AN ANALYTICAL STUDY OF THE SOCIO-FAMILIAL STATUS OF LOW ACHIEVERS AMONG THE SECONDARY SCHOOL STUDENTS OF KERALA STATE

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by

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DECLARATION

I, Mr. Showkath Hussiain K. T., do hereby declare that this dissertation, AN ANALYTICAL STUDY OF THE SOCIO-FAMILIAL STATUS OF LOW ACHIEVERS AMONG THE SECONDARY SCHOOL STUDENTS OF KERALA STATE has not been submitted by me for the award of any Degree, Diploma, Title or Recognition before.

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30.12.2002

Showkath Hussiain K. T.

CERTIFICATE

This is to certify that the Ph. D. thesis entitled "**An Analytical Study of the Socio-Familial Status of Low Achievers Among the Secondary School Students of Kerala State**" submitted by Mr. Showkath Hussiain K. T. embodies the results of the research carried out under my guidance and supervision.

I also certify that it is not previously found basis for award of any degree, diploma or associate fellowship of the University of Calicut or any other University.

Dr. P. Kelu,
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Supervising teacher,
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INTRODUCTION

- Need and Significance of the Study
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INTRODUCTION

Education has continued diversity and extended reach and coverage since the dawn of human history. Every country develops with system of education to express and promote its unique-socio cultural identity and also to meet the challenges of the times (Aggarval, 1992).

Education is universally recognised as an important investment in human capital. It contributes to socio-economic development by endowing individuals with the means to improving their health, skills, knowledge and capability for production work. For society as a whole, education enriches the political and cultural life of the community and strengthen the community's stability to exploit technology for social and economic advancement and hence, the development of education is a key concern everywhere. (Tan and Mingat, 1992).

Education develops man power for different levels of the economy. It also helps for the self reliance of the nation. Education is a unique investment in the present and the future. The new education policy will lay special emphasis on giving equality of educational opportunities to all the citizen and to equalise specific needs of

education.

The Backward section of the society will be taken into special consideration by providing suitable incentives particularly in remote areas of the country. Some minority groups are educationally backward and hence more attentions should be made for giving equality and social justice to these groups. By way of providing ample educational facilities and incentives to the pupils like Lumpsom grant, Scholarships, Uniform and study materials and infrastructural facilities to the institutions like teaching grant, building grant, furniture grant etc.

Priority was given to the National Policy (NEP) 1986 for concerted efforts towards the educational development of disadvantaged children. There is no difference in the way in which the underprivileged children learn. There is only difference being the rate, the sequence and various materials provided. The parents of disadvantaged children who were totally in backward level requires various incentives for the educational programmes of their children. Many of the disadvantaged children are income earners to the family. So monitory benefits and free educational programmes should be provided to the family.

NEED AND SIGNIFICANCE OF THE STUDY

In a knowledge based society, the content and process of education has to undergo continuous reorganisation and upgradation. Education plays a vital role in the development of human potentials. Every country develops its system of education to meet the challenges of changing times. In our situation the developing education must build upon the gains of the past and present from a better future for our people and indeed of man kind.

In a complex society like India several environmental factors both socio-economic and socio-familial factors act on the development of the person. Only after studying the socio-familial conditions and the economic status the poor performance of the child can be identified. Though a teacher Can do a little to alter these factors at least the knowledge of the pupil and his socio-familial conditions.

The present study is to investigate the various socio-familial factors of low achievers among secondary school students. On examining the academic achievements of secondary school students in their various subjects the investigator himself having a long period of experience have noted that the time and effort involved in teaching these subjects have resulted in failure. This may be due to the flow in the system or in the methodology of teaching. Many of the studies

reviewed by the investigator has also substantiating this view point. As a result the performance of the students in the examination failed to come any where near the expectations. The performance of the students in their terminal common examination conducted by the state at the end of the ten year of schooling has always been unsatisfactory. The investigator have noted that students who have shown constant poor academic performance are coming from poor socio-familial conditions. This motivated the investigator to identify such socio-familial factors associated with low-achievement. It is a matter of common knowledge that a factor will be able to correct the situation if he is provided adequate knowledge about these multitude of factors which lead to such poor performance very often the school can provide some of the positive factors present in the family and society and investigative factor which impede proper learning and development. The study was thus under taken to the hope that the new knowledge yielded by the study would be help to teachers and curriculum framers in understanding. The most significant areas that influence scholastic achievement of secondary school students. To identify such factors help the teaches also for taking necessary steps by conducting compensatory programmes, Remedial teaching and other steps facilitating the achievements in various subjects.

Education System in Kerala

Kerala is spending its one third of the total revenue for educational purposes. Nearly one fifth of the population are students. Number of teachers form more than 50 percent of total number of workers in factories. But there is question of the wastage of expenditure in education field. Educational institutions were started in large numbers to meet the demand of different types of educations. The government also responded to the societal demand by starting institutions of their own.

Educational needs like family improvement, community improvement and skill development received only less importance in the state. Long years of schooling also lead to deskilling of children. The students failed to master in traditional skills normally acquired by process of apprenticeship. The school curriculum fail to train the students either their traditional skills or modern skills.

Kerala's educational system had been attuning itself to the changing requirement of job opportunities out side the states and countries. But now the capacity of Kerala's formal education system required qualitative changes for the job opportunities in Indian and abroad. Educational system now a days expanded substantially in response to societal demand social religious and political group acted

as pressure groups for starting new institutions. The education system of the state neglected the quality so much so that the quality standards have been coming down.

Elementary Education

Kerala has made major achievements in school enrolment at the primary level and trying to prevent dropout as an important programme like noon meal scheme. But even there is discontinuation of children in the age of 6-14 years, the position of SC/ST students is higher than their counter parts in states like Bihar, Uttar Pradesh, Himachal Pradesh, Rajastan and north eastern region. Some of the qualitative aspects of Kerala's primary education are equally distressing. The recent study showed that Kerala ranked very low among the Indian states in terms of learning achievement of primary school children. (Jangira, 1994). About 30 percent of children who complete primary school do not reach necessary achievement levels in literacy and numeracy. Therefore various steps were planned to improve the teaching learning process in order to enhance achievement. There is massive enrolment and development of infrastructural facilities helped for progress in achievement.

Secondary Education

While the drop-out rates are very low in primary schools, the same increases in ninth and tenth standards in Kerala. this is

particularly true about SC/ST students. the progress of a sample cohort in schools showed that only 73 per cent of the students joining standard I reach standard X. in the case of scheduled caste students, only 59 per cent reach tenth standard. Sixty per cent of scheduled tribe students drop out by tenth standard (Kerala Education Commission, 1999).

Another major indicator of inefficiency of Kerala's school education system is the large scale failure of students in matriculation examination. Only about 50 percent of the students who appear for the examination get through in spite of liberal valuation and provision of grace marks. Only one third of the children who join the first standard pass the matriculation examination.

The large scale drop-outs in ninth and tenth standards as also high percentage of failures at the matriculation level is a manifestation of the low level of preparation of students till then and their consequent inability to cope up even with the modest sifting procedures. The state thus faces the problem of a large number of children, 15 or 16 years of age, being rejected by the school system.

The poor academic standards are understandable in view of the poor infrastructure and other facilities. Secondary schools have less facilities in the field of library, laboratory and equipments for co-

curricular activities. In addition to this there is shortage of trained teachers for different subjects.

The Expected Application of the Results of the Study

The identification and manipulation of socio-familial factors of low achievers can help those concerned with instruction in improving such factors associated with low-achievement among secondary school pupils in the following ways:

1) The findings will help the framers of curriculum to grade the various aspects of achievement.

2) Factors accounting low-achievement in various subjects can be detected and remedial teaching can be done.

3) The teacher will be able to improve his teaching devices and evaluation practices.

4) On the basis of the findings of the study the teacher can diagnose the socio-familial factors leading to low-achievement and he can also give remedial instruction and compensating programmes for the condition that are not satisfactory.

The above facts strongly emphasise the need for the present study.

STATEMENT OF THE PROBLEM

The problem of the present study is entitled "AN ANALYTICAL STUDY OF THE SOCIO-FAMILIAL STATUS OF LOW-ACHIEVERS AMONG THE SECONDARY SCHOOL STUDENTS OF KERALA STATE".

DEFINITION OF KEY TERMS

i) Analytical Study

1) Purposeful mental activity involving breaking down the problem into elements or logical parts.

2) Selective thinking carried on the solution of a problem.

3) An investigation on the published findings of an investigation based on the reduction of a problem to its elements or logical parts and the examination of these elements in detail (Good, 1984).

ii) Socio-Familial Status

A group of variables which quantitatively describe some identifiable characteristics of the social group or the family to which an individual belongs.

The term "socio-familial status" in the study refers to the following variables.

i) Parents Education level.

ii) Parents professional level.

iii) Parents income level.

iv) Income level of family.

v) Learning facilities at home.

vi) Family acceptance of education.

vii) Cultural level of family.

viii) Cultural level of family neighbourhood.

ix) Total socio-familial status.

iii) Secondary School Students

Students who are attending standards VIII, IX and X of the schools of Kerala.

VARIABLES

The foregoing discussions in a general way, indicate the nature of the study and also the variables to be subjected to the study. The variables used for the study are classified and presented below.

Dependent Variables

The following are the dependent variables selected for the study.

(i) Achievement in Malayalam

(ii) Achievement in English

(iii) Achievement in Social Studies

(iv) Achievement in General Science

(v) Achievement in Mathematics

Independent Variables

The following socio-familial variables have been taken as the independent variables for the study.

i) Parents education level

ii) Parents professional level

iii) Parents income level

iv) Income level of family.

v) Cultural level of family.

vi) Family acceptance of education.

vii) Learning facilities at home.

viii) Cultural level of family neighbourhood.

ix) Total socio-familial status.

OBJECTIVES OF THE STUDY

The following are the objectives of the study:

1. To compare the mean scores in each of the nine socio-familial variables obtained by low achievers and high achievers (so classified on the basis of total achievement in the five school subjects) among secondary school students with a view to

identify the socio-familial variables associated with the two achievement levels.

2. To explore the nature of the correlation of each of the socio-familial variables selected, with each of the school subjects among the high achievers students and the relevant sub groups therein.

3. To explore the nature of the correlation of each of the socio-familial variables selected, with each of the school subjects among the low achievers students and the relevant sub groups therein.

4. To compare the coefficient of correlation obtained in socio-familial variables for high achievers in each of the school subjects selected for the study based on gender and locale.

5. To compare the coefficient of correlation obtained in socio-familial variables for low achievers in each of the school subjects selected for the study based on gender and locale.

HYPOTHESES

1) There will be significant difference between the mean scores in each of the nine socio-familial variables obtained by the low achievers and high achievers when they are compared.

2) There will be significant correlation between each of the nine socio-familial variables selected with the achievements in each

of the five school subjects among high achievers and the sub groups therein.

3) There will be significant correlation between each of the nine socio-familial variables selected with the achievements in each of the five school subjects among low achievers and the sub groups therein.

4) To compare the coefficient of correlation obtained in socio-familial variables obtained by high achievers in each of the school subjects selected for the study based on gender and locale.

5) To compare the coefficient of correlation obtained in socio-familial variables obtained by low achievers in each of the school subjects selected for the study based on gender and locale.

PROCEDURE IN BRIEF

a) Sample

The study was conducted on a sample of 1000, IX standard students belonging to 23 representative schools of Kerala state. The sample was selected to give due representation to factors like school efficacy, gender and locale.

b) Tools

The following tools were used for collection of data.

1) Kerala socio-economic status scale.
2) Socio-familial inventory.
3) Achievement test in Malayalam.
4) Achievement test in English.
5) Achievement test in Social Studies.
6) Achievement test in Mathematics.

SCOPE AND LIMITATIONS OF THE STUDY

The study has to be confined to certain well defined groups of variables and also representative group of secondary school students because of number of reasons like paucity of time and finance, practical difficulties of covering samples spread out over a considerable area availability of measuring - tools etc. The following factors need special mention.

The study is confined to one education level with in secondary classes in Kerala standard VIII, IX and X are designated as secondary school stage. But in view of the practical difficulty involved in developing suitable standardised achievement test for all the three levels, the investigator decided to confine his study to one educational level i.e. standard IX which will reasonably represent all the three

educational levels. Further if an achievement test has to be administered to standard X the investigator had to wait for the completion of the course. Thus the investigator was compelled to select the sample from standard IX itself.

In selecting socio-familial variables also the investigator has confined his selection to a group of socio-familial variables which are very relevant to Kerala condition.

Owing to the above limitations the investigator would like to note that such limitations are not unusual in a study of this kind. The investigator hopes that the findings of the present study will be of use to teachers educational administers and planers and other concerned in this field.

ORGANISATION OF THE REPORT

The study has been presented in five chapters.

Chapter I presents need and significance of the study, statement of the problem, definition of the key terms, the objectives of the study, hypotheses as well as scope and limitation of the study.

Chapter II gives an idea about the review of related studies.

Chapter III presents the methods followed in the study viz., the methods, Sample, Tests and Statistical techniques used for analysis

Chapter IV presents the details of the analysis of the data and

Chapter V describes the summary of the study, major findings, educational implications of the study and suggestions for further research.

REVIEW OF RELATED LITERATURE

K. T. Showkath Hussiain “An analytical study of the socio-familial status of low achievers among the secondary school students of Kerala state” Thesis. Department of Education, University of Calicut, 2002

REVIEW OF RELATED LITERATURE

- Socio-familial Status and School Achievement – A Theoretical Overview
- Socio-economic Status, Social Status
- Studies Related to Socio-familial Status and Achievement

REVIEW OF RELATED LITERATURE

Review of related literature is an important aspect of the planning of the study and the time spent in such a survey is very helpful for the study. It promises a greater understanding of the problem and ensures the avoidance of unnecessary duplication.

The present study is an attempt to find out the relationship between achievement and socio-familial factors of secondary school students of Kerala state.

The reviewed literature has been classified and presented in this chapter under the following heads,

A. Socio-Familial Status and School Achievement : A theoretical overview.

B. Socio-familial status and achievement - Related studies.

Some selected studies reveals that socio-familial status influence academic achievement of the children. The variation may be due to several factors: home environment, cultural background, socio-economic status of the parents, educational level of the parents, occupational level of the parents and home learning facilities may influence the study habits of the children. Different families have

different attitude towards education. This may affect the achievement of the children. Family is the prime socialisxing agency for the child. The basic needs may be given from the family itself. So the individual child wants to get proper encouragement from the family for his education development.

