvement in mathematic achievement of eight, tenth and twelfth graders. Moline (1999) studied the parental involvement, students achievement link, to provide a scholarly basis for justifying and implementing parental involvement programs that produce significant and long-lasting effects on children's academic outcomes. Thakur (2001) attempted to study the effect of home environment on intelligence and educational aspiration of senior higher secondary school students. Devi,s and Mayuri, k (2003) conducted a study on the family factors contributing to the academic achievement of IX and X class residential school children and to study the relationship between family and school factor with academic achievement. Jagpreet Kaur (2009) has taken "Home Environment and Academic Achievement as Correlates of Self-concept among Adolescents". Mishra, Sandhya, Bamba, Veena (2012) study was aimed to investigate the impact of family environment on the academic achievement of a child. Kareer, Rosenbalm (2006) examined the relationship between parental monitoring and student adjustment and achievement of community college students. Sarika (2008) conducted a study locus of control in relation to academic achievement and adjustment, Indian social and psychological studies, Patna. Major purpose of the study was to examine the effect of locus of control over the pattern of adjustment of the respondents. Moly Kurvilla, P.,

Usha, (2009) studied the emotional adjustment, achievement motivation and academic achievement of the adolescent of working and non-working mothers. Nelakshi, A., Lavakare (2009) conducted a study on the background factor in adjustment of adolescents, this study tried to bring out the factors that influence the adjustment of adolescent. Gawali (2012) in “Academic stress and Adjustment among School student: A correlation study” found that there was a significant adjustment difference between male students and female students in themes of their home adjustment. Kumar, V (1984) designed a study of perception of classroom social climate with reference to perception of dimension of academic motivation of high school student. Mehta and Kumar (1985) studied the relationship between academic achievement and personality, intelligence, study habits, adjustment, and academic motivation. Mukhopadhyaya, Dulal (1991) attempted to make a cross-sectional study on the effect of academic motivation and scientific attitude on science aptitude of the students. Martin J Andrew et al (2009) attempted to study the role of interpersonal relationship in student academic motivation; encouragement and achievement. Brett D. Jones (2009) an article to present the model of academic motivation that can be used by the instructor to design courses which can be engaged students in school learning.

It is clear from the above review of related literature, that a little work has been done in this potentially important but less researched area of adolescence. Not even a single research incorporates the three variable viz. Family Climate, Academic Motivation and Adjustment. Moreover, in this era of high-grade, where every parent feels that their children should be high achiever in the field of education. The investigator was interested to take up this study and to investigate the impact of family climate, academic motivation and adjustment on academic achievement of adolescents.

In this specific context the present investigation was undertaken to specifically provide empirical answers to the following questions:

1. What is the role of family climate in academic achievement of adolescents ?
2. How academic motivation is related with academic achievement of adolescents ?
3. Is adjustment related with academic achievement of adolescents ?
4. Whether the academic achievement of adolescents vary with the family climate, academic motivation and adjustment ?

1.9 Statement of the Problem:

Incorporating the above raised questions the problem for this empirical study was given following formal title-

“Impact of Family Climate, Academic Motivation and Adjustment on Academic Achievement of Adolescents”

1.10 Objectives of Study:

The proposed study is aimed at achieving the following objectives:

1. To study the level of family climate, academic motivation, adjustment and academic achievement of adolescents
2. To study the impact of family climate on the academic achievement of adolescents
3. To study the impact of academic motivation on the academic achievement of adolescents
4. To study the impact of adjustment on the academic achievement of adolescents.
5. To study the relative contribution of family climate, academic motivation and adjustment to academic achievement of adolescents.
6. To study the differences in family climate, academic motivation, adjustment and academic achievement of adolescent in relation to some demographic variable such as –
 - (1) Gender (Male / Female)
 - (2) Location (Rural/ Urban)
 - (3) Type of family (Nuclear /Joint)

1.11 Operational Definition of the Terms:

The terms which are used in the study have been defined operationally to carry following operational meaning in the study.

1. Family Climate:

Family climate means an interpersonal relationship between the parents and the child. Family climate of adolescents for this investigation has been taken as the score

obtained by students on a Family climate scale (FCS), as developed by Dr Beena Shah (2006).

2. Academic Motivation:

Academic motivation may be regarded as the present study as a student's desire to learn (as reflected in the approach, persistence, and level of interest) regarding academic subjects. Academic motivation of students for present study has been taken as the scores obtained by the students on Academic Motivation Scale (AMS) as developed by the researcher.

3. Adjustments:

Adjustment is an individual's ability to cope with all kinds of situations in his environment. In the present study, adjustment has been taken the scores obtained by students on an adjustment inventory for School Students (AISS) as developed by A K P Sinha and R P Singh (2012, reprinted.)

Academic Achievement:

The Academic Achievement in this study has been taken as the total marks obtained by the students in their final examination of class VIII .

Adolescents:

Boys and girls in the age group of 13-18 years studying in IX standard at selected government and private secondary schools, Agra. were considered as adolescents in the present study

1.12 Research Hypotheses:

HR1 Family climate, Academic motivation, Adjustment and Academic achievement of adolescent varies.

HR2 Family climate is related with academic achievement of adolescents

HR3 Academic motivation is related with academic achievement of adolescent.

HR4 Adjustment is related to the academic achievement of adolescents.

HR5 Family climate, Academic motivation and Adjustment have related contribution to the academic achievement of adolescents.

HR6.1 Gender, Location and Type of family are related with family climate.

HR6.1 Gender, Location and Type of family are related with academic motivation.

HR6.3 Gender, Location and Type of family are related with adjustment.

HR6.4 Gender, Location and Type of family are related with academic achievement.

1.13 Hypotheses of the Study:

Corresponding to the objectives of the study based on the given rationale the research hypotheses were translated in to the following null hypotheses for empirical verification:

H1 The family climate, academic motivation, adjustment and academic achievement level of adolescents will not vary.

Ho2 There is no significant impact of family climate on the academic achievement of adolescents.

Ho3 There is no significant impact of academic motivation on the academic achievement of adolescents.

Ho4 There is no significant impact of adjustment on the academic achievement of adolescents.

Ho5 There is no relative contribution of family climate, academic motivation and adjustment on the academic achievement of adolescents.

Ho6.1 There is no significant difference in family climate, in relation to gender, location and type of family.

Ho6.2 There is no significant difference in academic motivation, in relation to gender, location and type of family.

Ho6.3 There is no significant difference in adjustment, in relation to gender, location and type of family.

Ho-6.4 There is no significant difference in academic achievement, in relation to gender, location and type of family.

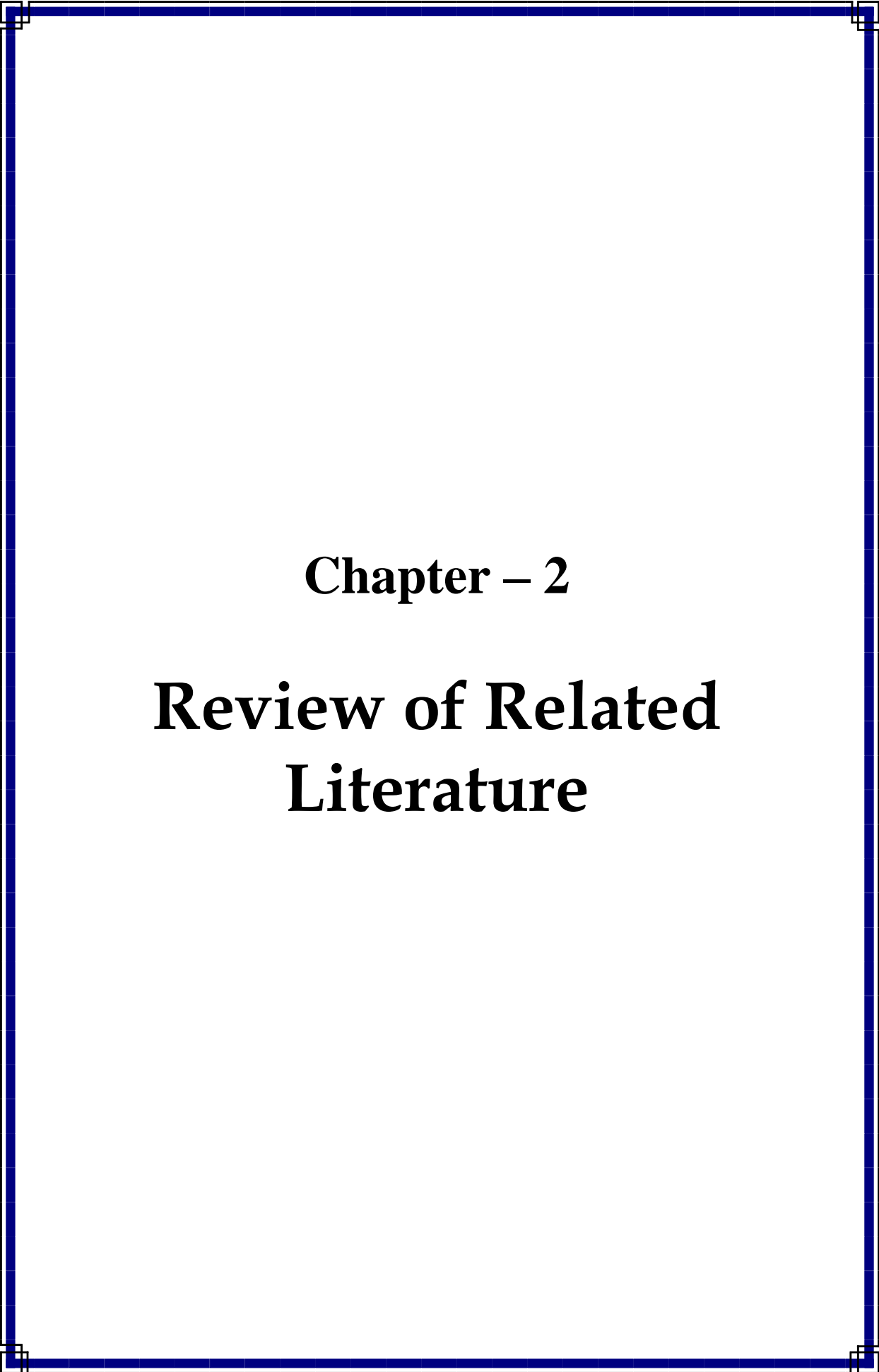
1.14 Significance of the Study:

Adolescence is a stage of revolutionary change in human life. It is the most important and crucial period of human life. Though, this period is full of challenges, but potential among adolescents is also far greater. This study was undertaken to provide the empirical evidence that could be of some utility to throw light over the problems of adolescent learners related to their adjustment with family, society, school and their academic motivation which ultimately affect their academic achievement at this stage. As the three independent variables family climate, academic motivation and adjustment taken in the present study are based upon the expectation that they affect the academic achievement of adolescents, the relative contribution as well as individual contribution of these independent variables will provide empirical evidence as determinants of academic achievements of adolescents. It is hoped that the results of the present study will be of immense value for teachers and parents for raising the level of academic achievement of adolescents and ultimately their performance in different pursuits of life. The findings of this study is further expected to identify the contribution of these factors in academic achievement of adolescents and provide effective measure to enhance the academic achievement of secondary school students.

1.15 Delimitations of the Study:

The present study will be confined to the following parameters:

1. There are a number of factors that may affect the academic achievement of adolescents, but due to the limited resources and time available only the impact of family climate, academic motivation and adjustment has been studied.
2. The study will be confined to Agra district of Utter Pradesh only.
3. The study will be limited to Secondary level school student only.
4. The study will be confined to only few demographic variables such as age, gender, rural/urban and family status single/ joint, etc.
5. A variety of statistical techniques are available for analyzing the data, but the investigator has employed only descriptive statistic, multiple regression analysis and analysis of variance.



Chapter – 2

**Review of Related
Literature**

CHAPTER 2

Before going into the real phase of research, it is thought essential to study the whole literature including research finding related to the variables in the study being conducted.

The review of related studies involves locating, studying and evaluating reports of relevant journal, encyclopedias, etc. The investigator needs to acquire up-to-date information about what has been thought and done in a particular area. The researchers draw maximum benefits from the previous investigations, utilize the previous findings, takes many hints from design and procedures of previous researches and formulate an outline for future research. The review of related studies provides an insight into the methods, measures, etc. employed by others in the particular area. It provides ideas, theory, explanation, hypotheses of research, valuable information for formulating and studying the problem at hand. It also furnishes indispensable suggestions related to the problem and already employed technique to the researcher. Unless it is learnt what others have done and still remain to be done in the area one cannot develop a research project in and could contribute to furthering knowledge in the field. In fact, the review of literature serves multiple purposes and is essential to well-designed research study. It helps the researcher in making the problem precise, researchable and meaningful. It is with this intention that theoretical and empirical literature in the field related to impact of family climate, academic motivation and adjustment on academic achievement of adolescents were reviewed and reported. For convenience the total review has been divided in to two parts.

2.1 International studies

2.2 National studies

2.1 International Studies:

Coleman (1991) study showed that the quality of family interactions has important associations with children's and adolescents' academic motivation, achievement, and with young adults' eventual educational and occupational attainments. The family environment is the most powerful influence in determining students' school

achievement, academic motivation, and the number of years of schooling they will receive. Similarly, it states that parents' involvement in learning activities has substantial emotional and intellectual benefits for children. He observed that because of supportive and strong families being significant for school success, teachers confront increasing challenges as many children experience severe family disruption and upheaval. It is acknowledged that families are perhaps the most substantial influence on children's school success.

Ontasa, et al (1997) carried out a study to examine family composition, size, atmosphere, parental control, the level of parents' education, school and SES as associated with young people's problem and society. In this study 13 to 14 year old underachievers, matched pair control, were compared according to their family background, low achieving pupils, vocational school pupils and senior high school pupils age between 14 to 19 were examined. The result showed that underachievers, low achievers, and society dropout typically came from a family in which their biological father was not present. They also reported a lower level of parental control and a more negative family atmosphere than the students in the control groups. Overachievers came from families with a positive atmosphere.

Fulgini (1997) attempts a study to examine the impact of family background, parents' attitude, peer sub-families sports and adolescents' own attitudes and behaviors' on the academic achievement of students from emigrant families with Latino East Asian, Filipino, European background. Results indicated that the first and second generation students received higher grades in Mathematics and English than their peers from native's families. Only a small portion of their success could be attributed to their socio-economic background, a more significant correlate of their achievement was a strong emphasis on education that was shared by students, their parents and their peers.

Cherian and Malehase (1998) studied the relationship between financial conditions in the home and scholastic achievement of 234 standard 7 pupils (103 boys, 131 girls). A questionnaire was given to the children who were chosen at random from 34 Junior Secondary Schools in the Menken Education Circuit of South Africa. Pearson correlation coefficient and analysis of variance showed no relationship between

financial conditions at home and scholastic achievement of children from single parent and two-parent families.

Aunola, and Nurmi. (2000) conducted a study to investigate the relationships between the achievement strategies adolescents deploy in a school context, and their self-esteem, school adjustment, and internalizing and externalizing problem behaviors'. A total of 1185 adolescents of 14 to 15 year age filled in the Strategy and Attribution Questionnaire (SAQ), Rosenberg's Self-Esteem Scale, and scales measuring school adjustment, depression and externalizing problem behaviour. The adolescents' parents were also asked to evaluate their children's achievement strategies, school adjustment and externalizing problem behaviour. The results revealed that low self-esteem was associated with adolescents' use of maladaptive achievement strategies which in turn was associated with their maladjustment at school and internalizing and externalizing problem behaviours. Moreover, the association between adolescents' maladaptive strategies and their externalizing problem behaviour was partly mediated via their school adjustment.

Verkuyten, Thijs and Canatan (2001) conducted three studies in which Turkish and other adolescents in the Netherlands completed questionnaires that addressed the importance of collectivist cultural values for achievement motivation and education outcomes. In study 1, the participants were 762 students between age 10 and 13 years. The study was carried out in 51 classes in 26 primary schools in different cities. Task goal orientation was measured with six items rated on a 5-point scale. Academic performance was assessed by collecting information on self-reported performance and the Willing Scale was used to assess the perceived relative academic position within the classroom. Results showed that the multilevel analyses indicated no significance between-classroom variance for individual-oriented motivation ($p > 0.10$). A significant difference between-classroom variance for family-oriented motivation, task-goal orientation, and perceived competence (for all three $p < 0.05$) was observed. Hence family motivation, task-goal orientation and perceived competence appeared to be determined not only by children's characteristics but also by classroom characteristics.

A second study was conducted to ensure that findings from Study 1 were reliable and could be generalized to a somewhat older age group (13- to 16-yearold). The

participants were 163 Turkish students and 445 Dutch students (54% boys, 46% girls) between 13 and 16 years old. The study was carried out in five secondary schools in different parts of the Netherlands. Similar questionnaires were administered as in study one. Results showed that Turks scored higher on individual-oriented motivation and especially on family-oriented motivation. Both Turkish and Dutch students scored higher on individual-oriented motivation than family-oriented motivation, but the difference between both motivations was much smaller among the Turks, $t(255.03) = 7.22, p < 0.001$.

The third study was conducted among 245 students, of which 39% were boys and 61% were girl between 13 and 16 years of age from one particular secondary school in the centre of Rotterdam to examine the reliability of the study's findings. In Study 3, other achievement data were used as educational outcome measures, and a multi-ethnic sample was involved. The procedures and measures for study 3 were similar to those used in study 2. Significant differences were found for individual- oriented motivation and family-oriented motivation as well as for ethnic identification. The findings of the 3 studies indicated that family motivation was positively related to task-goal orientation, which mediated the relationship between family motivation and academic performance. Individual motivation was an independent predictor of performance.

Kareer (2006) examined the relationship between parental monitoring and student adjustment and achievement of community college students. A sample of 322 students the experiences in the college was surveyed to assess their perceptions of parental monitoring and their adjustment to the college. Each group were almost equal with 162 being African American students 160 being white students. Finding of the study revealed that significant differences in parental monitoring students' adjustment and performance of gender and ethnicity were noted. Women reported higher levels of parental control better academic adjustment, and higher average GPA than man. Man reported the highest level of social adjustment and satisfaction with the college than women. Parental monitoring had significant direct effects on student adjustment and performance.

Uwaifo (2008) investigated the effects of family structure and parenthood on the academic performance of Nigerian university students. The sample for the study

consisted of 240 students drawn from the six randomly selected faculties in Ambrose Alli University, Ekpoma, Edo State. The results showed that significant differences existed between the academic performance of students from single parent family and those from two-parent family structures. The results also indicated significant differences in academic performance of male and female students compared on two types of family structures. On the basis of findings, it was recommended that school counselors should be employed in all schools and that they should provide necessary assistance to students, especially those from single-parent family to enable them overcome their emotional concerns.

Martin Marsh and Debus (2009) attempted to study the role of interpersonal relationship in student academic motivation, encouragement and achievement. We argue that the achievement motivation theory, current issues, and educational practices can be conceptualized in relational terms. Implications for the educational practice are examined in the light of the theoretical perspective and their component constructs and mechanism. A tri-level framework is proposed an interrogative and relationally based response to enhance student's motivation engagement, and achievement. This framework encompasses students-level action teacher and classroom level action and school-level action.

Jones (2009) wrote an article. The purpose of the article was to present the model of academic motivation that can be used by the instructor to design courses which can engage students in school learning. The model, based on research and theory, consists of five components that an instructor should consider when designing's instruction: (1) empowerment, (2) usefulness, (3) success, (4) interest (5) caring.

Muola (2010) attempted to find out the relationship between academic achievement motivation and home environment among eight standard pupils. The study was carried out on 235 standard eight Kenyan pupils from six urban and rural primary schools randomly selected from Machakos district. Their age ranged between 13 to 17 years. Two questionnaires, the simple profile (SP) and home environment questionnaire, were used to provide information on the pupils' levels of academic motivation and home environment. A significant positive relationship was found between six of the home environmental factors, that is fathers' occupation, mothers' occupation, fathers' education, mothers' education, family size and learning facilities

at home and academic achievement motivation. Parental encouragement was the only factor that was not significantly related to academic achievement motivation. These correlations showed that pupils' motivation to do well in academic work is to some extent dependent on the nature of their home environment.

Cecilia (2011) conducted a research to examine parents' involvement in children's learning in the United States and China. Beginning with seventh grade, 374 American and 451 Chinese children reported on their parents' involvement in their learning as well as their parents' psychological control and autonomy support every six months until the end of eighth grade. Information on children's academic and emotional adjustment was obtained. The analyses were conducted in the context of Structural Equation Modeling (SEM) using AMOS 6.0. Parents' involvement was associated less with their control and more with their autonomy support. Results show that parents' heightened involvement predicted children's enhanced engagement and achievement similarly in the United States and China. Their studies also revealed enhanced perceptions of competence and positive emotional functioning more strongly in the United States than China.

Winga (2011) investigated the levels of school adjustment and its relationship with academic achievement. Poor school adjustment leads to low academic achievement, behavioural problems, discordant educational aspirations and even school dropout. Gender differences in school adjustment were also examined. The theory used in the current study is the stage-environment fit theory propounded by Eccles and Midgley. A cross sectional research design was employed. The target population was 4500 students. The sample consisted of 450 secondary school students with mean age 18.38, SD 1.078. The forms for classes in the selected schools were used. Questionnaires as well as official KCSE examination results were used to collect data in the study. Cronbachs' alpha as well as a pilot study was used to depict the reliability of the instrument. Face validity was also ascertained by three experts from the department. The data was analyzed using descriptive statistics like the mean, frequency counts and percentages. The inferential statistics that were used in the study were t-tests. The results showed that there were no significant differences between girls and boys in school adjustment, there were significant differences between high achievers and low achievers in dedication, absorption, engagement and school

adjustment. The study recommends that the study environment of the low achievers can be further scrutinized.

Brima, Abubakarr and Sheik (2015) The purpose of this study was to investigate the impact of motivation on pupils' academic achievement and learning outcomes in mathematics among secondary school pupils in Njala and Taiama kori chiefdoms Moyamba district Southern Sierra Leone. A total of 100 questionnaires were administered in the four schools and twenty five questionnaires from each school. Conclusions were made: There is significant different between male and female pupils' performance in mathematics. Sixty nine percent (69%) of the students are male that responded to the questionnaire. That Majority of the students including male and female falls within the age group (14-18) years of age that responded. A good number of the students disagree to the statement that mathematics classes/lessons are not interesting. Forty eight percent (48%) of the students strongly agree to the statement that learning mathematics is just remembering what the teacher says and does while in class. Seventy three percent (73%) of the student says mathematics is possible to learn, That trained and qualifies teacher's need to be employed in order to make learning of mathematics interesting and easier to understand. Most pupils are motivated by their friends in doing mathematics. Pupils strongly agree to the statement that a good motivation will lead into an achievement

2.2 National studies:

Kumar (1984) designed a study of perception of classroom social climate with reference to perception of dimension of academic motivation of high school students. The sample of the study consisted 1251students of class X. Major findings revealed that there was a positive and significant correlation between nine dimensions of classroom social climate and 14 dimensions of academic motivation.

Mehta and Kumar (1985) studied the relationship between academic achievement and personality, intelligence, study habits, adjustment, and academic motivation. 60 male and 60 female postgraduate students were administered the Eysenck Personality Inventory, a study survey designed, a group general mental ability test designed by S. Jalota, a test of academic motivation designed, and the Bell Adjustment Inventory. Results indicated that psychological variables in terms of personality. Intelligence, study habits, academic motivation, and adjustment are not related and are independent

of achievement. There was hardly any regularity of relationship among the independent variables.

Agarwal (1986) conducted a study of the effect of parental encouragement upon the educational development of the students. The sample consisted of 1000 students studying in 24 higher secondary schools in the Garhwal region. The major findings of the study were –The high achieving group had been getting higher parental encouragement. The Urban boys received greater parental encouragement than the rural ones and the urban girls got greater parental encouragement than the rural ones. The girls in general received greater parental encouragement than the boys.

Gagandeep (1986) conducted a study on the defense mechanism used by the adolescent in different school environment and their impact on their adjustment to school and home. A sample of 400 students was selected on the basis of their socio-economic status by adopting a multistage randomized design. Sharma tool for socio economic status, Mittal adjustment inventory and defense mechanism questionnaires were used for collecting the data. The findings of the study revealed that the adolescents studying in a high SES based environment had less problem as compared to adolescents studying in a low SES based environment. With decrease in (SES) the adjustment to home become poor. The defense mechanism, aggression, regression, displacement, withdrawal, self-punishment and identification had a significant negative relationship with home adjustment.

Tripathy and Kumar (1990) aimed to assess the academic performance of tribal and non- tribal children and its relationship with their self-concept, level of aspiration and academic motivation. The main objectives of the study were –to measure the level of academic performance, self-concept, and level of aspiration of tribal and no tribal students, to study the differentials between tribal and non-tribal high school students on academic achievement, self- concept, level of aspiration and academic motivation. The sample of the study consists 800 school students from class IX in the Sambalpur Districts of Orrisa. The number of tribal and non-tribal students in the sample was equal. Coefficient of correlation and critical ratio were used to analyse the data. The major findings of the study were- 1. Academic performance was found to be significantly, but negatively correlated with self-concept and level of aspiration. However, no such relationship was found between academic performance and

academic achievement except on one of its fifteen dimensions, e.g. desire for self-improvement. 2. Academic performance was found to be significantly and positively related with self-concept, level of aspiration and academic motivation of tribal high achievers. 3. Academic performance was found to be significantly and negatively related self-concept, significantly but positively related to the level of aspiration. 4. Tribal students had lower academic performance, lower self-concept and lower level of aspiration than non-tribal students. However, both the groups had similar academic motivation. 5. The tribal high achievers had lower levels of aspiration than the non-tribal high achievers, but both groups had similar academic motivation. The low achiever tribal students had a lower academic performance, lower self-concept, lower level of aspiration and lower academic motivation in comparison to low achiever non-tribal students.

Mukhopadhyaya (1991) attempted to make a cross-sectional study on the effect of academic motivation and scientific attitude on science aptitude of the students. Six hundred students of 24 schools (12 urban + 2 rural) were selected at random for the sample. The tools used include scientific aptitude test, scientific attitude questionnaire and academic motivation questionnaire. The results of the studied revealed that significant difference was found between subgroups only in certain cases. On scientific aptitude, urban students were superior to rural students particularly girls. Scientific aptitude could be predicted to a considerable extent from academic motivation and scientific attitude, both of which showed a highly significant positive relationship with it.

Chouhan (1993) Studied the relative contribution of socio-economic and familial variable of over and under achievement. The sample of the study was 489 students of eight class randomly selected from eleven different intermediate colleges of Aligarh city. Result of the study indicates that family income, family occupation and socio-cultural background had significant correlation with academic achievement.

Chauhan and Murthy (1994) studied the effect of achievement on adjustment of deprived adolescents and found that male students were high achiever and better adjusted than their female counterparts.

Kurdek, Fine and Sinclair (1995) conducted a study to examine whether 223 VI grades adjustment to the school contact was affected by factors from both the family

contact and the peer context, grades, achievement scores and disruptive behaviour assessed, adjustment to school. Family context was represented by students' reports of the number of parenting transitions and by levels of supervision, acceptance, autonomy granting and conflict in the family. Peer context was represented by students' perceptions of peer norms supporting academic transitions, family climate and peer norms. High GPAs occurred at only moderate levels of family supervision. Achievement scores were positively related to supervision at only low level of family autonomy granting. GPA was positively related to peer norms at only high levels of family acceptance.

Rani (1998) examined a study of public school children's psychological development in relation to home environment. Psychological Development and Environment are two sides of the same coin. Environment found at home plays an important role in determining cognitive, emotional and social development of children's. In Indian home-parent-child relation is the most important constituent of home environment. The study reveals that the total home environment and parent-child relationship were significantly related to all the CPQ factors. But the other two dimensions of home environment, i. e., inter-parent relationship and inter-sibling relationship were not found significantly related to any CPQ factors.

Pajares and Urdan, (2002) study revealed that motivation was a great concern to educators in developing and maintaining student's optimum motivation particularly during adolescence. Many students experience lack of motivation to engage in academic activities and fail to reach their academic potential. Consequently, the motivation of adolescents has been the focus of much research although there has been a range of theories developed to better understand why students choose to engage in learning activities over the last 20 years. Goal theory has emerged as one of the most prominent theories of motivation and to develop understanding about their goals that influence adolescents' desire to achieve at school.

Neeraj (2002) attempted to compare the family environment, achievement motivation and self-esteem of students of vocational and academic stream. The sample consists of 474 students of class XI and XII studying in government senior secondary school in Moonga and Fareedkot. The study revealed that there was a positive relationship

among family environment achievement motivation and self-esteem found a partial support.

Goel (2002) conducted a study to determine the relationship between feeling of security, family attachment and values of adolescent girls. A sample of 500 adolescent girls of the age group of 16-21 years was selected for the study. The study revealed that the family attachment and achievement score were negatively related a relative factor responsible for higher educational achievement was parental attitude, Feeling of security–insecurity was significantly and positively related to family attachment.

Sharma (2002) attempted to examine the effect of parental involvement and aspiration on academic achievement of +2 students and some other parental factors (economic status, educational qualification and self-esteem of parents) for their association with parental involvement and parental aspiration (educational and occupational) and academic achievement of students. The sample of the study consisted of 320 students of class XI and XII and their parents chosen from four schools of Chandigarh and Panchkula through stratified random sampling technique. Findings of the study revealed that the parents of high and low achieving students exhibited differentiated behavioural profiles with regard to some dimensions of parental involvement. Parents of high achieving students often provide academic guidance to their children and also plan various cultural activities such as arranging picnics dance shows and other festivals. The academic achievement scores were different for children belonging to different parental involvement groups. High parental involvement group scored higher on educational aspirations as compared to their counterparts in low parental involvement groups. Higher parental involvement resulted in to higher occupational aspiration of students.

Devi and Mayuri (2003) attempted to study the family factors contributing to the academic achievement of IX and X class residential school children and to study the relationship between family and school factor with academic achievement. The sample consisted of 120 children; 60 from IX, 60 from X and 40 teachers from 15 residential school of Hyderabad city. Results revealed that family factor was not found to be critically important for the academic achievement of residential school children. School factor like qualified teachers good physical facilities, and classroom organization, checking up of curriculum and subject matter on time, impressive

method of teaching and teacher student interaction contributed significantly to academic achievement.

Fatima (2003) studied the relationship between the family climate and educational achievement. She tried to find out whether favourable home climate results in high academic achievement and whether unfavorable climate leads to poor academic achievement. She found out that there was no relationship between the type of family climate and academic achievement of students.

Desetty and Agrawal (2004) conducted a study to find out the association between modernization levels of college going girls and their family background variables. The study was based on a sample of 200 college going girls (18-21 years) selected from the Parbhani town of Maharashtra. All the college going girls had positive attitudes towards overall modernization and their levels were rated to be very good.

Mohanraj and Latha (2005) aimed to study aimed to investigate the relationship between family environment, the home adjustment and academic achievement in adolescents. The adolescents (106-boys and 86 girls) were assessed using the Moons and Moons family environment scale and Bell's adjustment inventory, academic scores were taken from the school records. Family environment appeared to influence home adjustment as well as academic performance .Academic performance was significantly related to independence and conflict domains of family environment. Boys and girls differed in perception of the home and environment.

Arati and Prabha (2005) conducted a study to find out influence of different family variables on family environment of adolescents. The sample comprised 120 adolescent (60 boys and 60 girls) in the age group of 13-16 years. Questionnaire and family environment scale developed by Hariprasad Bhatia and NK Chadda were used to find out selected family variables and family environment of adolescents. The results showed that the number of siblings, fathers' education, father's occupation and family income had a significant positive influence on family environment of adolescents.

Shankar and Rachel (2005) investigated to measure parents' anxiety in attitude development of the children especially at the board examination level. Special interest; care and coaching were given at this level to facilitate higher achievement.

The stress on the students resulted in low achievement; deviation in the interest; improper motivation etc. The sample comprised 100 parents whose children were studying in government and private schools. It was found that more than 55 % of the low achievers were students, who were given extra care and coaching by their parents forcibly at this level and 20 % of the high achievers were gifted with normal care and no special coaching and concern; the rest of the 15% were beneficiary of this anxiety of parents and 10% of failures remain stoic in this hypothetical frame.

Vamadevappa (2005) investigated to measure the effectiveness of parental involvement and academic achievement among higher primary students. The sample of 200 students studying in 6th standard consisting of 100 boys and 100 girls were selected from four higher primary schools of Davangere in Karnatka. Tools used for the collection of relevant data included parental involvement rating scale (PIRS) by Abdul Gafoor (2001) and achievement test by researcher (2002). Pearson's product moment correlation technique was used to find out the relationship between parental involvement and academic achievement. 't' test was also used to find out the significant difference between the means of two groups. Finding of the study reveals that:

- (1) there was a positive and significance relationship between parental involvement and academic achievement.
- (2) there was a significant difference in the academic achievement score of boys and girls of high parental involvement group
- (3) there was no significant difference the achievement score of boys and girls of low parental involvement low parental income group
- (4) there was significance difference between high achiever and low achiever with respect to parental involvement.
- (5) there was significant difference between boys and girls in their academic achievement.

Ahuja and Goel, S (2006) conducted a study to investigate the significance of difference in subject-wise performance of adolescents belonging to highly involved and highly aspirant parents and those belonging to lower aspirant and low

involvement parents. The sample of the study was 100 adolescents studying in IX grade of schools of Chandigarh and their parent numbering 100. Findings of the study showed that high parental involvement leads to higher achievement of adolescents in Science, English and Maths as compared to that of the group belonging to the parents having low involvement with their ward's academics. High education aspiration of parents leads to higher achievement scores only in Math's, Achievement scores in English and Science were not significantly different for children of parents having high and low educational aspiration.

Adeniyi, et al (2008) conducted a study of five variables as predictors of Academic Achievement among school-going adolescents. The purpose of the study was to investigate the predictive effect of home, school, society, and government on the academic achievement. The participants were 200 senior secondary school students Indian metropolis. Validated instrument, namely, Academic performance five factor inventory (APSS-II) was used to data collect. The result showed that the five variables compositely predicted academic performance of students. They also revealed that the factor, resident in the child uniquely predicted academic performance of the respondent then did other factors.

Daulata (2008) conducted a study to assess the effect of home environment on the scholastic achievement of children of class VII. The study was based on a sample of one hundred twenty students drawn from senior secondary schools of Panipat. Mishra's environment inventory scale was used to assess the quality of home environment and scholastic achievement was ascertained with the help of report card of students and other school records. The data revealed that boys of the high home environment group achieved a significantly greater mean score than the boys of falling in the group of low home environment. The impact of home environment has also been observed in the values of the scholastic achievement of girls belonging to high, medium, and low home environment groups. The result also showed that good quality of home environment had a significant positive correlation with 'high' level of scholastic achievement in boys than among girls. It was found that as the quality of home environment gets deteriorated, the level of scholastic achievement also comparatively declines in boys.

Sarika (2008) conducted a study on locus of control in relation to academic achievement and adjustment, Indian social and psychological studies, Patna. The major purpose of the study was to examine the effect of locus of control over the pattern of adjustment of the respondents. The study was conducted on 120 boys and 120 girls of high school of Patna town. Locus of control was measured using Husain's and Joshi rotters locus of control scale. The patterns of adjustment were measured using Mohsin Samshad bells adjustment inventory (Hindi adaptation). In the light of results, a significant and positive correlation was found between endogenous locus of control and academic achievement and also between endogenous locus of control and overall adjustment of respondents. Similarly, a significant and a negative correlation were reported between exogenous locus of control and academic achievement and also between exogenous locus of control and overall adjustment of the results.

Kaur (2009) has undertaken the study "Home Environment and Academic Achievement as Correlates of Self-concept among Adolescents". The present study was an attempt to explore academic achievement and home environment as correlates of self-concept in a sample of 300 adolescents. The results of the study revealed self-concept to be positively correlated with academic achievement, though not significantly so. A significant positive relationship of home environment components of protectiveness, conformity, reward, and nurturance with self-concept is revealed, thereby meaning that the use of rewards and nurturance from parents should be done for positive self-concept development among adolescents. However, the correlation of social isolation, deprivation of privileges and rejection components of the home environment is significantly negative with self-concept among adolescents indicating that for positive self-concept development among adolescents, there should be less or no use of social isolation, deprivation of privileges and rejection. The study has implications for educationists and parents as well. Studies have revealed that high home environment groups achieved greater success than middle and lower home environment groups (Jagannathan, 1986). It has also been reported that punishment aspect of home environment has negative impact on achievement among girls. Other aspects of home-environment viz. permissiveness, control, protectiveness, conformity, deprivation of privileges, nurturance and reward were not significantly related. She concluded that if a proper system of reward and punishment is followed, children shall certainly perform well in school (Pandey, 1985). It has also been reported that a

positive affective relationship between parents and children increases the likelihood that the child will initiate and persist in challenging and intellectual tasks. The positive and affective relationship is likely to get hampered when control and punishment exist beyond optimum limits.

Kurvilla and Usha (2009) studied of emotional adjustment, achievement motivation and academic achievement of the adolescents' of working and non-working mothers. The aim of the study was to examine whether the employed mothers have any deleterious impact on the development of adolescents. The study compares three major variables that are often linked with maternal employment viz emotional adjustment, achievement motivation and academic motivation and academic achievement of adolescents of employed and non-employed mothers. The sample consisted of 980 X standard students of whom 412 were children of employed mothers and 568 were of non-employed mothers. The results showed adolescents of employed mothers to be superior to children on non-employed mothers with regard to emotional adjustment and academic achievement, but children of non-employed mothers were found to have higher achievement motivation than their counterparts.

Nelakshi (2009) conducted a study on background factors in the adjustment of adolescents. The study tried to bring out the factors that influence adjustment in adolescent. It examined personal and social adjustment with reference to age, gender and class (IX and X, XI and XII). The sample of the study was 263 students selected randomly from 26 English medium schools from the city of Mumbai. The result revealed that the personal adjustment status was a good indicator of physical ailments and behaviour problems. When the personal adjustment was high both the physical ailments and the behaviour problem were low. The adolescents of the non-working mother, physical ailments reflected significant class-wise differences indicating higher classes, i.e., XI and XII were low on physical ailments than the lower ones. The picture was reversed with behaviour problems than the old standards. Behaviour problem was higher in the older group (17 to 18 years) than in younger ones (14 to 16 years).

Ghazi Rehman Safder (2010) examined parental involvement in their parental involvement in their child's academic motivation with the objective: to investigate the moral and financial involvement of the parents in their child's academic motivation in

rural areas at primary level. It was concluded that the most of the parents were not aware of their role in their children's education. In addition, their attitude was of irresponsible type, they do not take interest in their children's education, even they did not help children in their homework or making arrangement for their tuition and as well as child's participation was not encouraged in co- curricular activity. Instead of positive reinforcement's negative reinforcement are used to motivate children towards education.

Winga Maureen Adhiambo (2011) the current study investigated the levels of school adjustment and its relationship with academic achievement. Poor school adjustment leads to low academic achievement, behavioural problems, discordant educational aspirations and even school dropout. Gender differences in school adjustment were also examined. The theory used in the current study is the stage-environment fit theory propounded by Eccles and Midgley. A cross sectional research design was employed. The target population was 450 students. The sample consisted of 450 secondary school students with mean age 18.38, SD 1.078. The form for classes in the selected schools was used. Questionnaires as well as official KCSE examination results were used to collect data in the study. Cronbachs' alpha as well as a pilot study was used to depict the reliability of the instrument. Face validity was also ascertained by three experts from the department. Data was analyzed using descriptive statistics like the mean, frequency counts and percentages. The inferential statistics that were used in the study were t-tests. The results showed that there were no significant differences between girls and boys in school adjustment, there were significant differences between high achievers and low achievers in dedication, absorption, engagement and school adjustment. The study recommends that the study environment of the low achievers be further scrutinized.

Sharma and Khatoon (2011) investigated the influence of parental education, parental occupation and family size on science achievement of secondary school students in western U.P. (India). Selection of the sample was done by the stratified random sampling technique. Data collection tools contained 50 items. Objectives test in science and art questionnaire measuring some family aspects. The results indicated that parental education, parental occupation and family size contributed significantly to achievement in science of the students. But no difference in science achievement

was found between children whose fathers were either in the professional or in businessmen group.

Chawla (2012) studied the relationship between family environment and academic achievement. The participant of the study were included were two hundred students i.e., 100 boys and 100 girls randomly selected from the IX standard of Marathi medium school of Nasik city. Family environment scale by Dr Harpreet Bhatia and Dr N K Chadda (1993) was used to purpose of data collect. Findings of the study revealed that the family environment score was positively correlated with the academic achievement student.

Mishra (2012) aimed to study the family climate of the family of adolescents in relation to their family gender and academic achievements. The family is the first school where a child learns his initial lessons of life. The strongest factor in moulding a child's personality is his relationship with his parents. The present study is. A total of 109 adolescents (63-Boys and 46-girls) were randomly selected for the study. The tool used for this study was Family Climate Scale (FCS) developed by Dr. Beena Shah. This tool access the family climate on 10 different dimensions. Academic scores were taken from the school records. The analysis of the data was done using one way ANNOVA and the calculation of correlation coefficient. It was found that though there is no significant correlation between academic achievement and the family climate of the adolescents, the gender was found to be significant in determining the family climate in the house. This indicated that there still exists in the social discrimination on the basis of gender in families. It was recommended that the parents and teachers should play a deciding role in curbing this social divide in the society.

Mishra and Bamba (2012) investigated the impact of family environment on academic achievement of a child. The early beginning of knowledge originates within the family. Family vary greatly in structure and functioning, variation exists also in school and in children understand how children's experience within the family contribute to their educational outcome.

Sood's (2012) study of "Need for achievement, academic achievement and socio-demographic variables of high school students of Kullu & Manali districts (India)" was undertaken to study the need for achievement among high school students in

relation to their academic achievement and certain socio-demographic factors like gender, family type and residential background. A sample of 300 high school students (studying in Class IX) was selected from 15 high/senior secondary schools of Kullu and Manali districts in Himachal Pradesh by following systematic random sampling technique. In order to collect the requisite data, Achievement Motivation Inventory by Prayag Mehta (1969) was administered. Data was analyzed by applying descriptive statistics (Mean, SD) and Two-Way ANOVA (2x2 factorial designs). The results revealed that need for achievement positively and significantly affected academic achievement of high school students. The students with high need for achievement possessed significantly higher academic achievement as compared to students with average or low need for achievement. Girls were found to have a significantly higher need for achievement in comparison to boys. However, no significant difference in need for achievement was found among rural and urban students as well as students belonging to nuclear and joint type of families. Although, the students residing in urban areas and those belonging to joint type of families have shown a higher need for achievement than their counterparts, the respective mean differences were not significant statistically. The implications were drawn on the basis of these results to enhance need for achievement among high school students.