SOCIO-FAMILIAL STATUS AND SCHOOL ACHIEVEMENT

The concept of social class itself highly complex and its use raises a number of issues of considerable theoretical and practical importance which will need to be considered at later stage. In the mean time it is useful to begin by looking at those studies which have examined particular indices of social class or socio-economic status and their relationship to various measures of school achievement, and there the obvious starting point is occupational status. Although the occupation as an indicator of social class has been rightly criticised, it can be defended on the grounds of its convenience. Since it is information which is relatively simple to collect and to code. At the same time and in spite of notable exceptions, it is closely linked to income on the one hand and to social status, or prestige, on the other, so that it is seems to summarise these two major aspects of socio-economic status more than any other single measure. More over the different life chances and life experiences typical of certain occupational grouping may well

predispose them towards a different view of the world and of their place in it (McKinely, 1964).

Although the occupation of father is more usual measure of the family status, mothers occupation before marriage has also been included in a few studies and there is some evidence that it operates an independent variable particularly in influencing working class success. For example Flond, Husley and Martrin study found that those mothers whose occupation before marriage was superior to that of their husbands were more likely than other mothers to have children who were successful in the 11+. The social origin of the parents themselves has also attracted some attention and again there is some evidence that the children of those working class parents who have been downwardly mobile are more likely to be high achievers than other working class children.

Another cognate area which has been very extensively researched and amply documented is the relationship between measured ability and family size. The large family is to some extent, part of the 'culture of poverty' and there is relationship between the size of the family and socio-economic status. On the other hand the effect of family size on intelligence appears to operate all socio-economic levels even if not the same extent in the middle class (Douglas, 1964). Nevertheless, the

process by which family size influences ability is still largely unexplored, although both the material consequences for housing standards and the amount and kind of parent/child interaction are promising areas of study.

Like occupation of parental education is a convenient index of socio-economic status and is sometimes used in combination with in aim and occupation for this purpose. Its relationship to school achievement is to well documented to need reviewing here. As with the other indices discussed so far however there is still a need to spell out the processes by which the educational background of parent influence the school progress of the child. Clearly, a direct link is feasible between the intellectual level of the parents and the 'educability' fo the home which can express it self in such practical ways as helping with home work, as well as in shared hobbies of an intellectual kind. The indirect effects of educational background are also likely to be pervasive since the level of education can manifest itself through not the whole style or way of life.

Family is an important educational institution. In the present study socio-familial status is treated as major variable. The variables include cultural level of family (2) family acceptance of education (3) learning facilities at home (4) cultural level of family neighbourhood.

The score on socio-familial status are the sum of the above components. Anastasi (1956) has concluded that there is a negative relationship between family size and school achievement. A small family is a planned family and there will be chances for achievement in a small family.

Socio Economic Status

Socio-economic status denotes a person's status or position on within the society (or any social group) by social class or wealth or income.

The term socio-economic status refers that the social class in which an individual is a member. It is grouping of people into different classes on the basis of occupation. Traditionally, society was divided into upper, middle and working classes according to socio-economic grouping.

Socio economic background includes all aspects of income profession, culture, religious beliefs, family relations and standard of living. An individual has more salary than others and leading a high profession like engineer, doctor or judge have a high status. Parents of high socio-economic group have limited number of children and they could easily utilise the resources for better purposes and it may help for useful planning in the family. But when members in a family is large

there will be problem of shortage of food substances, lack of educational opportunities and children were emotionally unsafe about their future. There is indiscipline in their home and that is why their attitude is rebellious. They don't have opportunities to self expression. They tell lies, steel, play truant and indulge in delinquent activities.

In Hickersons view children of low socio-economic group have no much expectations from their parents for their success so they have to search some labour to improve their condition. Some times the children of low castes have to face some discrimination. This may be from school itself or from society.

But all these does not mean that socio-economically backward children cannot progress. There are many examples of individuals who achieved heights with their hardwork and motivation, even though they belong to poor families. The famous personalities like Abraham Lincoln. Edison and Lal Bahadurshastri were examples for them.

Social Status

This is the position occupied by a person family or kinship group in a social system relative to others. This determines rights, duties and other behaviours, including the nature and extend of the relationship with person of other status.

Social status has a hierarchical distribution in which a few persons occupy the highest positions. The simplest theoretical model of the status system would be a distribution in which portion was determined completely by the professional abilities relative to the demand for abilities in the society. The institution of private property inheritance differential taxation and social services all modify the form of the distribution of statuses.

The child is placed is society by its family and kinship group. They determine its education its initial endorsement of wealth and the esteem of the family in which it was born in transmitted to the child. This may include elements of class, caste or estate. From this position the child may lose, maintain or improve his status by his achievements in competition with others.

Social status is determined by education, income, possession and the social valuation of occupation and of other activities in society. All modern societies have a number of honours system which introduce the element of social worth in a system which is primarily based on active high status by some persons who concentrate their resources upon the purchase of certain visible items of the style of life of a higher groups these are popularly called status symbols.

B. Socio-Familial Status and Achievement Related Studies

Rosalind and Milton (1971) conducted a study on thirty-three low achieving regular class (RC) and 46 educable mentally retarded special class (SC) adolescents from a white, low-income, urban district were administered the learning potential procedure and were interviewed to determine the differences in their familial relationship. The learning procedure involved three administrations of 16 test and five coaching designs prior to coaching and 1 month following coaching. Ss were considered gainers whose pre to posttest four designs score change was more than nongainers (whose pre-to posttest score change was less than four designs), and high scorers (who solved a difficult block problem in upper level of test during pretest). Results indicated that SC Ss tended to report spending free time with families rather than friends, that both groups reported being given responsible roles at home, and that RC Ss tended to report more responsibility in the home. Also findings showed that nongainers reported themselves most alienated from their parents, desired increased physical contacts, and did not desire verbal interactions; that high scorers and gainers to a lesser degree reported spending free time outside the family though they had good relations with their families, that high scorers reported having good relation with their fathers; and that gainers reported good relations with their

mothers and desired better relations with their fathers. The data provided further support for the finding that the more able SC students by the learning potential assessment probably severely educationally retarded; also, data showed that nongainers evidenced the alienation and immaturity in family relations ascribed to the mentally retarded.

Gordon *et al.* (1968) in their study, "Educational Achievement and Aspirations of Mexican-American Youth in a Metropolitan Context" Mexican American educational aspirations and achievements were studied to determine why they tended to be considerably lower than those of Anglos and also to account for the sources of variation within each group, thus attempting to explain the particular contribution of school contexts of varying socioeconomic level and ethnic composition. A survey was taken of 6th, 9th, and 12th grade pupils in the predominantly Mexican American areas of the Los Angeles School District to determine educational patterns and to verify findings. Cumulative school records and questionnaires administered by the staff supplied the data. Academic ability differences between the 2 ethnic groups as measured by achievement tests were found to be the direct result of the teaching provided by the school. Further results indicated the following sources of influence on pupil performance: (1) family educational level was the most important for both groups, with

family economic level contributing less; (2) pupil attitudes and values were important for both groups at all grade levels; (3) social context of the school contributed substantially to the performance of Mexican Americans at the elementary and junior high levels and minimally at the senior high level; and (4) English usage made a positive contribution for Mexican American pupils at all grade levels. (CM)

Annegret *et al.* (1975) conducted a study on "Early childhood socialisation and social class environment". This report of family social class influences on children's characteristics is based on data from a longitudinal study of more than 1,000 children, black and white, of various social backgrounds. The sample was originally selected for another study (the St. Louis Baby Study) giving only secondary consideration to social factors. It includes a large number of lower-class black families and is not considered to be representative of the general American urban population. Data were collected from the mother, as general family informant and personal respondent, and from the child. Data on child and family cover the period from birth through the first year of school. Child characteristics include physical characteristics, scores on developmental measures, and scores on the Peabody Picture Vocabulary Test. Family factors include: family income, parental authority and role, number of siblings and size of household, paternal

stability, maternal employment and age, parental education, and housing. Changes in maternal attitudes are also examined. The report differentiates between social class (its primary concern) and social status, attempting to keep parental occupational level, education and source of income conceptually distinct. The bulk of the volume consists of charts, tables and other background materials. Appendices include materials from an earlier report dealing with social class configurations of early childhood socialization.

Edward (1976) discussed the influence of home and school environments on learning in children. Studies are cited which support the hypothesis that the home environment is the major predictor of school achievement. These studies deal with "status" variables such as father's occupation and education, mother's education, and social and economic status of the *family*. "*Status*" variables are contrasted with "process" variables, which indicate what parents do to encourage or support (directly or indirectly) the educational achievements and related attitudes of their children. Process variables in both home and school are of interest because they provide clues to structuring optimal learning environments. Research indicates a correlation between certain (process variables) in the home environment and school achievement. These process variables can be seen as facets of three main conceptual

dimensions of the home environment: (1) the verbal dimension, (2) activities congruent with the expectations and demands of school, and (3) the general cultural level of the home. Variables found in research to be important to the school environment are teacher competence, classroom teaching procedures, and the ability to elicit student motivation. It is suggested that in addition to considering process variables and what it is these process variables change, researchers should also look at the climate surrounding parent-child and teacher-student interactions.

A report (1977) on American families who have children under 13 years old focused on how parents are coping with the problems of raising their children in a period of rapid social change. The exploratory phase of the study included focused group discussions with parents from widely varying backgrounds, interviews conducted with professionals, consultation with an advisory panel and a review of the literature. A national probability sample of 1,230 households was selected for the administration of questionnaires to parents and children between 6 and 12 years old. Sex, age of respondent; income, education, *family status* and number of children were major demographic variables. The document includes a discussion of families in terms of traditional and less traditional families, transmission of

values, new concepts of parenting, and the children. Details from the parent questionnaires includes sections on who the parents are, economic outlook, parenting, values, sex roles, problems, discipline and rewards, parents' attitudes on important issues, and where parents seek advice. Details on the responses to the children's questionnaire include sections on children's views of their world, problems and concerns, what children like about their parents, minority children, children in one-parent households, the children of working mothers, children and economic status and future dreams. (MS)

Ronald's (1978) highlights of Report No. 3 (see UD 018 835) on Compensatory Education (CE) are summarized in text and tables. Results reported include the following: (1) proportionally, CE selection is highest among the poor for both math and reading; (2) CE selection is proportionally higher for low achievers; (3) the greatest number of students selected for CE come from the low-income and low achiever group; (4) teacher judgment plays a large role in selection; (5) a significant relationship exists between students' economic status and educational achievement; (6) students from impoverished homes attend one week less school than other students; and (7) family economic status is related to the number of hours spent in reading classes of various sizes. In addition, effects of non-academic programs are

evaluated and the progress of the Sustaining Effects Study on CE is outlined.

Susan and Marylin (1980) states that virtually no research conducted on women and mathematics is longitudinal in scope, generalizable in extent, and ethnic-race specific in nature. This descriptive study begins to fill the gap by examining the effects of background, school, and social-psychological factors on Hispanic, black, and white women's mathematics attainments. Data for the study are taken from the National Longitudinal Study of the High School Class of 1972 (NLS) with follow-ups in 1973, 1974, and 1976. Results of descriptive analyses show differences in factors affecting white and racial minority women with respect to their decision to pursue mathematics-related fields of study. The 10 sets of variables considered included: (1) family background; (2) high school experience; (3) self-concept; (4) significant others' perceived influence on college plans; (5) expectations; (6) expected college majors; (7) college mathematics experience; (8) sex-role orientation; (9) *family status;* and (10) mathematics-related attainment.

Robert (1981) reviewed to identify findings indicating the effects of the one-parent family on the elementary school child's *academic achievement* and social and emotional development. While findings are

contradictory in the area of *academic achievement,* it is concluded that disruption in home life accompanying death, separation, or divorce is probably severe enough to impair school performance to some degree and to require educational intervention. Further research is recommended to take into consideration the sex of the child, family income, and educational opportunities, as well as to compare achievement records before and after *family status* transition. The literature review indicates that in the area of emotional development controversy centers on the degree to which divorce or the loss or absence of a parent "damages" a child. It is suggested that the most important variables in the child's emotional adjustment to his or her new lifestyle are the nature and quality of the new family arrangements, the extent and duration of changes imposed, and the new psychological climate provided. The point is made that research on the social reactions of children from single-parent homes reveals differences between children from intact and single-parent families--differences associated with adjustment to a new lifestyle. Again, more research is recommended.

Duane and Arland (1984) compared the effects on high school achievement of family socio-economic factors present during students early childhood and during students late adolescence. Results point to

the potentially stronger role in cognitive development and school learning of early socioeconomic factors, except in the case of family size.

Stone (1984) conducted a study to explore the relationship between participation in secondary marketing and distributive education (MDE) and economic attainment after high school. Specifically, the study sought to develop a model of economic attainment, i.e., job status attainment, unemployment, and wages for secondary MDE students. The study used the National Longitudinal Study of the High School Class of 1972 as the database. Two subsamples were used: the first subsample was of 1,118 students identified as MDE students; the second subsample was of 3,500 workers employed in marketing-related occupations in 1979. Path analysis was used to explore the association between secondary MDE and socio-economic attainment. The results showed that both MDE participation and cooperative education participation had positive, significant relationships with job status attainment in marketing. Also positively affecting job status attainment in marketing was being male, obtaining higher education, mother's educational level, higher grade point average, and the size of the community where the respondent went to high school. No effect was found for race. It was concluded that

participation in MDE and cooperative education enhanced the attainment of job status in marketing. However, the model created in the study showed that 86 percent of the explanation of the variance in job status attainment in marketing came from factors outside the model. Thus, MDE and cooperative education explain only a small part of this complex process. (KC) Investigated the mediating effects of social support on the *academic achievement* of children in single parent families. Parents and oldest school-age children completed questionnaires on demographic and support group information. Results indicated adequate social support may mediate negative effects of single parent *family status* on *academic achievement.* (PAS)

Misra (1986) through his study on "correlation among IQ, Age Academic achievement and parental income of High School Science students" found that there is significant relation between Achievement and parental income.

Rodha and Virginia (1986) This study tested the hypothesis that there is no significant difference in reading achievement among children in grades 2 through 5 related to family structure. Researchers administered the Stanford Achievement Test to 119 students in an Alabama city suburban school system. Of the sample, 69 children lived in intact families and 50 lived in either single parent or "blended"

families. A blended family is defined as a child living with a stepfather or stepmother. In addition to the test, pupils completed a demographic data sheet. Analysis upholds the hypothesis in grades 2 through 4;; subjects in grade 5 who were in intact families, however, exhibited higher scores in reading achievement than did those from other family types. These findings suggest that students in grade 5 may experience preadolescent changes that affect achievement. Furthermore, a cumulative effect among poor readers could present itself by grade 5. Demographic data reveal more "latchkey" children from single parent and blended families in upper grades than in lower grades. Results indicate that teachers should not assume that students living in a family situation other than an intact structure will exhibit a difference in achievement scores. Two tables of data are appended. (CJH)

Waltonis (1986) study tested whether a significant difference exists between academic performance scores of eighth grade students from one-parent homes and those from two-parent homes in the areas of reading, mathematics, science, social studies, and English. School records pertaining to *academic achievement,* and free-lunch applications were used to collect data. Findings showed no sigificant difference in the total sampling population when all subjects were compared. Generally, the number of parents in the home was found to be

statistically insignificant. Major significant differences found in the data centered on the sex of the parent. *Academic achievement* was found to be significantly related to father's presence in the home. In the cases of math and science, sex of child was a determinant of *academic achievement*. No significant relationship was found between *academic achievement* and *family status* in the total population, but slight significant differences were found between groups. Findings suggest that teachers should not expect students from one-parent homes to be low achievers

Kapoor and Rita (1987) in their study found out that majority of the high achievers belonged to higher socio-economic status group and large number of low-achievers belonged to the lower socio-economic status groups. The high achievers had better home, health, social and school adjustment.

Nambiar (1988) found that there is significant difference in the mean achievement scores of secondary school pupils belonging to educationally forward and educationally backward areas of Kerala. He conducted the study on 1200 standard IX students consisting of 600 educationally forward and 600 educationally backward area students by administering Calicut University Achievement Test Scores Part II.

Seethamony (1988) observed familial and social factors associated with under achievement in school subjects. It was found that the mean scores of normal achievers were significantly greater than the mean scores of under achievers with respect to the eleven familial and social factors. There was significant difference between the two achievement levels with regard to six of the familial and social variables the difference being in favour of the normal achievers.

Ganguly and Malabika (1989) conducted a study on socio-economic status and scholastic achievement and found that the mean achievement of upper socio-economic students of urban area in three groups of subjects differed significantly from those of lower groups. In rural areas also the upper socio-economic status group differed significantly in its achievement from the lower socio-economic status group in all those group of subjects and all these were found to be significant.

Kelu (1989) found that Parental education level, Parental occupation level parental income, socio-economic status, family acceptance of education, culture level of family and socio-familial status are correlates of basic language skills.

Marlaine *et al.* (1989) reports two studies analyzing the effects of family background on students' achievement in Thailand and Malawi,

using measures of social class valid for developing countries. Found that family background accounted for achievement in both countries, suggesting that previous research may have underestimated these influences

William and Wilson (1989) reviews that the school effects literature is replete with discussions of whether any factors, beyond socioeconomic status (SES), contribute to an explanation of student achievement. Recent attention has focused on the role of the school administrator. One argument is that a strong, controlling principal is a key to improved student performance. Another argument is that, through supportive efforts, administrators can facilitate teachers' work, which in turn affects student achievement. This paper presents findings of a study that examined two related issues--the administrative factors that influence student achievement and the effect of family SES on the working of those factors. Data were obtained from a survey of 175 elementary and 118 secondary southeastern Pennsylvania schools. Findings indicate that, independent of SES, supportive administrative behaviour was positively associated with achievement at both the elementary and secondary levels. Tight administrative control over teaching was negatively associated with achievement, but only at the elementary level. In conclusion, school conditions do influence what

students learn. Three figures are included. Appendices contain two statistical tables (LMI).

Lohani *et al.* (1990) studies the link between selected family demographic factors, Home environment and academic performance and found out that positive relationship exist between variables such as education of the mother and education of the father with academic performance.

Samal (1990) found that academic performance of high planners were better than that of low planners. And there was no significant difference between boys and girls with regard to academic achievement. The children from high social economic status had a better planning ability than that of children from low socio-economic status. Planning ability had no relationship with family size. This was concluded with the study of relationship between planning and academic achievement of boys and girls: effect of home environment variables.

Sood (1990) Carried out a study on 120 students of pre-engineering classes from four colleges of Ambala. He examined their academic achievement and found that socio-economic status had no effect on achievement.

Ajeh's (1991) study of Home effect on achievment reported that there exists a difference in the academic achievment of High and low

socio-economic status students, but there is no such difference between higher and middle socio-economic students.

Badari (1991) investigated into the causes for low-achievement in government high schools in Chengalpettu Educational District, Tamil Nadu. He found that the causes of poor achievement were identified as low motivation policy of liberal promotion to the next higher class, poor study habits. Lack of parental involvement in education and poor teaching.

Gerald (1991) in his study found that third-year students (equivalent to U.S. 9th graders, ages 14-15) in six rural and urban Japanese middle schools were given two questionnaires. Information was gathered on family background, school life, educational aspirations, sources of information about high school and high school entered. The number of students who returned one or both of the surveys was 1,175--a 98% response rate. Analysis of the data focused on hypotheses derived from theories of gender and educational stratification. Significant interaction was found between students' gender, parental educational levels, and students' aspirations and attainments during the transition period from middle school to high school. No evidence of tracking was discovered at the middle school level nor was any association found between parental education and

early planning for high school entrance. Birth-order among males was not significantly associated with rank of high schools attended. A 23-item bibliography is included.

Indra (1991) observed the relation of social class, religion, family size and birth order to academic achievement of high school students. It was concluded that students belonging to different social class differed in the their academic achievement. Hindu, Muslim and Christian students differed in their academic achievement scores. Family size of the student had its effect on the academic achievement.

Koteswara (1991) investigated on a comparative study of the characteristics of high achievers and low achievers in reading of Class VIII pupils with special reference to school and home factors. It was found that urban students had a higher achievement in comprehension - vocabulary and composite reading ability than the rural students. Girls had higher achievement in comprehension than boys.

Sahay (1991) investigated familial correlates of academic achievement in rural Hindu school students. It was found that the level of education, sex and caste had no independent effect on the development of the scholastic achievement. The level intelligence remaining the same students with higher level of parental support achieved more than the students with lower level of parental support.

Aswathy Bina (1992) conducted a study of prolonged deprivation self concept and scholastic achievement found that the students coming from low parental education non deprived and high intellectual ability and high parental education non deprived and high intellectual group were found having higher self concept showing the degree of deprivation and intellectual ability as the most influential factor. The self ideal discrepancy was found to be in related to parental education degree of deprivation and intellectual ability. The relation ship between degree of deprivation and intellectual ability was found to be negative but significant.

The study of Bbatnagar and Sharma (1992) indicated that children whose parents attended school performed at a significantly higher level than children whose parents do not attend school. That is parental education is related to academic achievement of students.

Garg and Chaturvedi (1992) found that there exists a linear relationship between IQ and academic performance which held good both for rural and urban students. They also found that academic performance is related to socio-economic status and also has linear correspondence. This position also held good for both rural and urban students. They states that academic performance is related to socio-economic status and also has a linear correspondence. This position also

held good for both rural and urban students. Rural students had a higher mean IQ as compared to urban students. These were concluded when he studied intelligence and socio-economic status as correlates of academic performance.

Harikrishnan (1992) conducted a study of academic achivement of students of the higher secondary in relation to achievement motivation and socio-economic status. It was found that girls obtained a higher mean in achievement than boys. Socio economic status was significantly related to academic achievement.

Philips and Lerac (1992) in their research findings showed that substantial differences in achievement were related to parental expectations, goals activities and school environment. Family members-controlled activates were negatively related to achievement and gains.

Persidsky and James (1992) conducted a study on "Educational perspectives for Elderly migrants: a case of soviet refugees. Reviews patterns of migration among the elderly worldwide, highlighting the immigration of elderly people form the Soviet Union to the United States. Describes their social and economic status in the Soviet Union, and their particular problems among soviet immigrants. Considers ways in which appropriate education can resolve some problems.

Usha (1992) conducted a study of certain socio-familial correlates of secondary school science achievement. It was found that the best

social correlates of achievement in physical science were identified as (in the order of importance) in the level of father, educational level of mother, occupational level of mother and educational level of father. The best familial correlates of achievement in physical science were (in order of importance) home learning facility, family acceptance of the child, size of the family, parents sex bias in education, family environment and order of birth.

Verma (1992) in his study on value orientation of socially disadvantaged-adolescents found out that socially advantaged students have significantly higher social and religious value in comparison to socially disadvantaged students.

Honig and Lim (1993) reveals that nothing that play varies as a function of culture, gender, setting and parent or teacher valuing, a study examined the play of children in Singapore. Subjects were 56 middle-and working class preschoolers between the ages of 46 and 72 months who were videotaped at play in their homes and in the child care centres that they attended and rated on the Parten/Piaget and smilansky play scales. The children's mothers completed a 20-item questionnaire on their attitude towards play and were assessed as to socio-economic status by the Hollingshead 4-factor index. It was found that parallel play and functional play occurred more at home, whereas

associative and cooperative play occurred more in the child care centers. Girls play scores were higher than boys on the Smilansky but not the Parten/Piaget play scales. The lack of socio-economic status differences and the relative mildness of sex differences reflects a strong movement toward modernity in Singapore families. Examines a sample of 710 subjects ages 14-19 to assess psychological health of united Arab Emirates (UAE) families with adolescent members. Used the family functioning questionnaire to assess adolescents' perception of family life and climate. Males scored higher on emotional fulfilment. Family functioning scores wer higher in upper social economic status (SES) families than other SES levels. Discusses other findings .

Massey (1993) in his study on "Latincs, poverty and the underclass: A new Agenda for research". The underclass model used to describe the situation of inner-city Blacks cannot legitimately be employed to understand the social and economic status of Hispanic Americans. A comprehensive theory of Hispanic poverty must consider diversity of Spanish-origin groups; race; residential segregation; immigration; and role of the Spanish language. Contains 116 references.

According to Teresa and Ulric (1993), differential language development and preparation for school among young children of different racial and social groups has been asserted for decades. A

study focused on mother-child interaction in two common activities: reading children's books and telling narratives about both shared and unshared experiences. A socially dir\verse group of 46 mothers and their 3-year-old children, half white, half African American, were compared. Each racial group was evenly divided among children whose mothers had no college, some college, and a bachelor's degree or more. Income ranged from under $ 5,000 to $75,000 in both racial groups. No children were in preschool or institutional day care, although more than half in each group were in family day care while their mothers worked. At home sessions consisted of four experimental activities: (1) mother and child read "the ABC Exhibit"; (2) mother and child read "Mole and Mouse Clean House"; (3) mother asked child to tell experimenter about something exciting or fun they had done lately; and (4) experimenter made playdoh with the child (without mother) and mother then asked child how they did it. All mothers, including African American working class mothers. Used known-answer questioning and provided other forms of "scaffolding to assist their children in telling and reading. White mothers used more known-answer questions only in "the ABC Exhibit"; in other tasks there were no differences of race or social economic status. Six figures present the data.

Andews *et al.* (1994) conducted a study on "Explaining the Relation between Academic Motivation and Substance Use: Effects of

Family Relationships and Self Esteem". The inverse relation between academic motivation and substance use has been well established, but the direction of the influence remains to be specified; two possible influences are the mediating and moderating effects of family relationships and self-esteem. In this study, investigators used General Estimating Equation (GEE) models based on data from four annual assessments of adolescents, 12 to 16 years of age. The adolescents' mothers were included in the study. Families were recruited from moderate-sized northwestern urban areas; 91.7 percent of the participants were Caucasian. The results suggest that substance use leads to a decrease in academic motivation one year later. However, the data did not support a direct path of academic motivation to substance use, as researchers found mediating effects for alcohol use and moderating effects for cigarette and marijuana use for both males and females. A somewhat surprising result was that for boys and older girls, good family relationships increased the inverse effect of academic motivation on marijuana use. This may be due to the additional pressures that parents from families with good relationships place on their children for academic success. Eight tables present the statistical summaries for this study. Contains 24 references. (RJM)

Alwin and Arland (1994) compared the effects on high school achievement of family socioeconomic factors present during students' early childhood and during students' late adolescence. Results point to the potentially stronger role in cognitive development and school learning of early socioeconomic factors, except in the case of family size.

Clark Sorensen (1994) in a study found that South Korean students scored better than students from 18 other countries on math and science achievement tests. In South Korea, economic social status for oneself and one's family are directly related to educational level. This, plus intense pressure form parents and authoritarian teachers, motivates students to score well on competitive national exams for high school and college admission.

Davis *et al.* (1994) in their study on the effect of school context structure and experiences on African, American male in middle and high schools showed that there is necessarily to rethink about the current secondary school disciplinary policies and extra help delivery, for the improvement of black male.

Daniel and King (1995) in their on "Relationships among Various Dimensions of Self-Esteem and Academic *Achievement* in Elementary Students" conducted to determine the degree to which children's

perceived self-esteem is related to their overall academic *achievement* as measured by their performance on a standardized *achievement* test battery. Specifically, the study sought to determine the dimensions of perceived self-esteem that would be most clearly associated with higher levels of student *achievement*. The Self-Esteem Index (SEI) was administered to 208 third-, fourth-, and fifth-grade regular and special education students. Students' SEI subscale scores (familial acceptance, academic competence, peer popularity, and personal security) were correlated with their national percentile scores on four subtests of the Stanford *Achievement* Test. The results confirmed the existence of a positive relationship between self-esteem, as defined in the SEI, and *achievement*. Characteristics associated with higher levels of academic *achievement* were academic competence, familial acceptance, and personal security. In contrast, peer popularity was not highly correlated with academic *achievement*. Results suggest that schools should address both self-esteem and academic *achievement* as integral parts of the learning experience.

In a study conducted by Entwiste et al. (1995) found that two parents in the home and family resources did not affect growth in achievement during school sessions. Family resources did influence achievement.

Marjoribanks (1995) made a study on factors affecting learning environment and school related outcomes of Australian adolescents showed that students learning environment and school out comes were related strongly.

Snipp (1995), conducted a study in American Indian studies, reveals that it is divided about equally between historical research and studies of contemporary American Indians, reflecting the strong influence of history and anthropology in the field. American Indian studies overlaps many disciplines. Characterized as an "area study," it is unified by the single theme of its link to the culture and experiences of American Indians as a people separate from the Euro-American culture. Many studies focus on American Indian demography, investigating the size, distribution and composition of the historical and contemporary American Indian: populations. The literature on the social and economic status of American Indians is relatively large, as is the literature on political organizations and legal institutions among historic and contemporary American Indian groups. The cultures of American Indians are extremely diverse, and broad generalizations are difficult to make. Many studies of spirituality and cultural survival can be found in the literature. A crucial distinction between the literature of the past and contemporary approaches is the modern assumption that

the American Indian peoples are dynamic and vital part of the American ethnic spectrum, not a population doomed to extinction. (contains 103 references)

Chen (1997), made a study on students peer-groups in high school and revealed that their influence is both positive and negative. Those students whose friends cared more about learning had better educational outcomes.

Deslandes *et al.* (1997), in a study about influence of parenting style and parental involvement in schooling on academic achievment of secondary level related that parental acceptance, affective support supervising, and granting psychological autonomy- contribute to school achievement.

Roberts (1997), describes the life of Mary Wollstonecraft, the pioneer feminist, author, and educator in 18th century England and how the influence of rational education caused her to be an advocate of women's education beyond social deportment and menial activities. Wollstonercraft believed that education should be built on strengthening a women's intellectual faculties, particularly by emphasizing the skills of logical reasoning and abstract thinking through the mastery of such subjects as mathematics, science, history, literarture, and language. The industrial revolution forced a

redefinition of women's social and economic status when many abandoned their traditional child-rearing roles and joined the factory labor force, at usually lower wages than men. The paper provides numerous citations of Wollstonecraft's writing in which she challenges the inherent inequality of the English educational and social system and calls for change.