Yellah (2012) study belongs to normative survey methods of research. A sample of the study consist of 300 students studying in class IX from various government and private school students, rural and urban areas of Mahabhub Nagar district in Andhra Pradesh. The investigator has collected data by using Adjustment inventory for school students (AISS) Prof A.K.P. Singha and R.P. Singh. The study concluded that Adjustment and Academic Achievement cause significant difference between male and female students, Government and Private Schools students and rural and urban school students do not cause any significant difference between adjustment and academic achievement. It is found that there is low positive relationship between adjustment and academic Achievement.

Gupta and Sath's (2012) "Sex differences in adjustment among secondary school students" was an attempt to study the existing adjustment problem of the students, which involves emotional, social and educational dimensions. Survey method was used for the study. A sample of 150 students of Class IX was selected from Balh valley of Mandi district in Himachal Pradesh. The study revealed that no significant

difference exists between boys and girls regarding different dimensions of adjustment as well as in total adjustment.

Gawali (2012) studied “Academic stress and Adjustment among School student: A correlation study” and found that there was a significant adjustment difference between male students and female students in themes of their home adjustment. In terms of academic stress between male students and a female student’s result indicate that there is no significant difference and negative correlation between academic stress and adjustment of school students.

Aggarwal and Bhalla (2012) in “Gender differences in academic achievement of adolescents in relation to their home adjustment” and found that out of the numerous factors that might have an effect on the academic achievement of adolescents, their adjustment plays a vital role. Adjustment with family, peers, emotions, etc., determines the mental make-up of young adolescents. This age is said to be the age of transition from childhood to adulthood. Home or family adjustment can be a significant factor in determining the success in academics. The paper sought to study the academic achievement of adolescents in relation to their home environment.

Prajapati (2012) carried out “A study of adjustment of adolescents with special reference to their gender and education”. The result showed that the secondary school going boys are more adjusted in social area than secondary school girls. Higher secondary school girls are more adjusted in home and health area compared to boys. Higher secondary school boys are more adjusted in health and emotional areas than secondary school boys but secondary school boys are more adjusted in educational area compared to higher secondary school boys. Higher secondary school girls are more adjusted in home, health and social area of adjustment compared to secondary school girls. But secondary school girls are more adjusted in educational area than higher secondary school girls.

Gupta, Devi and Pasrija (2012) the present study was planned to find the effect of achievement motivation on the academic achievement of adolescents in relation to some demographic variables viz. gender, locality and type of schools. In the present study, descriptive method was used. 320 adolescent students selected by the method of random sampling from the target population constituted the sample for the present investigation. However, academic achievement of the students was determined on the

basis of marks obtained in 10th class of Board Examination. To measure the achievement motivation of the subjects, Achievement Motive Test by Dr Bhargava was used. After sorting the data for final scores, Means, SD's, and t-test were employed to compare the academic achievement of adolescents with high and low achievement motivation as statistical techniques in the present study. Data analysis showed that there was significant difference in academic achievement among adolescents with high and low level of achievement motivation in relation to gender, locality and type of schools. It was found that male & female adolescents with high achievement motivation showed better academic achievement than their counterparts. Further, results also showed that high achievement motivation adolescents of rural area and urban area as well as private and govt. schools were found to be better on academic achievement than their corresponding parts.

Shevatekar (2012) conducted a study to investigate the relationship between achievement motivation and academic achievement in adolescents and to know the relationship between family environment and academic achievement in the district of Maharashtra. Purposive sampling technique was used to select the samples. 442 adolescent boys and 358 girls between the ages 13 to 16 years were assessed using the achievement motivation scale. Academic scores were taken from the school records. Statistics revealed that correlation score between family environment and educational achievement of 0.34 and it was significant at $p < 0.01$ level on 798 degree of freedom grade indicating that the correlation of family environment and educational achievement was positive and at low level. The study also revealed that achievement motivation appeared to influence of academic performance.

Ganai and Muhammad (2013) the sample for the present study comprised of 80 students who were on rolls in various higher secondary schools of district Baramulla. The tool used for data collection was Mental Health Battery by A.K. Singh and Alpana Sengupta which is the battery of six tests, including Emotional Stability (ES), Overall adjustment (OA), Autonomy (AY), Security- Insecurity (SI), Self – Concept (SC), Intelligence (IQ). The data was analysed by using mean, SD and t-value. The findings revealed that the male and female adolescents differ significantly on mental health. However the two groups showed no difference on academic achievement. Further the two groups showed a difference on various dimensions of the Mental Health Battery including Emotional Stability (ES), Overall Adjustment (OA),

Security Insecurity (SI) and General Intelligence. The main difference favored the male adolescents in the case of these dimensions. However, the two groups showed no difference on Autonomy (AY) and Self Concept dimension (SC). Based on the findings of the study recommendations were made to provide guidance and counseling facilities in the higher secondary schools of district Baramulla.

Taviyad Mansing Bhai S and Yasvant Bhai H. Patel (2013) aimed to study and compare certain areas of adjustment and academic achievement of higher secondary school students. The study was conducted on random sample of 100 (50 male And 50 female students) of higher secondary school student of Himmat Nagar City adjustment inventory for adolescent students by R. K. Ojha was used for data collection and Average marks of last three years annual results was considered as academic achievement to analyze the data ‘t’ test was used results revealed that male adolescent differ significantly on health, social and emotional adjustment as compare to female adolescent. Significant difference is also existed between male and female adolescent on academic achievement.

Singh (2013) aimed at investigating the impact of family environment on academic achievement of secondary school science students. It is well known fact that the school performance is not an independent phenomenon, rather it is directly influenced by a number of factors, some of which are personal to the individual while many others are located in the environment in which learning takes place i.e. school an family. Early beginnings to knowledge originate within the family, on a simple level in early years, and are then further built on in the school. Family sets the stage for interactions and learning at school later. Families vary greatly in structure and functioning. Variations exists also in school and in children understand how children's experiences within the family contribute to their educational outcomes.

Kumar and Roshan (2014) attempted towards examining the pattern of relationship between the academic achievement and family environment. The adolescent is the real capital of any society and we should protect and preserve it for the betterment of the society and nation. The research was carried out of 200 adolescents in the age group of 15 to 18 years. The researchers used academic achievement scores which were the aggregate percentage of marks from the previous two classes, serve as indicators of academic achievement. Moos (1974) Family Environment Scale (FES)

was used to study the impact of family on adolescent's academic success. The academic scores of girls were found better than the boys while boys lead the girls on family environment scores where the t-value was significant at 0.01 levels. There was a clear cut difference between the scores of high and low groups and the t-value was again significant at 0.01 levels. The obtained results indicate that the adolescent experiencing healthy family environments are found to have higher academic achievement in comparison to children belonging to lower family environment.

Haider, et al (2015) conducted a study to find out the impact of students' motivation on their academic performance. The data was collected from 120 students from the three different departments (DMS, CS and Pharmacy) of The Islamia University of Bahawalpur. Questionnaire was divided into three parts. In the first part we asked the students about their personal information, in second part there were 30 items to measure student's intrinsic and extrinsic motivation and third part comprises of questions about academic performance. This study reveals that intrinsic motivation and extrinsic motivation had a positive impact on students' academic performance and our overall model is significant ($p < 0.05$). If on individual basis we equate the variables it is concluded that the student whom espouse variable like altruism, Self-Exploration, Social pressure, career and qualification, social enjoyment are supposed to perform better and these variable had a positive impact on students' academic performance and those students who espouse rejection of alternative options variable are supposed to perform less and this variables had a negative impact on students' academic performance. This study reveals that motivation is important part in students' life and plays a very important role in students' success

Choudhury (2015) attempted a study to examine the adjustment level of students in relation to their academic achievement. The study was made on 400 students of +2 stage, studying in different degree colleges of Kamrup District of Assam. The sample for study was selected by using stratified random sampling procedure. The tools used in the present investigation were-(i) Tool for academic achievement and (ii) Standardized test. The mean score and S.D. were calculated. The study indicated that students belongs to the category of 'academic consistency' are better adjusted than the students belongs to the category of 'academic fluctuation' and students under the category of 'academic deterioration' are less adjusted than the students of 'academic improvement' category.

Mahmood and Iqbal (2015) conducted a study to examine the gender differences on psychological adjustment and academic achievement. Purposive sampling technique was used in this study with sample size of one hundred and twenty (N=120) students, sixty female (N=60) and sixty (N=60) male, age ranged between 12-19 years, who had passed O' level. The Reynolds Adolescents Adjustment Screening Inventory (RAASI) was used to measure psychological adjustment. Statistical Package for Social Sciences Version-20 (SPSS-20) was used for statistical analysis. First of all reliability of the scale was determined. Pearson Product Moment Correlation and Independent sample 't' test were applied to find the quantitative facts of the study. Results revealed that there is negative correlation between psychological adjustment and academic achievement of students who passed O' level. Independent Sample t-test revealed that there is significant difference on psychological adjustment among students who passed O' level. The results also showed that female have more psychological adjustment as compared to male.

2.3 Critical Appraisal of the Review:

On critically examining the existing studies the investigator found that the familial background has been studied by different investigators under various names and under different conditions and most of the studies attributed positive and significant relationship of familial background with the scholastic achievement of the students studies like Agarwal, (1986); Fulgini, (1997); Chauhan, (1993); Cherian and Malehase, (1998); Sharma, S, Nidhi (2002); Shankar and Rachel (2005); Ahuja M and Goel S (2006); Daulata Pee Meena Siwach (2008); Jagpreet Kaur (2009); Sharma, Manika, Khatoon Tahira, (2011) and Chawla, Anita. (2012); examined the effect of parental encouragement upon the educational development of students and found that higher parental encouragement is attributed to high achievement. While as, Devis and Mayuri, (2003); Cecilia Sin Cheung, (2011) reported that, family factor were not important for the academic achievement, although, Devis and Mayuri, (2003); attributed school factor like, qualified teachers, good physical facilities, and classroom organization, checking up of curriculum and subject matter on time, impressive method of teaching and teacher student interaction as the significant contributor of academic achievement of children. Also, Fatima (2003) found no significant relationship between the type of family, family climate and academic achievement of students. While as, Rani and Seema, (1998); Neeraj, (2002); found

that home environment plays an important role in determining cognitive, emotional and social development of children's. Arati, C. Rathna Prabha (2005); Mohanraj Rani and Latha (2005) found that the family environment greatly influences the home adjustment as well as academic performance of the students. Adeniyi, et al. (2008) explored that type of residence/location (rural/urban) of the child, uniquely predicted academic performance of the respondent. Uwaifo (2008) attributed type of family (single parent/two parent family) and gender as the determinants of academic performance. The results indicated significant differences in academic performance of male and female students compared on two types of family structures. Mishra. G Santwana (2012); Mishra Sandhya, Bamba Veena (2012); studied the family climate of the adolescents in relation to gender and academic achievements. No significant correlation between academic achievement and the family climate of the adolescents was found and the gender was found to be significant in determining the family climate in the house.

Adjustment as the variable of the study in the educational psychology has been studied far and wide by the investigators. Gagandeep, K. (1986); studied defence mechanism of adolescent and their impact on their adjustment at school and home and found that the adolescent studying in high SES based environment had less problem as compared to adolescent studying in a low SES based environment. Mythii, B. (2004) revealed that boys have more adjustment problem compared to girls. Aunola, et al. (2000) revealed that low self-esteem was associated with adolescents' maladaptive achievement strategies which in turn was associated with their maladjustment at school and internalizing and externalizing problem behaviours. Moreover, the association between adolescents' maladaptive strategies and their externalizing problem behaviour was partly mediated via their school adjustment. Kareer, Rosenbalm (2006) revealed that significant differences in parental monitoring student's adjustment and performance by gender and ethnicity were noted. Women reported higher levels of parental control better academic adjustment, and higher average GPA than man. Man reported the highest level of social adjustment and satisfaction with the college than women. Parental monitoring had significant direct effects on student adjustment and performance. Sarika (2008) explored a significant and positive correlation between endogenous locus of control and academic achievement and also between endogenous locus of control and overall adjustment of

respondents. Similarly, a significant and a negative correlation were reported between exogenous locus of control and academic achievement and also between exogenous locus of control and overall adjustment of the results. Moly Kurvilla, P. Usha (2009) showed adolescents of employed mothers to be superior to the children of non-employed mothers with regard to emotional adjustment and academic achievement, but children of non-employed mothers were found to have higher achievement motivation than their counterparts. Nelakshi A, lavakare (2009) examined the personal and social adjustment with reference to age, gender and class (IX and X, XI and XII). The result revealed that the personal adjustment status was a good indicator of physical ailments and behavior problems. When the personal adjustment was high both the physical ailments and the behavior problem were low. Winga Maureen Adhiambo (2011) showed that there were no significant differences between girls and boys in school adjustment, there were significant differences between high achievers and low achievers in dedication, absorption, engagement and school adjustment. Yellah (2012) revealed that adjustment and academic achievement cause significant difference between male and female students, Government and Private Schools students and rural and urban school students do not cause any significant difference between adjustment and academic achievement. It is found that there is low positive relationship between adjustment and academic achievement. Gupta and Sadh's (2012) revealed that no significant difference exists between boys and girls regarding different dimensions of adjustment as well as in total adjustment. Gawali (2012) found that there was significant adjustment difference between male students and female students in themes of their home adjustment. In terms of academic stress between male students and a female students' result indicate that there is no significant difference and negative correlation between academic stress and adjustment of school students. Aggarwal and Bhalla (2012) found that out of the numerous factors that might have an effect on the academic achievement of adolescents, their adjustment plays a vital role. Adjustment with family, peers, emotions, etc., determines the mental make-up of young adolescents. Home or family adjustment can be a significant factor in determining the success in academics. Prajapati (2012) showed that the boys are more adjusted in the social area than girls. Girls are more adjusted in the home and health area compared to boys. While as boys are more adjusted in health and emotional areas than boys. Taviyad Mansingbhai S and Yasvant Bhai H. Patel (2013) revealed that male adolescent differ significantly on

health, social and emotional adjustment as compare to female adolescent. Significant difference also existed between male and female adolescent on academic achievement.

A very few studies were found in which academic motivation has been studied by the researchers like Kumar, V. (1984); Mehta and Kumar (1985); Tripathy, Suresh Kumar (1990) studied academic motivation along a variety of cognitive and non-cognitive variables, and found that there is a positive and significant correlation between nine dimensions of class room social climate and 14 dimensions of academic motivation (Kumar, 1984). The psychological variables in terms of personality, intelligence, study habits, academic motivation, and adjustment are not related and are independent of achievement (Mehta and Kumar, 1985). The academic motivation was similar in both tribal and non-tribal groups (Tripathy, Suresh Kumar, 1990). James S. Coleman (1991) study showed that the quality of family interactions has important associations with children's and adolescents' academic motivation and achievement. The family environment is the most powerful influence in determining students' school achievement, academic motivation, and the number of years of schooling they will receive. Kaur and Kaur's (2010) studied academic achievement of adolescents in relation to their educational aspirations. The study revealed a positive and significant relationship between academic achievement and educational aspiration of adolescent boys and girls. The students of higher and lower level of educational aspiration differ significantly on their academic achievement. Dubey, Ruchi (2012) tried to explore emotional intelligence in relation to academic motivation. The result of the study revealed a positive relationship between emotional intelligence and academic motivation. Martin J Andrew et al (2009) attempted to study the role of interpersonal relationship in student academic motivation; encouragement and achievement. Metin, Guven (2009) showed no significant relationship between academic motivation and socio-economic level, self-determination, and parental pressure to elicit extrinsic motivation. Muola, J. M. (2010) explored a significant positive relationship between six of the home environmental factors, that is fathers' occupation, mothers' occupation, fathers' education, mothers' education, family size and learning facilities at home and academic achievement motivation. Parental encouragement was the only factor that was not significantly related to academic achievement motivation. Ghazi Rehman Safder (2010) revealed that most of the parents are not aware of their role for

their children's education. Instead of positive reinforcement's negative reinforcement are used to motivate children towards education. Gupta Madhu, Devi Mamta & Pasrija Pooja (2012) showed a significant difference in academic achievement among adolescents with high and low level of achievement motivation in relation to gender, locality and type of schools. It was found that male & female adolescents with high achievement motivation showed better academic achievement than their counterparts. High achievement motivation adolescents of rural area and urban area as well as private and government schools were found to be better on academic achievement than their corresponding parts. Shevatekar, V. (2012) revealed that correlation score between family environment and educational achievement of 0.34 and it was significant. The study also revealed that achievement motivation appeared to influence of academic performance.

2.4 Research Gap:

A plethora of studies has been reviewed both at the national and international level. It was found that family climate is a complex entity which comprises a variety of dimensions. Various investigators have studied it under various sub headings, like, parental care, parental aspiration and structure of family etc. but, none of them has studied in its full version. Here in this study investigator has attempted to study the maximum dimension of this variable. Academic motivation has been studied in a very few studies. The investigator attempted to formulate a standardized and a valid tool in order to access various dimensions of academic motivation. The Adjustment has been studied far and wide among the adolescents right from the beginning. Literature related to the study expresses a deep impact of adjustment upon the achievement of adolescents. Therefore, with this background the investigator decided to study the impact of family climate, academic motivation and adjustment on the academic achievement of the adolescents.

Chapter – 3

Method and Procedure

CHAPTER 3

METHOD AND PROCEDURE:

The basic purpose of this study was to find out the impact of family climate, academic motivation, and adjustment on the academic achievement of adolescents and also to study whether these variables vary with some demographic variables such as gender, location, family status and parent's education, etc. In this chapter the details of the method and procedure adopted for achieving the objectives of this study has been described. This chapter consists of the following sections:

- 3.1 Method of the study
- 3.2 Population
- 3.3 Sample
- 3.4 Variables of the study
- 3.5 The Tools
- 3.6 Personal data sheet
- 3.7 Data Collection
- 3.8 Response Rate
- 3.9 Data Organization
- 3.10 Statistical Techniques used

3.1 Method of the Study

The procedure, planning and the way in which researcher wants to proceed research for obtaining an answer of the research question is method of the study. The nature of the problem determines the appropriateness of the method to be used in any research. In present research work, descriptive survey research method has been used as the method of research.

The descriptive survey research method has undoubtedly been the most popular and the most widely used research methods in education. It describes and interprets "what is?" It is concerned with the conditions or relationships that exist, opinions that are

held, processes that are going on, the effects that are evident, or trends that are developing. It deals with the relationships between variables, the testing of hypotheses, and the development of generalizations, principles, or theories that have universal validity. According to **John W. Best (1998)**, “Descriptive survey research involves events that have already taken place. The only elements that the researcher manipulates are his methods of observation and description in which he analyses relationship”. The researcher observes the facts, collects data by administering the tools for the variables specified in research work and analyzes the data using appropriate statistical techniques.

In the present study, researcher had observed the impact of family climate, academic motivation and adjustment on the academic achievement of adolescents. After organizing and analysing the data, interpretation and conclusion were made to observe the impact of family climate, academic motivation and adjustment on the academic achievement of adolescents and to decide the status of what it is.

3.2 Population:

Population or universe means, the entire mass of observations, which is the present group from which a sample is to be formed. In selecting a sample, it is very essential that researchers should define his/her population and estimate its characteristics. Population of the present study consists of all the students of the IX class of secondary schools, whether government, aided or unaided of U. P. Board and C. B. S. E. Board of Agra District during the session 2012- 2013.

3.3 Sample:

Since the population defined for this study was very large, a sample of 920 students from 12 governments, aided and non-aided secondary schools of U. P. Board and C. B. S. E. Board of Agra District has been taken with the help of simple random sampling.

The table 3.1 represents the figures of the students studying in different type of schools of the two boards, who were selected for the present study.

Fig 3.1 DESCRIPTION OF THE TOTAL SAMPLE

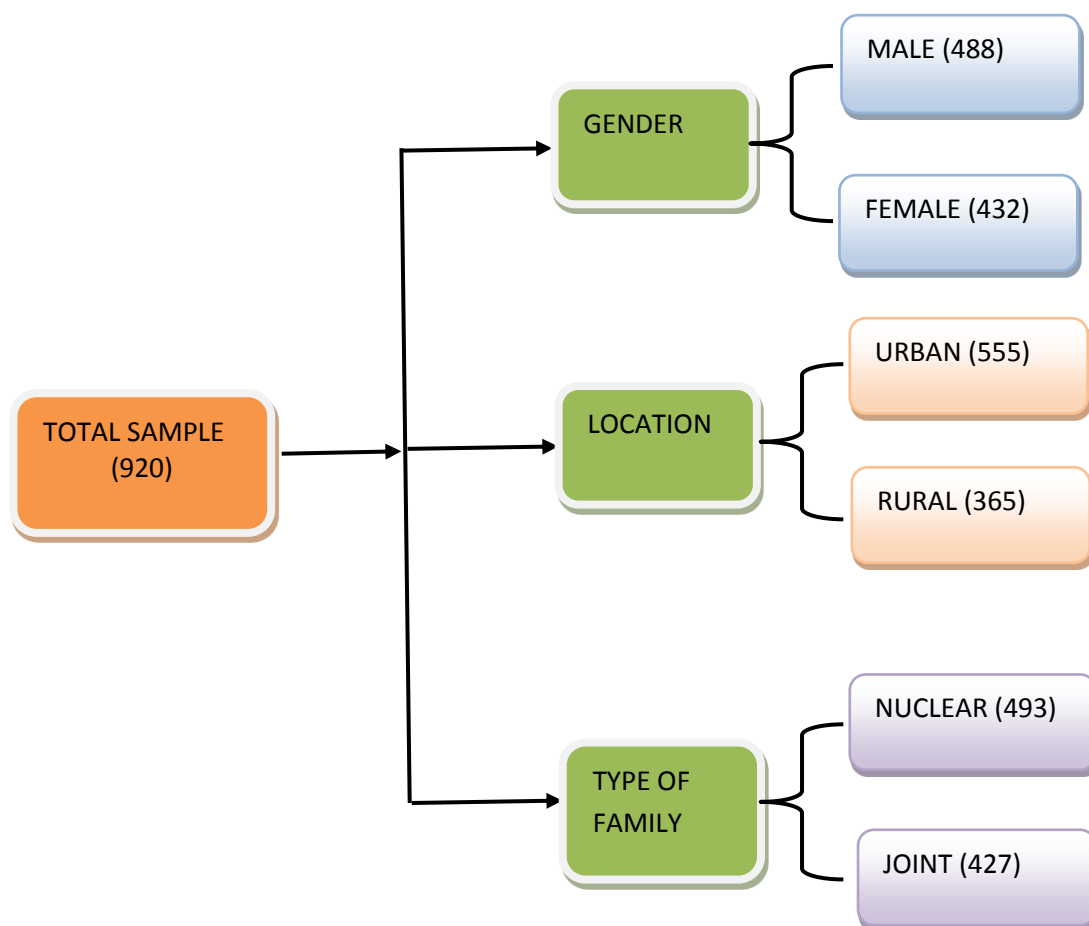


Table 3.1

Distribution of Schools

S. No.	Type of Board	Type of Schools	Total students
1.	U. P. Board	Government Schools	115
		Aided Schools	230
		Non-Aided Schools	225
2.	C. B. S. E. Board	Government Schools	180
		Non-Aided Schools	170
			920

3.4 Variables of the Study

Variables are the characteristics or conditions that are manipulated, controlled or observed by the experimenter. Variables can be classified as:

1. **Independent Variables (I.V.):** The independent variables are the conditions or characteristics that the experimenter manipulates in his effort to find out their relationship to the observed phenomenon. In the present study, family climate, academic motivation and adjustment are the independent variables.
2. **Dependent Variables (D.V.):** The dependent variables are the conditions or characteristics that appear or changes independent variables. In the present study, academic achievement is dependent variable.

3.5 Tools Used:

The relevance and reliability of any research work depends on appropriateness, reliability and validity of the tools and measures employed in the study. Thus to obtain the meaningful result of any research work, the tools applied should be valid and reliable as well as must see it to the corresponding age and ability levels of the sample involved in the research work. The dependent variable, i.e. academic achievement was measured in terms of the total marks secured by the students in the final exam of the previous class. In order to measure academic motivation, an Academic Motivation Scale was developed by the researcher while family climate and adjustment was measured by the standardized tools. Following tools were used in the present study to collect relevant data-

1. Family Climate Scale developed by Dr. Beena Shah (2006).
2. Academic Motivation Scale (AMS) as developed by the Investigator.
3. Adjustment Inventory for School Students (AISS) constructed and standardized by Dr A.K.P. Singh & R P Singh (2012, reprinted).

3.5.1 Family climate scale (FCS):

The present scale is designed by Dr. Beena Shah. In this test, family climate means an interpersonal relationship between the parents and the child. It includes parent's attitude towards the child as perceived by him in the 10 dimensions of FCS. Dimensions of FCS were randomly recorded in the final format of the scale

Table 3.2
Distribution of items over 10 dimensions of FCS

S. No	Dimensions	Response	Item number	Total items
1	Restrictiveness Vs Freedom	Positive	4,47,50,56,68,79	9
		Negative	48,60,89	
2	Indulgence Vs Avoidance	Positive	19,25,65,78	9
		Negative	1,16,26,54,81	
3	Partiality Vs Fairness	Positive	23,30,38,45,62,84	9
		Negative	2,28,86	
4	Attention Vs Negligence	Positive	3,5,8	9
		Negative	7,49,55,67,69,75	
5	Acceptance Vs Rejection	Positive	6,14	9
		Negative	10,13,40,52,59,61,71	
6	Warmth Vs Cold relation	Positive	9,34,53,64	9
		Negative	32,42,58,73,80	
7	Trust Vs Distrust	Positive	11,27,77,82	9
		Negative	15,17,21,66,76	
8	Dominance Vs Submissiveness	Positive	51,57,72,90	9
		Negative	20,29,36,83,86	
9	Expectation Vs Hopelessness	Positive	22,33,35,70	9
		Negative	41,43,46,86,87	
10	Open communication Vs Controlled communication	Positive	12, 31, 39, 44,74	9
		Negative	18,24,37,63	
TOTAL				90

The first draft, containing 133 statements with 3 alternative responses was administered over 200 secondary school students' C-R values were calculated for each statement between uppermost 27% and bottom 27% cases. Only those statements were retained in the final draft which have yielded highly significant C-R value ($p < 0.001$). Only 90 statements related to 10 dimensions.

Reliability of the scale:

The investigators adopted the test-retest method to find out the reliability coefficients of the family climate scale (FCS). The values of the reliability coefficients for each dimension are given below.

Table 3.3
Values of reliability coefficient for different dimensions of FCS

S. No.	Dimension	Coefficient Of Reliability
1	Freedom Vs Restrictiveness	.75
2.	Attention Vs Negligence	.72
3.	Dominance Vs Submission	.83
4	Acceptance Vs Rejection	.76
5.	Trust Vs Distrust	.79
6.	Indulgence Vs Avoidance	.69
7.	Warmth Vs Coldness	.79
8.	Expectation Vs Hopelessness	.71
9	Partiality Vs Fairness	.76
10	Open Communication Vs Controlled Communication	.81

Validity of the scale: Validity of the FCS was tested against the judgment of 20 judges. The selection of items on the opinions of the experts as well as the highly significant discriminative indices of all the items retained in the final format of FCS, confirm the item validity of the scale.

Administration of the scale:

This FCS can be used with the Hindi speaking student of both the sexes of Secondary and High School of our country belonging to rural or urban areas. It can be administered either individually or in groups. Some statements related to personal data and instructions are printed on the cover page of the test booklet. There is no time, limit but usually it takes 35-40 minutes.

Scoring of the items:

There is a three point scale, making for negative statements 0,1&2 for 'always', 'sometimes' and 'never', respectively, whereas it is 2,1,&0 for positive statement. The 'Positive' Total Score speaks of the 'Favourable Family Climate' where as 'Negative Total Score' indicates 'unfavorable Family Climate' of the child.

3.5.2 Development of Academic Motivation Scale (AMS):

A survey of available scales revealed that although a few foreign and Indian scales were available for measuring Academic Motivation of adolescents, but they measured it only in fewer restricted dimensions. None of them was found suitable for the measurement of all the dimensions of academic motivation as analyzed by the researcher after detailed analysis of various definitions. Hence development of an academic motivation scale on the basis of the definition of academic motivation and its dimensions as adopted by the researcher was undertaken by the researcher.

Behavioral Manifestation of the Academic Motivation: The researcher gone through various definitions of academic motivation. After analyzing these definitions seven dimensions of academic motivation were identified. These are as:-

1. **Achievement in examination:** All the factors related to the examination, which somehow affects the achievement of a student in his examination.
2. **Study habits:** Persistence of those habits which motivate a student to achieve academic excellence.
3. **Academic goal:** All the intentions and endeavors of a student to achieve the stipulated target.
4. **Interest in study:** The actions or thoughts which instigate the feeling of a student towards the study.
5. **Attitude to study:** Those believes of the student which motivate him to do all those things which excels his academic achievement
6. **Regularity in study:** Punctual behavior of the student related all the tasks of his study
7. **Extracurricular activities:** All those activities other than the curricular activities which help to groom the students for better academic achievement

3.5.2.1 Source of Items:

The basic need for the construction of the scale was to collect a large number of positive and negative statements that reflected academic motivation of adolescents' opinions about the academic motivation of adolescents along the seven dimensions of academic motivation from all the possible sources. All the available scales in this field were consulted to get relevant statements. Following material were consulted for collecting attitudinal statements regarding academic motivation scale:

- i) Handbook of Psychological and Social Instruments by Pareek and Rao (1974).
- ii) Handbook of competence and motivation by Elliot, A. J. & Dweck, C. S. (Eds.), New York: The Guilford Press (2005).
- iii) Academic Motivation of Adolescents by Frank Pajares .Urdan Timothy
- iv) Academic Motivation Inventory by J.P Srivastva, Department of Education, Meerut University, Meerut
- v) Achievement Motivation Scale by Dr. Beena Shah, Education Faculty, Garhwal University, Srinagar (Garhwal)

Beside this, for collection of academic motivation statements researcher took the help of the research scholars, university teachers and experts working in the field of Education. From the various sources, in all 240 positive and negative items were collected.

3.5.2.2 Editing the items:

The statements were carefully edited. In editing these statements, following point was taken into consideration (Edward, 1957).

- i) Factual and ambiguous statements were likely to be all or none were avoided.
- ii) Statements that were referring to a part or were irrelevant were left out.
- iii) Short statements covering the entire range of the effective scale of interest were selected.
- iv) Language was kept clear, simple, and direct and only one thought was expressed in a statement.

- v) Universal, double negative and difficult words were not used.
- vi) Statements were kept in a simple form.

Keeping in view the above points, items were evaluated for their suitability with the help of the researcher's supervisor. In this way, out of 240 items 145 were selected and rests were rejected. In this way Pre-try-out form of 145 statements (95 positive and 50 negative) got ready. Further, the instructions were added to it. For the sake of convenience the respondents were required to give their response on a separate answer sheet which contained the serial number of the statements and the space for three point scale response. Answer sheet got printed.

3.5.2.3 Pre-try-out:

Before going for the final try out, the preliminary draft was subjected to pre-try-out for checking gross language errors and to find out if all items were relevant to the attitudinal objectives of academic motivation to be measured in students. For this, 30 copies of this draft got typed and administered to 30 students studying in class IX. An analysis of the responses of these 30 students did not reveal any gross defect in the language, format and the relevance of items. Hence, this draft was accepted for try-out.

3.5.2.4 Try-out:

Try out form of academic motivation scale (AMS) along with instructions got typed. The AMS was administered upon a group of 100 students during the school time in Aligarh. During the try-out it was emphasized that no item should be omitted and the students were requested to reply honestly. No time limit was set at the time of try-out. However, the time taken to respond by each student was noted down by the researcher. As already mentioned, the scoring was based on three point Likert type scale. The positive items received scores of 3 for always, 2 for seldom and 1 for never response. For scoring negative items the scoring pattern was reversed. By using this scoring procedure the scores on positive and negative items were obtained. They were added to get over all students' academic motivation score on AMS.

Table 3.4
Scoring of the Items

Statement	Always	Seldom	Never
Positive	3	2	1
Negative	1	2	3

3.5.2.5 Item Analysis:

Item analysis is the process of analyzing item's characteristics, in the numerical form, on the basis of which items are selected or rejected for test consideration. This is done by administering the test on a representative sample of the population on which the test is built and then responses of these subjects are statistically analyzed with respect to each item.

The responses of the 100 respondents who were administered AMS during try-out were used for item analysis. Scores for each individual were summated over all the items. The score sheet for 100 students was prepared. On the basis of their total scores upper 27% and lower 27% of the respondents were selected. It may be stated here that the standard error of difference between means is least when 27% top and bottom cases are selected to form the two groups. The significance of the difference between the mean academic motivation scores of the two groups of any item was tested.

On the basis of 't' value 46 items were rejected because they were not significantly discriminating higher group from the lower group. 99 items were found significant at 0.05 level and 86 items were found significant at 0.01 level. All the significant items were arranged in the descending order and according to their 't' values. Out of these 52 best items were selected for the final scale, keeping in the mind that each dimension in academic motivation scale carries approximately equal favourable and unfavorable items. Thus, in the final scale, out of 52 items, 25 items are unfavorable and 27 items are favourable. In this way 52 (i.e. 27 positive and 25 negative) are there in the scale to measure the academic motivation of adolescents. The details are shown in the tables.

Table 3.5

Mean, S.D. and 't' value for various items according to Sub-Area of AMS

S.No.	Sub –Area	Item	Group	Mean	S.D.	't'	P	Significant		
1	Achievement in Examination	1(+)	Upper Lower	2.44 1.85	.751 .534	3.342	.01	Significant		
		2	Upper Lower	2.85 2.70	.362 .542	1.182	.05	N.S.		
		6	Upper Lower	2.78 2.67	.424 .480	.901	.05	N.S.		
		11	Upper Lower	2.30 2.19	.465 .622	.425	.05	N.S.		
		14(-)	Upper Lower	2.33 1.74	.784 .764	2.812	.05	Significant		
		15	Upper Lower	2.56 2.52	.641 .643	.212	.05	N.S.		
		17(+)	Upper Lower	3.00 2.56	.000 .698	3.309	.01	Significant		
		28	Upper Lower	2.00 1.67	.555 .679	1.975	.05	N.S.		
		34(+)	Upper Lower	2.93 2.30	.267 .724	4.240	.01	Significant		
		36(+)	Upper Lower	2.93 2.41	.267 .747	3.395	.01	Significant		
		41	Upper Lower	2.22 2.11	.801 .847	.495	.05	N.S.		
		43(-)	Upper Lower	2.89 2.22	.424 .892	3.509	.01	Significant		
		47(-)	Upper Lower	2.96 2.37	2.85 2.07	3.686	.01	Significant		
		50(-)	Upper Lower	2.96 2.26	.192 .656	5.349	.01	Significant		
		52(+)	Upper Lower	2.96 2.37	.192 .629	4.679	.01	Significant		
		58(+)	Upper Lower	3.00 2.33	.000 .734	4.721	.01	Significant		
		67(-)	Upper Lower	2.81 2.00	.483 .832	4.400	.01	Significant		
		70	Upper Lower	2.44 2.07	.751 .829	1.721	.05	N.S.		
		91(+)	Upper Lower	2.81 2.41	.396 .694	2.650	.05	Significant		
		96	Upper Lower	2.26 1.93	.859 .781	1.492	.05	N.S.		
		100	Upper Lower	1.67 1.56	.679 .751	.570	.05	N.S.		
		101	Upper Lower	2.11	.641	.388	.05	N.S.		
		102	Upper Lower	2.11 2.00	.934 .734	.486	.05	N.S.		
		113	Upper Lower	2.26 1.93	.656 .730	1.765	.05	N.S.		
		123(+)	Upper Lower	2.96 2.48	.192 .643	3.729	.01	Significant		
		Total								13
		+ =								8
- =								5		

Table 3.6
Study Habit

S.No.	Sub Area	Item	Group	Mean	S. D.	“t’	P	Significant
2	Study Habit	3(-)	Upper Lower	2.56 2.11	.506 .577	3.007	.01	Significant
		4(-)	Upper Lower	2.56 2.22	.577 .641	2.009	.05	Significant
		7(-)	Upper Lower	2.59 2.15	.694 .770	2.228	.05	Significant
		8	Upper Lower	2.33 1.93	.877 .781	1.803	.05	N.S.
		10(+)	Upper Lower	2.96 2.19	.192 .786	4.993	.01	Significant
		11	Upper Lower	2.30 2.19	.465 .622	.743	.05	N.S.
		13(+)	Upper Lower	2.96 2.37	.192 .742	4.019	.01	Significant
		16	Upper Lower	2.70 2.52	.542 .643	1.145	.05	N.S.
		20(-)	Upper Lower	2.67 2.30	.480 .669	2.337	.05	Significant
		21(-)	Upper Lower	2.70 2.04	.609 .706	3.716	.01	Significant
		22(+)	Upper Lower	2.85 2.33	.456 .620	3.500	.01	Significant
		23(+)	Upper Lower	3.00 2.37	.000 .792	4.132	.01	Significant
		30(+)	Upper Lower	2.96 2.44	.192 .641	4.029	.01	Significant
		42	Upper Lower	1.59 2.07	.797 .829	-2.176	.05	N.S.
		49(+)	Upper Lower	2.67 1.96	.679 .759	3.591	.01	Significant
		62(+)	Upper Lower	3.00 2.44	.000 .698	4.162	.01	Significant
		75(+)	Upper Lower	2.96 2.41	.192 .636	4.344	.01	Significant
		77(-)	Upper Lower	2.81 1.93	.483 .874	4.625	.01	Significant
		79(-)	Upper Lower	2.67 2.00	.555 .679	3.950	.01	Significant
		84(+)	Upper Lower	2.85 2.22	.362 .801	3.723	.01	Significant
		95(+)	Upper Lower	2.96 2.48	.192 .753	3.219	.01	Significant
		103	Upper Lower	2.56 2.22	.751 .801	1.578	.05	N.S.
		118	Upper Lower	2.37 2.07	.629 .781	1.535	.05	N.S.
		119(-)	Upper Lower	2.93 2.19	.385 .736	4.635	.01	Significant
		125(+)	Upper Lower	2.85 2.07	.362 .730	4.960	.01	Significant
								Total
						+=	11	
						-=	8	

Table 3.7
Extracurricular activity

S.No	Sub area	Item	Group	Mean	S.D.	't'	'P'	Significant	
3	Extracurricular activity	5	Upper Lower	2.41 2.15	.636 .770	1.349	.05	N.S.	
		19	Upper Lower	2.22 1.89	.801 .847	1.486	.05	N.S.	
		27(-)	Upper Lower	2.67 2.15	.480 .818	2.840	.01	Significant	
		31	Upper Lower	1.96 2.00	.587 .734	-.205	.05	N.S.	
		37(-)	Upper Lower	2.78 2.41	.577 .694	2.132	.05	Significant	
		53(+)	Upper Lower	2.56 1.85	.506 .718	4.161	.01	Significant	
		63(+)	Upper Lower	2.96 2.37	.192 .742	4.019	.01	Significant	
		78	Upper Lower	2.56 2.22	.641 .751	1.755	.05	N.S.	
		83(-)	Upper Lower	2.93 2.00	.267 .734	6.162	.01	Significant	
		109	Upper Lower	1.93 2.07	.917 .874	-.608	.05	N.S.	
		115(-)	Upper Lower	2.11 1.56	.934 .751	2.409	.05	Significant	
		122	Upper Lower	2.56 2.22	.641 .751	1.755	.05	N.S.	
		128(-)	Upper Lower	2.63 1.93	.742 .781	3.396	.01	Significant	
		132	Upper Lower	1.93 2.11	.874 .698	-.860	.05	N.S.	
		139	Upper Lower	2.56 2.19	.698 .834	1.770	.05	N.S.	
		143	Upper Lower	2.37 2.11	.792 .751	1.234	.05	N.S.	
								Total	7
								+=	2
								-=	5

Table 3.8
Interest in study

S.No.	Sub area	Item	Group	Mean	S.D.	't'	'P'	Significant	
4	Interest in study	9	Upper Lower	2.56 2.48	.751 .643	1.882	.05	N.S.	
		18	Upper Lower	1.81 1.63	.681 .629	1.037	.05	N.S.	
		35(+)	Upper Lower	2.81 2.33	.483 .620	3.182	.01	Significant	
		38	Upper Lower	2.56 2.26	.698 .594	1.679	.05	N.S.	
		54(-)	Upper Lower	2.74 2.04	.526 .854	3.646	.01	Significant	
		55(+)	Upper Lower	2.96 2.63	.192 .688	2.425	.05	Significant	
		56(-)	Upper Lower	2.33 1.74	.679 .712	3.129	.01	Significant	
		64(-)	Upper Lower	2.59 1.85	.572 .818	3.854	.01	Significant	
		74(-)	Upper Lower	2.93 2.11	.293 .211	5.017	.01	Significant	
		85(-)	Upper Lower	2.93 1.89	.267 .751	6.76	.01	Significant	
		86(+)	Upper Lower	2.63 2.00	.492 .784	3.533	.01	Significant	
		87(+)	Upper Lower	2.93 2.33	.267 .832	3.524	.01	Significant	
		93(+)	Upper Lower	2.96 2.33	.192 .679	4.633	.01	Significant	
		117	Upper Lower	1.78 2.30	.847 .775	-2.346	.05	N.S.	
		131(-)	Upper Lower	2.63 1.93	.688 .730	3.646	.01	Significant	
		138	Upper Lower	2.63 2.19	.742 .764	1.807	.05	N.S.	
		144(-)	Upper Lower	2.37 2.11	.792 .751	2.457	.05	Significant	
		145(-)	Upper Lower	2.81 2.00	.483 .920	4.075	.01	Significant	
								Total	13
								+=	5
						-=	8		

Table 3.9:
Attitude to Study

S. No.	Sub –Area	Item no	Group	Mean	S.D.	‘t’	‘P’	Significant
5	Attitude to study	44	Upper Lower	1.11 1.85	.424 .907	-3.844	.05	N.S.
		57(-)	Upper Lower	2.56 1.96	.751 .854	2.707	.01	Significant
		60	Upper Lower	2.59 2.48	.636 .580	.671	.05	N.S.
		66(-)	Upper Lower	3.00 2.30	.000 .724	4.954	.01	Significant
		76(+)	Upper Lower	2.93 2.30	.267 .823	3.780	.01	Significant
		82(-)	Upper Lower	2.96 2.26	.192 .656	5.349	.01	Significant
		92(+)	Upper Lower	2.93 2.37	.267 .742	3.662	.01	Significant
		94(+)	Upper Lower	2.96 2.56	.192 .641	3.165	.01	Significant
		97	Upper Lower	2.41 2.15	.747 .818	1.216	.05	N.S.
		98(+)	Upper Lower	2.96 2.44	.192 .801	3.274	.01	Significant
		106(+)	Upper Lower	3.00 2.44	.000 .641	4.507	.01	Significant
		111	Upper Lower	1.63 1.93	.742 .829	-1.385	.05	N.S.
		112(-)	Upper Lower	2.70 2.26	.465 .764	2.581	.01	Significant
		113	Upper Lower	2.26 1.93	.656 .730	1.765	.05	N.S.
		126(+)	Upper Lower	2.85 2.11	.534 .801	4.000	.01	Significant
		130(+)	Upper Lower	3.00 2.33	.000 .679	5.099	.01	Significant
		133(+)	Upper Lower	2.81 2.33	.396 .832	2.715	.01	Significant
		137(+)	Upper Lower	2.63 2.26	.742 .764	2.609	.01	Significant
		140	Upper Lower	2.19 2.52	.921 .643	-1.452	.05	N.S.
		141	Upper Lower	2.70 2.59	.609 .501	.733	.05	N.S.
								13
							+=	9
							-=	4

Table 3.10:

Regularity in study

S. No.	Sub -area	Item no	Group	Mean	S.D.	't'	'P'	Significant
6	Regularity in study	24(-)	Upper Lower	2.70 2.15	.669 .718	2.942	.05	Significant
		26(-)	Upper Lower	2.96 2.44	.192 .641	4.029	.01	Significant
		32	Upper Lower	2.74 2.48	.447 .700	1.622	.05	N.S.
		39	Upper Lower	2.56 2.44	.506 .577	.752	.05	N.S.
		40(-)	Upper Lower	2.96 2.44	.192 .641	4.029	.01	Significant
		45(-)	Upper Lower	2.81 2.37	.483 .792	2.490	.05	Significant
		46(+)	Upper Lower	2.85 2.41	.362 .747	2.781	.01	Significant
		61(+)	Upper Lower	2.89 2.30	.320 .669	4.153	.01	Significant
		69(+)	Upper Lower	2.69 2.30	.192 .775	4.336	.01	Significant
		71	Upper Lower	2.70 2.37	.542 .742	1.886	.05	N.S.
		72(+)	Upper Lower	2.89 2.30	.424 .609	4.153	.01	Significant
		73(-)	Upper Lower	2.93 2.33	.385 .784	3.524	.01	Significant
		81(+)	Upper Lower	2.67 1.96	.679 .759	3.591	.01	Significant
		88	Upper Lower	1.15 1.70	.534 .869	-2.831	.05	N.S.
		89(+)	Upper Lower	3.00 2.15	.000 .718	6.164	.01	Significant
		99	Upper Lower	2.70 2.48	.669 .802	1.105	.05	N.S.
		104(-)	Upper Lower	2.67 2.00	.679 .555	3.950	.01	Significant
		114(-)	Upper Lower	2.85 2.07	.534 .730	4.469	.01	Significant
		120(+)	Upper Lower	2.93 2.22	.385 .751	4.333	.01	Significant
		127(+)	Upper Lower	3.00 2.15	.000 .907	4.878	.01	Significant
142(+)	Upper Lower	2.96 2.30	.192 .775	4.336	.01	Significant		
								16
							+=	9
							-=	7

Table 3.11
Academic Goal

S. No.	Sub -area	Item No	Group	Mean	S.D.	't'	'P'	Signf.
7	Academic goal	12(+)	Upper Lower	3.00 2.44	.000 .698	4.136	.01	Significant
		25(-)	Upper Lower	2.67 2.15	.480 .718	3.119	.01	Significant
		29(-)	Upper Lower	2.85 2.30	.362 .775	3.374	.01	Significant
		33(+)	Upper Lower	2.89 2.59	.424 .572	2.162	.05	Significant
		48(+)	Upper Lower	2.96 2.37	.196 .629	4.679	.01	Significant
		51(+)	Upper Lower	3.00 2.30	.000 .823	4.441	.01	Significant
		59(+)	Upper Lower	2.96 2.52	.192 .643	3.442	.01	Significant
		65(+)	Upper Lower	2.78 2.44	.577 .641	2.009	.05	Significant
		68	Upper Lower	2.37 2.00	.884 .877	1.546	.05	N.S.
		80(+)	Upper Lower	2.93 2.19	.267 .879	4.191	.01	Significant
		90(-)	Upper Lower	2.89 2.30	.424 .823	3.325	.01	Significant
		106(+)	Upper Lower	3.00 2.44	.000 .641	4.507	.01	Significant
		107(+)	Upper Lower	2.96 2.33	.192 .620	5.038	.01	Significant
		108(+)	Upper Lower	2.96 2.44	.192 .698	3.721	.01	Significant
		110(+)	Upper Lower	2.85 2.07	.456 .694	2.781	.01	Significant
		124(+)	Upper Lower	2.96 2.44	.192 .696	3.721	.01	Significant
		129	Upper Lower	2.22 2.30	.641 .775	-.383	.05	N.S.
		134	Upper Lower	2.59 2.48	.636 .580	.671	.05	N.S.
		135(+)	Upper Lower	2.81 2.33	.483 .620	3.182	.01	Significant
		136(+)	Upper Lower	2.85 2.52	.456 .753	1.968	.05	Significant
								17
							+=	14
							-=	3

When selection of the items for final scale was complete, the items were again rearranged randomly to avoid sequential order of response. This form of the final scale along with the instructions for the respondents was got printed.