Sylvia Tauba (1997) in his study on "Unit partitioning as a Mechanism for constructing basic fraction knowledge: testing a hypothesis examined the theory asserting that partitioning a unit is basic in developing understanding of the different rational number constructs. A fraction sequence was developed in which early experiences with partitioning units were provided. An alternative fraction sequence was designed to include initial activities with pattern blocks in which fractional parts of a region are covered by blocks instead of drawing lines or splitting sets. Both fraction sequences were taught for 2 weeks in two fourth-grade classes of mostly language minority students from low social-economic status (SES) families. A repeated-measures design was adopted using a 40-item instrument assessing 8 different fraction topics. In addition, three students from each class were individually interviewed. Analysis of covariance did not indicate that the experimental fraction curriculum was superior

than the alternative one while results from the videotaped interviews indicated that students' fraction knowledge was incomplete and unstable during the 4-weeks period. The interviews revealed students' strategies in dividing units and n using concrete materials which clearly influenced their fraction ideas. It is concluded that the findings support the theory which views partitioning a unit as critical in building rational number concepts. Contains 17 references.

Taube (1997) conducted a study on "Unit portioning as a mechanism for constructing Basic Fraction Knowledge: Testing a Hypothesis. This study examined the theory asserting that partitioning a unit is basic in developing understanding of the different rational number constructs. A fraction sequence was developed in which early experiences with partitioning units were provided. An alternative fraction sequence was designed to include initial activities with pattern blocks in which fractional parts of a region are covered by blocks instead of drawing lines or splitting sets. Both fraction sequences were taught for 2 weeks in two fourth-grade classes of mostly language minority students from low social-economic status (SES) families. A repeated-measures design was adopted using a 40-item instrument assessing 8 different fraction topics. In addition, three students from each class were individually interviewed. Analysis of covariance did

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Tudge *et al.* (1997) This study used Vygotskian perspective to compare child rearing values and beliefs of parents, especially in regard to self-directed activities of children, in the united states, Russia, and Estonia. Participating were 60 families, evenly divided by society and social class (middle or working class), each with a child between 28 and 45 months old. Families were located in Greensboro, North Carolina; Obninsk, Russia; and Tartu, Estonia. Interview and questionnaire data were collected from parents, and observational data were obtained from children observed in their everyday activities for 20 hours during 1 week, focusing on academic lessons, skill/nature lesson, play with academic objects, and conversation with adults. Finings indicated that middle-class parents rated self-direction higher, and control and discipline lower, than working-class parents, and were less likely to be

concerned with spoiling their children by giving attention than were working class parents. There were no cultural differences in parent values and beliefs. Children in Obnisk and Tartu were far more likely than those from Greensbore to be involved in skill/nature lesson. Middle-class children were more likely than working-class counterparts to be involved in academic or skill/nature lessons, except in Obnisk, were there were no social class differences in academic lessons. Middle-class children were more likely to initiate the activities of interest than were their working-class counterparts.

Javier (1998) conducted a study in poor Puerto Rican households in Philadelphia (Pennsylvania) that shows the complex relationships between household members' survival strategies, residential mobility, home-school connections, and students' learning. Results from five families show that household stability is the strongest factor affecting students' learning. (SLD)

Michael *et al.* (1998) in his study "Educational status of children who are receiving services in an urban family reservation and reunification setting" examined the educational performance of 56 children (ages 6-15) receiving services from an urban child care service agency that emphasized family preservation and reunification. Although the majority of participants were performing poorly in math,

reading and science, no relationships were found between school performance and family status.

In a study of McCoy *et al.* (1999) on contextual effects on educational accountability in Kentucky found that the school district, educators should be held accountable regardless of the advantaged or disadvantaged circumstances of their communities, socio-economic factors associated with geographical location may strongly influences the school system performance.

Ed Watch Online's (2001) report provides data on the academic *achievement* gap that separates low-income and minority students from other students, examining how well different groups of students perform in Vermont and noting inequities in teacher quality, course offerings, and funding. Included are tables and data that provide: a frontier gap analysis (a comparison of Vermont to the leaders in *achievement* and gap closing); student profile (the demographic distribution of youth in Vermont); state performance (academic *achievement* and educational attainment); opportunity (well prepared teachers, challenging curricula, special student placements, effective instruction, and annual per pupil investments); minority *achievement* gains, state by state; and analysis of minority-white *achievement* gaps by subject area and grade level. Student *achievement* data are based on the

National Assessment of Educational Progress (NAEP). Because Vermont did not participate in any of the NAEP tests given in 1998, it is impossible to provide a complete profile of student *achievement* in Vermont. According to 1996 data, Hispanic 8th graders in Vermont score more than 2 years behind white 8th graders in science. Eighth graders from low-income families in Vermont score about 1 year behind non-poor 8th graders in the state in math and science.

According to Ed Watch Online's (2001) report titled "State Summary of West Virginia provides data on the academic *achievement* gap that separates low-income and minority students from other students, examining how well different groups of students perform in West Virginia and noting inequities in teacher quality, course offerings, and funding. Included are tables and data that provide: a frontier gap analysis (a comparison of West Virginia to the leaders in *achievement* and gap closing); student profile (the demographic distribution of youth in West Virginia); state performance (academic *achievement* and educational attainment); opportunity (well prepared teachers, challenging curricula, special student placements, effective instruction, and annual per pupil investments); minority *achievement* gains, state by state; and analysis of minority-white *achievement* gaps by subject area

and grade level. African American 8th graders in West Virginia score about 2 years behind white 8th graders in the state in math and science, and 1 year behind in reading. Hispanic 8th graders in West Virginia score more than 2 years behind white 8th graders in the state in math, science, and writing. The state's poor/non-poor *achievement* gap would close for 8th graders in both math and science if poor students in West Virginia scored as well as poor students in North Dakota.

METHODOLOGY

K. T. Showkath Hussiain “An analytical study of the socio-familial status of low achievers among the secondary school students of Kerala state” Thesis. Department of Education, University of Calicut, 2002

METHODOLOGY

- Objectives of the Study
- Hypotheses
- Tools Used for the Study
- Sample Used for the Study
- Data Collection Procedure and Scoring
- Statistical Techniques Used

METHODOLOGY

As indicated earlier the present study is designed with a view to analyse the socio-familial variables related to low-achievement among secondary school students. For this, nine socio-familial variables already listed have been taken as the independent variables while the low achievement has been considered as the dependent variables. Low achievers are identified on the basis of their achievement scores obtained in the various school subjects after conducting an achievement test in various school subjects selected for the study.

OBJECTIVES OF THE STUDY

The following are the objectives of the study:

1. To compare the mean scores in each of the nine socio-familial variables obtained by low achievers and high achievers (so classified on the basis of total achievement in the five school subjects) among secondary school students with a view to identify the socio-familial variables associated with the two achievement levels.
2. To explore the nature of the correlation of each of the socio-familial variables selected, with each of the school subjects

among the high achievers students and the relevant sub groups therein.

3. To explore the nature of the correlation of each of the socio-familial variables selected, with each of the school subjects among the low achievers students and the relevant sub groups therein.

4. To compare the coefficient of correlation obtained in socio-familial variables for high achievers in each of the school subjects selected for the study based on gender and locale.

5. To compare the coefficient of correlation obtained in socio-familial variables for low achievers in each of the school subjects selected for the study based on gender and locale.

HYPOTHESES

1. There will be significant difference between the mean scores in each of the nine socio-familial variables obtained by the low achievers and high achievers when they are compared.

2. There will be significant correlation between each of the nine socio-familial variables selected with the achievements in each of the five school subjects among high achievers and the sub groups therein.

3. There will be significant correlation between each of the nine socio-familial variables selected with the achievements in each of the five school subjects among low achievers and the sub groups therein.
4. To compare the coefficient of correlation obtained in socio-familial variables obtained by high achievers in each of the school subjects selected for the study based on gender and locale.
5. To compare the coefficient of correlation obtained in socio-familial variables obtained by low achievers in each of the school subjects selected for the study based on gender and locale.

TOOLS USED FOR THE STUDY

In order to test the above hypotheses the independent and dependent variables are measured with respect to sample selected for the study. This data involves scores representing from each of the nine independent variables and five dependent variables.

The following tools were used for the collection of data.

1) Kerala Socio-economic status scale
2) Socio-Familial inventory
3) Achievement Test in Malayalam
4) Achievement Test in English
5) Achievement Test in Social Studies

6) Achievement Test in General Science

7) Achievement Test in Mathematics

1. Kerala Socio-Economic Status Scale

In this study the 'Kerala Socio-Economic Status scale and Manual (Nair, 1970) is used for calculating Socio-Economic status of the students. The data for the scale was obtained from the general data sheet administered on the sample. The mode of the data sheet to be used in this study is given as appendix.

The general data sheet is denoted into five sections.

First shows the general information about the subject regarding the name of the pupil, locality of the school age, sex, place of residence caste etc. The second section calls for information regarding the level of education of parents, siblings and other occupants of the family. The section III gives the details about the income of the family members. The details of information were collected form the pupils during the administration of the tool.

Each variable in the scale has been divided into categories on the basis of the discussion held with the experts in the field and suggestion given by them. Education occupation and income of the main parents were considered for fixing the Socio-Economic score of the family. The

details regarding the categories and the respective weightage were presented in below.

Method Adopted for Weighing the Various Categories

1. Education Level of Father

The education level of father has been divided into seven categories from the illiterate to post-graduate level. 5 scores are allotted to illustration, 10 scores to those whose education level varies from 1st standard to IV standard 15 parents for those who were educated from standard V to VII. Twenty points for those whose level of education is between standard VIII to X. Twenty five points for pre-degree, TTC holders. Thirty points for BA, BSc, B.Com, degree holders and thirty five points for those with M.A., M.Sc., M.Com, MBBS, Ph.D./Degree

2. Occupation

Classification of various occupation is done as described below:

a) Unemployed

Those who have no work are included in this category weightage 5 points.

b) Unskilled Work

The occupation profession included under this category are as follows:

Watchman, Peon, Labourers and Coolies. Weightage 10 points.

c) Semi-skilled Work

Farmer, small scale merchants library attender, police constable. Weightage 15 points.

d) Skilled Work

The following are included in this category. Mechanic fitter, Electrician, Driver, Photographer, Painter, Laboratory attendant, Carpenter, Mason, Document writer, Vakil clerk, Head constable of police, Village officer. Weightage 20 points.

e) Semi- Profession

Those who included in this category are: Chemists, Druggists, Qualified nurse, Teachers, Managers, Superintendent of any government office, Minor businessmen, Contractor, Sub-inspector of police, Excise inspector, A.E.O., D.E.O., Sales tax officer of sub district level and health worker - weightage 25 points.

f) High Profession

The following occupation/profession come under the category. Minister, Judge, Bank executives, Doctor, Engineer, Lawyer, University teachers, University official, Head of research organisation, Chief

executives, Big land holder and business executives. Weightage 30 points.

3. *Income Level of Father*

The level of income has been decided into seven categories.

Five points have been given to below Rs. 450/- monthly income ten points to Rs. 451-1000. Fifteen points to 1001-2000. Twenty points to 2001-3000. Twenty five points to 3001-4000. Thirty points to 4001-5000 and thirty points to 4001-5000 and thirty five points to above 5000 monthly income.

The scores obtained in the three categories namely education level, occupation level and income level of father (guardian) are added to obtain the total Socio-Economic Status score.

4. Home Learning Facilities Inventory (Nair & Devi 1981)

This inventory developed by Nair and Nirmaladevi thou on the various facilities for learning that the parents arrange at home.

The inventory contain twenty three items. The subjects have to mark either Yes or No against each item. Score of 'one' is given for a 'Yes' answer and a score zero for a 'No'. The maximum possible total score of the inventory is twenty three.

Some of the items used in the inventory are given below:

1. Which of the following facilities are available in home for studies?

	Yes	No
Separate room	☐	☐
Separate chair	☐	☐
Separate lamp	☐	☐
Home library	☐	☐

2. Which of the following reference materials/accessories are available to you in your home.

The maximum possible scope of this part is 1/8 some of this items used in this scale are given below.

	Always	Some times	Never
Your parents check up your school work	☐	☐	☐
Your parents help you to do your school assignments	☐	☐	☐
Your parents meet your teachers and assess your work in school	☐	☐	☐
Your parents attend parent teachers association meeting	☐	☐	☐
Yours parents contribute to short improvement programme	☐	☐	☐

5. Family Environment Index Inventory

This inventory developed by Nair and Nirmala Devi measure the cultural level of family neighbourhood of secondary school pupils. This

inventory helps into evaluate the cultural level of our family neighbourhood. This inventory has fourteen

	Yes	No
English Dictionary	☐	☐
English Malayalam Dictionary	☐	☐
Logarithm table	☐	☐
World Map	☐	☐
Map of Kerala	☐	☐
World Atlas	☐	☐

6. Family Acceptance Of Education Rating Scale (Nair & Devi, 1981)

This scale developed by Nair and Nirmaladevi helps to rate the extent to which the parents accept the educational work of their children.

The inventory contains sixteen statements and three possible answers, namely, 'Always, 'Some times', 'Never' given along with each statement. Students have to read each statement carefully and put a tick mark in the appropriate squares. A score of three or one is given for the answer 'Always, 'Sometimes' and 'Never' respectively.

Statements each of them helps to give an item of cultural level of the family neighbourhood. For each statement there are these possible

answers. They are 'Many', 'Few' and 'Nil'. The score three two and one are given respectively for answers many few and 'Nil'. The maximum possible total scores of the scale is forty two.

Some of the items used in this inventory are given below:

	Many	**Few**	**Nil**
Number of educational families around your home	☐	☐	☐
Number of peoples in the area holding top jobs	☐	☐	☐
Number of cultural and social organisation in the area	☐	☐	☐
Number of libraries/reading rooms	☐	☐	☐
Possibility of help from neighbours for studies and social activities	☐	☐	☐

7. Family Cultural Level Rating Scale (Nair and Devi, 1981)

This scale developed by Nair and Nirmala Devi measures the family cultural level of secondary school pupils. This scale helps into evaluate the cultural back ground of ones family. There is no time limit for this test. For each item three alternatives are given along side. For the first seven item the three possible answers are 'many', 'few' and 'none'. For the last six items the possible answers are 'always', 'sometimes' and 'never'. The subject has to mark the appropriate answer against each item by entering a tick mark in the appropriate

square. Three scores are given for the tick mark in the first square, two scores for the second square and one for the last square. The maximum possible scores of this scale is 42. Proper instructions have been given to the scale.