3.5.2.6 Description of the Final Draft (AMS):

The 52 item measures academic motivation in terms of seven dimensions. Hence the scale consists of seven sub scale. The table 3.4 presents detail of the scale.

Table 3.12:

Total No. of Positive and Negative Items and their Area-Wise Distributions in the Final Draft of Academic Motivation Scale

S.No.	Sub-Scale	Category	Serial No.	Total No. of Items
1	Achievement in examination	Positive Negative	1,15,29,42, 8,22,36,48	8
2	Study habit	Positive Negative	2,9,23,37 16,30,43,49	8
3	Academic goal	Positive Negative	3,10,24,31 17,38,44	7
4	Interest in study	Positive Negative	4,18,32,45, 11,25,39,50	8
5	Attitude to study	Positive Negative	5,12,19,33,51 26,40,46	8
6	Regularity in study	Positive Negative	6,20,27,41 13,34,47,52	8
7	Extracurricular activity	Positive Negative	14,21 7,28,35	5

3.5.2.7 Reliability:

According to Kerlinger (1973), to be reliable a measuring instrument should be relatively free from errors of measurement, thus being both accurate and predictable. Predictability or suitability of the scale “Refers to the extent to which a measuring device yields consistent result upon testing and re-testing”(Freeman, 1965). Accuracy of the measuring device is related to the consistency of the results when administered only once. In this study the reliability (stability) of the test was established through test-retest method and Cronbach Alfa.

Test-Retest Reliability:

In order to establish test-retest reliability, the same 100 students, which were previously administered the scale, were re-administered the Academic Motivation Scale after a gap of two weeks. The test-retest reliability coefficient of correlation was found 0.72. This index of test-retest reliability indicates that the academic motivation scale is fairly stable scale for measuring academic motivation among adolescents.

Coefficient of Cronbach Alpha:

The coefficient of Cronbach alpha which is a measure of internal consistency as well as factor concentration was also computed in order to establish the internal consistency of the total Academic Motivation Scale which was found 0.78. The table 3.5 gives the values of the coefficient alpha obtain for the AMS dimension

Table 3.13**Cronbach Alpha Values for the Dimensions of the AMS**

S.No.	Dimensions	Cronbach alpha coefficient.
1	Achievement in examination	.66
2	Study habit	.71
3	Academic goal	.68
4	Interest in study	.70
5	Attitude to study	.66
6	Regularity in study	.71
7	Extracurricular activity	.67
	Total	.78

The values of the coefficient of Cronbach alpha obtained for the AMS, presented in the table 3.5, are quite sufficient to justify the internal consistency of the scale. Further the alpha Cronbach alpha values obtained for each dimension indicates that they are also measuring academic motivation as accurately as it is being measured by the total scale. Hence the AMS was considered to be appropriate for assessing the academic motivation of the adolescents quite accurately and reliably.

3.5.2.8 Validity:

Although reliability is an essential component of test, validity cannot be substituted for it. Whereas reliability indicates the accuracy of measure, validity deals with the question as to whether a measure is in fact measuring what it purports or intends to measure. Validity of test was determined by two ways-

Content validity:

Content or face or logical validity is essentially a matter of judgment by experts of the sampling adequacy of content. This means that each item must be presumed of its relevance to the construct being measured (Kerlinger, 1973). The content validity of the items put in the AMS was based on the judgment of the experts and practitioners. The items were thoroughly evaluated and criticized by the experts and their relevance was also judged on the basis of pre-try out and their works in the field of academic motivation.

Construct validity:

To ensure the construct validity for the AMS the researcher used Pearson correlation coefficient between the domain and the total score

Table 3.14

S.No	Achievement in Examination	Study habit	Academic goal	Interest in study	Attitude to study	Regularity in study	Extra-curricular activity
Academic motivation	0.71	0.77	0.73	0.73	0.74	0.74	0.56

3.5.3 Adjustment Inventory for School Students (AISS):

The Adjustment Inventory has been designed by Dr. A.K.P. Singh and Dr. R. P. Singh (2012, Reprinted). The inventory seeks to segregate well-adjusted secondary school students (age group 14 to 18 years) from poorly adjusted students in three areas of adjustment: Emotional, Social and Educational. The 60 item inventory, in its final form, was administered to a randomly selected representative sample of 1950 (1200 boys and 750 girls) from class IX to XI grade pupils of 40 schools of Bihar.

3.5.3.1 Reliability of the test:

Coefficient of reliability was determined by (i) split-half method (ii) Test-retest method, and (iii) K-R formula-20 Table 1 gives the reliability coefficient of the total test and of sub-tests by the different methods

Table 3.15**Reliability of the Test (AISS)**

S. No.	Method used	Emotional	Social	Educational	total
1.	Split half	0.94	0.93	0.96	0.95
2.	Test retest	0.96	0.90	0.93	0.93
3.	K-R formula-20	0.92	0.92	0.96	0.94

3.5.3.2 Validity of the test:

In item-analysis validity coefficient was determined for each item by the biserial correlation method and only such items were retained which yielded biserial correlation with both the criteria (i) total score (ii) area score, significant level being .001.

Inter-correlations among the three areas of the inventory were calculated. The correlation matrix is being presented in table.

Table 3.16:**Correlation Matrix of three Areas**

	Areas	I	II	III
I	Emotional	-	.20	.19
II	Social	.20	-	.24
III	Educational	.19	.24	-

3.5.3.3 Reliability and Validity calculated by investigator:

The investigator has also calculated the reliability and validity for the adjustment inventory used to assess the adjustment of secondary students of Agra District. The

reliability of the inventory was calculated by using Cronbach's Alfa and the calculated value is .823.

The Validity of the inventory was calculated by using Person's coefficient of correlation (construct validity). The calculated coefficient of correlation for Emotional Adjustment was .824, for Social Adjustment this value was calculated as .704 and for Educational Adjustment the coefficient of correlation was found .84.

Administration of the test:

It is self-administering inventory. The examiner should read the instructions given on the front page and the examinees should also read them silently along with the examiner. There is no time limit for answering it. Ordinarily an individual takes 10 minutes in completing the test.

Scoring of the items:

Inventory can be scored by hand only, for any answer indicative of adjustment zero is given, otherwise a score of one is awarded.

3.6 Personal Data Sheet:

To know the biographical factors and other status the personal data sheet was developed by the investigator himself. The description of the personal data sheet is given below

3.7 Data Collection:

For collecting the data researcher took formal permission from the school authorities, who gave their consent to supply all types of information for this study. Accordingly the researcher approached the student and administered the AMS, FCS & AISS upon them. The marks in the VIII class final exam were made available to the researcher by school authority. This data served the purpose and was put to statistical analysis according to the nature of the hypotheses framed in the study

3.8 Response rate:

Out of total 1050 questionnaires administered to students only 920 were got filled by the students and they were found to be usable. In this way the response rate of 87.61%

was obtained. A response rate of 87.61% can be considered as quite satisfactory, particularly in the light of the fact that it is quite difficult for school administration to provide classes for fill three questionnaires from their busy schedule.

3.9 Data Organization:

All the three scales (FCS, AMS and AISS.) and personal data sheets were scored according to scoring procedures as described earlier. The scores on each of the subscales and total scores for FCS, AMS and AISS of 920 students were taken down on a master chart. The information's over personal data sheet were coded into suitable categories and transferred over the master chart.

3.10 Statistical Techniques used:

Raw data have no meaning until it is put on the anvil of some statistical techniques to draw useful inferences in a logical manner. In the present study, following statistical techniques were used

Descriptive Statistics:

Descriptive statistics refers to procedures for organizing, summarizing and describing quantitative data for the selected samples or for the population (where complete population data are available). In the present investigation, mean, median, standard deviation, and standard errors of mean were computed and used as descriptive statistics for further analysis of data and inferential statistics.

Mean:

The mean of the distribution is commonly understood as the arithmetic average. It is computed by dividing the sum of all the scores by the numbers of scores. It is computed by following formula.

$$Mean = \frac{\sum X}{N}$$

Where, $\sum X$ = Sum of raw scores

N = Number of scores

Standard Deviation:

Standard deviation is a widely used measurement of variability or diversity used in statistics and probability theory .It shows how much variation or ‘dispersion’ there is from the average (mean, or expected value). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data are spread out over a large range of value.

$$SD = \sqrt{\frac{\sum x^2}{N}}$$

Where,

\sum = sum

x^2 = squared deviation of a raw score from the mean

N= Number of scores

Standard error of mean (SEM):

This statistic is computed by the formula given below and is a measure of variability of means based on samples of the same size. It gives an index of sampling fluctuation of sample mean

$$\sigma_M = \frac{\sigma}{\sqrt{N}}$$

Where, σ = Standard deviation of raw scores

N= size of sample

σ_M = Standard error of mean

Inferential Statistics:

Statistical procedures used for drawing inferences about the properties of a population from data based on a sample are known as inferential statistics. The technique of “Analysis of Variance” and Multiple Regression Analysis (MRA) were used for data analysis.

Confidence Interval:

After mean and standard deviation were computed for a sample of a given size, it is possible to estimate the value of population mean (parameter) from the sample statistics. In order to estimate the values of population means for scores on various variables, the investigator computed confidence intervals at 95% and 99% confidence levels. For a given sample whose mean and standard deviations were available, the 95% and 99% confidence intervals were computed by using the following formulae:

$$M_o = M \pm 1.96 \sigma_M \text{ (for 95 \% confidence interval)}$$

$$M_o = M \pm 2.58 \sigma_M \text{ (for 99 \% confidence interval)}$$

Where, M_o symbolizes the population mean.

Each of these equations resulted in an interval of score-points by using '+' and '-' signs in the computation. Use of '+' sign resulted in the upper limit of the confidence interval and the '-' sign gave the lower limit of the interval within which the population mean would most probably be located. The process was used for each variable and for each dimension separately. The difference between sample mean and upper/lower limit of the confidence interval is a measure of sampling error which could be used on as an index of chance error in terms of percent of the sample mean. If M is a sample mean and U is the upper limit of 99% confidence interval, then percent maximum sampling error E would be

$$E = \left(\frac{U - M}{M} \right) 100$$

The investigator used this index as a measure of reliability of sample mean while estimating and interpreting the population means (parameters).

Multiple Regression Technique:

Multiple Regressions is a statistical technique that allows us to predict someone's score on one variable on the basis of their scores on several other variables. Multiple regressions allow us to identify a set of predictor variables which together provide a useful estimate of a participant's likely score on a criterion variable. Multiple regressions are simply an extension of this principle, where we predict one variable on

the basis of other variables. Having more than one predictor variable is useful when predicting human behavior, as our actions, thoughts, and emotions are likely to be influenced by some combination of several factors.

Multiple Regressions is the term used for predicting Y from two or more independent variable

$$Y' = B_1X_1 + B_2X_2 + B_3X_3 + \dots + C$$

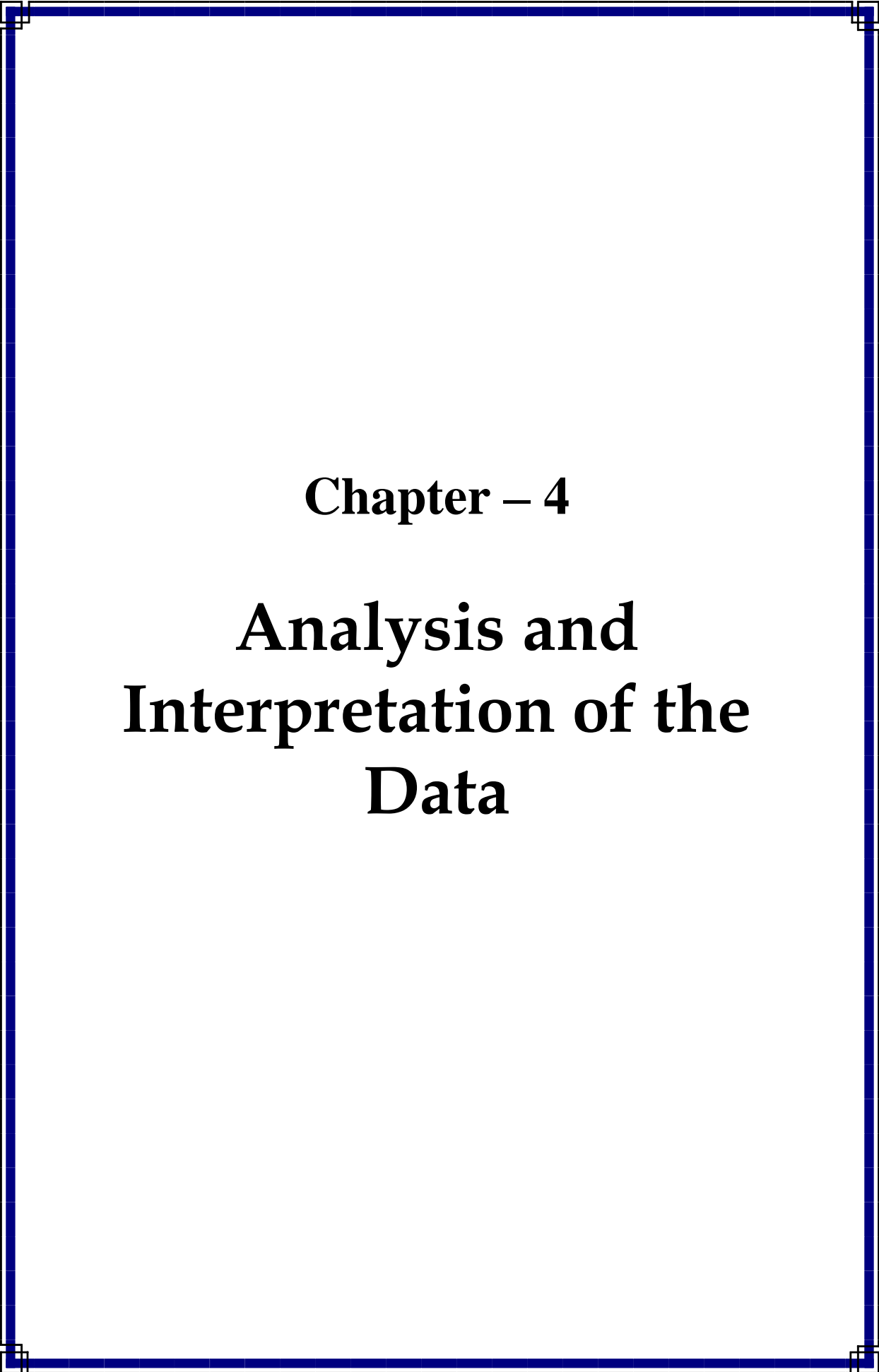
Where Y' is the predicted value of dependent variable Y with the help of known values of independent variables $X_1, X_2, X_3 \dots$ etc. and $B_1, B_2, B_3 \dots$ etc. denote the corresponding regression coefficients. The term 'C' at the end of the equations is a numerical constant. The technique of regression analysis mainly computes the regression coefficients $B_1, B_2, B_3 \dots$ related to each independent variable and the constant term 'C'. These values may applied in the obtained regression equation to find out the predicted value for this dependent variable related to the known value of independent variables $X_1, X_2, X_3 \dots$ etc. This regression equation may be used to predict the score on dependent variable of a person who is not included in the sample if values of independent variables are known in his case. The computational process, in addition to the regression equation, also results in multiple correlation-coefficients R of the linear combination of independent variables with the dependent variable. This value of R is square to obtained coefficient of determination R^2 , which is a measure of the proportion of the variance in the dependent variable explained by the linear combination of independent variable

Factorial ANOVA:

As the present study includes $2 \times 2 \times 2$ design, a $2 \times 2 \times 2$ factorial ANOVA is used for analyzing the data. Factorial Designs are used for the implementation of multiple factors in which all possible combinations of all the selected values of independent variables are used in a single study. Factorial ANOVA is the statistical method that analyses the independent and interactive effects of two and more than two independent variables on a dependent variable. In the present investigation fixed effect model factorial ANOVA is employed in which within group mean square is always used as the correct error term. This technique involves Analysis of Variance ANOVA and the various components of variances are estimated. Here the between

group sum of squares are further broken down separately for each independent variable to produce F ratios for main effects and interaction effects of the independent variables.

Since the study comprised more than two independent variables, manual calculations were not easily possible. Therefore, Statistical Package for Social Sciences (SPSS) 20.0 was used to conduct various statistical analyses. Chapter IV presents the analyses and interpretation of data.



Chapter – 4

**Analysis and
Interpretation of the
Data**

CHAPTER 4

4.0 Introduction:

Once the data have been collected in a research study the next step usually involves the analysis of the collected data. Data collected through the administration of the tools on selected sample are raw in nature. Such data needs to be organized, analyzed and interpreted for drawing sound conclusions and generalizations. The purpose of analysis is to reduce data to intelligible and interpretable form so that the relations of variables can be studied and tested by extracting as much information as possible that is pertinent to the subjects under consideration. The data analyses: (1) Descriptive statistics that help in computing measures of central tendency and dispersion. (2) Inferential statistics used to make inferences concerning the other aspect of a population.

Actually, the basic purpose of the analysis is to summarize the completed observation in such a manner that they yield answers to the research problems. The basic purpose of the interpretation is to look for the broader meaning of these answers by connecting them to other available knowledge. All previous steps have been taken in order to make their fulfillment possibility. The analysis is not an end in itself: but is a basic preliminary step in the scientific development of the problem.

For achieving the aims and objectives of the present study, the researcher conducted analysis and interpretation of the data from several angles. It was thought appropriate, to present interpretation after analysis of each part to make the analysis meaningful and systematic.

In order to make meaning presentation and bring clarity in interpretation the entire analysis was presented according to the sequence of statements of objectives of the study as given in chapter one:

1. To study the level of family climate, academic motivation, adjustment and academic achievement of adolescents

2. To study the impact of family climate on the academic achievement of adolescents
3. To study the impact of academic motivation on the academic achievement of adolescents
4. To study the impact of adjustment on the academic achievement of adolescents.
5. To study the relative contribution of family climate, academic motivation and adjustment to academic achievement of adolescents.
6. To study the difference in family climate, academic motivation, adjustment and academic achievement of adolescent in relation to some demographic variable such as:
 - (1) Gender (Male / Female)
 - (2) Location (Rural/ Urban)
 - (3) Type of family (Nuclear /Joint)

4.1 Study of Family Climate, Academic Motivation, Adjustment and Academic Achievement of Adolescents:

The first objective of the study was concerned with the study of level of family climate, academic motivation, adjustment and academic achievement of adolescents. In order to achieve this objective the hypothesis H 1 was framed and subjected to empirical verification. This hypothesis stated that:

H1 The family climate, academic motivation, adjustment and academic achievement level of adolescents will not vary.

In order to verify this hypothesis descriptive statistics related to family climate, academic motivation, adjustment and academic achievement were calculated and results are shown in table 4.1, 4.2, 4.3 and 4.4.

Table 4.1.1
Descriptive Statistics for Family Climate Scores

Dimensions	Range	Mean	Median	SD	SEM	95% confidence interval for population mean	99% confidence interval for population mean
Restriction Vs Freedom	2-18	11.67	12.00	2.132	.070	11.53-11.80	11.49-11.85
Indulgence Vs Avoidance	4-18	11.72	12.00	2.794	.092	11.54-11.90	11.48-11.95
Partiality Vs Fairness	4-18	12.65	13.00	2.294	.076	12.50-12.79	12.45-12.85
Attention Vs Negligence	4-18	11.30	11.00	3.275	.108	11.09-11.51	11.02-11.55
Acceptance Vs Rejection	1-18	12.21	12.00	3.228	.106	12.00-12.42	11.93-12.47
Warmth Vs Cold-relation	3-18	12.62	13.00	2.591	.085	12.45-12.78	12.43-12.87
Trust Vs Distrust	2-18	11.03	11.00	2.310	.076	10.88-11.19	10.83-11.22
Dominance Vs Submissiveness	3-17	10.33	10.00	2.156	.071	10.19-10.47	10.15-10.51
Expectance Vs Hopeless	5-17	11.88	12.00	1.927	.064	11.75-12.00	11.71-12.05
Open com Vs Closed com	2-18	10.82	11.00	2.892	.095	10.66-11.00	10.57-11.07
Total	72-157	116.22	115	15.99	.527	115.19-117.25	114.87-117.57

The raw scores on the first dimension (restriction Vs freedom) of family climate ranged from 2 to 18 with a median score of 12 points. The mean of score on this dimension for sample-subjects (N=920) was 11.67 with the standard deviation of 2.132 point. The standard error of mean was found to be 0.07 points. The 95 percent

confidence interval for the population mean for scores on this dimension ranged from by the using of standards error of mean at 95 percent and 99 percent levels. The 95 percent confidence interval for population mean ranged from 11.53 to 11.80, which means that probability is .95 that mean score on this dimension, for the whole population, would fall within these limits. Similarly, 99 percent confidence interval ranged from 11.49 to 11.85, meaning thereby that probability is .99 that true mean score for the population on this dimension would not be outside these limits. The 99% confidence interval suggests that the population mean would be 11.67 with a maximum sampling error of 1.54 percent.

The family climate scores on the second dimension (indulgence Vs freedom) ranged from 4 to 18 with a median score of 12 points. The mean score on second dimension was found to be 11.72 with standard deviation of 2.794 points. The population mean was estimated by using the value of standard error of mean (Downie and Heath, 1959). The 95 percent confidence interval for population mean ranged from 11.54 to 11.90 and 99 percent confidence interval ranged from 11.48 to 11.95. This means that probabilities are 0.95 and 0.99 respectively that true mean of second dimension (Indulgence Vs Avoidance) scores for the population of secondary school students would lie within these intervals. The 99% confidence interval suggests that the population mean would be 11.72 with a maximum sampling error of 1.96percent.

The raw scores on the third dimension (partiality Vs fairness) of family climate ranged from 4 to 18 with a median score of 13 points. The mean of score on this dimension for sample-subjects (N=920) was 12.65 with the standard deviation of 2.294 point. The 95 percent confidence interval for the population mean for scores on this dimension ranged from by the using of standards error of mean at 95 percent and 99 percent levels. The 95 percent confidence interval for population mean ranged from 12.50 to 12.79 and 99 percent confidence interval ranged from 12.45 to 12.85. This means that probabilities are 0.95 and 0.99 that true mean for the population on partiality vs fairness scores would be within these intervals. The 99% confidence interval suggests that population on family climate (partiality Vs fairness) would be 12.65 with maximum sampling error of 1.58 percent.

The family climate scores on the fourth dimension (attention Vs negligence) ranged from 4 to 18 with a median score of 11 points. The mean score on second dimension

was found to be 11.30 with standard deviation of 3.275 points. The population mean was estimated by using the value of standard error of mean. The 95 percent confidence interval for population mean ranged from 11.09 to 11.51 and 99 percent confidence interval ranged from 11.02 to 11.55. This means that probabilities are 0.95 and 0.99 respectively that true mean of fourth dimension (attention Vs negligence) scores for the population of secondary school students would lie within these intervals. The 99% confidence interval suggests that the population mean would be 11.30 with a maximum sampling error of 2.21 percent.

The raw scores on the fifth dimension (acceptance Vs rejection) of family climate ranged from 1 to 18 with a median score of 12 points. The mean of score on this dimension for sample-subjects (N=920) was 12.21 with the standard deviation of 3.228 point. The 95 percent confidence interval for the population mean for scores on this dimension ranged from by the using of standards error of mean at 95 percent and 99 percent levels. The 95 percent confidence interval for population mean ranged from 12.00 to 12.42, which means that probability is .95 that mean score on this dimension, for the whole population, would fall within these limits. Similarly, 99 percent confidence interval ranged from 11.93 to 12.47, meaning thereby that probability is .99 that true mean score for the population on this dimension would not be outside these limits. The 99% confidence interval suggests that population mean would be 12.21 with a maximum sampling error of 2.13 percent.

The family climate scores on the sixth dimension (warmth Vs cold relation) ranged from 3 to 18 with a median score of 13 points. The mean score on sixth dimension was found to be 12.62 with standard deviation of 2.591 points. The population mean was estimated by using the value of standard error of mean. The 95 percent confidence interval for population mean ranged from 12.45 to 12.78 and 99 percent confidence interval ranged from 12.43 to 12.87. This means that probabilities are 0.95 and 0.99 respectively that true mean of sixth dimension (warmth Vs cold relation) scores for the population of secondary school students would lie with these intervals. The 99% confidence interval suggests that the population mean would be 12.62 with a maximum sampling error of 1.58 percent.

The raw scores on the seventh dimension (trust Vs distrust) of family climate ranged from 2 to 18 with a median score of 11 points. The mean of score on this dimension

for sample-subjects (N=920) was 11.03 with the standard deviation of 2.310 point.. The 95 percent confidence interval for the population mean for scores on this dimension ranged from by the using of standards error of mean at 95 percent and 99 percent levels. The 95 percent confidence interval for population mean ranged from 10.88 to 11.19, which means that probability is .95 that mean score on this dimension, for the whole population, would fall within these limits. Similarly, 99 percent confidence interval ranged from 10.83 to 11.22, meaning thereby that probability is .99 that true mean score for the population on this dimension would not be outside these limits. The 99% confidence interval suggests that the population mean would be 11.03 with a maximum sampling error of 1.72 percent.

The scores on family climate scale (dominance Vs submissiveness) ranged from 3 to 17 with a median score of 10 points. The mean of score on this dimension for sample-subjects (N=920) was 10.33 with the standard deviation of 2.156 point. The 95 percent confidence interval for the population mean for scores on this dimension ranged from by the using of standards error of mean at 95 percent and 99 percent levels. The 95 percent confidence interval for population mean ranged from 10.19 to 10.47, and 99 percent confidence interval ranged from 10.15 to 10.51. This means that probabilities are 0.95 and 0.99 respectively that true mean for the population on FCS on this dimension would fall within these intervals. The 99% confidence interval suggests that the population mean scores would be 10.33 with sampling error of 1.74 percent.

The raw scores on the ninths dimension (expectance Vs hopeless) of family climate ranged from 5 to 17 with a median score of 12 points. The mean of score on this dimension for sample-subjects (N=920) was 11.88 with the standard deviation of 1.927 point. The 95 percent confidence interval for the population mean for scores on this dimension ranged from by the using of standards error of mean at 95 percent and 99 percent levels. The 95 percent confidence interval for population mean ranged from 11.75 to 12.00, which means that probability is .95 that mean score on this dimension, for the whole population, would fall within these limits. Similarly, 99 percent confidence interval ranged from 11.71 to 12.05, meaning thereby that probability is .99 that true mean score for the population on this dimension would not be outside these limits. The 99% confidence interval suggest that population mean scores on family climate would be 11.88 with sampling error 1.43 percent.

The family climate scores on the tenth dimension (open communication Vs closed communication) ranged from 2 to 18 with a median score of 11 points. The mean score on tenth dimension was found to be 11.88 with standard deviation of 2.892 points. The population mean was estimated by using the value of standard error of mean. The 95 percent confidence interval for population mean ranged from 10.66 to 11.00 and 99 percent confidence interval ranged from 10.57 to 11.07. This means that probabilities are 0.95 and 0.99 respectively that true mean of tenth dimension (open communication Vs closed communication) scores for the population of secondary school students would lie with these intervals. The 99% confidence interval suggests that the population mean would be 10.82 with a maximum sampling error of 2.3 percent.

Interpretation

The table 4.1.1 presents various descriptive measures of family climate score attained through the administration of family climate test adolescent students in the sample were found to have moderate level of family climate. All the three values (Mean, 116.22 Mode, 104 and Median, 115) show moderate scores according to the standard of the test as prescribed in the scale. Therefore, it can be concluded that on average family climate of students belonging to the area of Agra is of moderate level. The table 4.1.1 depicts the measures of central tendency (mean, median, and mode) fall more or less at the midpoint of the distribution and are belonging to each other. Therefore, the normal curve is bilaterally symmetrical, because all the measure of central tendency coincides at the center of the distribution. Thus, it may be concluded that the distribution of family climate scores of secondary school students are approximately normal.

The raw score range of total family climate on scale 72 to 157 with a median 115. The value of standard deviation is 15.99, which means the deviation of the scores may only 15.99 both on positive and negative sides. The standard error of mean (.527), which means that the sample means may deviate (.527) from the population mean. Therefore, it gives an indication that the mean is relatively more or less close to the mean of population. Confidence interval of the family climate was estimated by the using of standards error of mean at 95 percent and 99 percent interval. The 95 percent confidence interval for population mean ranged from 115.19-117.25 and 99 percent

confidence interval ranged from 114.87-117.57. This means that probability is 0.95 percent and 0.99 respectively that true mean for the population would not be out these intervals. The 99% confidence interval suggests that the population mean on family climate scores would be 116.32 with a maximum sampling error of 1.16 percent.

4.1.1 Nature of Data on the Basis of Raw Scores for Family Climate:

In order to scrutinize the nature of the scores of family climate in the total sample of secondary school students of Agra District, the obtained scores were assorted in tabular form. A frequency distribution and the percentage distribution of the scores was prepared, which is given in the tabular form table 4.1.2

Table 4.1.2
Raw Scores for Family Climate

Family Climate	Frequency	CF	Percentage
147 and above	22	22	2.39%
146-136	112	134	12.17%
135-126	146	280	15.86%
125-115	184	464	20%
114-104	241	705	26.19%
103-93	166	871	18.04%
92-82	43	914	4.67%
81 and Below	6	920	0.652%

A perusal of the above table indicates that the most of the frequencies are within the range of 146 to 93. This shows that majority of the subjects are concentrated in the middle of the distribution i.e., there is a normal tendency in scores of school achievement. This trend is also visible from the figure 4.1.1.

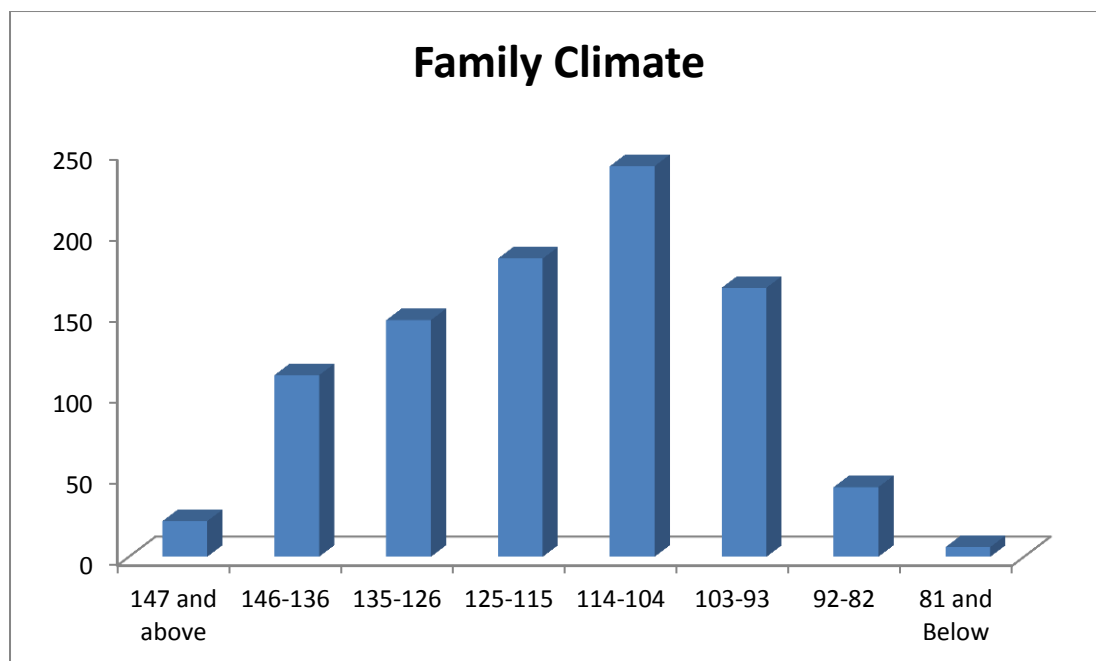


Fig. 4.1.1 Distributions of Scores on Family Climate for Total Sample

Table 4.1.3

Descriptive Statistic for Academic Motivation Scores

S.No.	Dimensions	Range	Mean	Median	SD	SEM	95% confidence interval for population mean	99% confidence interval for population mean
1	Achievement in Examination	15-24	20.92	21.00	1.908	.063	20.80-21.04	20.76-21.08
2	Study habit	15-24	20.58	21.00	2.228	.073	20.44-20.72	20.39-20.77
3	Academic Goal	12-22	18.28	19.00	1.896	.062	18.14-18.40	18.21-18.44
4	Interest in study	14-24	20.94	21.00	2.142	.071	20.80-21.08	20.76-21.12
5	Attitude to study	14-24	21.02	21.00	2.026	.062	20.90-21.14	20.86-21.18
6	Regularity in Study	15-24	21.40	22.00	2.009	.066	21.27-21.53	21.23-21.57
7	Extracurricular Activity	6-15	11.18	11.00	1.639	.540	10.13-12.23	9.79-12.57
	Total	101-157	134.28	136.00	9.982	.329	133.64-134.92	133.43-135.133

The academic motivation scores on the first dimension (achievement in examination) ranged from 15 to 24 with a median score of 21 points. The mean score on this dimension was found to be 20.91 with standard deviation of 1.908 points. The population mean was estimated by using the value of standard error of mean. The 95 percent confidence interval for population mean ranged from 20.80 to 21.04 and 99 percent confidence interval ranged from 20.39 to 20.77. This means that probabilities are 0.95 and 0.99 respectively that true mean of this dimension (achievement in examination) scores for the population of secondary school students would lie with these intervals. The 99% confidence interval suggests that the population mean would be 20.91 with a maximum sampling error of 0.8 percent.

The raw scores on the second dimension (study habit) of academic motivation ranged from 15 to 24 with a median score of 21.00 points. The mean of score on this dimension for sample-subjects (N=920) was 20.58 with the standard deviation of 2.223 point. The 95 percent confidence interval for the population mean for scores on this dimension ranged from by the using of standards error of mean at 95 percent and 99 percent levels. The 95 percent confidence interval for population mean ranged from 20.44 to 20.72 and 0.99 percent confidence interval ranged from 20.39 to 21.77. The 99% confidence interval suggests that the population mean on this dimension score would be 20.58 with a maximum sampling error of .9 percent.

The academic motivation scores on the third dimension (academic goal) ranged from 12 to 22 with a median score of 19 points. The mean score on this dimension was found to be 18.28 with standard deviation of 1.896 points. The population mean was estimated by using the value of standard error of mean. The 95 percent confidence interval for population mean ranged from 18.14 to 18.40 and 99 percent confidence interval ranged from 18.21 to 18.44. This means that probabilities are 0.95 and 0.99 respectively that true mean of this dimension scores for the population of secondary school students would lie with these intervals. The 99% confidence interval suggests that the population mean would be 18.28 with a maximum sampling error of 0.9 percent.

The raw scores on the fourth dimension (interest in study) of academic motivation ranged from 14 to 24 with a median score of 21.00 points. The mean of score on this dimension for sample-subjects (N=920) was 20.94 with the standard deviation of

2.142 point. The 95 percent confidence interval for the population mean for scores on this dimension ranged from by the using of standards error of mean at 95 percent and 99 percent levels. The 95 percent confidence interval for population mean ranged from 20.80 to 21.08 and 99 percent confidence interval ranged from 20.76 to 21.12. This means that probabilities are 0.95 and 0.99 respectively that true mean of this dimension scores for the population of secondary school students would lie within these intervals. The 99% confidence interval suggests that the population mean would be 20.94 with a maximum sampling error of 0.9 percent.

The academic motivation scores on the fifth dimension (attitude to study) ranged from 14 to 24 with a median score of 20.00 points. The mean score on this dimension was found to be 21.02 with standard deviation of 2.026 points. The population mean was estimated by using the value of standard error of mean. The 95 percent confidence interval for population mean ranged from 20.90 to 21.14 and 99 percent confidence interval ranged from 20.86 to 21.18. This means that probabilities are 0.95 and 0.99 respectively that true mean of this dimension scores for the population of secondary school students would lie within these intervals. The 99% confidence interval suggests that the population mean would be 21.02 with a maximum sampling error of 0.76 percent.

The raw scores on the sixth dimension (regularity in study) of academic motivation ranged from 15 to 24 with a median score of 22.00 points. The mean of score on this dimension for sample-subjects (N=920) was 21.04 with the standard deviation of 2.009 point. The 95 percent confidence interval for the population mean for scores on this dimension ranged from by the using of standards error of mean at 95 percent and 99 percent levels. The 95 percent confidence interval for population mean ranged from 21.27 to 21.53 and 99 percent confidence interval ranged from 21.23 to 21.57. This means that probability is 0.95 percent and 0.99 respectively that true mean for the population would not be out of these intervals. The 99% confidence interval suggests that the population mean would be 21.04 with a maximum sampling error of 0.8 percent.

The academic motivation scores on the seventh dimension (extracurricular activity) ranged from 6 to 15 with a median score of 11 points. The mean score on this dimension was found to be 11.18 with standard deviation of 1.69 points. The

population mean was estimated by using the value of standard error of mean. The 95 percent confidence interval for population mean ranged from 10.13 to 12.23 and 99 percent confidence interval ranged from 9.79 to 12.57. This means that probabilities are 0.95 and 0.99 respectively that true mean of this dimension (extracurricular activity) scores for the population of secondary school students would lie with these intervals. The 99% confidence interval suggests that the population mean would be 11.18 with a maximum sampling error of 12 percent.

Interpretation

The above given table presents total measures of academic motivation score attained through the administration of academic motivation test prepared by the researcher himself. On average adolescent students in the sample has high level of academic motivation, where all the three values (Mean, 134.28: Mode, 144: and Median, 136). Therefore, it can be concluded average students studying in secondary level belonging to the district Agra has high level of academic motivation. The table 4.2 shows the measures of central tendency (mean, median, and mode) fall nearer at the midpoint of the distribution and also are nearer to each other. Therefore, the normal curve is bilaterally symmetrical, because all the measures of central tendency coincide at the center distribution. Thus it may be concluded that the distribution of academic motivation scores of secondary school students are approximately normal. The standard error of mean (.329), which means that the sample mean (134.05) may deviate only (.329) from the population mean. Therefore, it gives an indication that the mean is relatively close to the true mean of the population. The value of standard deviation is 9.982 both on positive and negative sides. Confidence interval of the academic motivation was estimated by the using of standards error of mean (.329)at 95 percent and 99 percent interval. The 95 percent confidence interval for population mean ranged from 133.64 to 134.92 and 99 percent confidence interval ranged from 133.43 to 135.133. This means that probability are 0.95 percent and 0.99 percent respectively that true means for the population would not be out of these interval. The 99% confidence interval suggests that the population mean would be 134.28 with a maximum sampling error of 0.6 percent.

4.1.2 Nature of Data on the Basis of Raw Scores for Academic Motivation:

In order to scrutinize the nature of the scores of Academic Motivation in the total sample of secondary school students of Agra District, the obtained scores were assorted in tabular form. A frequency distribution and the percentage distribution of the scores was prepared, which is given in the table 4.1.4.

Table 4.1.4

Raw Scores for Academic Motivation

Academic Motivation	Frequency	CF	Percentage
146 and above	92	92	10%
145-135	410	502	44.56%
134-124	285	787	30.97%
123-113	93	880	10.10%
112-102	36	916	3.91%
Below 101	4	920	0.43%

A perusal of the above table indicates that the most of the frequencies are within the range of 145 to 113. This shows that majority of the subjects are concentrated in the middle of the distribution i.e., there is a normal tendency in scores of school achievement. This trend is also visible from the figure 4.1.2.

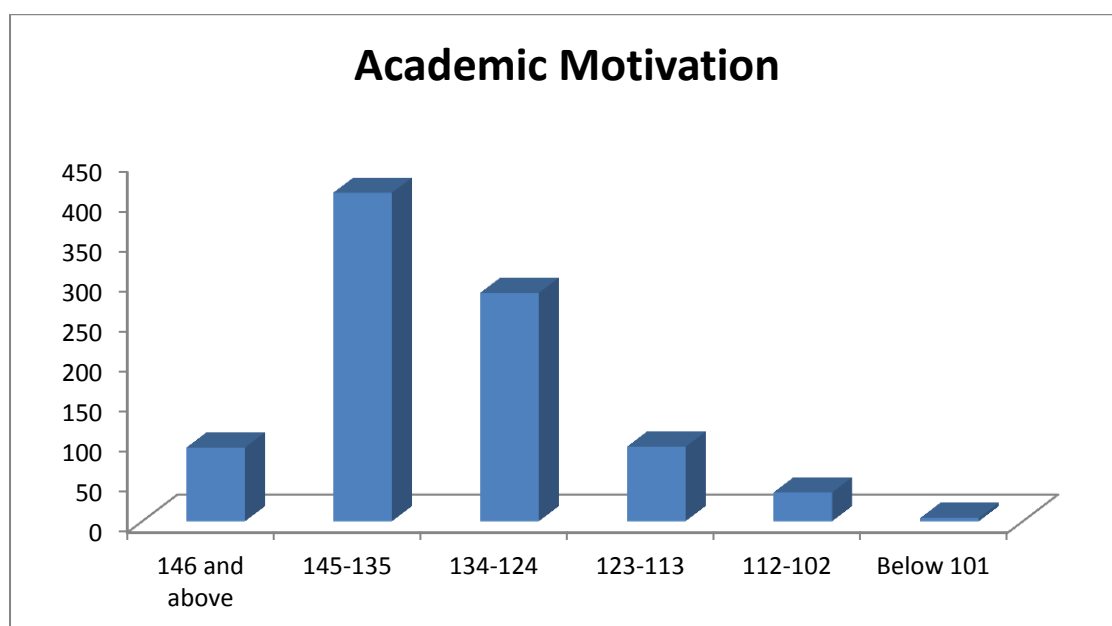


Fig. 4.1.2 Distributions of Scores on Academic Motivation for Total Sample

Table 4.1.5
Descriptive Statistic for Adjustment Scores

S.No.	Dimensions	Range	Mean	Median	SD	SEM	95% confidence interval for population mean	99% confidence interval for population mean
1	Emotional adjustment	0-13	3.43	3.00	2.949	.097	3.24to3.62	3.18-3.68
2	Social adjustment	1-14	6.85	7.00	2.374	.078	6.69-7.00	6.64-7.05
3	Educational adjustment	0-12	3.59	3.00	2.591	.085	3.42-3.76	3.37-3.81
4	Total	2-33	13.87	13.00	6.247	.206	13.47-14.27	13.34-14.40

The raw scores on the first dimension (emotional adjustment) of adjustment ranged from 0 to 13 with a median score of 3.00 points. The mean of score on this dimension for sample-subjects (N=920) was 3.43 with the standard deviation of 2.949 point. The 95 percent confidence interval for the population mean for scores on this dimension ranged from by the using of standards error of mean at 95 percent and 99 percent levels. The 95 percent confidence interval for population mean ranged from 3.24 to 3.62 and 99 percent confidence interval ranged from 3.18 to 3.68, meaning thereby that probability is .99 that true mean score for the population on this dimension would not be outside these limits. The 99% confidence interval suggests that the population mean would be 3.43 with a maximum sampling error of 7 percent.

The adjustment scores on the second dimension (social adjustment) ranged from 1 to 14 with a median score of 7.00 points. The mean of score on this dimension for sample-subjects (N=920) was 6.85 with the standard deviation of 2.374 point. The 95 percent confidence interval for the population mean for scores on this dimension ranged from by the using of standards error of mean at 95 percent and 99 percent levels. The 95 percent confidence interval for population mean ranged from 6.69 to 7.00 and 99 percent confidence interval ranged from 6.64 to 7.05. This means that probabilities are 0.95 and 0.99 respectively that true mean of this dimension scores for the population of secondary school students would lie with these intervals. The 99%

confidence interval suggests that the population mean would be 6.85 with a maximum sampling error of 2.5 percent.

The raw scores on the third dimension (educational adjustment) of adjustment ranged from 0 to 12 with a median score of 3.00 points. The mean of score on this dimension for sample-subjects (N=920) was 3.59 with the standard deviation of 2.591 point. The 95 percent confidence interval for the population mean for scores on this dimension ranged from by the using of standards error of mean at 95 percent and 99 percent levels. The 95 percent confidence interval for population mean ranged from 3.42 to 3.76, which means that probability is .95 that mean score on this dimension, for the whole population, would fall within these limits. Similarly, 99 percent confidence interval ranged from 3.37 to 3.81, meaning thereby that probability is .99 that true mean score for the population on this dimension would not be outside these limits. The 99% confidence interval suggests that the population mean would be 3.59 with a maximum sampling error of 6.1 percent.

Interpretation

The table 4.1.5 represents various descriptive measures of adjustment score attained through the administration of adjustment inventory. Adolescent students in the sample were found to have moderate level of adjustment. All the three values (Mean, 13.87 Mode, 10 and Median, 13.00) show moderate scores according to the standard of the test as prescribed in the inventory. Therefore, it can be concluded that on average adjustment of students belonging to the area of Agra is of moderate level. The table 4.1.3 depict the measures of central tendency (mean, median, and mode) fall more or less at the midpoint of the distribution and are belonging to each other. Therefore, the normal curve is bilaterally symmetrical, because all the measure of central tendency coincides at the center of the distribution. Thus, it may be concluded that the distribution of adjustment scores of secondary school students are approximately normal.

The range score of total adjustment on scale from 2 to 33 with median 13.00. The all overall mean score of adjustment was 13.87 with the standard deviation 6.85. Confidence interval of the adjustment was estimated by the using of standards error of mean (.206) at 95 percent and 99 percent interval. The 95 percent confidence interval for population mean ranged from 13.47 to 14.27 and 99 percent confidence interval

ranged from 13.34 to 14.40. This means that probability are 0.95 percent and 0.99 percent respectively that true means for the population would not be out of these interval. The 99% confidence interval suggests that the population mean would be 13.87 with a maximum sampling error of 3.8 percent.

4.1.3 Nature of Data on the Basis of Raw Scores for Adjustment:

In order to scrutinize the nature of the scores of Adjustment in the total sample of secondary school students of Agra District, the obtained scores were assorted in tabular form. A frequency distribution and the percentage distribution of the scores was prepared, which is given in the table 4.1.6

Table 4.1.6
Raw Scores for Adjustment

Adjustment	Frequency	CF	Percentage
29 and above	27	27	2.93%
28-18	212	239	23.04%
17—07	609	848	66.19%
Below 6	72	920	7.82%

As perusal of the table 4.16 indicates that the most of the frequencies are within the range of 28 to 07. This shows that majority of the subjects are concentrated in the middle of the distribution i.e., there is a normal tendency in scores of school achievement. This trend is also visible from the figure 4.1.3.

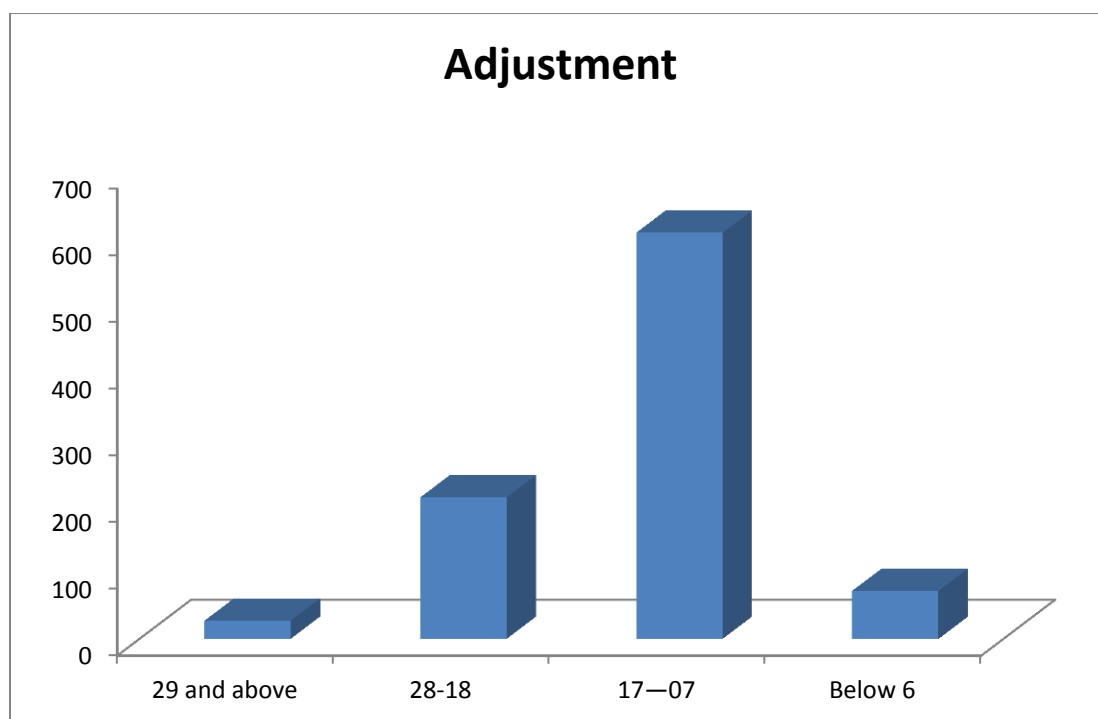


Fig. 4.1.3 Distributions of Scores on Adjustment for Total Sample

Table 4.1.7

Descriptive Statistic for Academic Achievement Scores:

S.No.	Dependent variable	Range	Mean	Median	SD	Standard error of mean	95% confidence interval for population mean	99% confidence interval for population mean
1	Academic achievement	38 to 98	71.05	71	12.986	.425	70.67-71.88	69.96-72.14

The range score of academic achievement from 34-98 percent with median 71.00. The overall score of was 71.05 with the standard deviation 12.986. Confidence interval of the academic achievement was estimated by the using of standards error of mean (.425) at 95 percent and 99 percent interval. The 95 percent confidence interval for population mean ranged from 70.67 to 71.88 and 99 percent confidence interval ranged from 69.96to72.14. This means that probability are 0.95 percent and 0.99 percent respectively that true means for the population would not be exceed these interval. The 99% confidence interval suggests that the population mean would be 71.05 with a maximum sampling error of 1.5 percent.

4.1.4 Nature of Data on the Basis of Raw Score for Academic Achievement:

In order to scrutinize the nature of the school achievement scores in the total sample scores of secondary school students of Agra District obtained scores were assorted in tabular form. A frequency distribution and the percentage distribution of the scores was prepared, which is given in the table 4.1.8

Table 4.1.8
Raw Scores for Academic Achievement

Academic Achievement	Frequency	CF	Percentage
88 and above	110	110	11.95%
87-77	226	336	24.56%
76-66	237	633	25.76%
65-55	249	822	27.06%
54-44	88	910	9.56%
43 and Below	10	920	1.08%

A perusal of the above table indicates that the most of the frequencies are within the range of 87 to 55. This shows that majority of the subjects are concentrated in the middle of the distribution i.e., there is a normal tendency in scores of school achievement. This trend is also visible from the figure 4.1.4

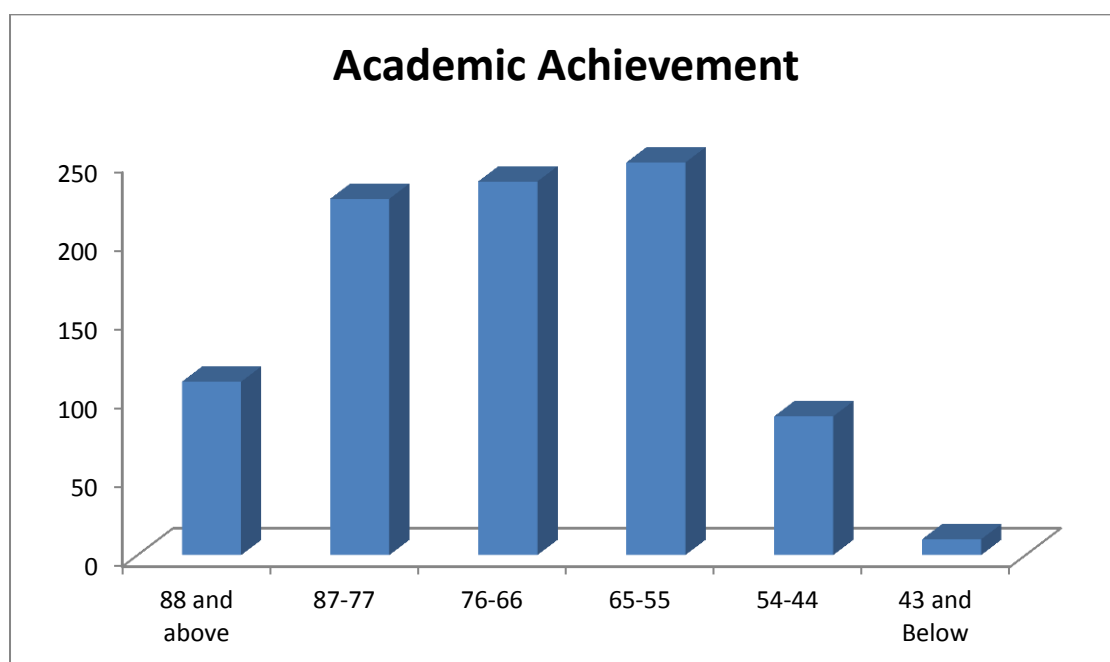


Fig. 4.1.4 Distributions of Scores on Achievement for Total Sample

4.2 The Impact of Family Climate on Academic Achievement of Adolescents

The second objective of this study was concerned with the study of impact of family climate on academic achievement of adolescents

To achieve this objective the following null hypothesis was framed and subjected to empirical testing. This hypothesis stated that-

Ho 2: There is no significant contribution of family climate on the academic achievement of adolescents

In order to verify this hypothesis regression analysis was done. The independent variable 'family climate' has ten dimensions. In order to examine the collective impact of these dimensions on the dependent variable, namely academic achievement, multiple regression analysis was used. The purpose of using this method was to study the contribution of each dimension as well as their collective contribution to academic achievement. The stepwise approach to regression analysis was used in this regard. The obtained results are summarized in the following table. Before applying regression analysis, correlation matrix of the dependent and independent variables is shown in following table 4.2.1.

Table 4.2.1

Coefficient of Correlation Among Academic Achievement and Dimensions of Family Climate

Variable	Academic Achievement	Rest Vs Freed	Indug Vs Avoid	Part Vs Fairn	Atten Vs Neglig	Accep Vs Rej	Warmth Vs Cold Rel	Trust Vs Distrust	Dom Vs Subm	Exp Vs Hop	Op C Vs Cl C
Academic Achievement	1.000	.060*	.362**	.204**	.349**	.337**	.268**	.206**	.123**	.221**	.275**
Rest. Vs Freed		1.00	.076**	.145**	-.062*	-.015	.113*	.040	.109**	.077**	.067
Indug Vs Avoid			1.00	.322**	.531**	.570**	.533**	.404**	.169**	.379**	.528**
Part Vs Fairn				1.00	.271**	.268**	.333**	.286**	.163**	.252**	.309**
Atten Vs Neglig					1.00	.619**	.488**	.366**	.086**	.337**	.516**
Accep VsRej						1.00	.518**	.428**	.166**	.384**	.512**
Warmth VsCold Rel							1.00	.397**	.217**	.386**	.476**
Trust Vs Distrust								1.00	.117**	.346**	.363**
Dom Vs Subm									1.00	.157**	.199**
Exp Vs Hop										1.00	.311**
Open Com Vs Closed com C											1.00

Significant 0.01**

Significant 0.05*

Interpretation:

Table 4.2.1 represents inter-correlations among different dimensions of family climate and academic achievement. Dependent variable i.e. academic achievement was found to be significantly correlated with dimensions of family climate variables i.e. indulgence Vs avoidance (0.362), partiality Vs fairness (0.204), attention Vs negligence (0.349), acceptance Vs rejection (0.337), warmth Vs cold relations (0.268), (trust Vs distrust 0.206), dominance Vs submissiveness (0.123), expectation Vs hopelessness (0.221), and open communication Vs controlled communication (0.275) at 0.01 level, and restrictiveness Vs freedom (.060) was significant at 0.05 level. The dimension restrictiveness Vs freedom was not found to be significantly correlated with other dimensions i.e. acceptance Vs rejection (-.015), trust Vs distrust (.040), open communication Vs close communication (.067). Most of the dimensions were found significantly correlated with each other at 0.01 levels, and few of them at 0.05 levels.

Regression analysis was applied to know the effect of predictor variable (Dimensions of family climate) on the criterion variable (i.e. academic achievement) of adolescents. Table 4.2.2 shows the results.

Table 4.2.2

**Regression Analysis of the Total Sample Criterion Variable
Academic Achievement (N=920)**

S.No.	Independent variable(added)	r	R	R ²	R ² Change	β	B	F
1	Indulgences Vs Avoidance	0.362	0.362	.131	.131	.191	.882	138.042**
2	Indulgences Vs Avoidance Attention Vs Negligence	0.349	0.406	.165	.034	.160	.631	37.650**
3	Indulgences Vs Avoidance Attention Vs Negligence Acceptance Vs Rejection	0.337	0.415	.172	.007	.110	.441	7.917**
4	Indulgences Vs Avoidance Attention Vs Negligence Acceptance Vs Rejection Partiality Vs Fairness	0.204	0.420	.176	.004	.069	0.389	4.688**
Constant = 43.267								

**Significant at the 0.01 level

β= Standardized Regression Coefficient

B= Unstandardized Regression Coefficient

Interpretation:

The results of regression analysis given in table 4.2.2 reveal that out of ten dimensions of family climate only four contributed significantly as determinants of academic achievement. These are: indulgences Vs avoidance, attention Vs negligence, acceptance Vs rejection and partiality Vs fairness. The table shows increase in multiple correlations (R) and coefficient of multiple determinations (R^2) along with F-ratios with the addition to each new variable.

The final values of co-efficient of determinant (R^2) indicates that 17.6% of the total variation in the academic achievement could be predicted by four dimensions, namely, indulgences Vs avoidance, attention Vs negligence, acceptance Vs rejection and. partiality Vs fairness. Out of these four dimensions, indulgences Vs avoidance ($R^2=.131$) is the strongest predictor which explains 13.1% variance in academic achievement. The dimension attention Vs negligence emerged as the second most significant predictor of academic achievement and contributed 3.4 % variance in the academic achievement. In the same way, acceptance Vs rejection explained the 0.7% variance and partiality Vs fairness contributed 0.4% in academic achievement. All the F-ratios were found to be significant at .01 levels.

The relative contribution of each dimension is proportional to corresponding beta weights which are all positive in this case. The proportion of variance in the dependent variable explained by each dimension separately is shown in the pie-diagram and the unexplained part of it. The regression coefficient (Bs) has also been given in the table which could be used in the regression equation for predicting academic achievement. The general regression equation is written as follows:

$$Y=B_1X_1+B_2X_2+B_3X_3+B_4X_4+\dots\dots\dots+C$$

Where,

$X_1, X_2, X_3, X_4, \dots\dots\dots$ are the raw scores on individual variables for a given person

$B_1, B_2, B_3, B_4, \dots\dots\dots$ are regression coefficient

C is the constant term.

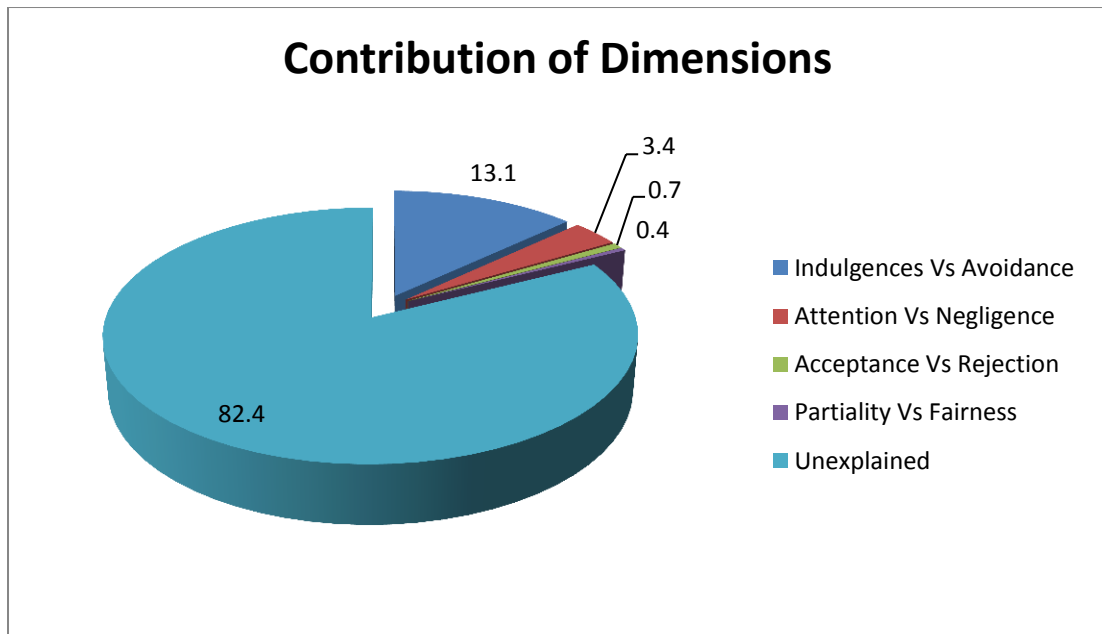


Fig. 4.2.1 Relative Contribution of Dimensions of Family Climate for all Students

By using the results of table 4.2.2 the academic achievement score of any individual not included in the sample of the present study, could be predicted by using the following equation:

$$Y = .882X_1 + .631X_2 + .441X_3 + 0.389X_4 + 43.267$$

If we know the raw scores of any individual on the four predictors X_1 , X_2 , X_3 , X_4 , we might predict his academic achievement score, by inserting the values in the above equation.

4.3 The Impact of Academic Motivation on Academic Achievement of Adolescents

The third objective of this study was concerned with the study of impact of academic motivation on academic achievement of adolescents

To achieve this objective the following null hypothesis was framed and subjected to empirical testing. This hypothesis stated that:

H₀₃: There is no significant impact of academic motivation on the academic achievement of adolescents.

In order to verify this hypothesis regression analysis was done. The independent variable 'Academic Motivation' has seven dimensions. In order to examine the

collective impact of these dimensions on the dependent variable, namely academic achievement, multiple regression analysis was used. The purpose of using this method was to study the contribution of each dimension as well as their collective contribution to academic achievement. The stepwise approach to regression analysis was used in this regard. The obtained results are summarized in the following table. Before applying regression analysis, correlation matrix of the dependent and independent variables is shown in following table 4.3.1.

Table 4.3.1

Coefficient of Correlation Among Academic Achievement and Dimensions of Academic Motivation

Variable	Academic Achievement	Achievement in examination	Study habit	Academic Goal	Interest in study	Attitude to study	Regularity in Study	Extracurricular Activity
Academic Achievement	1.000	0.252**	0.286**	0.296**	0.180**	0.254**	0.166**	0.304**
Achievement in Examination		1.000	0.506**	0.464**	0.417**	0.466**	0.461**	0.325**
Study habit			1.000	0.502**	0.485**	0.469**	0.502**	0.403**
Academic Goal				1.000	0.446**	0.478**	0.436**	0.354**
Interest in study					1.000	0.486**	0.511**	0.269**
Attitude to study						1.000	0.467**	0.309**
Regularity in Study							1.000	0.304**
Extracurricular Activity								1.000

***. Correlation is significant at the 0.01 level, **. Correlation is significant at the 0.05 level.**

Interpretation:

The table 4.3.1 represents inter-correlations among different dimensions of academic motivation and academic achievement. The dependent variable academic achievement was found to be significantly correlated the dimensions of academic achievement i.e. Achievement in examination (0.252), Study habit (0.268), Academic Goal (.296), Interest in study (.180), Attitude to study (.254), Regularity in Study (.166) and Extra-curricular activity (.304).The correlation among the dimensions was also found to be significantly correlated to each other at 0.01 level.

Regression analysis was applied to know the effect of predictor variable (Dimensions of academic motivation) on criterion variable (i.e. academic achievement) of adolescents. Table 4.1.4 shows the results.

Table 4.3.2
Regression Analysis of the Total Sample (N=920) Criterion
Variable-Academic Achievement

S.No.	Independent variable Added	r	R	R ²	R ² Change	β	B	F
1	Extracurricular Activity	0.304	0.304	0.093	0.093	.189	1.487	93.77**
2	Extracurricular Activity, Academic Goal	0.286	0.365	0.133	0.041	.139	0.947	70.48**
3	Extracurricular Activity, Academic Goal, Study Habit	0.296	0.379	0.144	0.011	.101	0.587	51.33**
4	Extracurricular Activity, Academic Goal, Study Habit and Attitude to study	0.250	0.385	0.149	0.005	.082	0.521	39.92**
Constant= 14.088								

***Significant at 0.01 level*

β= Standardized Regression Coefficient

B= Unstandardized Regression Coefficient

Interpretation:

The results of regression analysis given in table 4.3.2 reveal that out of seven dimensions of academic motivation only four contributed significantly as determinants of academic achievement. These are extracurricular activity, academic

goal, study habit and attitude to study. The table shows increase in the multiple correlations (R) and coefficient of multiple determinants (R^2) along with F- ratios with the addition to each new variable.

The final value of co-efficient of determinant (R^2) indicates that 14.9% of the total variation in academic achievement could be predicted by four dimensions, namely extracurricular activity, academic goal, study habit and attitude to study. Out of these four dimensions, extracurricular activity is the strongest predictor which explains 9.3% variance in academic achievement. The dimension academic goal emerged as the second most significant predictor of academic achievement and contributed 4.1 % variance in academic achievement. In the same way, study habit explained 1.1% variance and attitude to study contributed 0.05% in academic achievement. All the F-ratio were found to be significant at 0.01 levels.

The relative contribution of each dimension is proportional to corresponding beta weights which are all positive in this case. The proportion of variance in the dependent variable explained by each dimension separately is shown in the pie-diagram and its unexplained part. The regression co-efficient (Bs) have also been given in the table which could be used in the regression equation for predicting academic achievement. The general regression equation is written as follows:

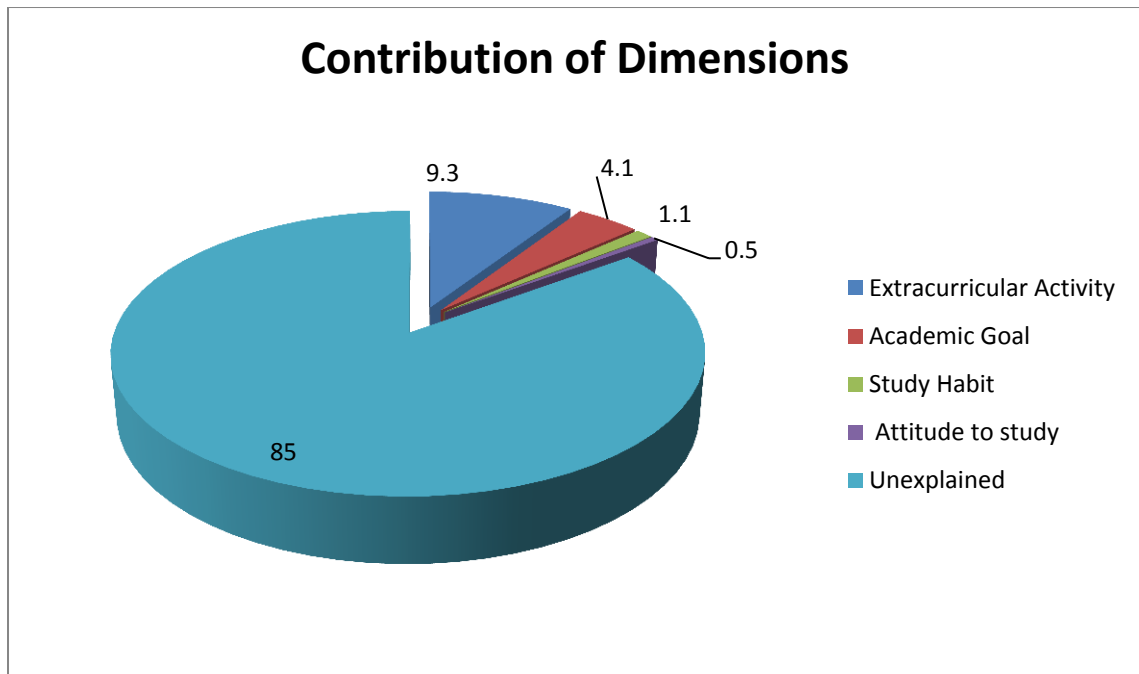
$$Y = B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + \dots + C$$

Where,

$X_1, X_2, X_3, X_4, \dots$ are the raw scores on individual variables for a given person

$B_1, B_2, B_3, B_4, \dots$ are regression coefficient and

C is the constant term.



**Fig. 4.3.1 Relative Contribution of Dimensions of Academic Motivation
for all Students**

By using the results of table 4.1.4 the academic achievement score of any individual not included in the sample of the present study, could be predicted by using the following equation:

$$Y=1.487X_1+.947X_2+.587X_3+.521X_4+14.088$$

If we know the raw scores of any individual on the four predictors X_1 , X_2 , X_3 , X_4 we might predict his academic achievement score, by inserting the values in the above equation.

4.4 The Impact of Adjustment on Academic Achievement of Adolescents

The fourth objective of the study was concerned with the study of impact of adjustment on academic achievement of adolescents.

To achieve this objective the following null hypothesis was framed and subjected to empirical testing. This hypothesis stated that:

H₀₃: There is no significant impact of adjustment on the academic achievement of adolescents.

The independent variable ‘adjustment’ has three dimensions emotional adjustment, Social adjustment and educational adjustment. In order to examine the collective as well as dimension wise impact on the dependent variable, namely academic achievement, multiple regression analysis was used. The purpose of using this method was to study the contribution of each dimension as well as their collective contribution to academic achievement. The stepwise approach to regression analysis was used in this regard. The obtained results are summarized in the following table. Before applying regression analysis, correlation matrix of the dependent and independent variables is shown in following table 4.4.1.

Table 4.4.1 Coefficient of Correlation Among Academic Achievement and Dimensions of Adjustment

Variable	Academic Achievement	Emotional Adjustment	Social Adjustment	Educational Adjustment
Academic Achievement	1.000	-0.232**	-0.155**	-0.325**
Emotional Adjustment		1.000	0.307**	0.567**
Social Adjustment			1.000	0.407**
Educational Adjustment				1.000

***. Correlation is significant at the 0.01 level,*

Interpretation:

Table 4.4.1 represents inter- correlations among different dimensions of adjustment and academic achievement. It is evident from the table that all the values of correlation co-efficient are significant at 0.01 level dependent variable i.e. academic achievement was found to be significantly correlated with dimensions of adjustment variables i.e. emotional adjustment ($r = -0.232$, $p < 0.01$), social adjustment ($r = -0.155$, $p < 0.01$) and educational adjustment ($r = -0.303$, $p < 0.01$). To be specific, academic achievement score increases with adjustment (lower score on AISS) and decrease (higher score on AISS), according to the manual. There was also significant correlation among all the dimensions adjustment.

Regression analysis was applied to know the effect of predictor variable (dimensions of adjustment) on criterion variable (i.e. academic achievement) of adolescents. Table 4.1.5 shows the results.

Table 4.4.2
Regression Analysis of the Total Sample (N=920) Criterion
Variable-Academic Achievement

Independent variable Added	r	R	R²	R² Change	β	B	F
Educational Adjustment	-0.232	0.325	0.105	0.105	-.325	-1.616	108.204**
Constant= 76.846							

*Significant at 0.01 level ***

β= Standardized Regression Coefficient

B= Unstandardized Regression Coefficient

Interpretation:

It is evident from the above table that out of three predictor variables, educational adjustment is the only significant predictor and it explains 10.5% ($R^2 = 0.105$) variance in the criterion variable i.e. academic achievement. The simple correlation $r = -0.232$ is found to be significant. The multiple correlations 'R' is 0.325 and 'F' value 108.204 shows that model is significant at 0.01 levels.

The relative contribution of dimension is proportional to corresponding beta weights (-0.325) which are negative in this case. However negative beta associated with educational adjustment to negative relationship between the scores obtained on adjustment inventory and academic achievement. It means higher score on adjustment inventory for school students (AISS) shows lack of adjustment corresponds to lower academic achievement score. To be specific, academic achievement scores increase with educational adjustment (lower score on AISS). The pie-diagram shows the share of variance explained by each predictor variable and the unexplained part of it.

The regression co-efficient (Bs) have also given in the table which could be used in the regression equation for predicting academic achievement. The general regression equation is written as follows:

$$Y=B_1X_1+\dots\dots\dots+C$$

Where,

$X_1 \dots$ are the raw scores on individual variables for a given person

$B_1 \dots$ are regression coefficient

C is the constant term.

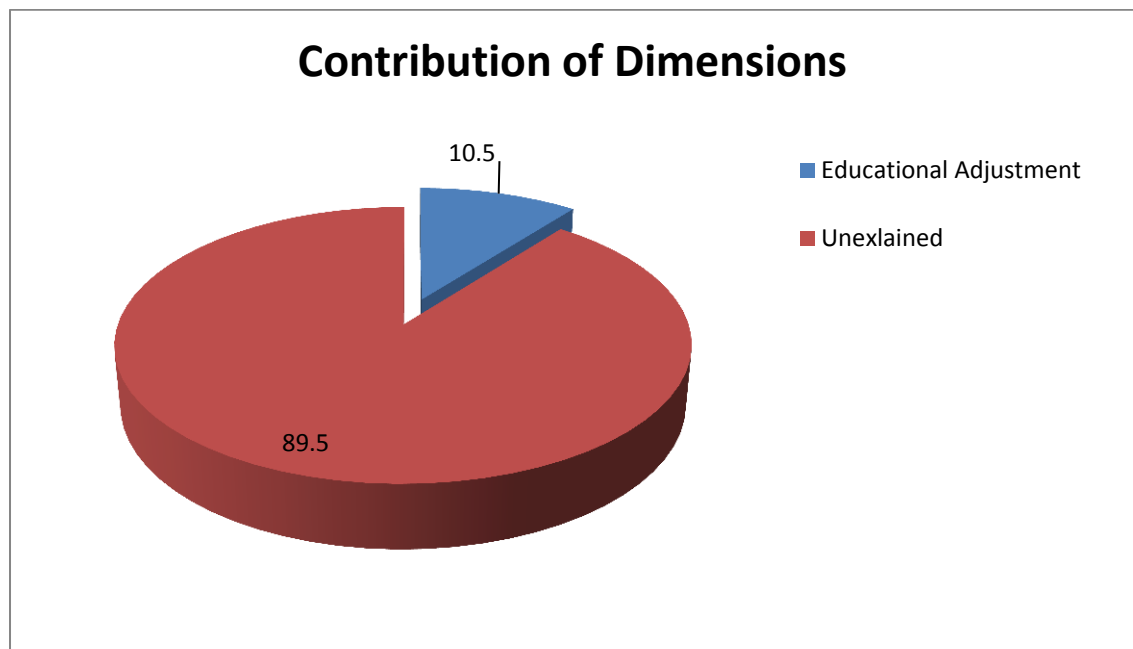


Fig. 4.4.1 Relative Contribution of Dimensions of Adjustment for all Students

By using the results of table 4.4.2 the academic achievement score of any individual not included in the sample of the present study, could be predicted by using the following equation:

$$Y= -1.616X_1 +76.846$$

If we know the raw scores of predictor X_1 we might predict his academic achievement score by inserting the value in above equation.

4.5 Study of Relative Contribution of Family Climate, Academic Motivation and Adjustment to Academic Achievement of Adolescents

The fifth objective of this study was concerned with the study of relative contribution of family climate, academic motivation and adjustment to academic achievement of the adolescents.

To achieve this objective the null hypothesis Ho 5 was framed and subjected to empirical testing. This hypothesis stated that:

Ho5: There is no significant contribution of family climate, academic motivation and adjustment to academic achievement of adolescents

In order to verify this hypothesis stepwise multiple regressions was used. The main purpose of using this method was to study contribution of each dimension of the three independents variables namely family climate, academic motivation and adjustment independently as well as their collective contribution to the academic achievement of adolescents. Before applying regression analysis, correlation matrix of the dependent and independent variables is shown in following table 4.5.1.

**Table 4.5.1 Coefficient of Correlation Among Academic Achievement and dimensions of Family Climate,
Academic Motivation and Adjustment**

Factors	Correlations																				
	ACD ACH	FC1	FC2	FC3	FC4	FC5	FC6	FC7	FC8	FC9	FC10	AM1	AM2	AM3	AM4	AM5	AM6	AM7	Emtl ADJ	Scl ADJ	Edu ADJ
ACD ACH	1	0.06	.362**	.204**	.349**	.337**	.268**	.206**	.123**	.221**	.275**	.252**	.286**	.296**	.180**	.254**	.166**	.304**	-.232**	-.155**	-.325**
FC1		1	.076*	.145**	-0.062	-0.015	.113**	0.04	.109**	.077*	.067*	.074*	.103**	.088**	.104**	.110**	0.049	-0.005	-.100**	-0.023	-.118**
FC2			1	.322**	.531**	.570**	.533**	.404**	.169**	.379**	.528**	.286**	.367**	.275**	.241**	.246**	.251**	.295**	-.256**	-.199**	-.290**
FC3				1	.271**	.268**	.333**	.286**	.163**	.252**	.309**	.230**	.245**	.242**	.180**	.177**	.235**	.200**	-.253**	-.151**	-.262**
FC4					1	.619**	.488**	.366**	.089**	.337**	.516**	.285**	.316**	.291**	.144**	.173**	.174**	.253**	-.215**	-.184**	-.281**
FC5						1	.518**	.428**	.166**	.384**	.512**	.336**	.358**	.277**	.199**	.233**	.215**	.303**	-.256**	-.235**	-.274**
FC6							1	.397**	.217**	.386**	.476**	.339**	.377**	.309**	.236**	.254**	.259**	.273**	-.312**	-.203**	-.322**
FC7								1	.117**	.346**	.363**	.243**	.310**	.237**	.200**	.205**	.202**	.191**	-.224**	-.146**	-.233**
FC8									1	.157**	.199**	0.063	.158**	.069*	.100**	.116**	.124**	.117**	-.159**	-.093**	-.157**
FC9										1	.311**	.268**	.229**	.243**	.135**	.226**	.237**	.169**	-.238**	-.138**	-.244**
FC10											1	.232**	.321**	.245**	.190**	.185**	.169**	.259**	-.261**	-.185**	-.286**
AM1												1	.506**	.464**	.417**	.466**	.461**	.325**	-.359**	-.243**	-.384**
AM2													1	.502**	.485**	.469**	.502**	.403**	-.447**	-.298**	-.475**
AM3														1	.446**	.478**	.436**	.354**	-.433**	-.217**	-.391**
AM4															1	.486**	.511**	.269**	-.353**	-.181**	-.374**
AM5																1	.467**	.309**	-.419**	-.225**	-.415**
AM6																	1	.304**	-.423**	-.182**	-.389**
AM7																		1	-.277**	-.143**	-.312**
Emtl ADJ																			1	.307**	.567**
Socl ADJ																				1	.407**
Edu ADJ																					1

** Correlation is significant at the 0.01 level, * Correlation is significant at the 0.05 level, FC= Family Climate, AM= Academic Motivation, ADJ= Adjustment.