Some of the items used in this scale are given as examples:

	Many	**Few**	**Nil**
Number of news papers purchased by your family	☐	☐	☐
Number of libraries to which you/your family members are a member	☐	☐	☐
You are corrected when you are speaking inappropriate words	☐	☐	☐
You are instructed /forced news papers	☐	☐	☐

Achievement Test in School Subjects

Achievement test in Malayalam, English, Social Studies, General Science and Mathematics were used for measuring the achievements of the students.

Validity

Content validity was achieved by the clear statement of the instructional objectives on the six levels in five subjects viz., Malayalam, English, Social Studies, General Science and Mathematics.

The instructional objectives are knowledge, comprehension, application, analysis and evaluation. By measuring the test using the statistical technique the validity was found out. This was done by finding the correlation coefficient between the test score and one external criterion. The external criterion used was the marks obtained for students in five subjects for annual examination. The correlation coefficient thus obtained was given below for different subjects.

Achievement in Malayalm	0.55
Achievement in English	0.62
Achievement in Social Studies	0.78
Achievement in General Science	0.80
Achievement in Mathematics	0.57

Validity of the test was found out the selected sample of 50 students. The marks of their annual examination has taken as an external criterion for Malayalam, English, Social Studies, General Science and Mathematics for comparing the marks obtained for the achievement test different subjects selected for the study as internal criterion.

To ensure the validity of the test the investigator has gone through several books and consulted with experts. Suggestions from experts are taken into consideration to prepare valid items in the inventory. The tools were given to the related experts for suggestions

and necessary changes were made. Thus the content validity of the test was ensured.

Reliability

The reliability of the test was found by test-retest method. The reliability co-efficient founded by using Pearson's Product Moment Co-efficient of Correlation. The obtained reliability co-efficient are:

Achievement in Malayalam	:	0.62
Achievement in English	:	0.77
Achievement in Social Studies	:	0.84
Achievement in General Science	:	0.78
Achievement in Mathematics	:	0.85

The result shows that the test is reliable to measure achievement in selected subjects among standard IX pupils.

SAMPLE USED FOR THIS STUDY

The population for the present study was the subjects attending in secondary schools of Kerala. Treating this as the reference population, in sample selection, the investigator has to take following decisions:

a) Size of the sample.

b) Techniques of sampling

c) Factors to be represented in the sample.

These are discussed below in detail.

a) Size of the Sample

This was decided in terms of the statistical indices to be calculated for this study and in terms of the subsamples to be obtained with in the total sample. The study also required the calculation of coefficient of correlation for the total sample and subsamples.

b) Techniques of Sampling

Of the various techniques of sampling used in social science research, the investigator decided to adopt the technique of stratified sampling for the purpose of the present study. Garrett (1985) defines stratified quota sampling "as a technique designed to ensure representative and avoid bias". This scheme is applicable when the population is composed of subgroups or strata of different sizes, so that the representative sample must contain individuals drawn from each category or stratum in accordance with the size of the subgroups. Stratified technique of sampling is widely accepted as the best procedure when heterogeneous samples have to be brought under study. This technique is composed of sub groups or strata of different sizes so that a representative sample must contain individuals drawn from each category or stratas in accordance with the size of the subgroups.

c) Factors Considered in the Sampling

The investigator decided to give representation to the following factors in sample selection.

1) Sex of the subjects

2) Rural-urban residence of subjects

3) Type of management

The study was confined to two Revenue districts of Kerala. They were Malappuram and Wynad. These districts contain all categories of schools and are fairly representatives of the schools of Kerala. Due representation has given to rural and urban schools.

On the basis of the above consideration an initial break-up of a tentative sample was worked out on the assumption that a final sample of about 1000 will be available for analysis. It was decided to confine the study to standard IX students and this level was taken as it would represent the standard VIII, IX and X of the secondary school of Kerala State.

DATA COLLECTION PROCEDURE AND SCORING

After finalising the sample and the tools to be used a programme for testing was arranged. The investigator contacted the school authorities (the Head Master) either through personal visits or through

correspondence explaining to them the scope of the study. The time and facilities required for testing etc.

The tools were conducted on week days during the academic years 1999-2000. The investigator personally visited all the schools. The schools co-operated by deputing 2-3 teachers for helping the investigator. In conducting the testing and by adjusting the school work to suit the convenience of testing. Since all the tests were standardised tools with manual of directions where even the intricate details of administration have been, laid down, the investigator strictly followed all the direction, rules and procedures for administering the different type of tests.

The general data sheet was administered first. The personal details about the subjects (Name, Class, Age, Sex, details about home etc.) were first obtained. Then the different socio-familial tests were administered. After an internal of 5 to 15 minutes Achievement test in Malayalam and English were administered. The other three tests social studies, general science and mathematics were administered next day. Uniform procedures were observed in administering the tests in different schools.

a) Scoring: The response sheets of all the tests were scores on per the scoring scheme of the tests described earlier along with each test often stencil cut score keys were used to facilitate scoring.

b) Consolidation and Processing of Data: All the relevant data relating to each subject test scores in the case of nine independent variables and dependent variables viz., Achievement test in schools subjects like Malayalam, English, Social Studies, General Science and Mathematics and the demographic details like age, sex, name, name of the school, class with division, place of residence (whether it is urban or rural) type of school efficiency of the school, etc.) were entered separately on specially designed sheets of paper.

The break-up of the final sample as used for statistical analysis is presented below:

Break-up of the Final Sample

Category	Boys	Girls	Total
Rural	336	316	500
Urban	164	184	500
Total	500	500	1000

STATISTICAL TECHNIQUES USED IN ANALYSING THE DATA

The following statistical techniques were used for analysis of data.

a) Calculation of mean and standard deviation of the score of the various variables.

b) Test of significance of difference between means for large independent samples. This was used to compare the low achievers with high achievers in various subjects with their socio-familial status.

c) Pearson's Product Moment Coefficient of Correlation. This was used to explore the nature of correlation of each of the socio-familial variables with achievement in each of the subjects for the whole sample and relevant subsamples.

d) Test of significance of difference between correlation. This was used to compute the correlation obtained in the case of the pairs of relevant subgroups with a view to find out whether the correlation differ significantly.

a) Description of the Statistical Techniques Used

1. Test of Significance of the Difference Between Means for Large Independent Sample (Guilford, 1973)

In order to compare the distribution of socio-familial variables in the relevant subgroups, the data obtained had to be subjected to test for

mean differences. The socio-familial variables and high achievers and low achievers were taken into consideration.

The procedure is to work out the t value (critical ratio) given by the formula.

$$CR = \frac{M_1 - M_2}{\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}}$$

Where M_1 and M_2 are the mean of different group to be compared. σ_1 and σ_2 are the standard deviation of these groups and N_1 and N_2 are the number of observations in each group.

If the obtained t-value falls outside the interval +2.58 the difference is said to be significant at 0.01 level; otherwise the difference is not significant at 0.01 level. A significant difference between means imply that the difference is in real and is different from zero. A not significant difference indicates that the difference between the mean is not real and the indicated difference is to be attributed to sampling errors.

2. Pearson's Product Moment Coefficient of Correlation r (Garrett, 1985)

When a set of pairs of scores for two continuous variables X and Y in the form (X_1, Y_1) and (X_2, Y_2) .... (X_n, Y_n) are given the contribution between the variables X and Y by means of the machine formula (correlation were calculated by computer) is given by:

$$r_{xy} = \frac{N\Sigma XY - \Sigma X\Sigma Y}{\sqrt{[N\Sigma X^2 - (\Sigma X)^2][N\Sigma Y^2 - (\Sigma Y)^2}}$$

In this ΣX = the sum of all X's

ΣY = the sum of all Ys

ΣX^2 = The sum of squares of each X

ΣY^2 = the sum of squares of each Y

ΣXY = the sum of the products of each X time Y.

The obtained correlation between coefficient have been interpreted by means of the following approaches.

3. Test of Significance of the Correlation (Garrett, 1985)

The test of significance of coefficient of correlation is found out by converting the r into Fisher's Z function and finding out the standard error of Z

The formula for

$$\sigma_Z = \frac{1}{\sqrt{N-3}}$$

0.95 percent confidence interval is fount out using the formula

$$Z \pm 1.96 x \sigma_Z$$

0.99 percent confidence interval is estimated using the formula

$$Z \pm 2.58 \times \sigma_Z$$

Test of significance of coefficient of correlation is then found out by checking whether the obtained r corresponding to Z lies between the confidence intervals.

4. Test of Significance of Difference between Two Correlation, r_1 and r_2 (Garrett, 1985)

In which Z_1 and Z_2 the Fisher's equation of the correlation coefficient r_1 and r_2 respectively.

SEZ_1-Z_2 the standard error of the difference between Z_1 and Z_2 when N_1 and N_2 are sizes of the groups compared

$$SEZ_1\text{-}Z_2 = \sqrt{\frac{1}{N_1 - 3} + \frac{1}{N_2 - 3}}$$

The obtained critical ratio is then treated as belonging to a normal distribution. Depending upon whether the critical ratio exceeds $\pm$1.196 or $\pm$ 2.58 the difference between correlation is said to be significant at 0.05 level or at 0.01 level respectively.

Techniques of Classification

In order to test sub-hypotheses, the whole sample had to be divided into three sub groups each based upon achievement levels, viz., high achievers, average achievers and low achievers. The procedure of classification of each is as follows:

1. ***Classification of the sample into high, average and low achievers in achievement levels***

Assuming a normal distribution of achievement scores, the conventional procedure of using sigma distance for dividing the sample was used to classify the whole sample in three groups, viz., high, average and low achievers. Thus, subjects whose achievement is falling between ($M \pm \sigma$) were classified as average achievers. Those subjects whose scores were below ($M - 1\sigma$) were considered as low achievers. While subjects whose scores were above ($M + 1\sigma$) were classified as high achievers.

The same conventional procedure of 'σ' distance from 'M' was used to classify each of the sub samples. viz., boys, girls, rural and urban subjects, into respective high, average and low achievers in selected subjects.

ANALYSIS AND INTERPRETATIONS

K. T. Showkath Hussiain “An analytical study of the socio-familial status of low achievers among the secondary school students of Kerala state” Thesis. Department of Education, University of Calicut, 2002

ANALYSIS AND INTERPRETATIONS

- Identification of the Socio-familial Correlates of the Achievements in the Subjects Selected
- Relation between Socio-familial Variables and Achievement, High Achievers
- Relation between Socio-familial Variables and Achievement, Low Achievers
- Comparison of Correlation between Socio-familial Variables and Achievement in High Achievers Based on Gender and Locale
- Comparison of Correlation between Socio-familial Variables and Achievement in Low Achievers Based on Gender and Locale

ANALYSIS AND INTERPRETATION

I. IDENTIFICATION OF SOCIO-FAMILIAL CORRELATES OF THE ACHIEVEMENT IN THE SUBJECTS SELECTED FOR THE STUDY

1. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Malayalam For Total Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in Malayalam for total sample is presented below in Table 1.

TABLE 1

Details Regarding the Test of Significance for Mean Difference of The socio-familial variables of low achievers And high achievers in malayalam for total sample

Dimension	High Achievement (N=197)	Low Achievers (N=184)	SD		
			σ_2	σ_1	CR
Education	18.65	13.20	6.44	4.65	0.52 NS
Occupation	16.01	12.06	6.33	4.13	16.91 S
Income	15.69	10.54	6.60	4.93	8.65 S
Totses	50.38	35.54	16.14	9.47	11.03 S
HLF	14.97	13.82	3.46	2.67	3.64 S
FAEdn	38.32	35.46	4.13	5.56	5.66 S
CL of Family	28.92	28.09	4.29	4.37	9.96 S
CL family neighbourhood	30.43	28.56	4.67	4.55	2.35 NS
Total SFS	112.44	103.26	10.99	13.35	9.32 S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

The test of significance of difference between mean scores of socio-familial status of low-achievers and high achievers in Malayalam is calculated as shown in the table no 1. For the variable education level the obtained CR is 9.52 is greater than the table value (2.58) is 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable occupation level of low achievers, high achievers is calculated. The obtained cr (16.91) is greater than the table value (2.58) as 0.01 level of significance the difference is found correct.

The test of significance of difference between mean scores of the variable income level of low achievers and high achievers in Malayalam is calculated. The obtained CR (8.65) is greater than the table value (2.58) as 0.01 level of significance. The difference is substantiated.

The test of significance of difference between mean scores of total SES scores of low achievers and high achievers in Malayalam is calculated. Since the obtained CR (11.03) is greater than the table value as 0.01 level of significance the difference is found to be significance.

The test of significance of difference between mean scores of home learning faculty variable of low-achievers and high achievers in Malayalam is calculated. Since the obtained CR (3.64) is greater than the table value (2.58) as 0.01 level of significance the difference is found correct.

The test of significance of difference between mean scores of the variable family acceptance of education of low-achievers and high achievers in Malayalam is calculated. Since the obtained CR (5.66) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family of low achievers and high achievers in Malayalam is calculated. Since the obtained R (8.96) is greater than the table value (2.58) as 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of cultural level of family neighbourhood variable of low-achievers and high achievers is Malayalam is calculated since the obtained CR (2.35) is less than the table value (2.58) required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of total socio-familial status of scores of low achievers and high-achievers in Malayalam is calculated. Since the obtained CR (9.32) is greater than the table value (2.58) as 0.01 level of significance the difference is found correct.

There is no significant difference between the variable cultural level of family neighbourhood.

2. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Malayalam For Boys Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in Malayalam for boys sample is presented below in Table 2.

TABLE 2

Details Regarding the Test of Significance for Mean Difference of the Socio-familial Variables of Low Achievers And high achievers in malayalam for boys sample

Dimension	High Achievement (N=70)	Low Achievers (N=104)	SD		
			σ_2	σ_1	CR
Education	16.5	13.41	4.99	4.56	4.14 S
Occupation	13.86	12.07	5.32	4.58	2.29 NS
Income	14.29	10.77	6.21	4.96	3.96 S
Totses	44.5	36.30	12.22	8.90	4.82 S
HLF	14.3	13.82	3.41	3.16	0.94 NS
FAEdn	37.16	35.63	5.10	5.08	-1.94 NS
CL of Family	29.3	28.38	4.19	4.32	1.41 NS
CL family neighbourhood	30.43	28.77	4.60	4.07	2.44 NS
Total SFS	110.73	104.23	12.69	12.69	3.28 S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

For the variable education for boys in Malayalam the obtained CR (4.14) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for boys in Malayalam is calculated. Since the obtained CR (2.29) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for boys in Malayalam is calculated. Since the obtained CR (3.96) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for boys in Malayalam is calculated. Since the obtained CR (4.82) is greater than the table value (2.58) as required for 0.01 level of significance the difference is to be significant.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for boys in Malayalam is calculated. Since the obtained CR (0.94) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for boys in Malayalam is calculated. Since the obtained CR

(-1.94) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for boys in Malayalam is calculated. Since the obtained CR (1.41) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for boys in Malayalam is calculated. Since the obtained CR (2.44) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for boys in Malayalam is calculated. Since the obtained CR (3.28) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

From table 2 it is clear that for occupation, home learning facility, cultural level of family, family acceptance of education and cultural level of family neighbourhood, there is no significant difference for education, income and total socio-familial and total socio-economic status there exists significant difference.

3. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Malayalam For Girls Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in Malayalam for girls sample is presented below in Table 3.

TABLE 3
Details Regarding the Test of Significance For Mean Difference of The Socio-Familial Variables of Low Achievers And High Achievers in Malayalam for Girls Sample

Dimension	High Achievement (N=127)	Low Achievers (N=80)	SD			
			σ_2	σ_1	CR	
Education	19.58	12.94	6.84	4.75	8.56	S
Occupation	17.20	12.07	6.54	4.34	6.80	S
Income	16.46	10.25	6.70	4.90	7.68	S
Totses	53.49	34.56	17.14	10.13	9.98	S
HLF	15.34	13.81	3.44	2.66	3.58	S
FAEdn	38.96	35.25	3.33	6.15	4.96	S
CL of Family	28.72	27.73	4.34	4.44	1.59	NS
CL family neighbourhood	30.44	28.27	4.73	5.12	3.80	S
Total SFS	113.38	102	9.71	14.14	6.32	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Table 3 reveals the significant difference between various variables for girls in Malayalam.

For the variable education for girls in Malayalam the obtained CR (8.56) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for girls in Malayalam is calculated. Since the obtained CR (6.80) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for girls in Malayalam is calculated. Since the obtained CR (7.68) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for girls in Malayalam is calculated. Since the obtained CR (9.98) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for girls in Malayalam is calculated. Since the obtained CR (3.58) is greater than the table value (2.58) as required for 0.01 level of significance the difference is to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for girls in Malayalam is calculated. Since the obtained CR (4.96) is less than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for girls in Malayalam is calculated. Since the obtained CR (1.59) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for girls in Malayalam is calculated. Since the obtained CR (3.80) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for girls in Malayalam is calculated. Since the obtained CR (6.32) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

4. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Malayalam For Government Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in Malayalam for government sample is presented below in Table 4.

TABLE 4

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Malayalam for Government Sample

Dimension	High Achievement (N=80)	Low Achievers (N=85)	SD			
			σ_2	σ_1	CR	
Education	18.31	13.18	5.39	4.49	6.63	S
Occupation	16.25	11.94	5.93	3.77	5.53	S
Income	14.74	9.82	6.46	4.78	5.54	S
Totses	49.43	13.53	14.95	6.63	19.74	S
HLF	14.66	10.95	3.21	3.20	7.44	S
FAEdn	38.2	35.69	3.51	4.74	3.88	S
CL of Family	27.97	27.61	4.37	4.74	0.50	NS
CL family neighbourhood	30.33	28.50	4.32	4.72	2.58	S
Total SFS	111	102.53	10.15	12.59	4.77	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Table 4 reveals the significant difference between various variables for government in Malayalam.

For the variable education for government in Malayalam the

obtained CR (6.63) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for government in Malayalam is calculated. Since the obtained CR (5.53) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for government in Malayalam is calculated. Since the obtained CR (5.54) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for government in Malayalam is calculated. Since the obtained CR (19.74) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for government in Malayalam is calculated. Since the obtained CR (7.44) is greater than the table value (2.58) as required for 0.01 level of significance the difference is to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for government in Malayalam is calculated. Since the obtained CR (3.88) is less than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for government in Malayalam is calculated. Since the obtained CR (0.50) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for government in Malayalam is calculated. Since the obtained CR (2.58) is the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for government in Malayalam is calculated. Since the obtained CR (4.77) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

5. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Malayalam For Private Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in Mala yalam for private sample is presented below in Table 5.

TABLE 5

Details Regarding the Test of Significance For Mean Difference Of The Socio-Familial Variables Of Low Achievers And High Achievers In Malayalam For Private Sample

Dimension	High Achievement (N=117)	Low Achievers (N=99)	SD			
			σ_2	σ_1	CR	
Education	18.89	13.23	7.07	4.81	6.96	S
Occupation	15.85	11.83	6.61	4.47	5.30	S
Income	16.32	11.16	6.64	4.99	6.51	S
Totses	51.02	13.53	16.94	2.82	23.57	S
HLF	15.18	11.98	3.61	3.37	6.73	S
FAEdn	38.40	35.26	4.51	6.20	4.19	S
CL of Family	29.57	28.51	4.13	4.47	1.81	NS
CL family neighbourhood	30.51	28.61	4.91	4.43	3.00	S
Total SFS	113.42	103.89	11.47	14.01	5.41	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

For the variable education for private in Malayalam the obtained CR (6.96) is greater than the table value (2.58) as 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for private in Malayalam is calculated. Since the obtained CR (5.30) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for private in Malayalam is calculated. Since the obtained CR (6.51) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for private in Malayalam is calculated. Since the obtained CR (23.57) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for private in Malayalam is calculated. Since the obtained CR (6.73) is greater than the table value (2.58) as required for 0.01 level of significance the difference is to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for private in Malayalam is calculated. Since the obtained CR

(4.19) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for private in Malayalam is calculated. Since the obtained CR (1.81) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for private in Malayalam is calculated. Since the obtained CR (3.00) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for private in Malayalam is calculated. Since the obtained CR (5.41) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

6. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Malayalam For Rural Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in Mala yalam for rural sample is presented below in Table 6.

TABLE 6

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Malayalam for Rural Sample

Dimension	High Achievement (N=120)	Low Achievers (N=124)	SD			
			σ_2	σ_1	CR	
Education	17.46	13.15	5.61	4.75	4.98	S
Occupation	18.44	12.18	5.86	4.29	9.50	S
Income	17.53	9.76	6.13	4.64	11.15	S
Totses	46.38	34.72	13.46	9.53	7.79	S
HLF	14.48	11.34	3.25	3.47	7.32	S
FAEdn	37.83	35.67	4.62	5.74	3.24	S
CL of Family	29.33	28.22	4.03	4.63	2.00	NS
CL family neighbourhood	30.97	28.5	9.99	4.36	2.49	NS
Total SFS	112.36	103.32	11.32	14.29	5.48	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

The test of significance of the variable education for Malayalam in rural sample the obtained CR (4.98) is greater than the table value (2.58) as 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for rural in Malayalam is calculated. Since the obtained CR (9.50) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for rural in Malayalam is calculated. Since the obtained CR (11.15) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for rural in Malayalam is calculated. Since the obtained CR (7.79) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for rural in Malayalam is calculated. Since the obtained CR (7.32) is greater than the table value (2.58) as required for 0.01 level of significance the difference is to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for rural in Malayalam is calculated. Since the obtained CR (3.24) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for rural in Malayalam is calculated. Since the obtained CR (2.00) is less

than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for rural in Malayalam is calculated. Since the obtained CR (2.49) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for rural in Malayalam is calculated. Since the obtained CR (5.48) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

7. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Malayalam For Urban Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in Malayalam for urban sample is presented below in Table 7.

TABLE 7

Details Regarding the test of Significance for Mean Difference of The Socio-Familial Variables of Low Achievers and High Achievers In Malayalam For Urban Sample

Dimension	High Achievement (N=77)	Low Achievers (N=60)	SD		
			σ_2	σ_1	CR
Education	20.52	13.33	7.19	4.48	7.17 S
Occupation	18.44	15.85	6.30	3.90	2.95 S
Income	17.53	12.17	0.62	5.12	5.20 S
Totses	56.6	37.25	17.98	9.18	8.18 S
HLF	15.73	11.85	3.65	2.99	6.83 S
FAEdn	39.09	35.03	3.09	5.18	9.87 S
CL of Family	28.30	27.83	4.62	3.62	0.66 NS
CL family neighbourhood	29.61	28.68	5.50	4.96	1.15 NS
Total SFS	112.56	103.13	10.5	11.29	4.99 S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

The test of significance of the variable education for Malayalam in urban sample the obtained CR (7.17) is greater than the table value (2.58) as 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for urban in Malayalam is calculated. Since the obtained CR (2.95) is greater than

the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for urban in Malayalam is calculated. Since the obtained CR (5.20) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for urban in Malayalam is calculated. Since the obtained CR (8.18) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for urban in Malayalam is calculated. Since the obtained CR (6.83) is greater than the table value (2.58) as required for 0.01 level of significance the difference is to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for urban in Malayalam is calculated. Since the obtained CR (9.87) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for urban in Malayalam is calculated. Since the obtained CR (0.66) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for urban in Malayalam is calculated. Since the obtained CR (1.15) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for urban in Malayalam is calculated. Since the obtained CR (4.99) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

8. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in English For Total Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in English for total sample is presented below in Table 8.

TABLE 8

Details Regarding the test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in English for Total Sample

Dimension	High Achievement (N=120)	Low Achievers (N=143)	SD			
			σ_2	σ_1	CR	
Education	17.69	14.34	6.24	5.70	4.89	S
Occupation	15	12.94	6.39	5.01	3.14	S
Income	15.19	11.54	6.68	5.97	5.02	S
Totses	47.90	38.78	16.19	12.37	5.57	S
HLF	14.39	11.80	3.81	3.36	6.28	S
FAEdn	38.18	35.76	4.42	5.14	4.39	S
CL of Family	29.01	27.28	3.85	4.61	3.53	S
CL family neighbourhood	30.45	29.15	4.73	4.55	2.44	NS
Total SFS	111.3	104.40	14.47	12.53	4.44	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for English sample is calculated as shown in the Table 8. For the variable education level the obtained CR (4.51) is greater than the table value (2.58) as 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for English is calculated. Since the obtained CR (2.87) is greater than the table value

(2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for English is calculated. Since the obtained CR (4.63) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for English is calculated. Since the obtained CR (5.06) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for English is calculated. Since the obtained CR (6.28) is greater than the table value (2.58) as required for 0.01 level of significance the difference is to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for English is calculated. Since the obtained CR (4.39) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for English is calculated. Since the obtained CR (3.53) is greater than the table value (2.58) as required for 0.01 level of significance the difference is significant.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for English is calculated. Since the obtained CR (2.44) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for English is calculated. Since the obtained CR (4.44) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The Table reveals that there is significant difference for the variables Education, occupation, Income, tot socio Economic status, Home Learning facility, Cultural level of family, Family acceptance of education and total socio-familial status in English except for the variable Cultural Level of family Neighbourhood.

9. **The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in English For Boys Sample**

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in English for boys sample is presented below in Table 9.

TABLE 9

Details Regarding The Test Of Significance For Mean Difference Of The Socio-Familial Variables Of Low Achievers And High Achievers In English For Boys Sample

Dimension	High Achievement (N=90)	Low Achievers (N=73)	SD			
			σ_2	σ_1	CR	
Education	15.89	14.79	5.74	5.92	1.19	NS
Occupation	12.72	13.01	5.09	5.12	0.36	NS
Income	13.61	11.44	6.36	6.26	2.19	NS
Totses	42.33	39.15	13.50	13.35	1.46	NS
HLF	13.31	11.62	3.62	3.34	3.10	S
FAEdn	37.32	35.75	4.99	5.05	1.98	NS
CL of Family	28.52	27.62	3.96	4.66	1.32	NS
CL family neighbourhood	30.21	29.02	4.59	4.62	1.63	NS
Total SFS	109.7	104.38	12.73	13.00	2.62	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for boys in English is calculated as shown in the Table 9. For the variable education level

the obtained CR (1.19) is less than the table value (2.58) as 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers boys in English is calculated. Since the obtained CR (0.36) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for boys in English is calculated. Since the obtained CR (2.19) is less than the table value (2.58) as 0.01 level of significance the difference is not found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers boys in English is calculated. Since the obtained CR (1.46) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers boys in English is calculated. Since the obtained CR (3.10) is greater than the table value (2.58) as required for 0.01 level of significance the difference is to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers boys in English is calculated. Since the obtained CR (1.98) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers boys in English is calculated. Since the obtained CR (1.32) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers boys in English is calculated. Since the obtained CR (1.63) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers boys in English is calculated. Since the obtained CR (2.62) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The Table reveals that there is no significant difference for the variables Education, occupation, Income, tot socio Economic status, Cultural level of family, Family acceptance of education and in English

except for the variable Home learning facility and total socio familial status.

10. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in English For Girls Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in English for girls sample is presented below in Table 10.

TABLE 10

Details Regarding the Test of Significance for Mean Difference of The Socio-Familial Variables of Low Achievers and High Achievers In English For Girls Sample

Dimension	High Achievement (N=70)	Low Achievers (N=70)	SD			
			σ_2	σ_1	CR	
Education	20	13.86	6.14	5.46	6.25	S
Occupation	17.93	12.86	6.73	4.93	5.08	S
Income	17.21	11.64	6.57	5.69	5.36	S
Totses	55.07	38.28	6.63	11.32	10.69	S
HLF	15.78	12.00	3.61	3.40	6.38	S
FAEdn	38.83	35.76	3.63	5.27	4.01	S
CL of Family	29.64	26.93	-3.63	4.56	3.89	S
CL family neighbourhood	30.76	29.27	4.92	4.50	1.87	NS
Total SFS	113.36	104.43	16.29	12.21	3.67	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for girls in English is calculated as shown in the Table 9. For the variable education level the obtained CR (6.25) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers girls in English is calculated. Since the obtained CR (5.08) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for girls in English is calculated. Since the obtained CR (5.36) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers girls in English is calculated. Since the obtained CR (10.69) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers girls in English is calculated. Since the obtained CR (6.38) is greater

than the table value (2.58) as required for 0.01 level of significance the difference is to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers girls in English is calculated. Since the obtained CR (4.01) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers girls in English is calculated. Since the obtained CR (3.89) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers girls in English is calculated. Since the obtained CR (1.87) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers girls in English is calculated. Since the obtained CR (3.67) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The Table reveals that there is no significant difference for the

variables Education, occupation, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education, Cultural level of family and total socio familial status in English except for the variable Cultural Level of Family Neighbourhood.

11. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in English For Government Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in English for government sample is presented below in Table 11.