Interpretation:

Table 4.5.1 reveals inter-correlations among the dimension of independent variables and academic achievement. It is evident from the table 4.5.1 that all of the values of correlation co-efficient are positive and significant at 0.01 level. Dependent variable i.e. academic achievement was found to be significantly correlated with the dimensions independent variables family climate i.e. Indulgence Vs Avoidance (.362), Attention Vs Negligence (.349) dimensions of academic motivation i.e. Extra-curricular Activity (.304), Academic goal (.296) and educational adjustment (.325). To be specific, academic achievement score increases with adjustment (lower score on AISS) and decrease (higher score on AISS), according to the manual. There was also significant correlation among most of the independent variables.

Further regression analysis was applied to know the effect of predictor variables dimension (family climate, academic motivation and adjustment) on criterion variable (i.e. academic achievement) of adolescents. The results of this analysis are presented in table 4.5.2.

Table 4.5.2
Regression Analysis of the Total Sample (N=920) Criterion
Variable-academic Achievement

S.No.	Independent variable Added	r	R	R ²	R ² Change	β	B	F
1	Indulgence Vs Avoidance	.362	.362	.131	.131	.169	.781	138.04**
2	Indulgence Vs Avoidance, Educational Adjustment.	.325	.428	.182	.053	.152	.758	103.01**
3	Indulgence Vs Avoidance, Educational Adjustment, Extra-curricular Activity.	.304	.456	.205	.024	.133	1.04	79.942**
4	Indulgence Vs Avoidance, Educational Adjustment, Extra-curricular Activity, Attention Vs Negligence.	.349	.476	.223	.019	.154	.606	67.052**
5	Indulgence Vs Avoid, Educational Adjustment, Extra-curricular Activity, Attention Vs Negligence, Academic goal	.296	.484	.234	.007	.098	.667	55.849**
	Constant= 33.835							

**Significant at 0.01 level.

β= Standardized Regression Coefficient

B= Unstandardized Regression Coefficient

Interpretation:

The results of regression analysis given in table 4.5.2 reveals that two dimensions of independent variable family climate, (Indulgence Vs Avoidance & Attention Vs Negligence), the two dimensions of academic motivation (extracurricular activity & academic goal) and educational adjustment dimension of adjustment contributed significantly as determinants of academic achievement. The table shows increase in multiple correlations (R) and coefficient of multiple determinations (R^2) along with F-ratios with the addition to each new variable.

The final value of coefficient of determinant (R^2) indicates that 23.4% of the total variation in the academic achievement could be predicted by the dimensions of all three independent variable namely, family climate, academic motivation and adjustment. Out of these twenty predictors, indulgence Vs avoidance is the strongest predictor which explains 13.1% variance in academic achievement. The predictor, educational adjustment emerged as the second and most significant predictor of academic achievement and contributed 5.3% variance in the academic achievement. In the same way, Extra-curricular Activity 2.4%, Attention Vs Negligence 1.9% and Academic goal contributed 0.7% variance in academic achievement. All the F-ratios were found to be significant at 0.01% levels.

The relative contribution of each dimension is proportional to corresponding beta weights which are all positive in this case. The proportion of variance in the dependent variable explained by each dimension separately is shown in the bar chart. The regression co-efficient (Bs) have also been given in the table which could be used in the regression equation for predicting academic achievement. The general regression equation is written as follows:

$$Y=B_1X_1+B_2X_2+B_3X_3+B_4X_4+B_5X_5.....+C$$

Where

$X_1, X_2, X_3.....$ are the raw scores on individual variables for a given person

B_1, B_2, B_3 are regression coefficient

C is the constant term.

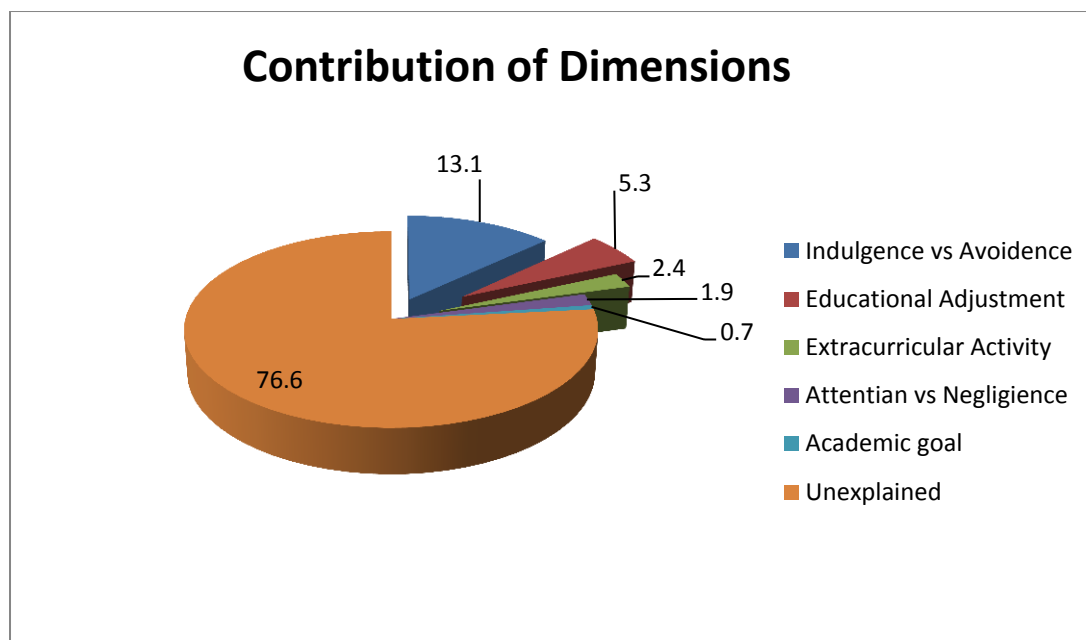


Fig. 4.5.1 Relative Contribution of Dimensions of Independent Variables for all Students

By using the results of table 4.5.2 the academic achievement score of any individual not included in the sample of the study, could be predicted by using the following equation:

$$Y = .781X_1 + .758X_2 + 1.04X_3 + .606X_4 + .667X_5 + \dots + 33.835$$

If we know the raw scores of any individual on the five predictors X_1 , X_2 , X_3 , X_4 and X_5 we might predict his academic achievement score by inserting the values in the above equation.

4.6 Study of Family Climate, Academic Motivation, Adjustment and Academic Achievement in Relation to Demographic Variable viz Gender, Location and Type of Family.

The sixth objective of this study was concerned with the study the differences in family climate, academic motivation, adjustment and academic achievement of adolescents in relation to some demographic such as gender location and type of family.

In order to achieve this objective, sub-objectives 6.1, 6.2, 6.3 & 6.4 were framed and their corresponding null hypotheses were also framed and empirically tested.

Objective 6.1: To study the differences in family climate of adolescents in relation to gender, location and type of family.

Objective 6.2: To study the difference in academic motivation of adolescents in relation to gender, location and type of family.

Objective 6.3: To study the difference in adjustment of adolescents in relation to gender, location and type of family.

Objective 6.4: To study the difference in academic achievement of adolescents in relation to gender, location and type of family.

4.6.1 Difference in Family Climate of Adolescents in Relation to Gender, Location and Type of Family

Objective 6.1 concern with the differences in family climate of adolescents in relation to gender, location and type of family.

To achieve this objective the following null hypothesis was formulated and subjected to empirical testing. This hypothesis stated that:

Ho6.1 There is no Significant Difference in Family Climate of Adolescents in Relation to Gender, Location and Type of Family

To test the above hypothesis three-way ANOVA (2X2X2 factorial design) has been done and results are shown in the table 4.6.1.

Table 4.6.1
Analysis of Variance Results for Family Climate Scores

Source		N	Mean	Sum of Squares	df	Mean Square	F	Sig.
Gender (A)	Boys	488	115.45	216.562	1	216.562	.893	.345
	Girls	432	117.09					
Location (B)	Rural.	365	112.19	9178.456	1	9178.456	37.842**	.000
	Urban	555	118.87					
Type of Family (C)	Nuclear	493	117.75	1436.196	1	1436.196	5.921*	.015
	Joint	427	114.46					
Gender (A)x Location (B)				1139.801	1	1139.801	4.699*	.030
Gender (A) x Type of Family (C)				649.303	1	649.303	2.677	.102
Location (B) x Type of family (C)				349.164	1	349.164	1.440	.231
Gender × Location × Type of Family (A) (B) (C)				171.997	1	171.997	.709	.400
Error				221204.069	912	242.548		
Total				12662351.000	920			

** Significant at the 0.01 level

*Significant at the 0.05 level

Interpretation:

From the table 4.6.1 it is clear that F value for gender ($F=.893$, $p>0.01$), is not significant. Thus there is no significant difference in family climate of adolescent according to their gender (where, mean of boys 115.45 and mean of girls 117.09). Thus the family climate of boys and girls was found to be of same level.

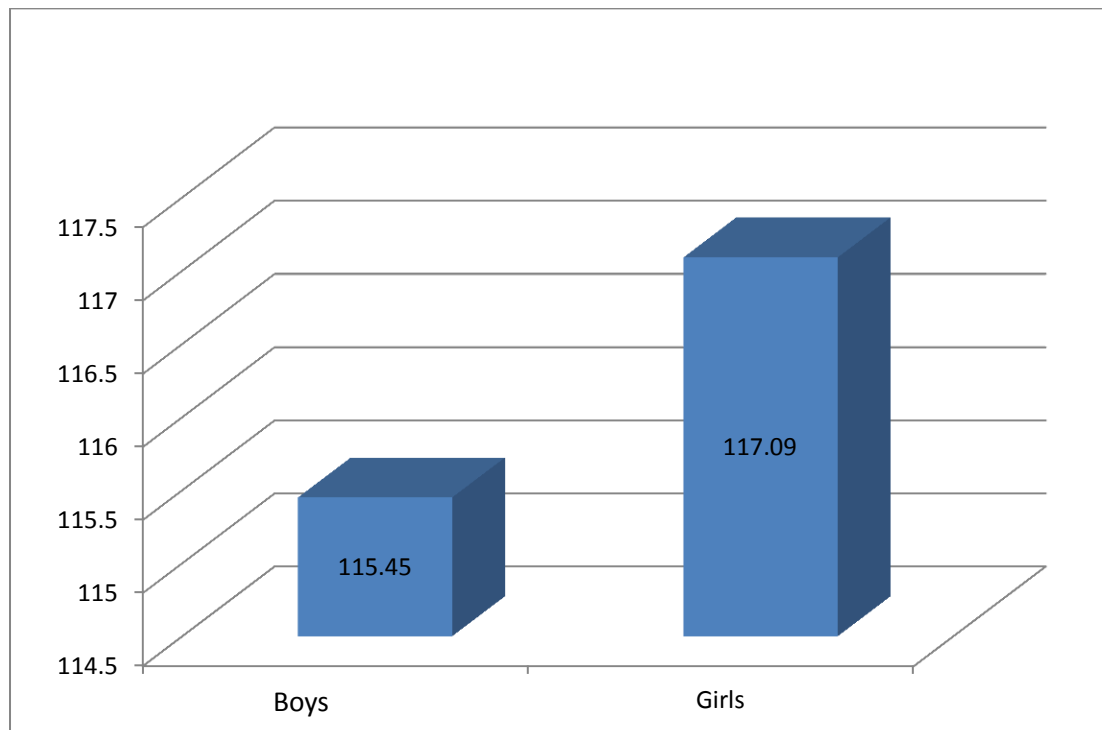


Fig. 4.6.1.1 Mean Difference in Family Climate of Boys and Girls Students

The result in table 4.6.1 further reveals that f- value for location ($F=37.842$, $p<1$) is significant at 0.01 level, which confirm that there is statistically significant difference in family climate between adolescents belonging for rural area and urban area. The mean value of urban students (118.87) is higher than the rural students (112.19) in family climate. Thus it can be concluded that there exists significant difference in family climate of adolescents belonging to rural and urban areas. The mean difference of rural and urban students in reasoning ability is represented graphically in figure 4.6.2.

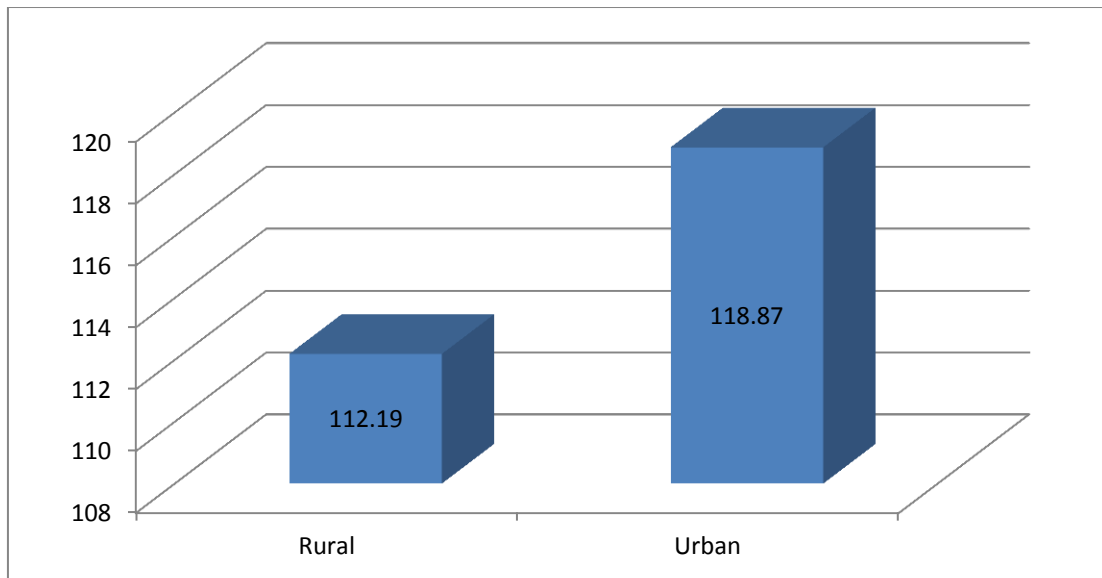


Fig. 4.6.1.2 Mean Difference in Family Climate of Rural and Urban Students

The Table 4.6.1 further reveals that the F- value for type of family ($F=5.921$, $p < .05$) is significant at 0.05 level, which confirm that there is statistically significant difference in family climate of nuclear and joint family. The mean value of nuclear family adolescents (117.75) is higher than the joint family adolescents (114.46). Thus it can be concluded there is significant difference in family climate of adolescent belonging to nuclear and joint family. The mean difference of nuclear and joint family adolescents in family climate is represented graphically in Fig 4.6.3.

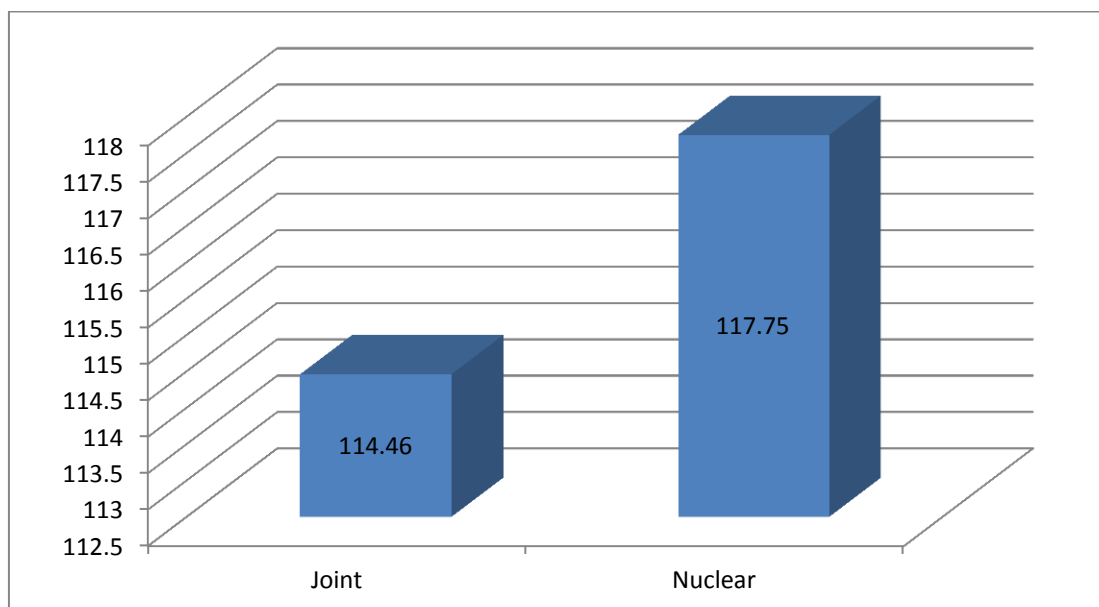


Fig. 4.6.1.3 Mean Difference in Family Climate of Joint and Nuclear Family Students

4.6.1.1 The Interactional Differences in Family Climate of Adolescents in Relation to Gender, Location and Type of Family:

Table 4.6.1 further reveals the interactional effects. Three way analysis of variance yield three two –way interactional effects and one three-way interactional effect which are discussed in the following sub sections:

1.1 Gender X Location:

The F ratio interaction between gender and location as shown in the table 4.6.1 i. e., $F = 4.699$, $p < .05$ is statistically significant, indicating that there is a significant interactional effect of gender and location on family climate of adolescents. The picture is clear from the line graph for this interactional effect as given in figure.

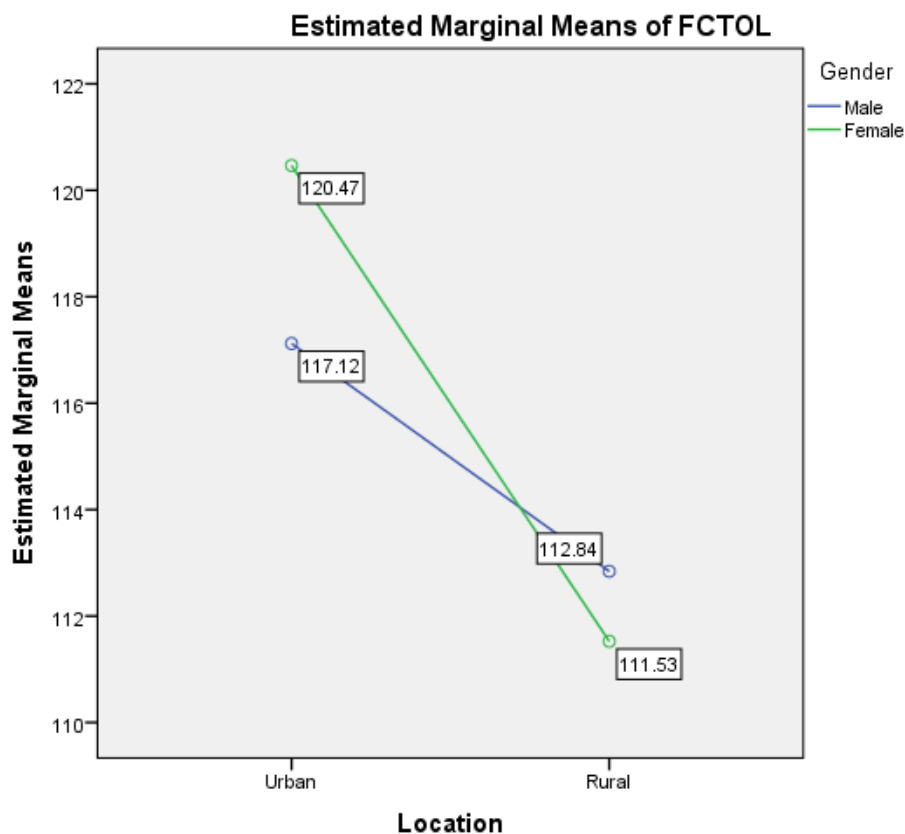


Fig. 4.6.1.4 Gender and Location Interaction

In the figure 4.6.4 interactional lines are marked as line the gender and location respectively. Two levels of location are shown on the horizontal axis (i.e., Rural and Urban). The end point of each line represents the means of the four conditions. Although the F- ratio for interaction between Gender and Location is statistically

significant, we observe interactions in which two lines intersect each other. This can be explained on account of highly significant F-ratio. In the figure 4.6.4 it is further clear that the family climate of urban female (120.47) is better than the rest three sub-groups, followed by the family climate score of the male (117.12) of the same group. In the rural male (112.84) are better than the female (111.53).

1.2. Gender X Type of Family:

The F ratio of interaction between gender and type of family as shown in the table 4.3.1 i.e., $F=2.677$, $p>0.05$ is statistically insignificant, indicating that there is insignificant interactional effect of gender and type of family on family climate of adolescents. To represent this in a better way, we take into consideration the line graph as given in the figure 4.6.5.

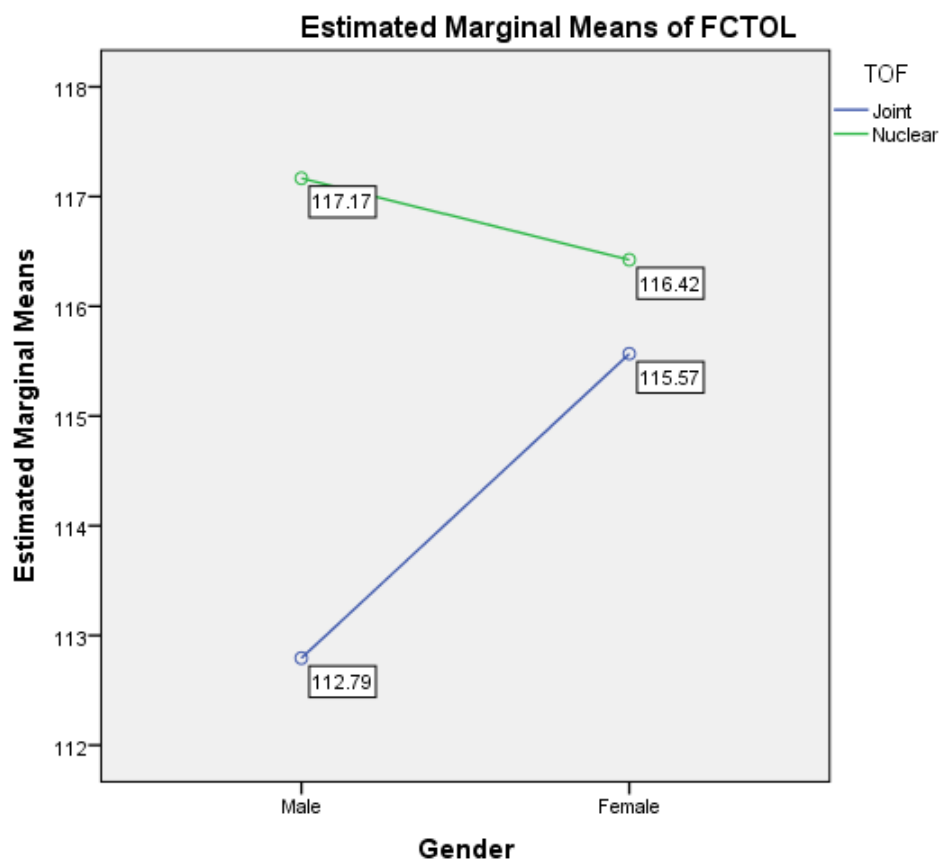


Fig. 4.6.1.5 Gender and Type of Family Interaction

In the above figure two levels of gender and type of family are shown on the horizontal axis (i.e., Male and Female). The end points of line one and two represent means of the four conditions; although the F- ratio for interaction between gender and

type of family statistically insignificant. The interactional lines (line 1 and 2) reveal that both lines are not parallel (up to a great extent). But, indicating that there is no significant interactional effect of the gender and type of the family on the family climate of the adolescents.

1.3. Location X Type of Family:

The F ratio value of interaction between location and type of family as given in the table 4.6.1 i.e., $F=1.440$, $p>0.05$, indicates that there is no significant interactional effect of location and type of family on family climate of adolescents. To understand this better, we consider the line graph for this interactional effect as given in fig. 4.6.6.

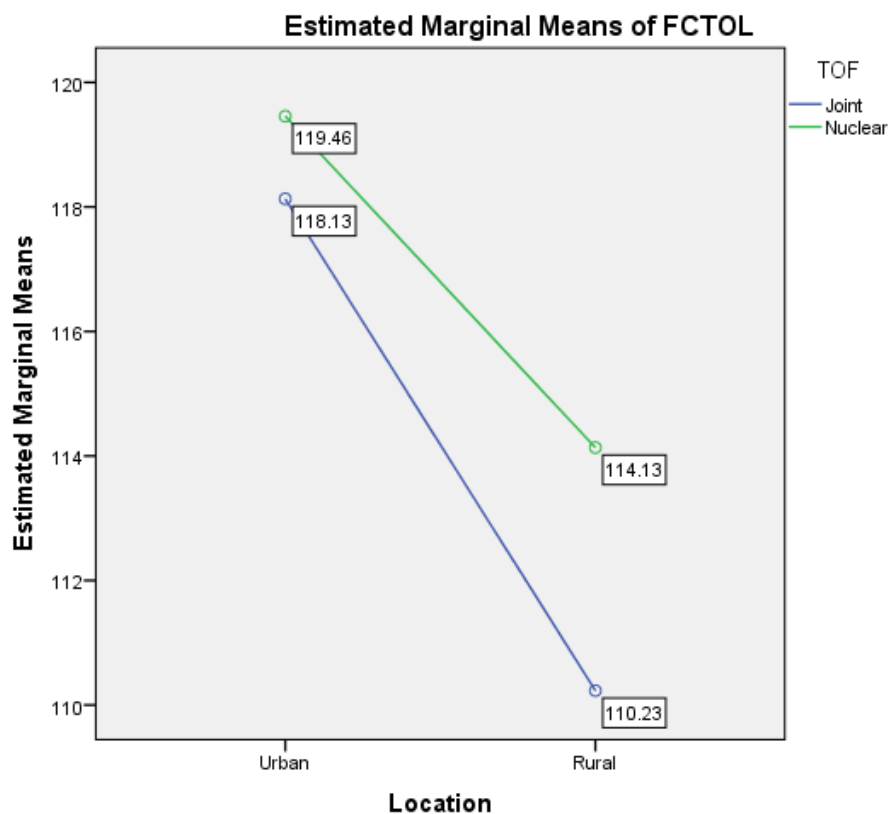


Fig. 4.6.1.6 Location and Type of Family Interaction

In the fig 4.6.5 two levels of location are shown on horizontal axis (i.e., Urban and rural). The end points of line 1 and 2 represent means of the four conditions, although the F- ratio for interaction between location and type of family statistically insignificant. The interactional lines (line 1 and 2) reveal that both lines are not

parallel (up to a great extent), but indicating that there is no significant interactional effect of the location and type of the family on the family climate of the adolescents.

1.4 Gender X Location X Type of Family

The table 4.6.1 also revealed the interaction F-value (.7099, $p > 0.01$) among demographic variables (gender, location and type of family) in family climate is not significant at 0.01 level as well as 0.05. Therefore, it can be concluded that demographic variables gender, location and type of family does not significantly interact each other with family climate.

As evident from the results the formulated null hypothesis Ho 6.1 “*There is no significant difference in family climate of adolescents in relation to gender, location and type of family*”, stands partially rejected for the main effect Location (B), Type of family (C) and interactional effect of AXB, and accepted for the main effect of gender (A) and the interactional effect of AXC, BXC and AXBXC.

4.6.2 Difference in Academic Motivation of Adolescents in Relation to Gender, Location and Type of Family

Objective 6.2 concern with the differences in academic motivation of adolescents in relation to gender, location and type of family.

To achieve this objective the null hypothesis Ho 6.2 was formulated for empirical testing. This hypothesis stated that:

Ho 6.2 There is no significant difference in academic motivation of adolescents in relation to gender, location and type of family.

To test the above hypothesis three-way ANOVA (2X2X2 factorial design) has been done and results are shown in the table 4.6.2.

Table 4.6.2
Analysis of Variance Results for Academic Motivation Scores

Source		N	Mean	Sum of Squares	df	Mean Square	F	Sig.
Gender (A)	Boys	488	133.54	205.563	1	205.563	2.172	.141
	Girls	432	135.11					
Location (B)	Rural.	365	131.67	3939.133	1	3939.133	41.629**	.000
	Urban	555	136					
Type of Family(C)	Nuclear	493	134.58	2.901	1	2.901	.031	.861
	Joint	427	133.93					
Gender(A) X Location(B)				617.774	1	617.774	6.529*	.011
Gender(A) × Type of Family(C)				.394	1	.394	.004	.949
Location(B) × Type of Family(C)				.002	1	.002	.000	.997
Gender × Location × Type of Family (A) (B) (C)				174.358	1	174.358	1.843	.175
Error				86297.193	912	94.624		
Total				16680312.000	920			

** Significant at the 0.01 level

*Significant at the 0.05 level

Interpretation:

From the table 4.6.2 it is clear that F value for gender ($F=2.172$, $p>0.01$), is not significant. Thus there is no significant difference in academic motivation of adolescent according to their gender (where, mean of boys 133.54 and mean of girls 135.11). Thus the academic motivation of boys and girls adolescents has same level.

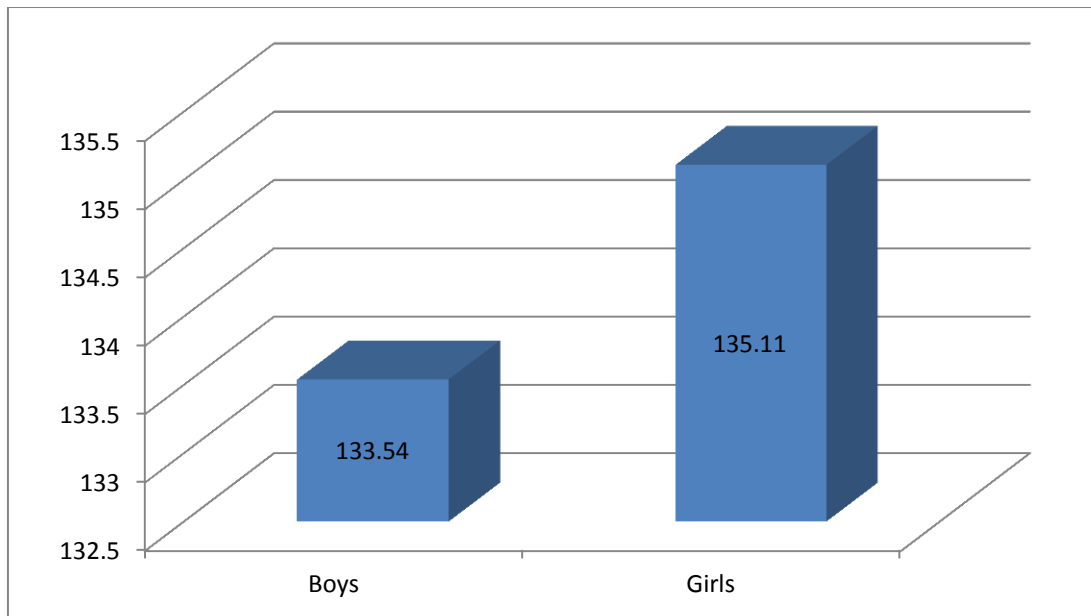


Fig. 4.6.2.1 Mean Difference in Academic Motivation of Boys and Girls Students

From the table 4.6.2 it is further revealed that F- value for location ($F=37.842$, $p<1$) is significant at 0.01 level, which confirm that there is statistically significant difference in location between adolescents belonging for rural area and urban area. The mean value of urban students (136) is higher than the rural students (131.67) in academic motivation. Thus it can be concluded that there exists significant difference in academic motivation of adolescents belonging to rural and urban areas. The mean difference of rural and urban students in academic motivation is represented graphically in figure 4.6.2.1.

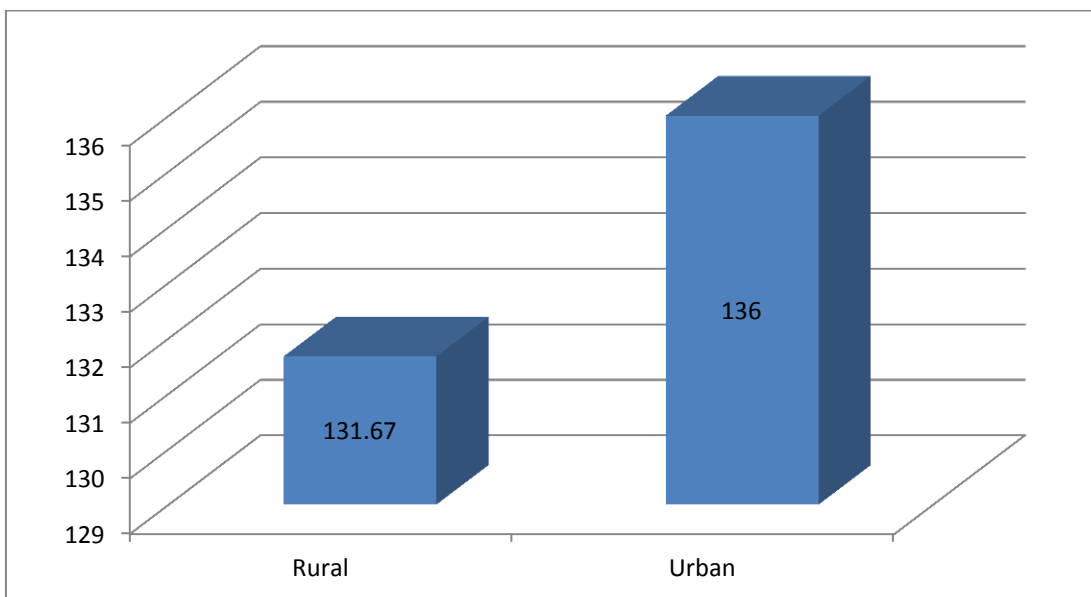


Fig. 4.6.2.2 Mean Difference in Academic Motivation of Rural and Urban Students

The Table 4.6.2 further reveals that the F- value for type of family ($F=.031, p>.861$) is not significant, which confirm that there is no statistically significant difference in academic motivation of nuclear and joint family. The mean value of nuclear family adolescents (134.58) is higher than the joint family adolescents (133.93). Thus it can be concluded that there is significant difference in academic motivation of adolescent belonging to nuclear and joint family. The mean difference of nuclear and joint family adolescents in academic motivation is represented graphically in Fig 4.6.2.2.

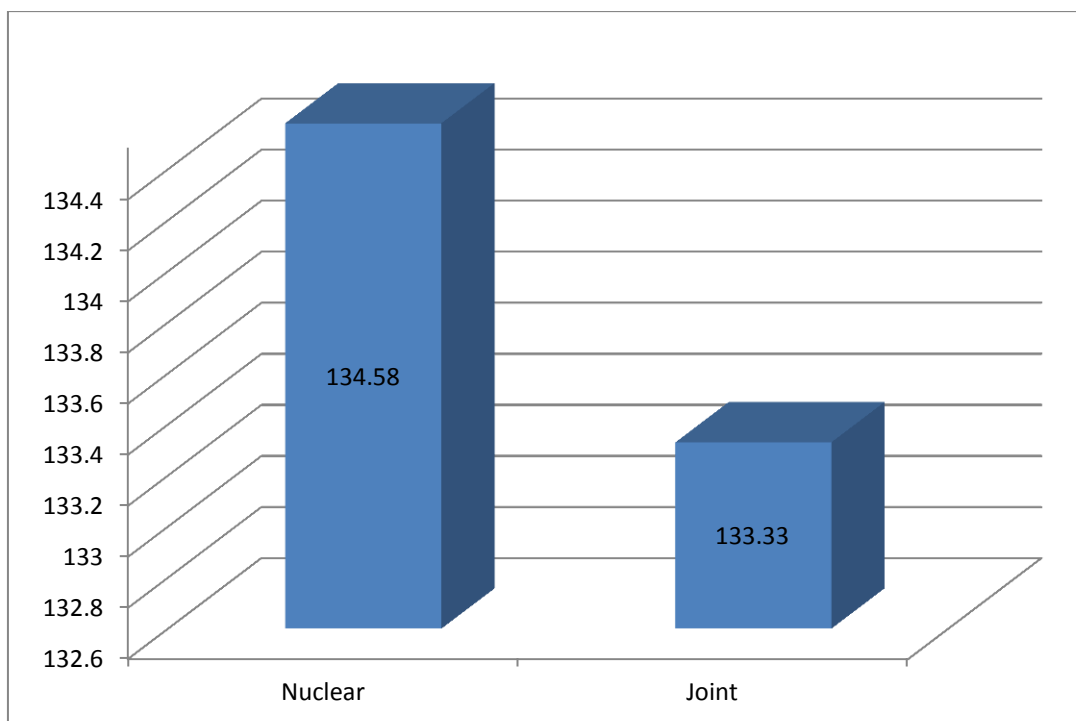


Fig. 4.6.2.3 Mean Difference in Academic Motivation of Joint and Nuclear Students

4.6.2.2 The Interactional Differences in Academic Motivation of Adolescents in Relation to Gender, Location and Type of Family:

Table 4.6.2 further reveals the interactional effects. Three way analysis of variance yield three two –way interactional effects and one three-way interactional effect which are discussed in the following sub sections:

1.1 Gender X Location:

The F ratio interaction between gender and location as shown in the table 4.6.2 i. e., $F = 6.529, p < .05$ is statistically significant, indicating that there is a significant interactional effect of gender and location on academic motivation of adolescents. To

understand this better, we consider the line graph for this interactional effect as given in fig. 4.6.2.4.

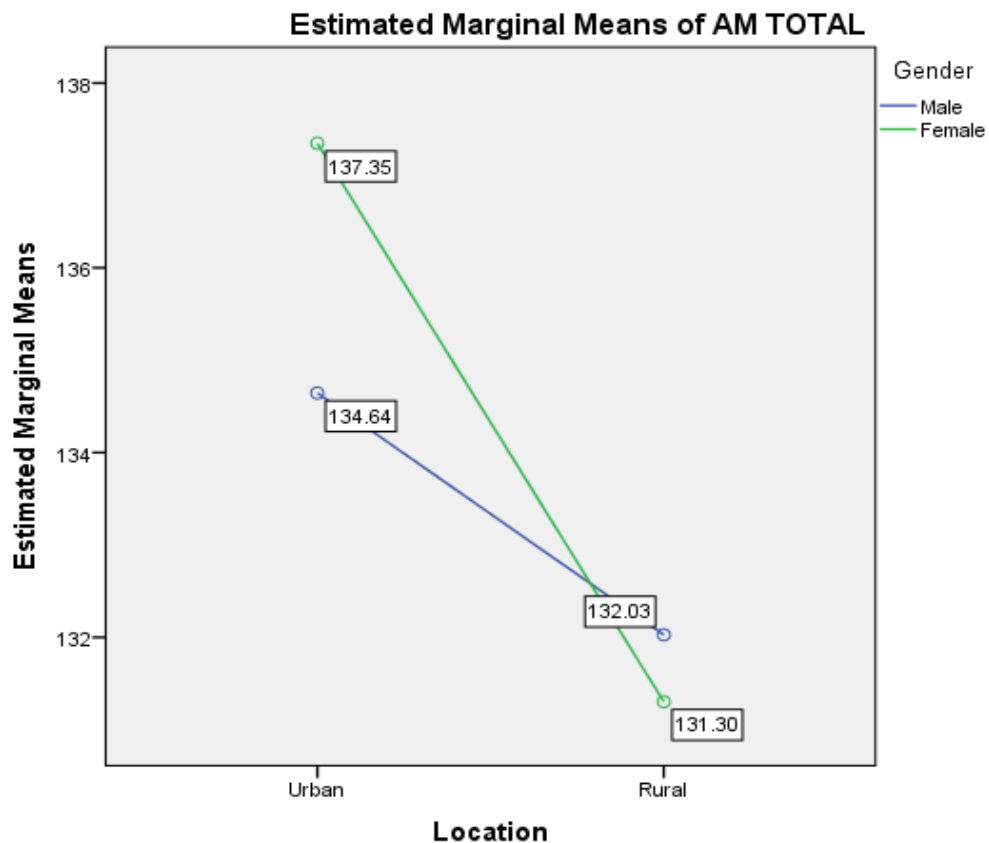


Fig. 4.6.2.4 Gender and Location Interaction

In the figure 4.6.2.5 interactional lines are marked as line the gender and location respectively. Two levels of location are shown on the horizontal axis (i.e., Rural and Urban). The end point of each line represents the means of the four conditions. Although the F- ratio for interaction between Gender and Location is statistically significant, we observe interactions in which two line are intersects each other. This can be explained on account of highly significant F-ratio. In the figure 4.3.4 it is further clear that the academic motivation of urban female (137.35) is better than the rest three sub-groups, followed by the academic motivation score of the male (134.64) of the same group. Academic motivation of rural male (132.03) is better than the female (131.30).

1.2 Gender X Type of Family:

The F ratio of interaction between gender and type of family as shown in the table 4.6.2 i.e., $F=.004$, $p>0.05$ is statistically insignificant, indicating that there is insignificant interactional effect of gender and type of family on academic motivation of adolescents. To represent this in a better way, we take into consideration the line graph as given in the fig. 4.6.2.6.

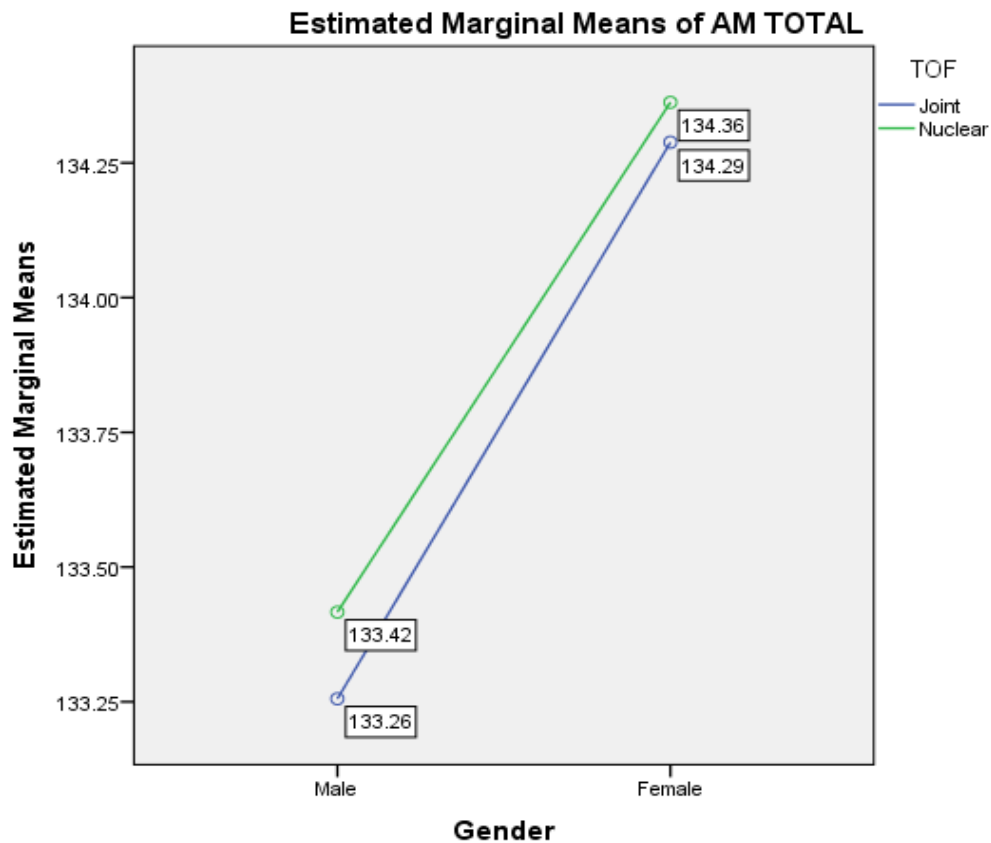


Figure 4.6.2.5 Gender and Type of Family Interaction

In the above figure two levels of gender are shown on the horizontal axis (i.e., Male and Female). The end points of line one and two represent means of the four conditions; although the F- ratio for interaction between gender and type of family statistically insignificant. The interactional lines (line 1 and 2) reveal that both lines are parallel (up to a great extent) indicating that there is no significant interactional effect of the gender and type of the family on the academic motivation of the adolescents.

1.3 Location X Type of Family:

The F ratio value of interaction between location and type of family as given in the table 4.6.2 i.e., $F=.000$, $p>0.05$, indicates that there is no significant interaction effect of location and type of family on academic motivation of adolescents. To understand this better, we consider the line graph for this interaction effect as given in figure 4.6.2.6.

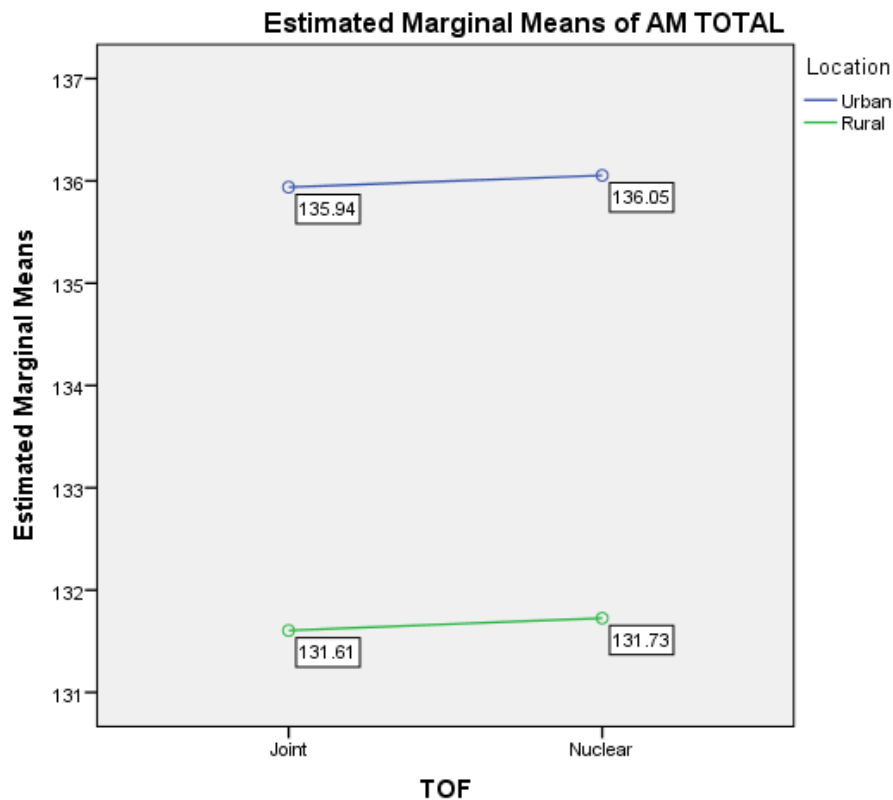


Fig. 4.6.2.6 Location and Type of Family Interaction

In fig.4.6.2.6 two interactional lines are shown marked as line one and two representing the location and type of family. Two levels of type of family are shown on the horizontal axis (i.e., Joint and Nuclear). The end points of each line represent the means of four conditions, although the F-ratio for interaction between location and type of family is statistically insignificant. The interactional line (line 1 and 2) candidly reveal that both the lines are parallel (up to great extent) indicating that there is no significant interaction effect of the type of the family and location on the academic motivation of the adolescents.

1.4 Gender X Location X Type of Family

The table 4.6.2 also revealed the interaction F-value (.1.843, $p > 0.05$) among demographic variables (gender, location and type of family) on academic motivation is not significant at 0.01 level as well as 0.05. Therefore, it can be concluded that demographic variables (gender, location and type of family) does not significantly interact each other in academic motivation.

As evident from the results the formulated null hypothesis H_0 6.2 “*There is no significant difference in academic motivation of adolescents in relation to gender, location and type of family*”, stands partially rejected for the main effect Location (B), and interactional effect of AXB, and accepted for the main effect of gender (A) type of family (B) and the interactional effect of AXC, BXC and AXBXC.

4.6.3 Difference in Adjustment of Adolescents in Relation to Gender, Location and Type of Family

Objective 6.3 concern with the differences in adjustment of adolescents in relation to gender, location and type of family.

To achieve this objective the following null hypothesis was formulated to empirical testing. This hypothesis stated that:

$H_{06.3}$ There is no significant difference in adjustment of adolescents in relation to gender, location and type of family.

To test the above hypothesis three-way ANOVA (2X2X2 factorial design) has been done and results are shown in the table no 4.6.3.

Table 4.6.3

Analysis of Variance Results for Adjustment Scores

Source		N	Mean	Sum of Squares	df	Mean Square	F	Sig.
Gender (A)	Boys	488	14.32	96.069	1	96.069	2.573	.109
	Girls	432	13.36					
Location (B)	Rural.	365	15.33	1152.428	1	1152.428	30.870**	.000
	Urban	555	12.91					
Type of Family (C)	Nuclear	493	13.57	40.540	1	40.540	1.086	.298
	Joint	427	14.22					
Gender (A) X Location(B)				195.274	1	195.274	5.231*	.022
Gender (A) X Type of Family (C)				16.701	1	16.701	.447	.504
Location(B) X Type of Family (C)				5.682	1	5.682	.152	.502
Gender X Location X Type of Family				132.188	1	132.188	3.541	.060
Error				34046.489	912	37.332		
Total				212890.000	920			

**Significant at the 0.01 level, *Significant at the 0.05 level

Interpretation:

From the table 4.6.3 it is clear that F value for gender ($F=2.573$, $p>0.01$), is not significant. Thus there is no significant difference in adjustment of adolescent according to their gender (where, mean of boys 14.32 and mean of girls 13.36). Thus the adjustment of male and female adolescents has same level.

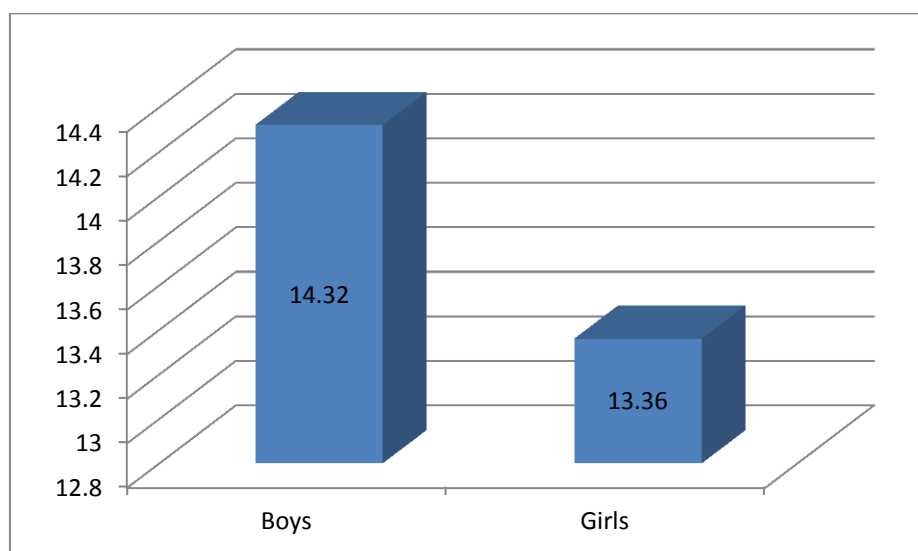


Fig.4.6.3.1 Mean Difference in Adjustment of Boys and Girls Students

From the perusal of the table 4.6.3 it is clear that f- value for location ($F=30.870$, $p<1$) is significant at 0.01 level, which confirm that there is statistically significant difference in adjustment between adolescents belonging for rural area and urban area. The mean value of urban students (12.91) is lower than the rural students (15.333) in adjustment. Thus it can be concluded that there exists significant difference in adjustment of adolescents belonging to rural and urban areas.

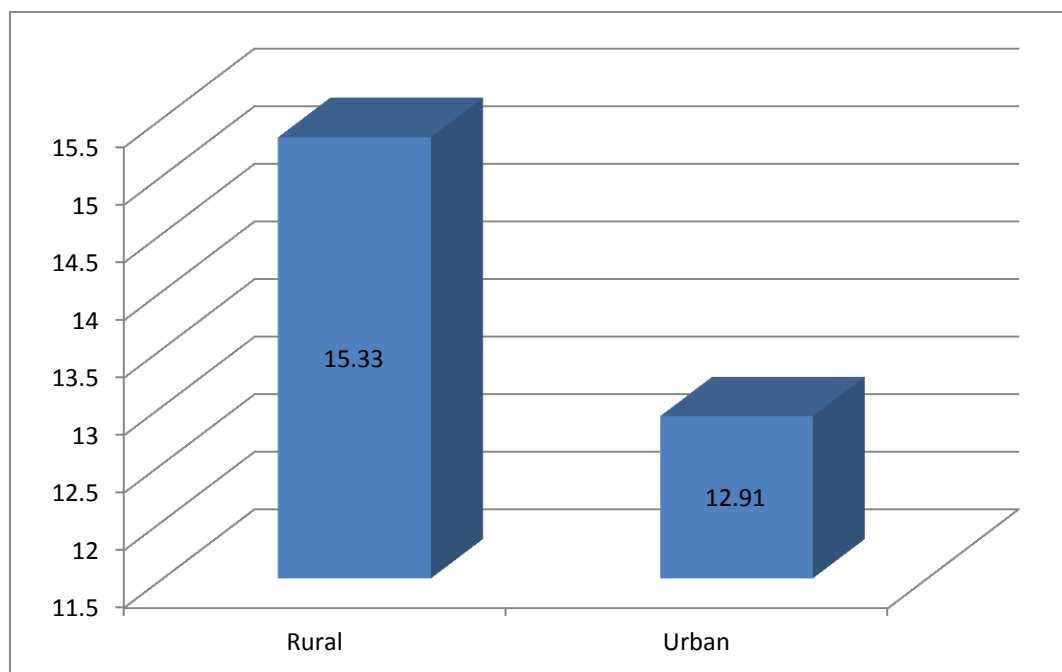


Fig.4.6.3.2 Mean Difference in Adjustment of Rural and Urban Students

The Table 4.6.3 reveals that the F- value for type of family ($F=1.086$, $p >.01$) is not significant, which confirm that there is no statistically significant difference in adjustment of nuclear and joint family. The mean value of nuclear family adolescents (13.57) is lower than the joint family adolescents (14.22). Thus it can be concluded there is significant difference in adjustment of adolescent belonging to nuclear and joint family. The mean difference of nuclear and joint family adolescents in family climate is represented graphically in Fig 4.6.3.

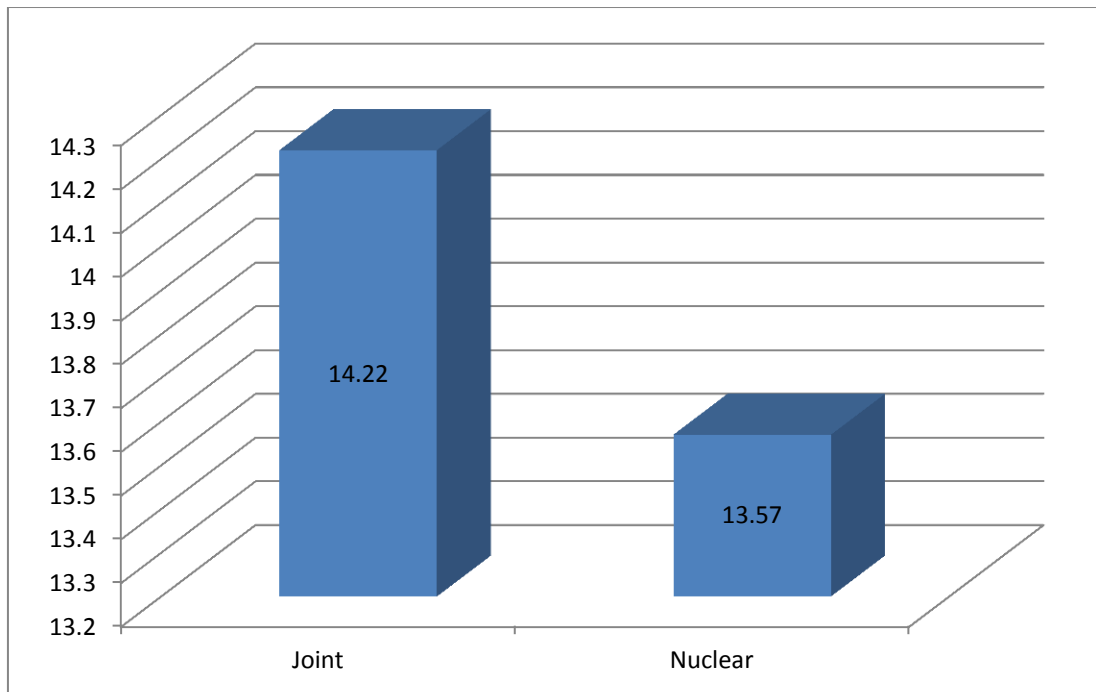


Fig.4.6.3.3 Mean Difference of Joint and Nuclear Family Students

4.6.3.1 The Interactional Differences in Adjustment of Adolescents in Relation to Gender, Location and Type of Family:

1.1 Gender X Location:

The F ratio interaction between gender and location as shown in the table 4.3.3 i.e., $F = 5.231$, $p < .05$ is statistically significant, indicating that there is a significant interactional effect of gender and location on adjustment of adolescents. To understand this better, we consider the line graph for this interactional effect as given in figure.

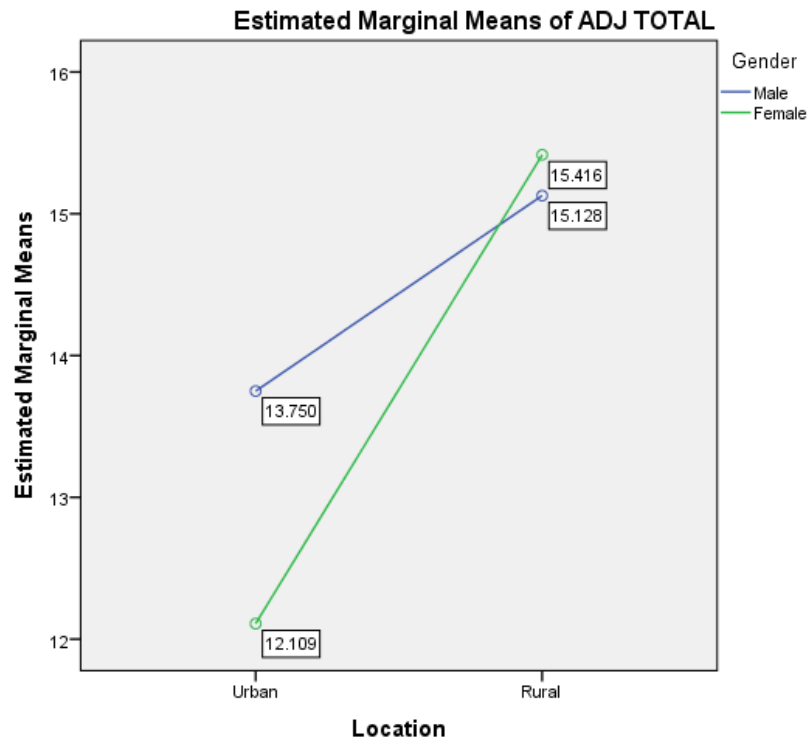


Fig. 4.6.3.4 Gender and Location Interaction

In figure 4.6.3.4 two intersectional lines are shown marked as line 1 and line 2 representing the location and gender respectively. Two levels of location are shown on the horizontal axis (i.e., Rural and Urban). The end points of each line represent the means of the four conditions. The F- ratio for interaction between location and gender is statistically significant, we observe that line of location and gender, intersect each other. In the figure 4.6.3.4 it is clear that the adjustment of urban male and female is better than the rural adolescents.

1.2 Gender X Type of Family:

The F ratio of interaction between gender and type of family as shown in the table 4.6.3 i.e., $F=0.447$, $p>0.05$ is statistically insignificant, indicating that there is insignificant interactional effect of gender and type of family on adjustment of adolescents. To represent this in a better way, we take into consideration the line graph as given in the figure 4.6.3.5.

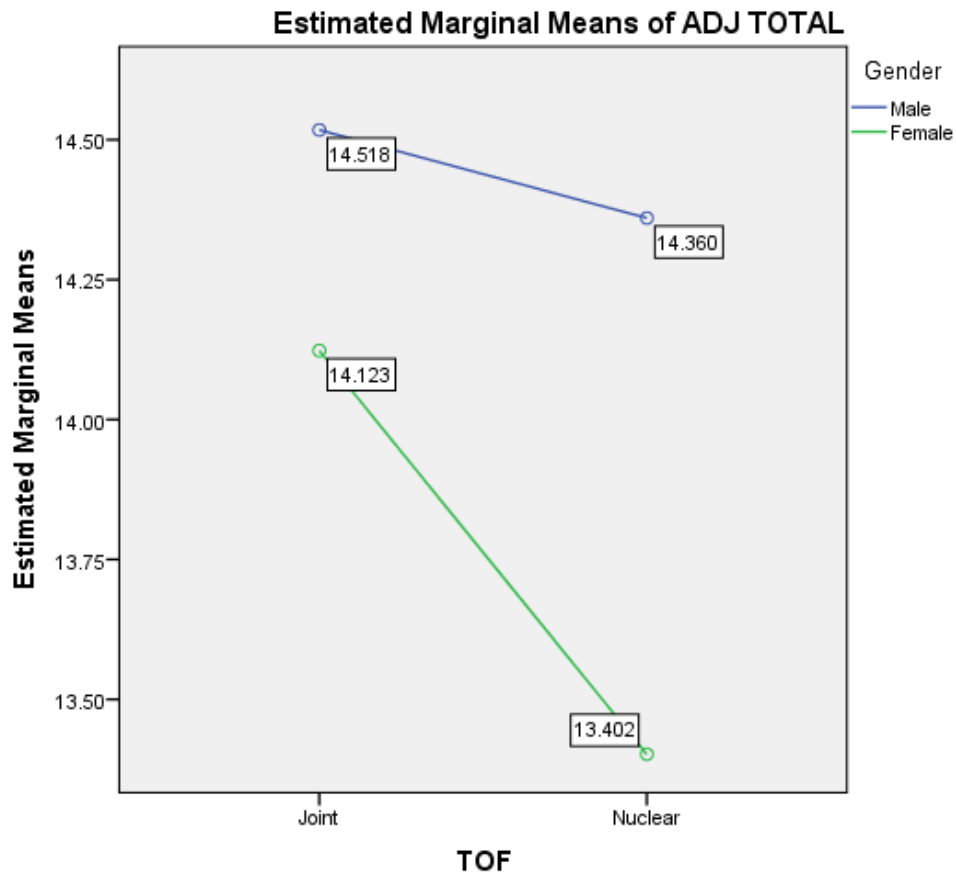


Fig. 4.6.3.5 Gender and Type of Family Interaction

In figure (4.6.3.5) two intersectional lines are shown marked as line 1 and line 2 representing the type of family and location respectively. Two levels of type of family are shown on the horizontal axis (i.e., Joint and Nuclear). The end points of each line represent the means of the four conditions. The interactional lines (line 1 and line 2) candidly reveal that both the lines are separate indicating that there is no significant interactional effect of the type of family and gender on the adjustment of the adolescents.

1.3 Location X Type of Family:

The F ratio value of interaction between location and type of family as given in the table 4.6.3 i.e., $F=.152$, $p>0.05$, indicates that there is no significant interactional effect of location and type of family on adjustment of adolescents. To understand this better, we consider the line graph for this interactional effect as given in figure 4.6.3.6.

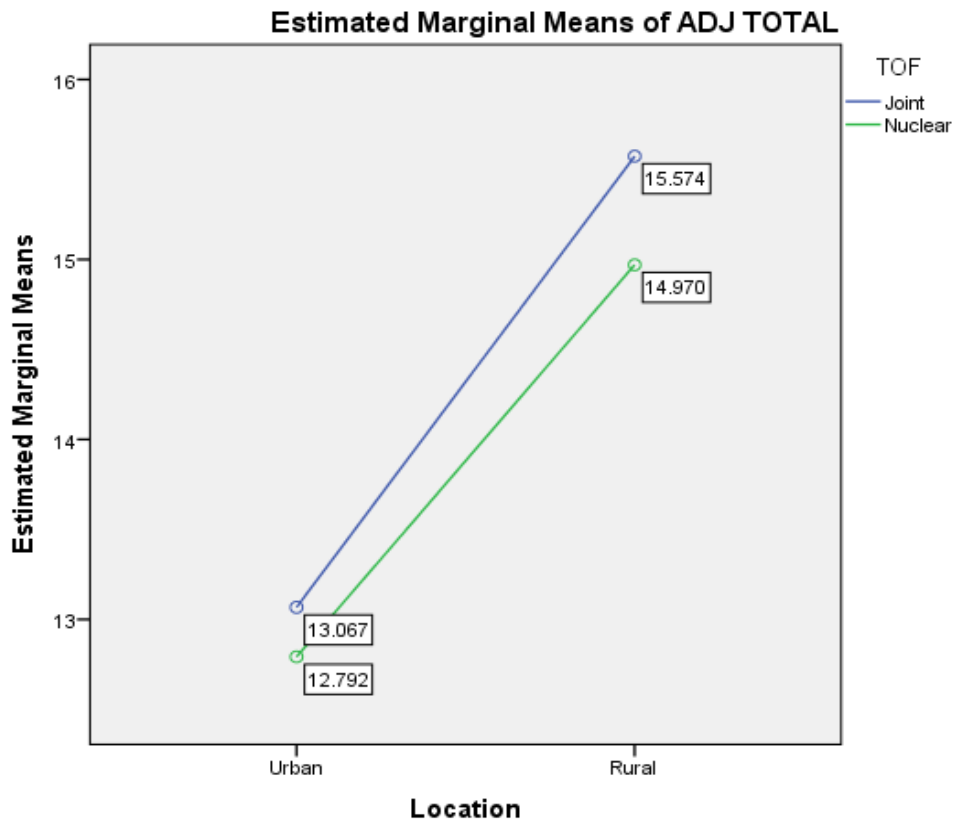


Fig. 4.6.3.6 Location and Type of Family Interaction

In the above figure (4.6.3.6) two lines are shown marked as line 1 and line 2 representing the location and type of family respectively. Two levels of location are shown on the horizontal axis (i.e., Rural and Urban). The end points of each line represent the means of the four conditions. The interactional lines (line 1 and line 2) candidly reveal that both the lines are separate indicating that there is no significant interactional effect of the location and type of family on the adjustment of the adolescents.

1.4 Gender X Location X Type of Family:

The table 4.6 also revealed the interaction F-value (3.541, $p > 0.05$) among demographic variables (gender, location and type of family) on adjustment is not significant at 0.01 level as well as 0.05. Therefore, it can be concluded that demographic variables (gender, location and type of family) does not significantly interact each other in adjustment.

As evident from the results the formulated null hypothesis H_0 6.3 “*There is no significant difference in adjustment of adolescents in relation to gender, location and type of family*”, stands partially rejected for the main effect Location (B), and

interactional effect of AXB, and accepted for the main effect of gender (A), Type of family and the interactional effect of AXC, BXC and AXBXC.

4.6.4 Difference in Academic Achievement of Adolescents in Relation to Gender, Location and Type of Family

Objective 6.4 concern with the differences in academic achievement of adolescents in relation to gender, location and type of family.

To achieve this objective the following null hypothesis was formulated to empirical testing. This hypothesis stated that:

Ho6.4 There is no significant difference in academic achievement of adolescents in relation to gender, location and type of family.

To test the hypothesis 6.4 three-way ANOVA (2X2X2 factorial design) has been done and results are shown in the table 4.6.4.

Table 4.6.4
Analysis of Variance Results for Academic Achievement Scores

Source		N	Mean	Sum of Squares	df	Mean Square	F	Sig.
Gender (A)	Boys	488	69.19	2097.713	1	2097.713	13.540**	.000
	Girls	432	73.15					
Location (B)	Rural.	365	68.22	3993.282	1	3993.282	25.776**	.000
	Urban	555	72.90					
Type of Family (C)	Nuclear	493	72.09	714.250	1	714.250	4.610*	.032
	Joint	427	69.85					
Gender (A) × Location (B)				2274.976	1	2274.97	14.685**	.000
Gender (A) × Type of Family (C)				83.548	1	83.548	.539	.463
Location (B) X Type of Family (C)				52.968	1	52.968	.342	.559
Gender × Location × Type of Family (A) (B) (C)				507.604	1	507.604	3.277	.071
Error				141288.508	912	154.922		
Total				4796512.000	920			

**Significant at the 0.01 level,

*Significant at the 0.05 level

Interpretation:

The table 4.6.4 reveals that F value for gender ($F=13.540$, $p<0.01$), is significant. Thus there is significant difference in academic achievement of adolescent according to their gender (where, mean of boys 69.19 and mean of girls 73.15). Thus the academic achievement of girls is better than boys.

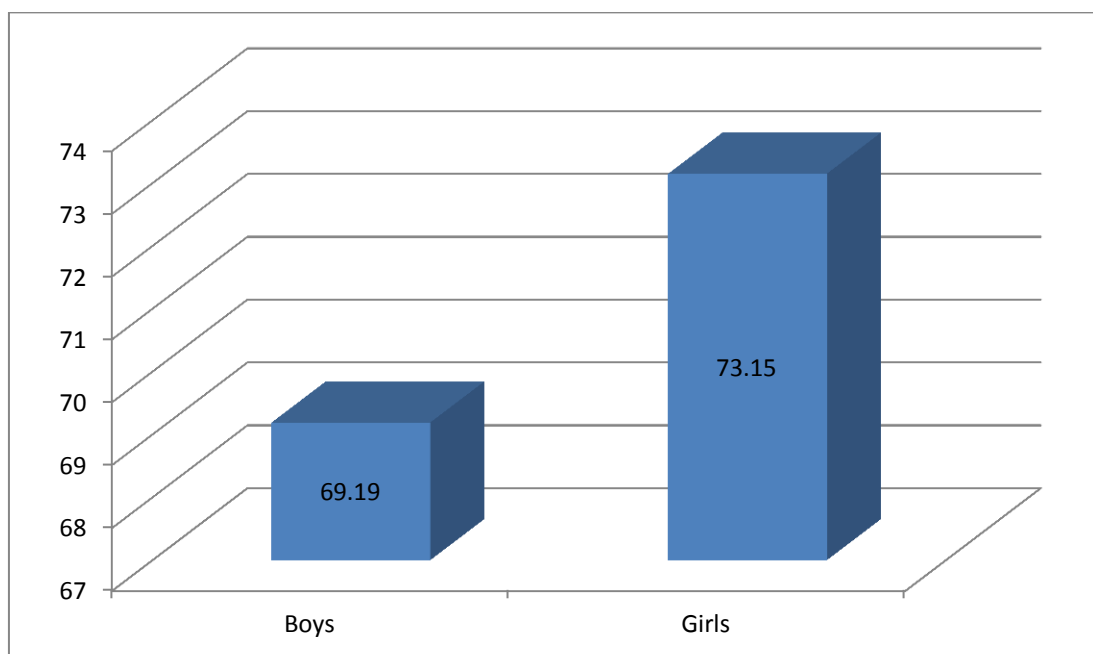


Fig 4.6.4.1 Mean Difference in Academic Achievement of Boys and Girls Students

The table 4.6.4 further reveals that F- value for location ($F=25.776$, $p<1$) is significant at 0.01 level, which confirm that there is statistically significant difference in academic achievement between adolescents belonging for rural area and urban area. The mean value of urban students (72.90) is higher than the rural students (68.22) in academic achievement. Thus it can be concluded that there exists significant difference in academic achievement of adolescents belonging to rural and urban areas.

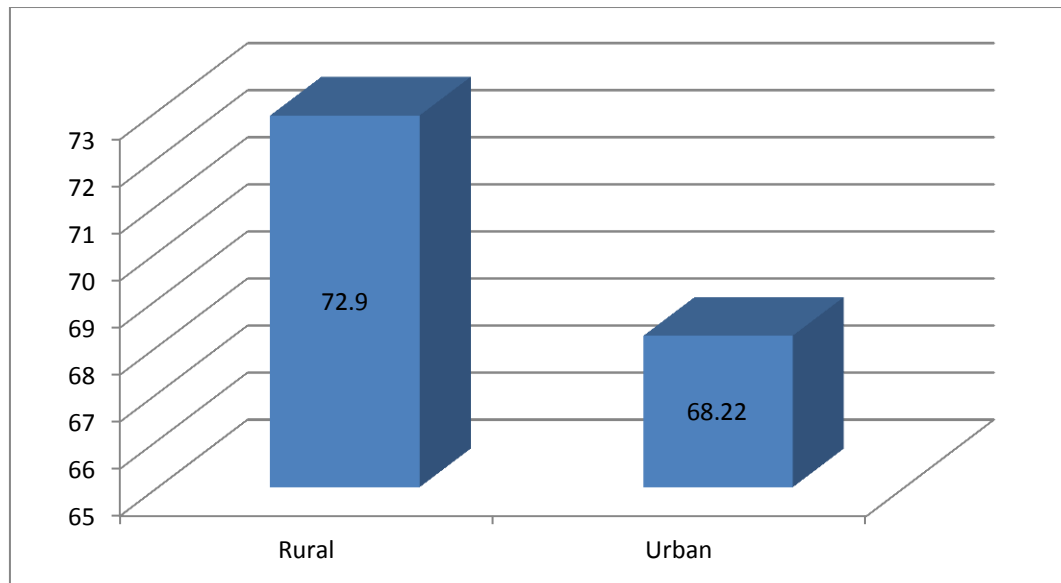


Fig 4.6.4.2 Mean Difference in Academic Achievement of Rural and Urban Students

The table 4.6.4 reveals that the F- value for type of family ($F=4.610$, $p<.05$) is significant at 0.05 level, which confirm that there is statistically significant difference in academic achievement of nuclear and joint family. The mean value of nuclear family adolescents (72.09) is higher than the joint family adolescents (69.85). Thus it can be concluded there is significant difference in academic achievement of adolescent belonging to nuclear and joint family.

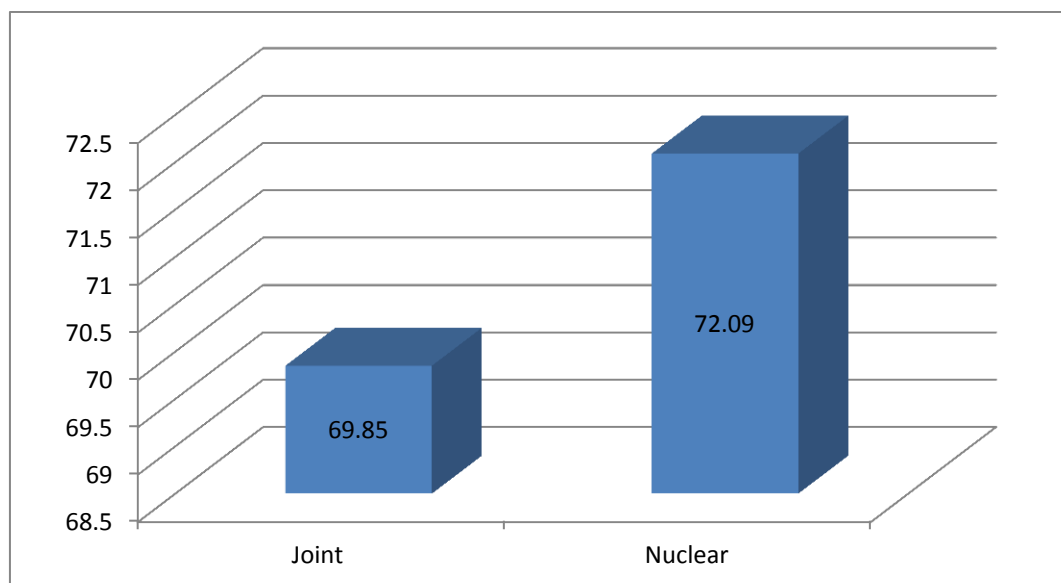


Fig 4.6.4.3 Mean Difference in Academic Achievement of Joint and Nuclear Family Students

4.6.4.2 The Interactional Differences in Academic Achievement of Adolescents in Relation to Gender, Location and Type of Family

1.1 Gender X Location:

The F-ratio interaction between gender and location as shown in the table 4.6.4 i.e., $F=14.685$, $p<0.01$ is statistically significant, indicating that there is a significant interactional effect of gender and location on academic achievement of adolescents. To understand this better, we consider the line graph for this interactional effect as depicted in figure (4.6.4.4).

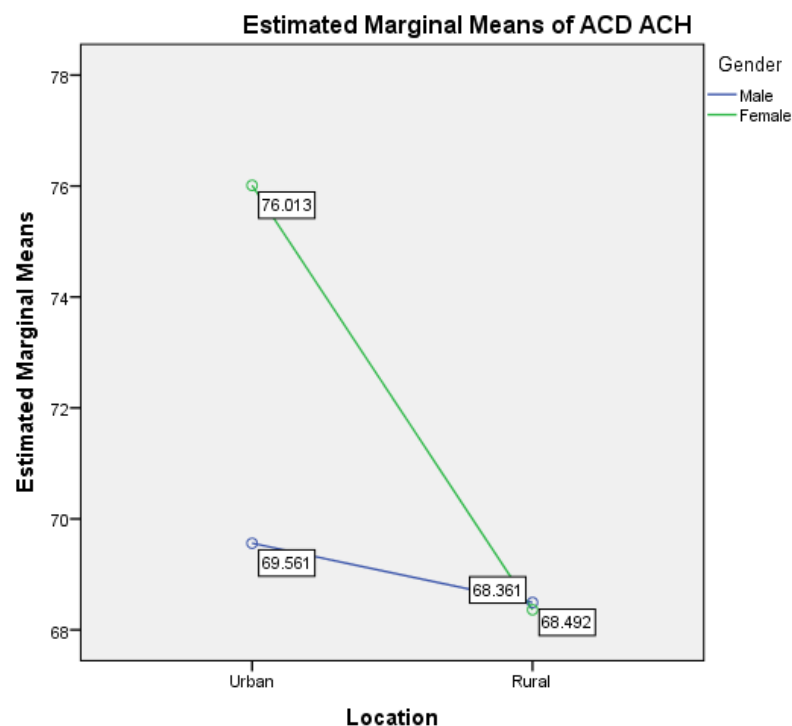


Fig.4.6.4.4 Gender and Location Interaction

In the fig. 4.6.4.4 two interactional lines are shown marked as line 1 and line 2 representing the location and gender respectively. Two levels of location are shown on the horizontal axis (i.e., Urban and Rural). The end point of each line represents the means of the four conditions. Although the F-ratio for interaction between location and gender is statistically significant, we observe an interaction in which the two lines intersect each other, which is given in figure. It is further clear that the academic achievement of urban female students is better than the rural female and academic achievement of urban male is better than the rural male students.

1.2 Gender X Type of Family:

The F-ratio interaction between gender and type of family as shown in the table 4.6.4 i.e., $F= 0.539$, $p>0.05$ is statistically insignificant, indicating that there is a insignificant interactional effect of gender and type of family on academic achievement of adolescents. To understand this better, we consider the line graph for this interactional effect as depicted in figure (4.6.4.5).

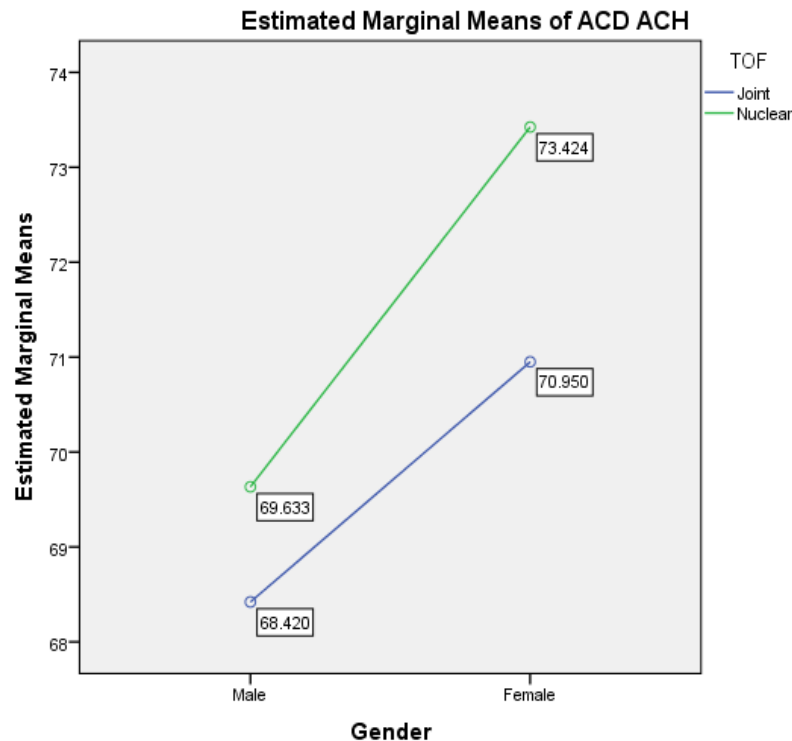


Fig. 4.6.4.5 Gender and Type of Family Interaction

In the figure (4.6.4.5) two interactional lines are shown marked as line 1 and line 2 representing the 1 gender and type of family respectively. Two levels of gender are shown on the horizontal axis (i.e., Male and Female). The end point of each line represents the means of the four conditions. The interactional lines (line 1 and line 2) reveal that both lines are more or less parallel (up to great extent) indicating that there is no significant interactional effect of gender and type of family on academic achievement of adolescents.

1.3 Location X Type of Family:

The F-ratio interaction between location and type of family as shown in the table 4.6.4 i.e., $F= 0.342$, $p>0.05$ is statistically insignificant, indicating that there is a insignificant interactional effect of location and type of family on academic achievement of adolescents. To understand this better, we consider the line graph for this interactional effect as depicted in figure (4.6.4.6).

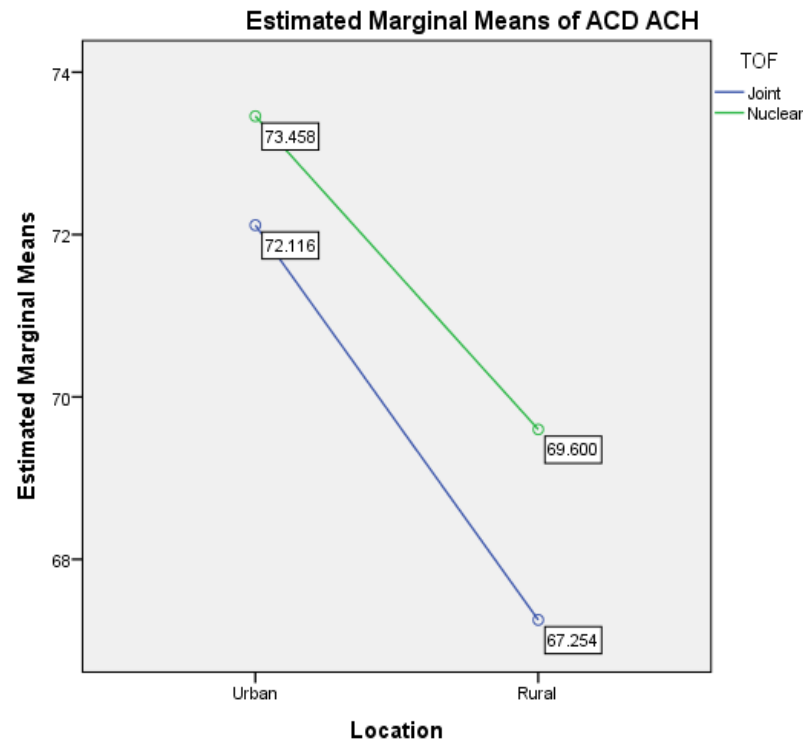


Fig.4.6.4.6 Location and Type of Family Interaction

In the figure (4.6.4.6) two interactional lines are shown marked as line 1 and line 2 representing the location and type of family respectively. Two levels of location are shown on the horizontal axis (i.e., Urban and Rural). The end point of each line represents the means of the four conditions. The interactional lines (line 1 and line 2) reveal that both lines are more or less parallel (up to great extent) indicating that there is no significant interactional effect of location and type of family on academic achievement of adolescents.