TABLE 11

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in English for Government Sample

Dimension	High Achievement (N=58)	Low Achievers (N=85)	SD			
			σ_2	σ_1	CR	
Education	17.33	13.59	5.64	5.15	4.03	S
Occupation	13.79	12.59	6.30	4.54	1.25	NS
Income	14.40	10.59	6.56	5.37	3.66	S
Totses	45.43	36.71	15.02	10.95	3.79	S
HLF	13.78	11.6	3.69	3.29	3.62	S
FAEdn	37.59	35.36	4.42	4.82	2.84	S
CL of Family	28.17	26.49	3.72	4.75	2.36	NS
CL family neighbourhood	30.03	28.56	4.61	4.59	1.88	NS
Total SFS	110.07	102.95	11.59	12.27	3.52	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for government in English is calculated as shown in the Table 11. For the variable education level the obtained CR (4.03) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers government in English is calculated. Since the obtained CR (1.25) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for government in English is calculated. Since the obtained CR (3.66) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers government in English is calculated. Since the obtained CR (3.71) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers

government in English is calculated. Since the obtained CR (3.62) is greater than the table value (2.58) as required for 0.01 level of significance the difference is to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers government in English is calculated. Since the obtained CR (2.84) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers government in English is calculated. Since the obtained CR (2.36) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers government in English is calculated. Since the obtained CR (1.88) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers government in English is calculated. Since the obtained CR (3.52) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The Table reveals that there is significant difference for the variables Education, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education and total socio familial status in English except for the variables occupation, Cultural level of family and Cultural Level of Family Neighbourhood.

12. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in English For Private Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in English for private sample is presented below in Table 12.

TABLE 12

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in English for Private Sample

Dimension	High Achievement (N=102)	Low Achievers (N=58)	SD			
			σ_2	σ_1	CR	
Education	17.89	15.43	6.58	6.30	2.33	NS
Occupation	15.69	13.45	6.37	5.64	2.37	NS
Income	15.64	1.293	6.74	6.56	2.48	NS
Totses	49.31	41.81	16.72	13.72	3.07	S
HLF	14.75	12.10	3.85	3.47	4.44	S
FAEdn	38.21	36.33	4.55	5.57	2.19	NS
CL of Family	29.49	26.43	3.85	4.17	4.58	S
CL family neighbourhood	30.69	30	4.80	4.38	2.07	NS
Total SFS	112	106.52	15.88	12.72	2.39	NS

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for private in English is calculated as shown in the Table 12. For the variable education level the obtained CR (2.33) is less than the table value (2.58) as 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers private in English is calculated. Since the obtained CR (2.37) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for government in English is calculated. Since the obtained CR (2.48) is less than the table value (2.58) as 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers private in English is calculated. Since the obtained CR (3.07) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers private in English is calculated. Since the obtained CR (4.44) is greater than the table value (2.58) as required for 0.01 level of significance the

difference is to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers private in English is calculated. Since the obtained CR (2.19) is greater than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers private in English is calculated. Since the obtained CR (4.58) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers private in English is calculated. Since the obtained CR (2.07) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers private in English is calculated. Since the obtained CR (2.39) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The Table reveals that there is no significant difference for the

variables Education, Occupation, Income, Family Acceptance of Education, Cultural Level of Family Neighbourhood and total socio familial status in English except for the variables total socio Economic status, Home Learning Facility and Cultural level of family.

13. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in English For Rural Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in English for rural sample is presented below in Table 13.

TABLE 13
Details Regarding the Test of Significance for Mean Difference of The Socio-Familial Variables of Low Achievers and High Achievers in English for Rural Sample

Dimension	High Achievement (N=102)	Low Achievers (N=90)	SD			
			σ_2	σ_1	CR	
Education	15.88	14.61	5.47	5.86	0.27	NS
Occupation	13.43	12.83	5.31	5.20	0.79	NS
Income	13.33	11.33	5.98	5.89	2.33	NS
Totses	42.60	38.78	12.74	12.41	2.10	NS
HLF	13.77	11.46	3.61	3.13	4.77	S
FAEdn	37.40	35.82	4.71	5.09	0.69	NS
CL of Family	26.65	27.53	3.97	4.53	1.43	NS
CL family neighbourhood	30.59	28.76	4.10	4.25	11.10	S
Total SFS	110.44	104.12	12.26	12.78	3.48	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for rural in English is calculated as shown in the Table 13. For the variable education level the obtained CR (0.27) is less than the table value (2.58) as 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers rural in English is calculated. Since the obtained CR (0.79) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for rural in English is calculated. Since the obtained CR (2.33) is less than the table value (2.58) as 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers rural in English is calculated. Since the obtained CR (2.10) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers rural in English is calculated. Since the obtained CR (4.77) is greater

than the table value (2.58) as required for 0.01 level of significance the difference is to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers rural in English is calculated. Since the obtained CR (0.69) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers rural in English is calculated. Since the obtained CR (1.43) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers rural in English is calculated. Since the obtained CR (11.10) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers rural in English is calculated. Since the obtained CR (3.48) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be substantiated.

The Table reveals that there is no significant difference for the variables Education, Occupation, Income, total socio Economic status, Family Acceptance of Education and Cultural level of family in English except for the variables, Home Learning Facility, Cultural Level of Family Neighbourhood and total socio familial status.

14. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in English For Urban Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in English for urban sample is presented below in Table 14.

TABLE 14
Details Regarding the Test of Significance for Mean Difference of The Socio-Familial Variables of Low Achievers and High Achievers in English for Urban Sample

Dimension	High Achievement (N=58)	Low Achievers (N=53)	SD			
			σ_2	σ_1	CR	
Education	20.86	13.87	6.29	5.43	6.28	S
Occupation	17.76	13.11	7.20	4.73	4.05	S
Income	18.45	11.89	6.64	6.14	5.41	S
Totses	57.24	38.77	17.45	12.40	6.47	S
HLF	15.48	12.40	3.94	3.69	4.26	S
FAEdn	39	35.64	3.93	5.28	4.25	S
CL of Family	29.65	26.85	3.58	4.75	3.49	S
CL family neighbourhood	30.21	29.81	5.69	4.98	0.39	NS
Total SFS	112.81	104.87	17.71	12.21	2.77	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for urban in English is calculated as shown in the Table 14. For the variable education level the obtained CR (6.28) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers urban in English is calculated. Since the obtained CR (4.05) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for urban in English is calculated. Since the obtained CR (5.41) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers urban in English is calculated. Since the obtained CR (6.47) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers urban in English is calculated. Since the obtained CR (4.26) is greater

than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers rural in English is calculated. Since the obtained CR (4.25) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers urban in English is calculated. Since the obtained CR (3.49) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers urban in English is calculated. Since the obtained CR (0.39) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers urban in English is calculated. Since the obtained CR (2.77) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be substantiated.

The Table reveals that there is significant difference for the

variables Education, Occupation, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education, Cultural level of family and total socio familial status in English except for the variable Cultural Level of Family Neighbourhood.

15. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Social Studies for Total Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in social studies for total sample is presented below in Table 15.

TABLE 15

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Social Studies for Total Sample

Dimension	High Achievement (N=174)	Low Achievers (N=161)	SD			
			σ_2	σ_1	CR	
Education	18.53	13.60	5.10	5.57	8.43	S
Occupation	16.32	12.32	6.45	4.71	6.50	S
Income	15.98	11.55	6.79	5.34	6.65	S
Totses	50.80	37.20	16.09	11.48	8.95	S
HLF	14.61	11.66	3.56	3.43	20.34	S
FAEdn	38.53	34.63	.3.86	5.33	14.90	S
CL of Family	28.90	27.80	4.08	4.34	2.41	N S
CL family neighbourhood	30.74	28.70	3.98	5.04	4.09	S
Total SFS	112.75	102.57	10.50	12.57	8.02	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for social studies is calculated as shown in the Table 15. For the variable education level the obtained CR (8.43) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for social studies is calculated. Since the obtained CR (6.50) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for social studies is calculated. Since the obtained CR (6.65) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for social studies is calculated. Since the obtained CR (8.95) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for social studies is calculated. Since the obtained CR (20.34) is greater

than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for social studies is calculated. Since the obtained CR (14.90) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for social studies is calculated. Since the obtained CR (2.41) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers urban for social studies is calculated. Since the obtained CR (4.09) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for social studies is calculated. Since the obtained CR (8.02) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be substantiated.

The Table reveals that there is significant difference for the

variables Education, Occupation, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education, Cultural Level of Family Neighbourhood and total socio familial status in social studies except for the variable Cultural level of family.

16. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Social Studies For Boys Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in social studies for boys sample is presented below in Table 16.

TABLE 16

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Social Studies for Boys Sample

Dimension	High Achievement (N=72)	Low Achievers (N=92)	SD			
			σ_2	σ_1	CR	
Education	16.74	13.91	6.06	5.92	2.99	S
Occupation	14.72	12.83	5.87	4.93	2.20	NS
Income	14.72	12.07	6.49	5.55	2.77	S
Totses	46.04	38.86	14.41	12.31	3.37	S
HLF	13.68	11.90	.3.21	3.40	3.43	S
FAEdn	38.56	35.04	3.89	4.81	5.17	S
CL of Family	29.24	27.63	3.46	4.13	2.71	S
CL family neighbourhood	30.61	28.60	3.61	5.26	2.89	S
Total SFS	111.86	103.20	10.48	12.30	4.87	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for boys in social studies is calculated as shown in the Table 16. For the variable education level the obtained CR (2.99) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for boys in social studies is calculated. Since the obtained CR (2.20) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for boys in social studies is calculated. Since the obtained CR (2.77) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for boys in social studies is calculated. Since the obtained CR (3.37) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for boys in social studies is calculated. Since the obtained CR (3.43) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for boys in social studies is calculated. Since the obtained CR

(5.17) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for boys in social studies is calculated. Since the obtained CR (2.71) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for boys in social studies is calculated. Since the obtained CR (2.89) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for boys in social studies is calculated. Since the obtained CR (4.87) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be substantiated.

The Table reveals that there is significant difference for the variables Education, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education, Cultural level of family, Cultural Level of Family Neighbourhood and total socio familial status in social studies except for the variable Occupation.

17. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Social Studies For Girls Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in social studies for girls sample is presented below in Table 17.

TABLE 17

Details Regarding The Test Of Significance For Mean Difference Of The Socio-Familial Variables Of Low Achievers And High Achievers In Social Studies For Girls Sample

Dimension	High Achievement (N=102)	Low Achievers (N=69)	SD			
			σ_2	σ_1	CR	
Education	19.80	13.88	5.84	5.07	7.04	S
Occupation	17.54	11.67	6.63	4.34	6.89	S
Income	16.86	10.87	6.89	5.00	6.59	S
Totses	54.17	35.00	16.43	9.93	9.50	S
HLF	15.27	11.35	3.66	3.49	7.07	S
FAEdn	38.52	34.07	3.85	5.95	5.48	S
CL of Family	28.68	28.01	4.46	4.62	0.93	NS
CL family neighbourhood	30.77	28.81	4.24	4.76	2.76	S
Total SFS	113.38	101.72	10.52	12.97	6.21	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for girls in social studies is calculated as shown in the Table 17. For the variable education level the obtained CR (7.04) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for girls in social studies is calculated. Since the obtained CR (6.89) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for girls in social studies is calculated. Since the obtained CR (6.59) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for girls in social studies is calculated. Since the obtained CR (9.50) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for girls in social studies is calculated. Since the obtained CR (7.07) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for girls in social studies is calculated. Since the obtained CR (5.48) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for girls in social studies is calculated. Since the obtained CR (0.93) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for girls in social studies is calculated. Since the obtained CR (2.76) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for girls in social studies is calculated. Since the obtained CR (6.21) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be substantiated.

The Table reveals that there is significant difference for the variables Education, Occupation, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education, Cultural Level of Family Neighbourhood and total socio familial status in social studies except for the variable Cultural level of family.

18. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Social Studies For Government Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in social studies for government sample is presented below in Table 18.

TABLE 18

Details Regarding the Test of Significance for Mean Difference of the Socio-familial Variables of Low Achievers and High Achievers in Social Studies for Government Sample

Dimension	High Achievement (N=67)	Low Achievers (N=87)	SD			
			σ_2	σ_1	CR	LS
Education	18.13	13.12	4.99	5.11	6.11	S
Occupation	16.79	12.12	6.61	4.36	5.29	S
Income	15.22	11.09	7.41	5.36	3.85	S
Totses	50.22	13.99	15.36	11.16	16.28	S
HLF	14.38	11.37	3.45	3.23	5.53	S
FAEdn	37.67	34.70	3.92	5.09	4.09	S
CL of Family	28.04	27.64	4.62	3.94	0.57	NS
CL family neighbourhood	30.58	28.71	3.48	4.74	2.82	S
Total SFS	110.63	102.48	10.41	11.04	4.69	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for government in social studies is calculated as shown in the Table 18. For the variable education level the obtained CR (6.11) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for government in social studies is calculated. Since the obtained CR (5.29) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for government in social studies is calculated. Since the obtained CR (3.85) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for government in social studies is calculated. Since the obtained CR (16.28) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for government in social studies is calculated. Since the obtained CR (5.53) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for government in social studies is calculated. Since the obtained CR (4.09) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for government in social studies is calculated. Since the obtained CR (0.57) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for government in social studies is calculated. Since the obtained CR (2.82) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for government in social studies is calculated. Since the obtained CR (4.69) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be substantiated.

The Table reveals that there is significant difference for the variables Education, Occupation, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education, Cultural Level of Family Neighbourhood and total socio familial status in social studies except for the variable Cultural level of family.

19. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Social Studies For Private Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in social studies for Private sample is presented below in Table 19.

TABLE 19

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Social Studies for Private Sample

Dimension	High Achievement (N=107)	Low Achievers (N=74)	SD			
			σ_2	σ_1	CR	
Education	18.79	13.99	6.72	6.08	5.00	S
Occupation	16.02	12.57	6.36	5.11	4.04	S
Income	16.45	12.09	6.37	5.30	5.00	S
Totses	51.17	37.91	16.59	11.88	6.27	S
HLF	14.75	12.01	3.64	3.63	4.99	S
FAEdn	39.07	34.54	3.73	5.63	6.06	S
CL of Family	29.45	27.97	3.61	4.79	2.24	S
CL family neighbourhood	30.79	28.68	-4.28	5.40	2.81	S
Total SFS	114.08	102.66	10.38	14.24	5.90	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for private in social studies is calculated as shown in the Table 19. For the variable education level the obtained CR (5.00) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for private in social studies is calculated. Since the obtained CR (4.04) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for private in social studies is calculated. Since the obtained CR (5.00) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for private in social studies is calculated. Since the obtained CR (6.27) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for private in social studies is calculated. Since the obtained CR (4.99) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for private in social studies is calculated. Since the obtained CR (6.06) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for private in social studies is calculated. Since the obtained CR (2.24) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for private in social studies is calculated. Since the obtained CR (2.81) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for private in social studies is calculated. Since the obtained CR (5.90) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be substantiated.

The Table reveals that there is significant difference for the variables Education, Occupation, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education, Cultural Level of Family Neighbourhood and total socio familial status in social studies except for the variable Cultural level of family.

20. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Social Studies For Rural Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in social studies for Rural sample is presented below in Table 20.