1.4 Gender X Location X Type of Family:

The table 4.6.4 also revealed the interaction F value ($F=3.277$, $p>0.05$) among demographic variables (gender, location and type of family) in academic achievement is not significant at 0.01 level as well as 0.05. Therefore, it can be concluded that demographic variables gender, location and type of family does not significantly interact each other in academic achievement of adolescents.

As evident from the results the formulated null hypothesis H_0 6.4 “*There is no significant difference in academic achievement of adolescents in relation to gender, location and type of family*”, stands partially rejected for the main effect gender (A), Location (B), Type of family (C) and interactional effect of AXB, and accepted for the interactional effect of AXC, BXC and AXBXC.

Chapter – 5

Findings, Conclusions and Suggestions

CHAPTER 5

In this final and concluding chapter the investigator tried to provide a brief summary of this study followed by conclusions, discussion, educational implications and at the end of the chapter some suggestions are furnished for the prospective researchers. All these are categorized in the following subheadings.

5.1 Summary with findings

5.2 Conclusion and educational implications

5.3 Suggestions for practice and further research

5.4 Limitation of this study

5.1 Summary with findings

5.1.1 Summary:

This study was undertaken to provide the empirical evidence that could be of some utility to throw light over the problems of adolescent learners related to their adjustment with family, society, school and their academic motivation which ultimately affect their academic achievement at this stage. Adolescence is a stage of revolutionary change in human life. It is the most important and crucial period of human life. Though, this period is full of challenges, but potential among adolescents is also far greater. In this regard family is an important socio-biological unit that exerts the greatest influence on the individual's behavior. It is the home which sets the patterns for their child's attitude towards people and society, aids intellectual growth and supports his aspirations and achievement. At this stage positive academic motivation helps a child to succeed in school and also him to see that learning is rewarding and important in all aspects of life. At this stage adolescents have an additional worry adjusting his personality in changing surroundings and according to the demands of society. This further affects his academic achievement.

Therefore, it is the duty of parents/guardian and school to provide adolescents favourable family climate and motivate them for better academic achievement in this cut throat competition era. This is the responsibility on the shoulders of parents,

guardian, teachers and policy makers to mould the adolescent mind into resourceful, responsible and growth oriented citizens, so that they can significantly contribute to the national development to the maximum. There are so many factors which affect academic achievement of adolescents directly or indirectly, and the investigator was motivated to take up this study to find out contribution of some important factors such as family climate, academic motivation and adjustment in academic achievement of adolescents along with some demographic variables i.e., gender, location and type of family. The study aimed to achieve the following objectives:

1. To study the level of family climate, academic motivation, adjustment and academic achievement of adolescents.
2. To study the impact of family climate on the academic achievement of adolescents.
3. To study the impact of academic motivation on the academic achievement of adolescents.
4. To study the impact of adjustment on the academic achievement of adolescents.
5. To study the relative contribution of family climate, academic motivation and adjustment to academic achievement of adolescents.
6. To study the difference in family climate, academic motivation, adjustment and academic achievement of adolescents in relation to some demographic variable such as –
 - (1) Gender (Male / Female)
 - (2) Location (Rural/ Urban)
 - (3) Type of family (Nuclear /Joint)

In order to suplicate this study Agra district was selected as the study area because of the investigator's familiarity to Agra. The descriptive survey research method was adopted to complete this study. A sample of 920 secondary school students was selected for the study. For the assessment of different variables standardized tools were administered over the selected students Family Climate Scale (FCS), Academic Motivation Scale (AMS) and Adjustment Inventory for School Students (AISS).

5.1.2 Findings- The Major Findings Related to Objectives of This Study are as Follows.

5.1.2.1 Finding related to the status of family climate, academic motivation, adjustment and academic achievement of adolescents.

In order to find out status of Family Climate, Academic Motivation, Adjustment and Academic Achievement of Adolescents descriptive statistical analysis was done. Beside this the status was also studied on the basis of interpretation of of raw scores. This section revealed following important findings-

Family Climate:

1. It was found that the overall estimated mean score in respect of dimension one (restriction Vs freedom) of family climate in the population of secondary school students, was found to be 11.67 score points with a maximum sampling error of 1.54%, as measured in terms of 99% confidence interval (Table 4.1.1).
2. The overall estimated mean score in respect dimension second (indulgence Vs avoidance) of family climate in the population of secondary school students (Table 4.1.1), was found to be 11.72 score points with a maximum sampling error of 1.96% as measured in terms of 99% confidence interval.
3. It was found that the overall estimated mean score in respect of dimension third (partiality Vs fairness) of family climate in the population of secondary school students, was found to be 12.65 score points with a maximum sampling error of 1.58% as measured in terms of 99% confidence interval (Table 4.1.1).
4. The overall estimated mean score in respect of dimension fourth (attention Vs negligence) of family climate in the population of secondary school students (Table 4.1.1), was found to 11.30 score points with a maximum sampling error of 2.21% as measured in terms of 99% confidence interval.
5. It was found that the overall estimated mean score in respect of dimension fifth (acceptance Vs rejection) of family climate in the population of secondary school students, was found to be 12.21 score points with a maximum sampling error of 2.13%, as measured in terms of 99% confidence interval (Table 4.1.1).

6. The overall estimated mean score in respect of dimension sixth (attention Vs negligence) of family climate in the population of secondary school students (Table 4.1.1), was found to be 12.87 score points with a maximum sampling error of 1.58 %, as measured in terms of 99% confidence interval.
7. It was found that the overall estimated mean score in respect of dimension seventh (trust Vs distrust) of family climate in the population of secondary school students, was found to be 11.03 score points with a maximum sampling error of 1.72 %, as measured in terms of 99% confidence interval (Table 4.1.1).
8. The overall estimated mean score in respect of dimension eighth (dominance Vs submissiveness) of family climate in the population of secondary school students (Table 4.1.1), was found to be 10.33 score points with a maximum sampling error of 1.74 %, as measured in terms of 99% confidence interval.
9. It was found that the overall estimated mean score in respect of dimension ninth (expectance Vs hopeless) of family climate in the population of secondary school students, was found to be 11.88 % score points with a maximum sampling error of 1.43 %, as measured in terms of 99% confidence interval (Table 4.1.1).
10. The overall estimated mean score in respect of dimension tenth (open communication Vs closed communication) of family climate in the population of secondary school students (Table 4.1.1), was found to be 10.82 score points with a maximum sampling error of 2.3 %, as measured in terms of 99% confidence interval.
11. It was found that the overall estimated mean score of family climate in the population of secondary school students, was 116.22 % score points with a maximum sampling error of 1.16 %, as measured in terms of 99% confidence interval (Table 4.1.1).

Academic Motivation:

1. The overall estimated mean score in respect of dimension I (achievement in examination) of academic motivation in the population of secondary school

- students (Table 4.1.2), was found to be 20.92 score points with a maximum sampling error of 0.8 %, as measured in terms of 99% confidence interval.
2. It was found that the overall estimated mean score in respect of dimension II (study habit) of academic motivation in the population of secondary school students, was found to be 20.58 score points with a maximum sampling error of 0.9 %, as measured in terms of 99% confidence interval (Table 4.1.2).
 3. The overall estimated mean score in respect of dimension III (academic goal) of academic motivation in the population of secondary school students (Table 4.1.2), was found to be 218.28 score points with a maximum sampling error of 0.87 %, as measured in terms of 99% confidence interval.
 4. It was found that the overall estimated mean score in respect of dimension IV (interest in study) of academic motivation in the population of secondary school students, was found to be 20.94 % score points with a maximum sampling error of 0.86 %, as measured in terms of 99% confidence interval (Table 4.1.2).
 5. The overall estimated mean score in respect of dimension V (attitude to study) of academic motivation in the population of secondary school students (Table 4.1.2), was found to be 21.02 score points with a maximum sampling error of 0.76 %, as measured in terms of 99% confidence interval.
 6. It was found that the overall estimated mean score in respect of dimension VI (regularity in study) of academic motivation in the population of secondary school students, was found to be 21.40 % score points with a maximum sampling error of 0.79 %, as measured in terms of 99% confidence interval (Table 4.1.2).
 7. The overall estimated mean score in respect of dimension VII (extracurricular activity) of academic motivation in the population of secondary school students (Table 4.1.2), was found to be 11.18 score points with a maximum sampling error of 12 %, as measured in terms of 99% confidence interval.
 8. It was found that the overall estimated mean score in respect of academic motivation in the population of secondary school students, was to be 134.28

score points with a maximum sampling error of 0.6 %, as measured in terms of 99% confidence interval (Table 4.1.2).

Adjustment:

1. The overall estimated mean score in respect of dimension I (emotional adjustment) of adjustment in the population of secondary school students (Table 4.1.3), was found to be 3.43 score points with a maximum sampling error of 0.7 %, as measured in terms of 99% confidence interval.
2. It was found that the overall estimated mean score in respect of dimension II (social adjustment) of adjustment in the population of secondary school students, was found to be 6.85 score points with a maximum sampling error of 2.5 %, as measured in terms of 99% confidence interval (Table 4.1.3).
3. The overall estimated mean score in respect of dimension III (educational adjustment) of adjustment in the population of secondary school students (Table 4.1.3), was found to be 3.59 score points with a maximum sampling error of 06.1 %, as measured in terms of 99% confidence interval.
4. It was found that the overall estimated mean score in respect of adjustment in the population of secondary school students, was found to be 13.87 score points with a maximum sampling error of 3.8 %, as measured in terms of 99% confidence interval (Table 4.1.3).

Academic Achievement:

- 1 The overall estimated mean score in respect of academi achievement in the population of secondary school students (Table 4.1.3), was found to be 71.08 score points with a maximum sampling error of 1.5 %, as measured in terms of 99% confidence interval.

5.1.3 Findings related to Impact of Family Climate, Academic Motivation and Adjustment on Academic Achievement of Adolescents

In order to find out impact of Family Climate, Academic Motivation and Adjustment on Academic Achievement of Adolescents multiple regression analysis was done. This section revealed following important findings-

1. The total academic achievement of adolescents score by any an individual not included in this sample can be predicted by on the basis of family climate dimension score by using the following regression equation

$$Y=0.882X_1+0.631X_2+.441X_3+0.389X_4+43.267$$

Where, Y = Academic achievement
 X_1 = Indulgences Vs Avoidance,
 X_2 = Attention Vs Negligence,
 X_3 = Acceptance Vs Rejection,
 X_4 = Partiality Vs Fairness.

The multiple regression analysis suggests that out of the ten dimensions of family climate only four are the most potent predictor of the academic achievement of adolescents, with the predictability strength of (17.6 %). The maximum variance is shared by Indulgences Vs Avoidance (13.1 %) followed by Attention Vs Negligence (3.4%,)AcceptanceVs Rejection (0.07 %) and Partiality Vs Fairness (0.04%).

2. The total academic achievement of adolescents score by any an individual not included in this sample can be predicted by on the basis of academic motivation dimensions score by using the following regression equation

$$Y=1.487X_1+.947X_2+.587X_3+.521X_4+14.088$$

Where, Y = Academic Achievemnt
 X_1 = Extracurricular Activity,
 X_2 = Academic Goal,
 X_3 = Study Habit,
 X_4 = Attitude to Study.

The multiple regression analysis suggests that out of seven dimensions of academic motivation only four are the most potent predictor of the academic achievement of adolescents, with the predictability strength of (14.9 %). The maximum variance is shared by extra-curricular activity (9.3 %) followed by academic goal (4.1%), study habit (1.1 %)and attitude to study (0.5%).

3. The total academic achievement of adolescents score by any an individual not included in this sample can be predicted by on the basis of adjustment dimensions score by using the following regression equation

$$Y = -1.616X_1 + 76.846$$

Where, Y = Academic Achievement,

X₁ = Educational Adjustment

The multiple regression analysis suggests that out of three dimensions of adjustment only one is the most potential predictor of the academic achievement of adolescents, with the predictability strength of (10.5 %).

4. The total academic achievement of adolescents score by any an individual not included in this sample can be predicted by on the basis of dimensions of three independent variables namely family climate, academic motivation and adjustment score by the using following regression equation

$$Y = .781X_1 + .758X_2 + 1.04X_3 + .606X_4 + .667X_5 + \dots + 33.835$$

Where, Y = Academic achievement

X₁ = Indulgence Vs Avoidance

X₂ = Educational Adjustment

X₃ = Extracurricular Activity

X₄ = Attention Vs Neglegience

X₅ = Academic Goal.

The multiple regression analysis suggests that out of twenty dimensions of all the three predictor variables only, indulgence Vs avoidance is the strongest predictor which explains 13.1% variance in academic achievement. The predictor, educational adjustment emerged as the second and most significant predictor of academic achievement and contributed 5.3% variance in the academic achievement. In the same way, Extra-curricular Activity 2.4%, Attention Vs Negligence 1.9% and Academic goal contributed 0.7% variance in academic achievement.

5.1.4 Finding Related to Relationship of Selected Demographic Variables with Family Climate:

In this section adolescents were compared to find out if their Family Climate varies with their sex, residential background and type of family to which they belong. This section revealed following important findings-

1. With regard to the relationship of Family Climate to gender difference, it was not found to be significantly related to the Family Climate of Adolescent students. It means adolescents of both sexes have the same kind of family climate.
2. The location or rural/urban background of adolescents was found to be significantly related with family climate. Adolescents belonging to urban family were found to have better family climate than the adolescents belonging to rural area.
3. The type of family i.e. single and joint family was found to be significantly related with family climate of adolescents. The adolescents belonging to nuclear family (117.75) were having a better family climate than the adolescents who live in joint family (114.46).
4. The interactional effect of gender and location variation on the family climate of adolescents was found to be statistically significant. The further analysis revealed that female students (120.47) belonging to urban area possess better family climate than the female students (111.53) residing in rural area. While the male students (117.12) of urban area possess better family climate than the male students (112.84) of the rural.
5. The interactional effect of gender and type of family on the family climate score of the total sample was found to be statistically insignificant, indicating that there was insignificant interactional effect of gender and type of family on family climate of adolescents.
6. The interactional effect of location and type of family on the family climate score of the total sample was found to be statistically insignificant, indicating that

there was insignificant interactional effect of location and type of family on family climate of adolescents.

7. The three way interaction, i.e., gender X location X type of family was found to statistically insignificant, indicating that there is no interactional effect of gender, location and type of family.

5.1.5 Findings Related to Relationship of Selected Demographic Variable with Academic Motivation

In this section adolescents were compared to find out if their academic motivation varies with their sex, residential background and type of family to which they belong. This section revealed following important findings-

1. Gender was not found to be significantly related with Academic Motivation. Adolescent boys and girls have similar levels of academic motivation.
2. Location variation was significantly related with academic motivation of adolescents. Urban students' possess (136) better academic motivation than rural (131.67) counterpart.
3. The main effect of the type of family on academic motivation of adolescents was found to be statistically insignificant, indicating that type of family variation has no significant effect on academic motivation of adolescents.
4. The interactional effect of gender and location variation on the academic motivation of adolescents was found to be statistically significant. The further analysis revealed that female students (137.35) of urban areas possess better academic motivation than the female students (131.30) of the rural areas. While the male students (134.64) of urban area possess better academic motivation than the male students (132.03) of the rural areas.
5. There was insignificant interactional effect of gender and type of family on academic motivation of adolescents.
6. The interactional effect of location and type of family on the academic motivation score of the total sample was found to statistically insignificant,

indicating that there was insignificant interactional effect of location and type of family on academic motivation of adolescents.

7. The three way interaction, i.e., gender X location X type of family was found to statistically insignificant, indicating that there was no interactional effect of gender, location and type of family.

5.1.6 Findings Related to Relationship of Selected Demographic Variable with Adjustment

In this section adolescents were compared to find out if their adjustment varies with their sex, residential background and type of family to which they belong. This section revealed following important findings-

1. With regard to the relationship of adjustment to gender difference, it was not found to be significantly related to the adjustment of adolescent students. It means adolescents of both sexes have the same kind of adjustment.
2. The location or rural/urban background of adolescents was found to be significantly related with adjustment. Adolescents belonging to urban family were found to be have better adjustment than the adolescents belonging to rural area. Urban students' possess (12.91) better adjustment score than rural (15.33). (Low mean on adjustment inventory (AISS) shows better adjustment and high mean shows poor adjustment).
3. The main effect of the type of family on adjustment of adolescents was found to be statistically insignificant, indicating that type of family variation has no significant effect on adjustment of adolescents.
4. The interactional effect of gender and location variation on the adjustment of adolescents was found to be statistically significant. Female students (12.10) of urban areas possess better adjustment than the female students (15.41) of the rural areas. While the male students (13.75) of urban areas possess better adjustment than the male students (15.12) of the rural areas.
5. The interactional effect of gender and type of family on the adjustment score of the total sample was found statistically insignificant, indicating that there

was insignificant interactional effect of gender and type of family on family climate of adolescents.

6. The interactional effect of location and type of family on the adjustment score of the total sample was found statistically insignificant, indicating that there was insignificant interactional effect of location and type of family on adjustment of adolescents.
7. The three way interaction, i.e., gender X location X type of family was found statistically insignificant, indicating that there was no interactional effect of gender, location and type of family.

5.1.7 Findings Related to Relationship of Selected Demographic Variable with Academic Achievement

In this section adolescents were compared to find out if their academic achievement varies with their sex, residential background and type of family to which they belong.

This section revealed following important findings-

1. With regard to the relationship of academic achievement to gender difference, it was found to be significantly related to the academic achievement of adolescent students. Adolescents girls possess (73.15) better academic achievement score than adolescent males (69.19).
2. The location or rural/urban background of adolescents was found to be significantly related with academic achievement. Adolescents belonging to urban were found to be have better academic achievement than the adolescents belonging to rural area. Urban students' possess (72.90) better academic motivation score than rural (68.22).
3. The type of family i.e. single and joint family were found to be significantly related with academic achievement of adolescents. The students' belonging to nuclear family possess (72.09) better academic achievement than students belonging to joint family (69.85).
4. The interactional effect of gender and location variation on the academic achievement of adolescents was found to be statistically significant. The female students (76.013) of urban areas possess better academic achievement

than the female students (68.49) of the rural areas. While the male students (69.561) of urban areas possess better academic achievement than the male students (68.36) of the rural.

5. The interactional effect of gender and type of family on the academic achievement score of the total sample was found to be statistically insignificant, indicating that there was no significant interactional effect of gender and type of family on academic achievement of adolescents.
6. The interactional effect of location and type of family on the academic achievement score of the total sample was found to be statistically insignificant, indicating that there was no significant interactional effect of location and type of family on academic achievement of adolescents.
7. The three way interaction, i.e., gender X location X type of family was found to be statistically insignificant, indicating that there was no interactional effect of gender, location and type of family.

5.2 Conclusions and their Implication:

Based on the findings of this study some major conclusions could be drawn. Here in this section an attempt has been made to draw some major conclusions. Their after each conclusion has been discussed with the intention of drawing the implication of the conclusion for theory/ practice and further research in the field of education

Conclusion 1

“Family climate of adolescents play important role in their academic achievement.”

Discussion and Educational Implication:

This conclusion was related with to study of the impact of family climate on the academic achievement of adolescents. Family climate in the present study was assessed through ten dimensions Out of these ten dimensions, four dimensions (Indulgence Vs Avoidance, Attention Vs Negligence, Acceptance Vs Rejection and Partiality Vs Fairness) were found to be the significant and the most powerful predictors of academic achievement. All these dimensions were significant at 0.01 level of confidence. Adolescents who were allowed to do the work according to their

views, perform best according to their capabilities and wherever their views or ideas are not considered they become de-motivated and their performance are not up to the mark. No doubt the adolescents of this age are filled with great zeal and zest; therefore, these dimensions (Indulgence Vs Avoidance, Attention Vs Negligence, Acceptance Vs Rejection and Partiality Vs Fairness) are the base for building personality of the individual, hence, best scholastic achievement. Therefore, parents should respect, indulge, pay attention and be fair to ensure the adolescents that they possess enough confidence to deliver things in a better way. These findings were in line with the findings of the studies like; Agarwal, (1986); Cherian and Malehase, (1998); Fulgini, (1997); Chouhan, (1993); Sharma, (2002); Shankar and Rachel (2005).

Academic achievement is the summative outcome of the total educational process within a school. It is dependent on a variety of dimensions that are cognitive or non-cognitive in nature. Besides this there are various other environmental factors that affect the achievement of the adolescents. In this study family climate emerged as the most significant predictor of adolescents school achievement with a total predictability strength of (17.6%); indicating that parents should take care of the adolescents at home; Interactive, appreciating, and motivating family climate helps adolescents students in achieving high in academics. Adolescents should be provided with an opportunity to mix and interact with social milieu, they should be rewarded for good behaviors and aversive behaviors should be rectified through positive and constructive criticism. Such, kind of nurturance will definitely enhance their scholastic achievement.

Conclusion 2:

“Academic Motivation given to adolescents helps a lot in increasing their Academic Achievement.”

Discussion and Educational Implication:

This conclusion was related with the study of impact of academic motivation on the academic achievement of adolescents. Academic motivation in the present study was assessed through seven dimensions. Out of these seven dimensions, four (extracurricular activity, academic goal, attention to the study and study habit)

dimensions were found to be the positive and significant predictors of academic achievement of adolescents. Extracurricular activity mainly include, all those activities other than the curricular activities like games, debate, drama, essay competition etc and it is well said that a sound mind fits in a sound body indicating that extracurricular activities indirectly enhances the academic achievement of these adolescents. Academic goal also emerges as a significant contributor of the scholastic achievement of the adolescents, Pintrich and Zusho, (2002;) referred academic goal to internal process that instigates and sustain activities aimed at achieving specific academic goal. Adolescents infused with sound academic goals usually achieve higher heights in their academic fields. These findings are in line with the findings of Haider, Syed Adnan et al. Also the third predictor that is the attitude of the students in this study is accessed as the overall view of a child towards their studies. In this study it has been candidly cleared that adolescents which have a good attitude towards their studies escalates in their scholastic achievement. These findings are in line with the findings of Brima Gegbe, Abubakarr Sheriff & Sheik (2015). Study habit is the last predictor of academic achievement among the seven dimensions of academic motivation. Habit of dealing with the study material entitled to achieve higher goals in the academic endeavor is attributed to study habit. Thus a sound study habit usually leads to achieve a better scholastic achievement. These findings are in line with the findings of Deb, and Grewal (1990), Riaz, Kiran and Malik (2002).

It has been found that positive parent-child relationship forms an important background for academic motivation. Letting a child know the value of schooling and the importance of the efforts lead by the parents in educating the child. They play an important role in motivating the child to learn and achieve better in academics. The findings of the present study reveal the importance of extracurricular activity, academic goal, attention to the study and study habit in the context of academic achievement of adolescents. Therefore school authorities should organize such programs that can motivate the students which further have a positive impact on their academic achievement.

Conclusion 3 :

“Educational adjustment is closely related to academic achievement of adolescents”

Discussion and Educational Implication:

This conclusion is based upon the findings pertaining to the objective where the impact of adjustment was examined as the determinant of academic achievement of adolescents. It was assessed under three dimension i.e., emotional, social and educational adjustment. Among these three dimensions only educational adjustment emerged as the most significant predictor of the academic achievement of the adolescents. The remaining two dimensions although found to be better predictors of academic achievement of the adolescents, but, in the present study these could not trace their impact statistically significant on the criterion variable. Therefore, no decision can be taken in this regard. Educational adjustment has been found as the capacity of an individual to withstand against the unwanted situations during the teaching learning process. Therefore more the children are educated and well adjusted, higher is their scholastic achievement. These findings are in line with the findings of Rosenbalm (2006), Sarika (2008), Aggarwal and Bhalla (2012).

The findings of the present study necessitate that the educational adjustment should ensure better academic achievement of adolescents. There is a clear need to improve the educational environment so that adolescents can be made better academic achiever. The school authorities should organize special welfare programs for adolescents' well being and positive changes should be done in the method of teaching by using audio visual-aids and activity based teaching

Conclusion 4 :

“Family climate, academic motivation and adjustment all contribute to academic achievement of adolescents learners .”

Discussion and Educational Implication:

All three variables were found to contribute in academic achievement of adolescents learning. Out of the three predictors, family climate (indulgence Vs avoidance and attention Vs negligence) was found to be the strongest and most significant predictor of the academic achievement of the adolescents with a predictability strength of 15%, Educational adjustment contributes 3.5%. followed by academic motivation (Extra-curricular Activity and Academic goal) that contributes 3.1% of variance in academic achievement. These findings reveal that family climate is an essential and statistically

significant predictor of school achievement of adolescents. Thus, steps should be taken to create that should produce a congenial family climate which will ultimately lead to better academic achievement of adolescents. These findings are in line with Daulata Pee Meena Siwach (2008); Kaur (2009); Sharma and Khatoon, (2011) and Chawla; (2012). Stakeholders should organize various programmes and competitions for the arousal of better academic motivation among the adolescents. Guidance and counselling programs, and organization of lectures, by profound dignitaries should be organised that will focus on culturing better academic motivation among the adolescents. These findings are in line with Shevatekar (2012). For the adjustment of the adolescents' psychological counselling, value education and story telling will help the students to adjust in this throat cut competition. So that they will feel secure and adjust well in the educational environment, consequently enhancing their academic achievement. These findings is in line with Chodhary (2015).

Academic achievement is the summative outcome of the total educational process within a school. It is dependent on a variety of dimensions that are cognitive or non-cognitive in nature. Besides this there are various other environmental factors that affect the achievement of the adolescents. In this study all the three predictor variables were found to be the significant predictors of academic achievement of adolescents, but vary in their degree of predictability. Out of these three, family climate emerged as the significant predictor of adolescents school achievement, indicating that familial climate should be taken care. Parents should interact, appreciate, and motivate the adolescents to set and achieve higher goals in their life so that they can out shine in their academic endeavours in a lucid manner. They should provide them with an opportunity to mix and interact with social milieu, reward them for good behaviors and aversive behaviors should be rectified through positive and constructive criticism. Such, kind of nurturance will definitely lead to enhance their scholastic achievement. schools should organise teacher parent meetings and should try to provide better counselling for the betterment of their family climate.

The second and third contributor of academic achievement i.e., adjustment and academic motivation also emerge as the significant contributor, but their contributory strength is very small, although significant. Teachers should organise debates, essay writing competition, dramas so as to provide an environment of seeking adjustment

and try to motivate children's academic motivation. That will help to enhance the school achievement of these students.

Conclusion 5:

“Family climate of urban and nuclear families is better than rural and joint families.”

Discussion and Educational Implication:

The adolescents of urban areas possess better family climate than their counterparts in rural areas. It has been found that urban families have congenial family climate and they provide a lucid atmosphere to their wards to develop in a better way than rural families. These findings are in line with Agarwal (1986) The main effect of type of family reveals a statistically significant effect on the family climate of adolescents, with nuclear families exercising lucid family climate than the joint families. It has been found that the decision making and control on their children has been found higher in nuclear families than in joint ones. These findings are in line with Fulgini, (1997), Chauhan, (1993), Cherian. The interactional effect of gender and locations has also been found to be statistically significant, with urban females enjoying the lucid family climate followed by urban males. It has been found that the urban females belong to socially and economically better families, thus enjoying the best family climate. These findings are in line with the findings of Gerry-eze, Omaze afemikhe the interaction effect between gender and type of family, location and type of family and the three way interaction of gender, location and type of family revealed no statistically significant difference.

In present study urban students enjoys a better family climate than rural adolescents, so there is a need to talk and consult parents through organizing various programme for rural adolescents. Nuclear type of family possess better family climate than joint family because there is abundant availability of recourses and less interference in the activity of adolescence, such kind of facility should also be provided for joint family to adolescents for their betterment. In case of joint family it is the responsibility of parents that they should provide stress free environment, friendly and cooperative family climate to their children.

Conclusion 6 :

“Adolescents residing in urban area are more academically motivated. Female adolescents belonging to urban areas are academically more motivated than urban male adolescents.”

Discussion and Educational Implication:

Urban adolescents possess better academic motivation than their rural ones. This conclusion corroborates with the finding of Mukhopadhyaya (1991) that urban female have better academic motivation followed by males of the same location. where as, rural males possess better academic motivation than rural females.

Urban adolescents possess better academic motivation than the rural ones as they are acquainted with the benefits of education and they are also aware of their goals and are motivated to achieve them, whereas, most adolescents belonging to rural areas are first generation learners have less exposure and less family support so they are less motivated. So, there is a need to make special provisions for the rural adolescents by the government and other concerned stakeholders in order to motivate them to pursue better goals and work harder to achieve them. The schools should also introduce formal programmes that encourage motivation like drama, science fair, lectures and healthy debates, etc. Parents should also motivate their children whether they succeed or not. Though monetary benefits play a crucial role in motivating the adolescents, but it has been discovered that one of the best ways to motivate the adolescents to praise and recognition of their outputs.

Conclusion 7:

“Urban adolescents in general are better adjusted and female adolescents belonging to urban areas are more adjusted than male counterparts”

Discussion and Educational implication:

The conclusion that urban adolescents possess better adjustment than their rural ones (reciprocal scoring) is in line with the findings of Yellah (2012), further urban females were better adjusted than the males of the same location. Where as, rural males possess were better adjusted than rural females. These findings is in line with

Prajapati (2012) all other interactions were found to be statistically insignificant; therefore no decision can be taken in this regard.

The findings of the study are also calls for all the concerned stakeholders to make special provisions for the better adjustment of rural and male urban adolescents, because of the fact that only the well adjusted adolescents are more likely able to express his full capabilities so, achieving higher goals. The results of the study reveal that the urban adolescents are better adjusted than their rural ones, the fact for this may be that in urban societies the social scenario more or less is changing and the adolescents over there are habitual for adjustment with respect to the latest change. While as in rural setting the change with respect to social scenario is not so much rapidly visualized. Thus, they are in one way used to daily routine life which has remained as such since year.

Conclusion 8:

“Academic Achievement of girls is higher than male adolescents. The adolescents belonging to nuclear family and of urban location have better academic achievement.”

Discussion and Educational Implication:

Girls were found to have better academic achievement than boys. These results are obvious as girls in most of the cases are found to pay a lot of heads towards their studies than boys thus enhancing their scholastic achievement. These findings is in line with the studies of Sood's (2012). The location variations candidly reveal that the urban sample has better academic achievement than the rural sample, as the urban students has easy access to a variety of resources like, internet, coaching, study material etc. than the rural students, Easy access to these avenues help them to have better academic achievement. Coleman (1991) also find the same results. Type of family reveals that the students of nuclear family possess better academic achievement than the joint ones. As in nuclear family there is least disturbance, more control and lot of avenues and time available for a child to study thus helping in achieving better. These findings are in line with Gupta, Devi and Pasrija (2012). Female urban sample has higher academic achievement followed by the males of the same location. As most of the females these days are more aware and more conscious for their education this helps them to escalate their academic achievement.

This fact may be because of the reason that girls pay more attention and depute more time for their studies and take their studies on priority basis. In urban settings the adolescents have access to a lot of resources that help them to achieve higher. Therefore, provisions should be taken to provide all the basic necessities available for the rural students too. Facilities like common library, internet, e-learning material, etc, should be made available to them free of cost so that they too can excel in their studies as their urban parts. Provisions should be taken to provide a better environment to rural students and better facilities should be made available to them so that these students can dream and acquire higher goals.

5.3 Suggestions for Further Research:

1. This study was limited to the Agra district of Utter Pradesh, thus, can't be generalized to the whole Indian population. So, same study could be taken with a larger sample in different parts of our country, so as to generalize the major findings.
2. This study was confined to only secondary school students. Research could be conducted on the students pursuing primary and tertiary education too.
3. In the present study, the investigator has selected only three independent variables, viz., family climate, academic motivation and adjustment. Researchers can incorporate various other psychological variables in order to discover other predictors of academic achievement.
4. The sample size of this study was confined to 920 because of time and financial constraints, further investigators may extend the area and the size of the sample.
5. In this study academic achievement was taken as the total marks obtained by the students in their previous examination, a standardized test can be used to obtain a standard score of academic achievement.

5.4 Limitations of this Study

The present study had the following major limitations which must be kept in mind while interpreting the findings of the study.

1. The study is done on the secondary school students of Agra district of Uttar Pradesh only.
2. Out of the total 1050 respondent only 920 questionnaires were found to be usable. A response rate of 87.61 % was obtained by the researcher. Hence the findings of this study should be interpreted in this light.
3. SES, Intelligence and Values are also important component of academic achievement of adolescents who were not included in this study. These factors should be kept in mind while interpreting the findings of this study.

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Appendices

कृपया निम्न सूचनाएँ भरिए

(Kindly furnish the following Information)

नाम (Name).....निरिक्ष कुमार.....

कक्षा (Class).....9th B.....

पिता का नाम (Father's Name).....पवन कुमार.....

लिंग (Gender)..... 1. (पुरुष) Male 2. महिला (Female)

स्थान (Location) 1. शहरी (Urban) 2. ग्रामीण (Rural) 3. अर्द्ध शहरी (Semi Urban)

परिवार का प्रकार (Type of Family) - संयुक्त (Joint) एकल (Nuclear)

आयु (Age) (In Years).....13 वर्ष.....

विद्यालय का नाम (Name of the School).....श्री वल्लभ इंटर कॉलेज.....

विद्यालय का बोर्ड (Board of the Institution)-

U.P. Board CBSE Board ICSE Board

पिता की शैक्षिक योग्यता (Father's Qualification).....12th कक्षा.....

माता की शैक्षिक योग्यता (Mother's Qualification).....B.A.....

पिता का व्यवसाय (Father's Occupation).....नेत्र व्यवसाय.....

माता का व्यवसाय (Mother's Occupation).....कोई कार्य नहीं.....

कक्षा आठ में प्राप्त प्राप्तांक (प्रतिशतियों में) (Percents in Class VIII).....75%.....

क्र. सं.	वक्तव्य	सदैव	कभी-कभी	कभी नहीं
1.	विद्यालय में दिये जाने वाले गृह-कार्य के सम्बन्ध में मुझसे घर में कोई नहीं पूछता है।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
2.	गलती न करने पर भी मेरे माता-पिता मुझे ही दोषी बतलाकर डाँटते हैं।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
3.	मेरे पिताजी मेरे भविष्य के बारे में काफी चिन्तित रहते हैं।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
4.	मैं परिवार के बीच बंधन महसूस नहीं करता हूँ।	2 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	पढ़ते समय मेरे माता-पिता मुझको किसी और कार्य को करने के लिये नहीं कहते हैं।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
6.	मेरी हर इच्छा को मेरे माता-पिता पूरा करने का प्रयास करते हैं।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
7.	मेरी माँ परवाह नहीं करती कि मैंने खाना खाया है या नहीं।	0 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	मेरे पिता काम में व्यस्त होने पर भी मेरी समस्याओं को सुनते हैं।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
9.	मेरे माता-पिता थोड़े दिन के लिये भी मुझे अपने से अलग करना नहीं चाहते हैं।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
10.	मेरे माता-पिता मुझको अपने साथ बाजार ले जाना पसन्द नहीं करते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
11.	मेरी कही गयी बातों पर मेरे माता-पिता पूर्ण विश्वास करते हैं।	2 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	मेरे पिता अपने बचपन के प्रसंग हमें सुनाया करते हैं।	2 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	जब कभी मैं रोता हूँ तो परिवार का कोई भी व्यक्ति मेरी ओर ध्यान नहीं देता है।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
14.	अच्छे अंक लाने पर मेरे पिता मुझे शाबासी/उपहार देते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 0
15.	मेरे माता-पिता मेरे मित्रों द्वारा शिकायत किये जाने पर उनकी बातों पर पूर्ण विश्वास कर लेते हैं।	0 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

क्र. सं.	वक्तव्य	सदैव	कभी-कभी	कभी नहीं
16.	मेरे माता-पिता स्वयं मेरी आवश्यकताओं के बारे में नहीं पूछते हैं।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
17.	मुझ पर विश्वास न होने के कारण मेरी माँ मुझसे कोई कार्य नहीं करवाती है।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
18.	बीमार हो जाने पर मेरे पिता मेरी तबियत के बारे में नहीं पूछते हैं।	0 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.	विद्यालय में मेरे कार्यक्रमों को देखने के लिये मेरे माता-पिता अवश्य आते हैं।	2 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20.	सड़क में दूर से ही अपने पिताजी को देखकर मैं भाग खड़ा होता हूँ।	0 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.	मैं फीस के लिये जितने पैसे माँगता हूँ मेरे पिताजी दे देते हैं।	0 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22.	मेरे माता-पिता पढ़ाई के साथ-साथ अन्य क्षेत्रों में मुझसे उत्तम सफलता की आशा रखते हैं।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
23.	मेरे माता-पिता मेरे मित्रों के बारे में उनकी जाति या धर्म के आधार पर बातें नहीं करते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 0
24.	अगर मुझे कोई चीज खरीदनी हो तो उसके बारे में घर में स्वयं बात नहीं कर सकता हूँ।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
25.	मेरे माता-पिता पढ़ाई के साथ विद्यालय के विभिन्न कार्यक्रमों के बारे में जानने के लिये उत्सुक रहते हैं।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
26.	कार्य में व्यस्त होने पर जब मैं अपने पिता से कुछ पूछता हूँ तो वे मुझको डाँटकर भगा देते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
27.	विद्यालय में किसी भी कार्य के लिये पैसे माँगवाये जाने की बात कहने पर मेरी माँ मेरे मित्रों से पूछने के बाद ही देती है।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 0
28.	मेरी माँ मेरी अनुपस्थिति में मेरी बुराई अन्य भाई-बहनों से करती हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
29.	मुझे अपने पिताजी से बातें करने में डर लगता है।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
30.	मेरी माँ अनुचित रूप से मेरी बुराई नहीं करती है।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 0

क्र. सं.	वक्तव्य	सदैव	कभी-कभी	कभी नहीं
31.	किसी भी फैशन या शहर से घटित घटना की चर्चा में मेरे परिवार के सभी सदस्य खुलकर भाग लेते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
32.	मुझे अपनी समस्याओं का हल खुद निकालना पड़ता है।	2 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.	मेरे परिवार के लोग यह चाहते हैं कि बड़ा होकर मैं उच्च अधिकारी बनूँ।	2 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.	गलती हो जाने पर मेरी माँ मुझे प्यार से समझाती है।	2 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.	मेरे माता-पिता यह चाहते हैं कि मैं अपने मित्रों की अपेक्षा अच्छे कार्य करूँ।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
36.	खेलने का समय होने पर भी खेलने जाने से पहले मुझको आज्ञा लेने में डर लगता है।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
37.	विद्यालय में दण्डित किये जाने की बातें मुझे अपने भाई-बहिनों से भी छुपानी पड़ती हैं।	0 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38.	मेरी माँ गलती के लिये दोषी होने पर ही मुझे डाँटती है।	2 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39.	मैं अपने मन की बात घर में किसी से भी कह सकता हूँ।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 6
40.	मेरे मित्रों के सामने मेरी माँ मेरी बुराई करती है।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
41.	मेरे पिताजी मुझसे किसी प्रकार की उम्मीद नहीं रखते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
42.	माता-पिता की अनुपस्थिति का मुझ पर कोई प्रभाव नहीं पड़ता है।	0 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43.	मेरे पिता मुझसे कहते हैं कि अच्छा होता यदि तुम पैदा ही न होते।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
44.	मेरी माँ मुझको रुलाती नहीं है।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
45.	मेरे माता-पिता मुझको अन्य भाई-बहिनों की अपेक्षा अधिक प्यार करते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 0

क्र. सं.	वक्तव्य	सदैव	कभी-कभी	कभी नहीं
46.	परीक्षा में माता-पिता के आशानुकूल अंक न ला पाने पर वह अत्यन्त दुखी हो उठते हैं।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
47.	मैं आवश्यक कार्य होने पर घर में बिना बताये अपने मित्रों के घर यदि चला जाऊँ तो मेरे माता-पिता नाराज नहीं होते हैं।	2 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48.	अच्छी फिल्म होने पर भी मेरे माता-पिता जाने की अनुमति नहीं देते हैं।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
49.	विद्यालय से आने पर अपने लिये दूध या चाय मुझको स्वयं बनाना पड़ता है।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
50.	मुझे जीवन मित्रों के साथ खेलने के लिये अनुमति नहीं लेनी पड़ती है।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
51.	घर में मुझसे कोई वस्तु टूट जाने पर मेरे माता-पिता क्रोधित नहीं होते हैं।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
52.	मेरी माँ उन चीजों को नहीं बनाती है जो मुझे प्रिय है।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
53.	मेरे माता-पिता मेरी आवश्यकताओं की पूर्ति प्रसन्नतापूर्वक करते हैं।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
54.	जब मैं अपने माता-पिता से अपने विद्यालय के कार्यक्रमों को देखने जाने की प्रार्थना करता हूँ तो वह नहीं आते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
55.	रात को देर से लौटने पर मेरी माँ मुझसे देर से लौटने का कारण नहीं पूछती है।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
56.	मेरे माता-पिता चाहते हैं कि मैं हर कार्य समय पर करूँ।	2 <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57.	मेरे विचार अपने पिता से न मिलने पर भी वह मुझे सन्तुष्ट करने के लिये मेरी इच्छानुसार कार्य कर देते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 0
58.	मेरे पिता मुझसे परेशानी पूछने की कोशिश नहीं करते।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>
59.	जब मैं अपनी योग्यता से अधिक कठिन कार्य करना चाहता हूँ तो मुझे अपने माता-पिता से कोई प्रोत्साहन नहीं मिलता।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
60.	खाली समय में कहानी की किताबें पढ़ने पर मेरे पिताजी मुझे डाँट देते हैं।	<input type="checkbox"/>	1 <input checked="" type="checkbox"/>	<input type="checkbox"/>

क्र. सं.	वक्तव्य	सदैव	कभी-कभी	कभी नहीं
61.	जब मैं अपने पिताजी से पैसे माँगता हूँ वे मुझे डाँट देते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
62.	मेरे पिता लड़कियों की पढ़ाई पर उतना ही ध्यान देते हैं जितना लड़कों की पढ़ाई पर।	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>	<input type="checkbox"/>
63.	किसी समारोह में जाने की अनुमति हम लोग सीधे पिताजी से लेने में घबराते हैं।	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/>
64.	बीमारी की अवस्था में मेरी माँ कड़वी दवाइयाँ भी प्यार से पिला देती हैं।	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>	<input type="checkbox"/>
65.	मेरी परेशानियों को दूर करने में मेरे पिताजी पूरी रुचि दिखाते हैं।	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>	<input type="checkbox"/>
66.	मुझ पर विश्वास न होने के कारण कोई भी सामान मेरे माता-पिता नहीं मँगवाते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
67.	मेरे माता-पिता कभी यह जानने की इच्छा नहीं रखते कि मैंने परीक्षा में कैसे अंक प्राप्त किये हैं।	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input type="checkbox"/>
68.	विद्यालय से लौटने के बाद ग्रह-कार्य पूरा करने पर ही मुझे खेलने की अनुमति मिलती है।	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>	<input type="checkbox"/>
69.	मेरे माता-पिता यह चिन्ता नहीं करते हैं कि मेरे मित्रों की आदतें कैसी हैं।	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input type="checkbox"/>
70.	मेरे माता-पिता मुझे खेलकूद में भाग लेते देखकर प्रसन्नता का अनुभव करते हैं।	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>	<input type="checkbox"/>
71.	जब मैं अपने पिताजी के साथ बाजार जाता हूँ तो वे मेरी पसन्द की चीजें नहीं खरीदते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
72.	मेरे माता-पिता चाहते हैं कि मैं उनकी इच्छानुसार ही कार्य करूँ।	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>	<input type="checkbox"/>
73.	परिवार के बीच मैं अकेलापन महसूस करता हूँ।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
74.	मेरे माता-पिता जीवन की विभिन्न समस्याओं पर हम भाई-बहिनों से भी बात कर लेते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 0
75.	बीमार हो जाने पर मैं अपनी दवाई स्वयं लाता हूँ।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2

क्र. सं.	वक्तव्य	सदैव	कभी-कभी	कभी नहीं
76.	मेरी अनुपस्थिति में मेरे माता-पिता मेरे बस्ते, अलमारी आदि की तलाशी लेते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
77.	मेरी माँ जानती है कि मैं कोई भी बात उनसे नहीं छिपाता हूँ।	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>
78.	मेरे पिताजी जरूरत न होने पर भी पढ़ाई में मदद करते हैं।	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>	<input type="checkbox"/>
79.	अपने माता-पिता के साथ काम करने में मुझे आनन्द आता है।	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>	<input type="checkbox"/>
80.	जब मैं पिताजी से किसी सम्बन्ध में प्रश्न पूछने की कोशिश करता हूँ तो वे माँ के ऊपर टाल देते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
81.	जब मैं गलत कार्य करता हूँ तो मेरी माँ बच्चा समझकर ध्यान नहीं देती है।	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
82.	जब मेरे माता-पिता किसी काम से बाहर जाते हैं तो मुझे घर की चाबी दे देते हैं।	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>
83.	मैं अपने माता-पिता से बिना पूछे कोई भी चीज नहीं खरीद सकता हूँ।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
84.	मेरी माँ घर में सबकी आवश्यकताओं का बराबर ध्यान रखती है।	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>	<input type="checkbox"/>
85.	मेरी गलती न होने पर भी मेरे पिता अन्य भाई-बहिनों की अपेक्षा मुझे ही डाँटते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> 2
86.	किसी भी निर्णय लेने के पहले मुझे अपने पिता की स्वीकृति लेने पड़ती है।	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input type="checkbox"/>
87.	मेरे पिता चाहते हैं कि कोई भी उनके बच्चों की शिकायत उनसे आकर न करे।	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input type="checkbox"/>
88.	मेरे माता-पिता चाहते हैं कि मैं परीक्षा में अच्छे अंक प्राप्त करूँ।	<input checked="" type="checkbox"/> 0	<input type="checkbox"/>	<input type="checkbox"/>
89.	घर में थोड़ा-सा भी शोर करने पर मेरे पिताजी डाँट देते हैं।	<input type="checkbox"/>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/>
90.	गुस्सा आने पर जब मैं खाना नहीं खाता हूँ तो मेरी माँ जब तक मुझे खाना नहीं खिला देती, स्वयं भी नहीं खाती है।	<input checked="" type="checkbox"/> 2	<input type="checkbox"/>	<input type="checkbox"/>

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Family Climate Scale

Name...Nikhil Kumar Class 9th.....

School Name...राधा कल्याण इ-एर कॉलेज
अहमदाबाद

Table 1

Distribution of items over 10 dimensions of FCS

Sr. No.	Dimensions	Response	Item Number														Total Items
1.	Restrictiveness VS Freedom	Positive	4	2	47	2	50	1	56	2	68	2	79	2	11	14	
		Negative	48	1	60	1	89	1							3		
2.	Indulgence VS Avoidance	Positive	19	2	25	1	65	2	78	2					7	15	
		Negative	1	1	16	1	26	2	54	2	81	2			8		
3.	Partiality VS Fairness	Positive	23	0	30	0	38	2	45	0	62	2	84	2	6	11	
		Negative	2	1	28	2	85	2							5		
4.	Attention VS Negligence	Positive	3	1	5	1	8	1							3	9	
		Negative	7	0	49	2	55	2	67	0	69	0	75	2	6		
5.	Acceptance VS Rejection	Positive	6	1	14	0									1	15	
		Negative	10	2	13	2	40	2	52	2	59	2	61	2	71		14
6.	Warmth VS Cold Relations	Positive	9	1	34	2	53	1	64	2					6	13	
		Negative	32	2	42	0	58	1	73	2	80	2			7		
7.	Trust VS Distrust	Positive	11	2	27	0	77	1	82	2					4	10	
		Negative	15	0	17	2	21	0	66	2	76	2			6		
8.	Dominance VS Submissiveness	Positive	51	1	57	0	72	2	90	2					5	10	
		Negative	20	0	29	1	36	2	83	2	86	0			5		
9.	Expectation VS Hopelessness	Positive	22	1	33	2	35	1	70	2					6	11	
		Negative	41	2	43	2	46	1	88	0	87	0			5		
10	Open Communication VS Controlled Communication	Positive	12	2	31	2	39	0	44	1	74	0			5	8	
		Negative	18	0	24	2	37	0	63	1					3		
															Total	116	

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8
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शैक्षिक अभिप्रेरणा मापनी

ACADEMIC MOTIVATION SCALE (AMS)

Dr Gunjan Dubey

Associate Professor

Department of Education

Aligarh Muslim University

Akashy kumar

Junior Research Fellow

Department of Education

Aligarh Muslim University

इस पुस्तिका में 52 कथन हैं जिनके द्वारा आपकी शैक्षिक अभिप्रेरणा के विषय में मत ज्ञात करने का प्रयत्न किया गया है। आपकी कक्षा में पूछे जाने वाले प्रश्नों से ये प्रश्न भिन्न हैं क्योंकि किसी कथन का कोई भी उत्तर सही या गलत नहीं है। किसी विशेष परिस्थिति में आप क्या सोचते हैं अथवा करते हैं, आदि बातों से ही सम्बन्धित कथन है। चूंकि प्रत्येक व्यक्ति अपने दृष्टिकोण के अनुसार भिन्न-भिन्न प्रकार से सोचता है, अतः आपका उत्तर इस बात पर निर्भर करेगा, कि आप कैसा सोचते हैं, अथवा अनुभव करते हैं। किसी भी परिस्थिति में आपके मत बताने वाले तीन सम्भावित उत्तर हो सकते हैं :-

- (1) सदैव (2) कभी-कभी (3) कभी नहीं

आप प्रत्येक कथन को ध्यानपूर्वक पढ़ें और पुस्तिका के साथ संलग्न उत्तर पत्र पर उसी प्रश्न क्रमांक के सामने दिये गये तीन विकल्पों में से किसी एक विकल्प पर अपने अनुरूप जो आपके लिये सर्वाधिक उपयुक्त हो पर सही का (✓) चिन्ह लगायें।

सभी कथनों पर प्रतिक्रिया व्यक्त करना अनिवार्य है।

उदाहरण- पढ़ते समय इधर-उधर की बातें जब कोई करता है तो मुझे अच्छा नहीं लगता।

- (1) सदैव (✓) (2) कभी-कभी () (3) कभी नहीं ()

1. किसी भी परीक्षा में अच्छे अंक प्राप्त करना मेरे लिए महत्वपूर्ण है।
2. पढ़ते समय कम समझ में आने वाली चीजों को मैं रेखांकित कर लेता हूँ।
3. मैं निर्धारित लक्ष्य को प्राप्त करने के लिए सदैव कठिन परिश्रम करता हूँ।
4. पुस्तकालय में अपने विषय की पुस्तक देखते ही मुझे उसे पढ़ने की इच्छा होती है।
5. किसी विषय को पढ़ते समय कोई कठिनाई पढ़ने पर मैं उसे जल्दी ही दूर करने की कोशिश करता हूँ।
6. मैं प्रायः समय का सदुपयोग पढ़ने-लिखने में करता हूँ।
7. मेरा मन पाठ्य विषयों को पढ़ने के अतिरिक्त पाठ्य सहागामी क्रियाओं में अधिक लगता है।
8. कक्षा में अन्य छात्रों के मुझसे अधिक अंक आने पर मुझे कोई फर्क नहीं पड़ता है।
9. परीक्षा में अच्छे अंक प्राप्त करने के लिए मैं वर्ष भर ध्यानपूर्वक अध्ययन करता हूँ।
10. मैं सभी प्रतियोगी परीक्षाओं में उच्चतम स्थान प्राप्त करना चाहता हूँ।
11. मुझे बहुत खुशी होती है जब मेरी कक्षा कुछ दिन के लिए किसी कारणवश छूट जाती है।
12. अवकाश के दिनों में मैं सोचता हूँ कि मित्रों के साथ पढ़ाई की कमजोरी पर ध्यान दूँ।
13. मुझे लगता है कि यदि समय-समय पर विद्यालय में हड़ताल होती रहे तो मैं अध्ययन से बचता रहूँगा।
14. मुझे अक्सर विद्यालय के सांस्कृतिक कार्यक्रमों में भाग लेने के लिए नामित किया जाता है।
15. मैं परीक्षा भवन में प्रश्न हल करने के बाद अपने द्वारा लिखे गये उत्तरों को एक बार दोहराता हूँ।
16. मुझे विषय को समझने के बजाय रटना अधिक पसंद है।
17. मित्रों से मिलने-जुलने में ही प्रायः मेरा समय बीत जाता है।
18. मुझे अपने सहपाठियों को पढ़ता देखकर पढ़ने की इच्छा होती है।
19. मेरा विश्वास है कि सफलता परिश्रम पर निर्भर है।
20. मैं नित्य प्रतिदिन स्कूल जाता हूँ ताकि मेरी पढ़ाई का नुकसान न हो।
21. मुझे स्कूली जीवन रूचिकर लगता है।
22. परीक्षा में कम अंक आने पर जब अध्यापक मुझसे कुछ नहीं कहते हैं, तो मुझे अच्छा लगता है।
23. पाठ्योत्तर क्रियाओं में भाग लेने पर भी मैं अपनी पढ़ाई नियमित रूप से कर लेता हूँ।
24. मुझे छात्र नेता बनने की जगह परीक्षा में सर्वप्रथम आना अधिक पसंद है।
25. पढ़ने-लिखने की अपेक्षा घूमने-फिरने या मनोरंजन में ही मेरा अधिक समय बीतता है।
26. मुझे लगता है कठिन परिश्रम करने की बजाय आराम से रहना चाहिए।
27. शिक्षकों द्वारा दिये गये गृह कार्य को मैं सही तरीके से करने के लिए कठिन परिश्रम करता हूँ।

28. मैं अध्ययन की अपेक्षा क्लब खेल या गतिविधियों को प्राथमिकता देता हूँ।
29. परीक्षा में प्राप्त कम अंक मुझे अधिक परिश्रम करने के लिए प्रेरित करते हैं।
30. मैं लिखित कार्य कम से कम करता हूँ क्योंकि इससे कोई लाभ नहीं होता, बल्कि समय खराब होता है।
31. मैं चाहता हूँ कि प्रत्येक विषय में उच्च स्थान प्राप्त करूँ।
32. जब मैं घर से ऊब जाता हूँ तो मेरी यह इच्छा होती है कि अपने विद्यालय के पुस्तकालय में पहुँच कर पढ़ाई करूँ।
33. मैं इतना योग्य बनना चाहता हूँ कि पढ़ाई में सबसे आगे रहूँ।
34. शिक्षक द्वारा दिया गया ग्रह कार्य प्रायः मैं पूरा नहीं कर पाता।
35. मैं पढ़ाई में उच्च स्थान प्राप्त करने की अपेक्षा कुशल खिलाड़ी बनना अधिक पसंद करूँगा।
36. बिना मेहनत में परीक्षा में अच्छे अंक प्राप्त करना चाहता हूँ।
37. मैं अनुभव करता हूँ कि सफल छात्र बनने के लिए कठिन परिश्रम करना पड़ता है।
38. मुझे छात्र नेता बनना अधिक पसन्द है।
39. काश मैं अमीर होता ताकि मुझे पढ़ने की जरूरत नहीं पड़ती।
40. आर्थिक कठिनाईयों के आने पर मैं निराश हो जाता हूँ और पढ़ाई लिखाई छोड़ने की बात करता हूँ।
41. मैं प्रातः शीघ्र उठता हूँ क्योंकि सुबह का समय पढ़ाई के लिए अच्छा होता है।
42. मैं निराशा का अनुभव करता हूँ जब कोई मुझसे अधिक अंक प्राप्त करे।
43. उपन्यास कहानी में अधिक मन लगने के कारण मैं कोर्स की किताबों को अच्छी तरह नहीं पढ़ पाता।
44. मुझे लगता है कि मैं स्कूली शिक्षा से कुछ खास प्राप्त नहीं कर रहा हूँ।
45. माता-पिता के न कहने पर भी मैं पढ़ने के लिए प्रयत्नशील रहता हूँ।
46. मैं ऐसे अध्यापक को पसंद करता हूँ जो सभी प्रश्न हल करवा देते हैं।
47. जब शिक्षक पढ़ा रहे होते हैं, तब मुझे कहानी कामिक्स और कार्टून आदि पढ़ना अच्छा लगता है।
48. अगले हफ्ते होने वाली परीक्षा की तैयारी करने की बजाय मैं पार्टी में जाने को प्राथमिकता देता हूँ।
49. पढ़ने-लिखने के समय मुझे नींद आने लगती है।
50. जब मैं अध्ययन करता हूँ तो मुझे जल्दी ही थकान हो जाती है व नींद आने लगती है।
51. मैं पहले कठिन पाठों को सीखने की कोशिश करता हूँ।
52. मुझे कक्षा में शोर मचाना और अध्यापक को परेशान करना अच्छा लगता है।

Adjustment Inventory for School Students (AISS)

Dr. A.K.P. Sinha

Ex- Professor of Psychology
Ravi Shankar University
RAIPUR

Dr. R.P. Singh

Professor and Head
Department of Education
Patna University, PATNA

निर्देश

आगे पन्नों पर तुम्हारे स्कूल से सम्बन्धित कुछ प्रश्न दिये हैं। जिनके साथ संलग्न उत्तर पत्र में प्रत्येक प्रश्न के सामने दो खाने बने हैं। प्रत्येक प्रश्न को ध्यान से पढ़ों और यह निश्चय कर लो कि तुम किसी भी प्रश्न का उत्तर 'हाँ' के द्वारा देना चाहते हो या 'नहीं' के द्वारा। यदि 'हाँ' के द्वारा देना चाहते हो तो 'हाँ' के नीचे वाले खाने में तथा यदि 'नहीं' के नीचे वाले खाने में टिक (✓) का निशान लगाइये। याद रहे कि तुम्हारा उत्तर किसी दूसरे व्यक्ति को नहीं बताया जायेगा। इसलिए बिना किसी संकोच भाव के सभी प्रश्नों के उत्तर दो। समय की पाबन्दी नहीं है। फिर भी यथा शीघ्र समाप्त करने का प्रयत्न करो।

1. (क) क्या तुमको स्कूल में हमेशा किसी बात का डर लगा रहता है।
2. (ख) क्या तुम अपने सहपाठियों से मिलने से भागते हो?
3. (ग) पढ़ी हुई चीज को क्या तुम जल्दी भूल जाते हो?
4. (क) किसी सहपाठी से कुछ अनुचित बात अनजाने बोली जाती है तो क्या तुम तुरन्त क्रोध (गुस्सा) हो जाते हो?
5. (ख) क्या तुम दयालु स्वभाव के हो?
6. (ग) क्या तुमको परीक्षा से डर लगता है?
7. (क) किसी शिक्षक द्वारा किसी गलती के लिए डाटे जाने पर तुम चिन्तित रहते हो?
8. (ख) क्या तुम क्लास में किसी चीज को नहीं समझने पर शिक्षक से उठकर प्रश्न पूछने में हिचकिचाते हो?
9. (ग) कला क्लास की पढ़ाई को समझने में तुम्हें कठिनाई होती है?
10. (क) क्या तुम अपने उन सहपाठियों से जिन्हें शिक्षक अधिक मानते हैं, ईर्ष्या करते हो?
11. (ख) क्या तुम शिक्षकों के बीच बेखटके जाते हो?
12. (ग) क्या क्लास की पढ़ाई को तुम ठीक से नोट कर लेते हो?
13. (क) क्या तुम, यह देखकर कि तुम्हारे बहुत से सहपाठी तुमसे अच्छे हैं, दोष करने लगते हो?
14. (ख) क्या स्कूल में तुम्हें कभी-कभी ऐसा लगता है कि तुम्हारा कोई मित्र नहीं है?
15. (ग) क्या क्लास में पढ़ाई के समय तुम प्रायः ऊँघते हो?
16. (क) कुछ विद्यार्थियों को आपस में बात करते देखकर तुम्हें लगता है कि शायद तुम्हारी निंदा कर रहे हैं?
17. (ख) क्या तुम आसानी से दोस्ती कर लेते हो ?
18. (ग) क्या तुम इस स्कूल के शिक्षकों की पढ़ाई से सन्तुष्ट रहते हो?
19. (क) क्या तुम स्कूल के किसी कार्यक्रम में आगे नहीं आने पर दूसरों पर अपना क्रोध प्रकट करने लगते हो ?
20. (ख) जब कुछ लड़के इकट्ठे होकर बात करते हैं तो क्या तुम भी बेखटके शामिल हो जाते हो ?
21. (ग) क्या तुम ऐसा समझते हो कि स्कूल के शिक्षक तुम्हारी कठिनाई पर ध्यान नहीं देते हैं ?
22. (क) क्या तुम स्कूल में प्रायः उदास और खिन्न रहते हो ?
23. (ख) क्या तुम सहपाठियों से मिलकर एक साथ काम करना चाहते हो ?
24. (ग) क्या तुम अपनी पढ़ाई की प्रगति से सन्तुष्ट हो ?
25. (क) क्या तुमको ऐसा लगता है कि शिक्षक तुम्हारी अवहेलना करते हैं ?
26. (ख) क्या तुम क्लास में शिक्षक का ध्यान अपनी ओर आकर्षित करने की चेष्टा करते हो ?
27. (ग) क्या पढ़ना तुम्हारे लिए भार मालूम पड़ता है ?
28. (क) क्या जब कोई विद्यार्थी शिक्षक से तुम्हारी साधारण शिकायत की बात करता है तो तुम आवेश में आकर उसको हानि पहुँचाने का प्रयत्न करते रहते हो ?
29. (ख) क्या तुम प्रायः एकान्त में रहना पसन्द करते हो ?
30. (ग) क्या तुम्हारे शिक्षक पठन सम्बन्धी तुम्हारी कठिनाई को दूर करने के लिए हमेशा तत्पर रहते हैं ?

31. (क) क्या तुम अपने स्कूल से प्रायः असन्तुष्ट रहते हो ?
32. (ख) क्या तुम अपने स्कूल के विद्यार्थियों से मेलजोल बढ़ाते रहते हो ?
33. (ग) क्या तुम्हारे स्कूल के शिक्षक तुम्हारी प्रशंसा करते हैं ?
34. (क) क्या तुम गलती करने पर भी सीनाजोरी करने पर तुल जाते हो ?
35. (ख) क्या क्लास में आगे की सीटों पर बैठना पसन्द नहीं करते हो ?
36. (ग) क्या परीक्षा में प्रायः तुम कम अंक पाते हो ?
37. (क) क्या जब शिक्षक तुमसे कोई प्रश्न पूछने हैं तो तुम्हारे मन में उनके प्रति द्वेष का भाव उत्पन्न हो जाता है ?
38. (ख) क्या तुम्हारा अपने सहपाठियों से मेलजोल रहता है ?
39. (ग) क्या तुम यह चाहते हो कि स्कूल में ओर अधिक छुट्टियाँ रहें ?
40. (क) क्या तुम अपने सहपाठी द्वारा किए गए कुछ हँसी-मजाक की बात पर भी तुरन्त तमतमा (गुरसा) जाते हो ?
41. (ख) क्या स्कूल की गतिविधियों में तुम खुलकर भाग लेते हो ?
42. (ग) क्या तुम छुट्टी के पहले ही कभी-कभी स्कूल से चले जाते हो ?
43. (क) क्या तुम अपने सहपाठी से प्रायः झगड़ लेते हो ?
44. (ख) क्या तुम स्कूल के खेलकूद में भाग लेते हो ?
45. (ग) क्या तुम्हारे कुछ शिक्षक तुम्हें प्रायः पढ़ाई के लिए डाँटते हैं ?
46. (क) क्या तुमको प्रायः स्कूल में दूसरों के प्रति शक बना रहता है ?
47. (ख) क्या तुम अपने ऊँचे क्लास के छात्रों से बातचीत करने में लजाते (शर्माते) हो ?
48. (ग) क्या तुम अपने शिक्षक को आदर की दृष्टि से देखते हो ?
49. (क) जिसे साथी से तुम्हारी पटती नहीं है उसके द्वारा कही गयी अच्छी बात पर भी क्या तुम उददंडता दिखाते हो ?
50. (ख) क्या इस स्कूल में तुम्हारे कुछ घनिष्ठ मित्र हैं ?
51. (ग) क्या क्लास में तुम्हारा ध्यान पढ़ाई की ओर लगा रहता है ?
52. (क) क्या परीक्षा में कम अंक आने पर तुम में शिक्षक के प्रति द्वेष का भाव उत्पन्न हो जाता है ?
53. (ख) क्या तुम अपने सहपाठियों की हर प्रकार की सहायता करने को तत्पर रहते हो ?
54. (ग) क्या तुम स्कूल के पुस्तकालय से किताब तथा पत्र-पत्रिकाएँ लेकर पढ़ते हो ?
55. (क) क्या तुम अपने से ऊपर क्लास के छात्रों से मिलने में प्रायः डरते हो ?
56. (ख) क्या तुम स्कूल के अन्य विद्यार्थियों को चिढ़ाकर मजा लेते हो ?
57. (ग) क्या तुम वाद-विवाद में भाग लेते हो ?
58. (क) क्या अपने से नीचे क्लास के छात्रों से मिलने में तम्हें ग्लानि होती है ?
59. (ख) क्या तुम अपनी नोट-बुक या पुस्तक अपने सहपाठियों के मांगने पर सहर्ष दे देते हो ?
60. (ग) क्या तुम्हें शिक्षा सम्बन्धी बातों में दिलचस्पी रहती है ?

Adjustment Inventory for School Students (AISS)

उत्तर पत्र (Answer Sheet)

नाम (Name).....अखिल कुमारकक्षा (Class).....9th Bविद्यालय (School).....श्री. व. लक्ष्मी इंटर कॉलेज

Emotional (क)		Social (ख)		Educational (ग)	
Yes	No	Yes	No	Yes	No
1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3	<input checked="" type="checkbox"/>
4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	<input checked="" type="checkbox"/>
7	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9	<input type="checkbox"/>
10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	11	<input checked="" type="checkbox"/>
13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	12	<input checked="" type="checkbox"/>
16	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	14	<input checked="" type="checkbox"/>
19	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	15	<input checked="" type="checkbox"/>
22	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17	<input checked="" type="checkbox"/>
25	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	18	<input checked="" type="checkbox"/>
28	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	20	<input checked="" type="checkbox"/>
31	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	21	<input checked="" type="checkbox"/>
34	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	23	<input checked="" type="checkbox"/>
37	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	24	<input checked="" type="checkbox"/>
40	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	26	<input type="checkbox"/>
43	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	27	<input checked="" type="checkbox"/>
46	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	29	<input checked="" type="checkbox"/>
49	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	30	<input checked="" type="checkbox"/>
52	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	32	<input checked="" type="checkbox"/>
55	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	35	<input type="checkbox"/>
58	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	38	<input checked="" type="checkbox"/>
				41	<input checked="" type="checkbox"/>
				44	<input checked="" type="checkbox"/>
				47	<input checked="" type="checkbox"/>
				50	<input checked="" type="checkbox"/>
				53	<input checked="" type="checkbox"/>
				56	<input checked="" type="checkbox"/>
				59	<input checked="" type="checkbox"/>
				60	<input checked="" type="checkbox"/>

06 + 10 + 07

= 23

LIST OF SCHOOLS

1. Balmukund Bajari Inter College Agra
2. Radha Balabh Inter College, Sahganj, Agra
3. GIC Pachkuiyan, Agra
4. Nagar Nigam Inter College, Tajgang, Agra
5. Rani Awanti Bi Inter College, Fatehabad, Agra
6. Maha Kavi Surdaas Inter College, Runkta, Agra
7. Queen Victoriya Girls Inter college Hari ParwatAgra
8. Ram Krishan Inter College, Khandari, Agra
9. Narayni Girls Inter College, Sikandra, Agra
10. Kendriya Vidhaalya School-1, Agra Cant, Agra
11. Kendriya Vidhayalya School-2, Agra Cant, Agra
12. Agra Public School, Vijay Nagar Agra

Publications

- 1. Gunjan Dubey and Akashy Kumar (2012).** Impact of Family Climate on Academic Achievement of Adolescents, *UPSSR ISSN: 09758852*, 4(1) 15-19, summer 2012.
- 2. Gunjan Dubey and Akashy Kumar (2015).** Impact of Residential Background over Adjustment of Adolescents, *Shodh Drishti (An International Refereed Research Journal)*, ISSN: 0976-6650, 6(7), 99-102,Oct.-Dec., 2015

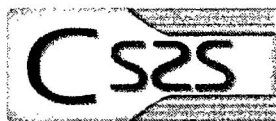
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GUNJAN DUBEY, AKASHY KUMAR

Introduction

The family of individual is a continuous and universal social setting influencing the learning process of the child directly or indirectly. Family not only provides for the primary needs of the individual but is also an institution that look after the child's socialization and initial education. It is here that his basic ideas and ideal are initiated, as well as attitudes towards himself and his associates that determine his later adjustment to school and other out of home situation are developed on other words it can be said that out of the various important aspects of learning the influence of family upon the child's ability to learn is very crucial. It is an established fact that family and family climate plays a significant and very crucial role in the development as well as educational and vocational attainment.

Family climate

The family is the oldest and the most important in all the institution that man has devised to regulate and integrate his behavior as he strives to satisfy his basic needs. The family is one of the primary groups of society concerned with face to face relationship. The term family is usually applied in both narrow and broad sense. In narrow sense it refers to the nuclear or immediate family, meaning parents and their children.

In the broad sense it refers to the extended family, meaning not only the parent and children but also such other relatives as grandparents, uncles, aunts, cousins, nieces and nephews. The infant begins his life under the fastering affection and care of his parents and other near and dear ones who are associated with the family. He receive the first lesson of his life in his family and tries to imbibe the habits, ideas and patterns of behavior of his family members. Family continuously influences him throughout his life. Family not only protects the child during its period of biological immunity, but it also serves as an institution. For the child socialization and initial education, family being the first and major agency of socialization, has

great influence and bearing on the development of the individuals. It has been shown in various studies that most of the children who are successful/great achievers and well adjusted come from families where sustaining wholesome relationship exist. So it is the home which sets the pattern for the child attitude towards people and society, aids intellectual growth in the child and supports his aspiration and achievement.

New Webster's dictionary (2004) Defines 'family' as a group of person, consisting of their children, 'climate environment' as the aggregate of all external and internal condition affecting the existence, growth and welfare of organism.

C.V.Good defines family climate as "The feeling tone present in any human relationship or social institutions"

In general the family climate refers to physical, social and emotional surroundings that the child focuses in a family. It refers to the "some total of the condition which surrounds the man" from the beginning of his life

Factors affecting family climate

There are various factors that effects the family climate and some of them are:

- **Family size** – Family size also affects the family climate. The family having few children and they are spaced three or more years apart, they have more protective upbringing than the family with two to three children close in age.
- **Family type** – There are two type of family existing in the society, nuclear and joint family. The children belong to nuclear families have lack of adult support which is available to joint family. This also supposed to affect to the personality development of children.
- **Sibling structure** – Number of sibling in the family has positive effect on family climate. Some research shows that sibling relationship becomes egalitarian during adolescent years and they perceive their sibling's as important and inherent associates. The mutual shearing, respect and affection which prevails in the sibling relationship is an important component of family climate (Brody and Stone man 1990; Brody, Storeman Mc Coy and forehead 1992).
- **Ordinal position** – Ordinal position of the child also affect the family climate because first born children most often have desired

to more attention and affection from their parents and were jealous of their sibling that affect the climate of family.

- **Parents education** – Parents education has positive effect on family climate as high parental knowledge is linked to adolescent adjustment (Kers and Stattin 2000).
- **Parent occupation** – Parents occupation also effect the family climate. It has positive effect over family climate while mother occupation have negative effect, because during adolescent period children strive for independence and if mothers are housewife's then their behavior can be controlled by the mother's (Ratna Praba; 2005).
- **Family income** – Family income can be said as a strong factor that effect's the family climate. The family climate of the higher economic starts is better than that of lower economic status. (Wimbush 1992, Mc Loyd, 1990).

Academic achievement

Today's modern society expects everyone to be a high achiever. The key criteria are to judge one's true potentialities and capabilities is perhaps scholastic/academic achievement. Academic achievement has become an index of future success. Academic achievement has been one of the important goal of the education process It is also a major goal ,which every individual is expected to perform in all culture. Therefore it is putting a great pressure on the minds of individual and their parents. Academic achievement is defined as "The measure of what and how much an individual has learnt. It may be the quality or quantity of learning attained by an individual in a subject of study after a period of institution"

The dictionary of Education. Good (1973) defined "academic achievement as accomplishment or proficiency of performance in a given skill or body of knowledge" Thus academic achievement is an end product of learning whose level and performance are affected by various condition existing at the time of learning and its use.

Relationship between family climate and academic achievement

Thomas Kellaghan and his colleagues (1993) claim. That the family environment is the most powerful influence in determining students' school achievement and the number of years of schooling they will receive. Family climate and academic achievement relationship seems to be just

as important for adolescent as they are for younger children. Although family climate and academic achievement relationship tend to wane during or even before children reach adolescence, such relationships continue to play an important role in youth outcomes. Aspect of family climate and academic achievement relationship include communicating with teachers and school personnel, attending school events, volunteering at school, and participating in parent – teacher organizations and leadership group. The extent to which parents attend and volunteering at school functions for example, has a constant positive impact on adolescent academic achievement (Jeynes 2005).

There are several reason why family climate and academic achievement relationship matter at middle and high school level. Involvement of parents and their presence at school helps the parents to monitor their youth's academic and social progress. They also acquire information's which they need to make decisions about their children's academic future. There are various research that have been conducted over 'family climate and academic achievement' some of them are as follow;

- Fuligni (1997) Examined the impact of family background, and adolescents own attitude and behavior on the academic achievement of students from immigrant families with Latino, east Asian, Filipino, and European background. Result indicated that first and second generation student received higher grades in mathematics and English then their peers from native families. Only a small portion of their success could be attributed to their socio-economic background a more significant co-relates of their achievement was a strong emphasis on education that was shared by students their parents and their peers.
- Portes etal (1998) examined the influence of parent's assistance on middle school student's problem solving ability and academic achievement. The researchers found that a cooperative problem solving style of interaction between parents and child was significantly correlated with children's intellectual performance in school.
- Fatima (2003) studied the relationship between the family climate and educational achievement tried to find out whether favourable home climate result in high academic achievement and whether the unfavorable climate leads to poor academic achievement. She found

out that there is no relationship between the type of climate and academic achievement of students.

- Khanam (2006) studied the relationship between family climate and academic achievement of the male and female student at the secondary school level she tried to investigate whether the unfavorable family climate result in poor academic achievement. The investigator did not obtain any significant relationship between the family climate and the academic achievement. The achievement of the male and female students was independent of the influence of the type of family climate (favorable or unfavorable).
- Manika Sharma (2011) studied the family variable as the predictor of students achievement in science. The result indicates that parental education, parental occupation and family size contribute significantly to the achievement in the science of the students.
- Anita N Chawla (2012) studied the relationship between family environment and academic achievement. Finding of study revealed that, family environment score was positively correlated with the academic achievement of the students.

Conclusion

From all above studies, it is clear that in most of the studies (Faliguni 1997, Porte et al 1998, Manika Sharma 2011, Anita N Chawla 2012) family climate is positively correlated with academic achievement, while few studies Fatima (2003), Khanam (2006) etc. shows that family climate is insignificantly correlated with academic achievement of the children/ adolescent. Family is considered as the social capsule in which feelings develop, personality is shaped, value are inculcated therefore it become the most potent force in developing the better outcome. It has been observed that healthy family relationship leads to good scholastic achievement. Hence we can say that family climate which parent establish with their children has a powerful influence on the all around development of the individual.

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ABOUT THE AUTHORS

Dr. Gunjan Dubey, Associate professor Department of Education A. M. U. Aligarh.

Akashy Kumar, Junior Research Fellow Department of Education A.M.U. Aligarh.

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Impact of Residential Background over Adjustment of Adolescents

Prof. Gunjan Dubey*

Akashy Kumar**

Life is nothing but the series of adjustment and readjustment. The present social life is very complicated today. A modern human being has to struggle a lot to live in modern society, for this every human being tries to adjust with their own needs. All human behavior is motivated by needs, and we behave to adjust to these needs or to satisfy them. Rarely these needs are easily satisfied or thoroughly acceptable to us. When these needs are not satisfied conflicts are inevitable.

As long as we live, we shall encounter problems that will demand some kind of adjustment and it is a continuous process. We can't avoid problems but we can only learn to handle them, and to face them bravely. We shall be able to handle them only as we learn more about adjustment.

Before we can understand how to adjust with ourselves or our environment we need to understand why it is necessary to adjust? We shall find the answer or these three questions, We shall learn to understand ourselves better, to understand other better, and to understand better the world, and the environment around us. In other words we need to study the adjustment process.

Adjustment refers to a process wherein one builds variations in the behaviour to achieve harmony with oneself, others or the environment with an aim to maintain the state of equilibrium between the individual and the environment. It is imperative that adjustment will encourage certain changes so that the optimum relationship between the self and surrounding can be achieved and maintained. The process of adjustment can be described in terms of two factors:

1. The individual and his or her characteristics, including needs and desires as well as the competencies and skills that enable them to fill those needs.
2. The situation in which individual find themselves and the demand placed upon them by that situation.

Need and Significance of the problem

There is a rapid change in our society regarding education systems, value systems and technological advancement etc. that we have to learn and adjust accordingly. The effect of these rapid changes seems to be the greatest on those people who can comprehend most and yet are most immature, that is adolescents. It is fact that social, emotional and educational adjustment is directly or indirectly associated with the adolescents. It is seen that adolescents in general have problem of adjustment at home, school and society. Is this problem is associated with their residential background too i.e. their rural and urban location? The present study was conducted to find out answer to this particular question so that they can be helped in their adjustment process.

Definition of Terms:

Emotional adjustment: The behavior is colored by emotions. Emotional adjustment is attained by the individual when he is expected to behave according to societal expectations. Emotions have both direct and indirect effects on personality. The direct effects come from physical and mental disturbance, while the indirect effects come from the reactions of member of the social group towards the person who is experiencing the emotion.

* Professor, Department of Education, A.M.U., Aligarh

** Senior Research Fellow, Dept. of Education, A.M.U., Aligarh

If the emotions are unpleasant such as fear and jealousy or if they are strong and uncontrolled, they are damaging to the personality pattern. If they are pleasant and if they are controlled in such a way as person's physical and mental well being, they have a favourable effect on the personality pattern. Directly, the emotions affect the individual's physical and mental functioning and his attitudes, interests and values.

Social Adjustment: As the individual's family responsibilities decrease and as their economic status improves, they are better able to engage in social activities than they were during adulthood. When family responsibilities and adjustments to work made an active social life difficult, many people, especially woman find that an active social life alleviates the loneliness they experience when their children are grown and have home of their own.

Middle aged people enjoy entertaining friends at dinners or parties, although much of the social life of middle age centers on gathering of members of the same sex. They tend to spend most of his time with his family, intimate friends and his children's newly established families. Socio-economic status is affected to social adjustment.

There are also sex differences in social activities. Men have more friends and acquaintances, than women but women have a more affectionate and a closer relationship with their friends than man have man belong to more community organization but women devote more time and effort to the activities of the family. Women have more social contacts with family members and relations than with outsiders. According to APA Dictionary of Psychology:

“Social adjustment is accommodation to the demands, restrictions, and mores of society, including the ability to live and work with others harmoniously and to engage in satisfying interactions and relationships.”

Educational Adjustment: Education Adjustments are the changes or supports that can be made to enable all students to learn and demonstrate: What they know, What they can do with what they know. According to APA Dictionary of Psychology:

“Emotional adjustment the condition or process of personal acceptance of and adaptation to one's circumstances, which may require modification of attitudes and the expression of emotions that are appropriate to a given situation.”

Objectives

- To study the Emotional Adjustment of Adolescents with respect to their rural/ urban location
- To study the Social Adjustment of Adolescents with respect to their rural/ urban location
- To study the Educational Adjustment of adolescent with respect to their location rural urban location.

Hypotheses

Ho-1 There is no significant difference in the Emotional Adjustment of Adolescent with respect to their rural /urban location.

Ho-2 There is no significant difference in the Social Adjustment of Adolescent with respect to their rural/ urban location.

Ho-3 There is no significant difference in the Educational Adjustment of Adolescent with respect to their rural/urban location.

Methodology

Tools: Adjustment is an individual's ability to cope with all kinds of situations in his environment. In the present study, adjustment was assessed by Adjustment inventory for School Students (AISS) as developed by A K P Sinha and R P Singh (reprinted 2012) which measured the variable in terms of three dimensions. It yielded a score for an individual on each dimension as well as on the entire inventory. Thus, adjustment was defined operationally in

terms of a profile of scores on its different dimensions. This profile was used in further analysis of data.

Sample and Data Collection

For the present research paper sample was selected by simple random technique from urban and rural higher secondary schools of Agra District. Total sample was categorized as under two category urban (250) and rural (150).

Table: A 't' test comparison of Rural and Urban Adolescents

ADJUSTMENT	Location	N	Mean	SD	t-Value
Emotional Adjustment	Urban	275	3.69	3.26	NS
	Rural	125	3.98	3.500	
Social Adjustment	Urban	275	6.52	2.405	2.153*
	Rural	125	7.07	2.387	
Educational Adjustment	Urban	275	3.49	2.595	1.988*
	Rural	125	4.05	2.624	

*Significant at 0.01 level

Analysis and Interpretation

From the above table it is clear that 't' value for location (0.78) is insignificant, indicating that there is insignificant effect of location on emotional adjustment of adolescents. Therefore the null hypothesis Ho -1 was accepted.

The table further revealed that 't' value for social adjustment (2.153) is significant at 0.05 level, indicating that there is a significant effect of location on social adjustment of adolescents. Urban adolescents mean (6.52) is better than the rural (7.07), because according to the manual scoring is reciprocal. Therefore the null hypothesis Ho-2 was rejected.

The table further revealed that 't' value for educational adjustment (1.98) is significant at 0.05 level, indicating that there is a significant effect of location on educational adjustment of adolescents. . Urban adolescents mean (3.49) is better than the rural (4.05), because according to the manual scoring is reciprocal. Therefore the null hypothesis Ho-3 was rejected.

Findings

1. This finding is based upon analysis pertaining to objective one of this study; where emotional adjustment of the adolescents with respect to their residential background was studied. It was inferred that the emotional adjustment of the adolescents doesn't significantly differ according to their residential background, because emotion is a worldwide phenomena it does not effect by residential background.
2. This finding is based upon analysis pertaining to objective two of this study; where social adjustment of the adolescents with respect to their residential background was studied. It was found that urban adolescent have better social adjustment as compare to the rural adolescents, because urban adolescent have better reach to the resources than compare to the rural adolescents. Urban adolescent have more opportunity to escalate their social adjustment as they belong from a diverse and well articulated social milieu
3. This finding is based upon analysis pertaining to objective three of this study, where educational adjustment of the adolescents with respect to their residential background was studied. It was observed that urban adolescent have better educational adjustment as compare to their counterpart rural adolescents. The main reason behind this achievement is easy reach to the resources like media, social group, work shop, orientation programme, etc.

Discussion and Educational Implications

It is easy to study the emotional, social and educational adjustment of child; but it is difficult in case adolescents. During the period of childhood the individual is under the control

or supervision of another person because he is weak and helpless in carrying out his activities. The real difficulty is experienced in studying emotional, educational and social adjustment of adolescents because they do not want others to observe their behaviors which they claim as their private affair. In such kind of situation all the stakeholder should engage themselves in organizing such programme that can uplift the adolescents to prove their metal in adjustment.

Everybody wants to emotionally, socially and educationally accept by other person. If a person obeys social norms, belief and set of values we may call him well adjusted but if he satisfied his needs by antisocial means than he is called maladjusted (Chauhan, 2011). Parents-child relationship play a crucial role in the adjustment of adolescents, if a adolescents is adjusted in his family than he will also adjusted in society. Residential background effect the social and educational adjustment of adolescents, because residential background is related to environment and environment is directly proportional to social and educational adjustment, So all the agencies authority of system i.e. family, school and society etc should understand the importance of residential background to uplift the social and educational adjustment of adolescents. Teacher should not differentiate their students on the basis of their rural/urban background. The adolescents who belong to rural area they must be given extra attention and care by the teachers in the school so they can be better adjusted in classroom and their education.

Conclusion

On the basis of above discussions it can be concluded that the residential background significantly affect the adjustment of adolescents, According to their residential background, social and educational adjustment varies. Emotional adjustment does not effect by their residential background because emotion has nothing to do with the location, but there are some factors that affect the emotional adjustment of the adolescent especially in this period. Educational and Social adjustment significantly effect by residential background according to present study urban adolescent are better to their counterpart, So there is need of some urgent step to improve educational and social adjustment of adolescent in present rapidly changing scenario.

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