TABLE 20

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Social Studies for Rural Sample

Dimension	High Achievement (N=100)	Low Achievers (N=93)	SD			
			σ_2	σ_1	CR	
Education	16.85	13.17	5.30	5.56	4.70	S
Occupation	14.75	11.88	6.29	4.66	3.60	S
Income	14.7	10.54	6.15	4.80	5.26	S
Totses	46.1	35.05	13.94	10.72	6.20	S
HLF	14.09	10.96	3.28	3.45	6.45	S
FAEdn	38.16	34.58	4.20	5.23	5.23	S
CL of Family	28.97	27.27	3.79	4.67	2.76	S
CL family neighbourhood	30.82	27.72	.3.65	5.01	3.10	S
Total SFS	111.96	100.68	10.54	13.21	6.53	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for rural in social studies is calculated as shown in the Table 20. For the variable education level the obtained CR (4.70) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for rural in social studies is calculated. Since the obtained CR (3.60) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for rural in social studies is calculated. Since the obtained CR (5.26) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for rural in social studies is calculated. Since the obtained CR (6.20) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for rural in social studies is calculated. Since the obtained CR (6.45) is greater than the

table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for rural in social studies is calculated. Since the obtained CR (5.23) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for rural in social studies is calculated. Since the obtained CR (2.76) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for rural in social studies is calculated. Since the obtained CR (3.10) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for rural in social studies is calculated. Since the obtained CR (6.53) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be substantiated.

The Table shows that there is significant difference for all the variables in social studies for rural sample.

21. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Social Studies For Urban Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in social studies for Urban sample is presented below in Table 21.

TABLE 21

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Social Studies for Urban Sample

Dimension	High Achievement (N=74)	Low Achievers (N=68)	SD			
			σ_2	σ_1	CR	
Education	20.81	14.19	6.41	5.57	2.92	S
Occupation	18.45	12.94	6.08	4.75	6.04	S
Income	17.70	12.94	7.27	5.75	4.35	S
Totses	57.16	40.15	16.70	11.91	7.03	S
HLF	15.32	12.63	3.81	3.17	4.59	S
FAEdn	39.04	34.56	3.29	5.52	5.82	S
CL of Family	28.82	28.51	4.46	3.72	0.45	NS
CL family neighbourhood	30.55	30.02	4.40	4.80	0.68	NS
Total SFS	113.82	105.15	10.41	11.23	4.76	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for urban in social studies is calculated as shown in the Table 20. For the variable education level the obtained CR (2.92) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for urban in social studies is calculated. Since the obtained CR (6.04) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for urban in social studies is calculated. Since the obtained CR (4.35) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for urban in social studies is calculated. Since the obtained CR (7.03) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for urban in social studies is calculated. Since the obtained CR (4.59) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for urban in social studies is calculated. Since the obtained CR (5.82) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for urban in social studies is calculated. Since the obtained CR (0.45) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for urban in social studies is calculated. Since the obtained CR (0.68) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for urban in social studies is calculated. Since the obtained CR (4.96) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be substantiated.

The Table reveals that there is significant difference for the variables Education, Occupation, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education and total socio familial status in social studies except for the variable Cultural level of family and Cultural Level of Family Neighbourhood.

22 The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in General Science for Total Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in general science for Total sample is presented below in Table 22.

TABLE 22

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in General Science for Total Sample

Dimension	High Achievement (N=175)	Low Achievers (N=164)	SD			
			σ_2	σ_1	CR	
Education	18.11	13.17	5.71	5.37	8.21	S
Occupation	15.74	12.16	6.25	4.40	10.48	S
Income	15.0	11.10	6.82	5.11	5.99	S
Totses	48.94	36.10	15.66	10.49	8.92	S
HLF	14.49	11.57	3.58	3.36	7.74	S
FAEdn	38.04	34.65	4.25	5.42	6.39	S
CL of Family	29.30	27.52	3.89	4.47	3.89	S
CL family neighbourhood	30.30	28.48	4.61	5.23	3.39	S
Total SFS	111.90	102.22	11.85	13.70	6.94	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for general science is calculated as shown in the Table 22. For the variable education level the obtained CR (8.21) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for general science is calculated. Since the obtained CR (10.48) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for general science is calculated. Since the obtained CR (5.99) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for general science is calculated. Since the obtained CR (8.92) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for general science is calculated. Since the obtained CR (7.74) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for general science is calculated. Since the obtained CR (6.39) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for general science is calculated. Since the obtained CR (3.89) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for general science is calculated. Since the obtained CR (3.39) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for general science is calculated. Since the obtained CR (6.94) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be substantiated.

The Table reveals that there is significant difference for the all the variables in general science.

23. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in General Science for Boys Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in general science for boys sample is presented below in Table 23.

TABLE 23

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in General Science for Boys Sample

Dimension	High Achievement (N=71)	Low Achievers (N=95)	SD			
			σ_2	σ_1	CR	
Education	16.34	13.16	5.00	5.60	3.85	S
Occupation	14.44	12.21	5.38	4.36	2.86	S
Income	13.66	11.5	6.49	5.48	2.27	NS
Totses	44.44	36.79	13.40	10.74	3.95	S
HLF	13.54	11.34	3.64	3.18	4.09	S
FAEdn	37.80	34.12	4.42	5.55	4.75	S
CL of Family	29.97	27.33	3.88	4.26	4.15	S
CL family neighbourhood	30.15	28.37	4.30	5.31	2.40	NS
Total SFS	111.07	110.26	11.99	13.75	0.40	NS

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for boys in general science is calculated as shown in the Table 23. For the variable education level the obtained CR (3.85) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for boys in general science is calculated. Since the obtained CR (2.86) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for boys in general science is calculated. Since the obtained CR (2.27) is less than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for boys in social studies is calculated. Since the obtained CR (3.95) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for boys in general science is calculated. Since the obtained CR (4.09) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for boys in general science is calculated. Since the obtained CR (4.75) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for boys in general science is calculated. Since the obtained CR (4.15) is greater than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for boys in general science is calculated. Since the obtained CR (2.40) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for boys in general science is calculated. Since the obtained CR (0.40) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The Table reveals that there is significant difference for the variables Education, Occupation, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education and Cultural level of family in social studies except for the variables Cultural Level of Family Neighbourhood and total socio familial status.

24. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in General Science for Girls Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in general science for girls sample is presented below in Table 24.

TABLE 24

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in General Science for Girls Sample

Dimension	High Achievement (N=104)	Low Achievers (N=69)	SD			
			σ_2	σ_1	CR	
Education	19.33	13.19	5.87	5.07	7.31	S
Occupation	16.63	12.10	6.66	4.49	5.35	S
Income	15.91	10.58	6.92	4.58	6.10	S
Totses	52.02	35.14	16.39	10.14	8.36	S
HLF	15.13	11.85	3.41	3.60	5.98	S
FAEdn	37.80	35.36	4.14	5.18	3.28	S
CL of Family	38.20	27.78	3.84	4.73	15.26	S
CL family neighbourhood	30.40	28.64	4.84	5.15	2.26	NS
Total SFS	112.46	103.55	11.44	13.75	4.45	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for girls in general science is calculated as shown in the Table 24. For the variable education level the obtained CR (7.31) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for girls in general science is calculated. Since the obtained CR (5.35) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for girls in general science is calculated. Since the obtained CR (6.10) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for girls in social studies is calculated. Since the obtained CR (8.36) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for girls in general science is calculated. Since the obtained CR (5.98) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for girls in general science is calculated. Since the obtained CR (3.28) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for girls in general science is calculated. Since the obtained CR (15.26) is greater than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for girls in general science is calculated. Since the obtained CR (2.26) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for boys in general science is calculated. Since the obtained CR (4.45) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The Table reveals that there is significant difference for the variables Education, Occupation, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education and Cultural level of family and total socio familial status in general science except for the variable Cultural Level of Family Neighbourhood.

25. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in General Science for Government Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in general science for government sample is presented below in Table 25.

TABLE 25

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in General Science for Government Sample

Dimension	High Achievement (N=82)	Low Achievers (N=86)	SD			
			σ_2	σ_1	CR	
Education	17.68	12.85	5.28	5.34	5.90	S
Occupation	15.49	11.80	6.36	3.83	4.52	S
Income	14.51	10.58	6.97	5.00	4.19	S
Totses	47.87	35.24	15.24	10.00	6.32	S
HLF	13.95	11.01	3.59	3.15	5.63	S
FAEdn	37.30	34.38	4.35	4.60	4.11	S
CL of Family	28.33	27.34	4.08	4.41	1.51	NS
CL family neighbourhood	29.61	28.23	4.72	5.01	1.84	NS
Total SFS	108.83	101.12	11.88	13.16	3.99	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for government in general science is calculated as shown in the Table 25. For the variable education level the obtained CR (5.90) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for government in general science is calculated. Since the obtained CR (4.52) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for government in general science is calculated. Since the obtained CR (4.19) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for government in social studies is calculated. Since the obtained CR (6.32) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for government in general science is calculated. Since the obtained CR (5.63) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for girls in general science is calculated. Since the obtained CR (4.11) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for government in general science is calculated. Since the obtained CR (1.51) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for government in general science is calculated. Since the obtained CR (1.84) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for boys in general science is calculated. Since the obtained CR (3.99) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The Table reveals that there is significant difference for the variables Education, Occupation, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education and Cultural level of family and total socio familial status in general science except for the variable Cultural Level of Family Neighbourhood.

26. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in General Science for Private Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in general science for private sample is presented below in Table 26.

TABLE 26

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in General Science for Private Sample

Dimension	High Achievement (N=93)	Low Achievers (N=78)	SD			
			σ_2	σ_1	CR	
Education	18.49	13.53	6.07	5.41	5.66	S
Occupation	15.97	12.56	6.18	4.95	4.00	S
Income	15.43	11.67	6.70	5.20	4.13	S
Totses	49.89	37.12	16.05	11.03	6.14	S
HLF	14.96	12.18	3.53	3.49	5.15	S
FAEdn	38.69	34.94	4.08	5.99	4.70	S
CL of Family	30.15	27.73	3.51	4.55	3.83	S
CL family neighbourhood	30.91	28.76	4.45	5.49	2.79	S
Total SFS	114.60	103.44	10.6	14.25	5.72	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for private in general science is calculated as shown in the Table 26. For the variable education level the obtained CR (5.66) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for government in general science is calculated. Since the obtained CR (4.00) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for private in general science is calculated. Since the obtained CR (4.19) is greater than the table value (4.13) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for private in social studies is calculated. Since the obtained CR (6.14) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for private in general science is calculated. Since the obtained CR (5.17) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for private in general science is calculated. Since the obtained CR (4.70) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for private in general science is calculated. Since the obtained CR (3.83) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for government in general science is calculated. Since the obtained CR (2.79) is greater than the table value (2.58) as required for 0.01 level of significance the difference is significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for boys in general science is calculated. Since the obtained CR (5.72) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The Table reveals that there is significant difference for all the variables in general science.

27. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in General Science for Rural Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in general science for rural sample is presented below in Table 27.

TABLE 27

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in General Science for Rural Sample

Dimension	High Achievement (N=108)	Low Achievers (N=103)	SD			
			σ_2	σ_1	CR	
Education	16.99	12.62	5.29	4.94	6.20	S
Occupation	14.63	11.50	6.03	4.13	3.12	S
Income	13.70	101.10	6.20	4.48	4.86	S
Totses	45.37	33.79	13.92	8.90	7.24	S
HLF	14.28	11.05	3.46	3.40	5.83	S
FAEdn	37.89	34.74	4.54	5.50	4.53	S
CL of Family	29.64	27.57	3.78	4.42	3.51	S
CL family neighbourhood	30.64	28.33	-3.94	5.18	3.63	S
Total SFS	112.14	101.78	11.38	14.03	5.88	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for rural in general science is calculated as shown in the Table 27. For the variable education level the obtained CR (6.20) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for rural in general science is calculated. Since the obtained CR (3.12) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for rural in general science is calculated. Since the obtained CR (4.86) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for rural in social studies is calculated. Since the obtained CR (7.24) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for rural in general science is calculated. Since the obtained CR (5.83) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for rural in general science is calculated. Since the obtained CR (4.53) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for rural in general science is calculated. Since the obtained CR (3.52) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for rural in general science is calculated. Since the obtained CR (3.63) is greater than the table value (2.58) as required for 0.01 level of significance the difference is significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for rural in general science is calculated. Since the obtained CR (5.88) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The Table reveals that there is significant difference for all the variables for rural in general science .

28. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in General Science for Urban Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in general science for urban sample is presented below in Table 28.

TABLE 28

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in General Science for Urban Sample

Dimension	High Achievement (N=67)	Low Achievers (N=61)	SD			
			σ_2	σ_1	CR	
Education	19.93	14.10	5.93	5.96	5.53	S
Occupation	17.4	13.28	6.24	4.64	4.41	S
Income	17.09	12.79	7.29	5.67	3.75	S
Totses	54.70	40.00	16.67	11.83	5.79	S
HLF	12.82	12.44	3.77	3.12	3.90	S
FAEdn	38.28	34.49	3.77	5.31	4.62	S
CL of Family	28.75	27.44	4.02	4.58	1.70	NS
CL family neighbourhood	29.76	28.78	5.52	5.38	1.01	NS
Total SFS	111.51	102.97	12.15	13.21	3.44	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for urban in general science is calculated as shown in the Table 28. For the variable education level the obtained CR (5.53) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for urban in general science is calculated. Since the obtained CR (4.41) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for urban in general science is calculated. Since the obtained CR (3.75) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for urban in social studies is calculated. Since the obtained CR (5.79) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for urban in general science is calculated. Since the obtained CR (3.90) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for urban in general science is calculated. Since the obtained CR (4.62) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for rural in general science is calculated. Since the obtained CR (1.70) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for urban in general science is calculated. Since the obtained CR (1.01) is less than the table value (2.58) as required for 0.01 level of significance the difference is significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for rural in general science is calculated. Since the obtained CR (3.44) is greater than the table value (2.58) as required for 0,01 level of significance the difference is substantiated.

The Table reveals that there is significant difference for the variables Education, Occupation, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education and total socio familial status in general science except for the variables Cultural level of family and Cultural Level of Family Neighbourhood.

29. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Mathematics for Total Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in mathematics for total sample is presented below in Table 29.

TABLE 29

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Mathematics for Total Sample

Dimension	High Achievement (N=164)	Low Achievers (N=188)	SD			
			σ_2	σ_1	CR	
Education	18.17	13.38	6.69	5.36	7.34	S
Occupation	15.82	12.39	6.72	4.72	5.63	S
Income	15.70	10.56	6.62	5.33	7.95	S
Totses	49.70	36.30	16.87	11.53	8.57	S
HLF	14.37	11.84	3.62	3.42	6.73	S
FAEdn	37.87	35.27	4.30	5.62	4.91	S
CL of Family	29.20	27.84	3.77	4.59	3.07	S
CL family neighbourhood	30.41	28.27	4.78	4.78	4.20	S
Total SFS	111.68	103.44	10.92	13.69	6.27	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for mathematics is calculated as shown in the Table 29. For the variable education level the obtained CR (7.34) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for mathematics is calculated. Since the obtained CR (5.63) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for mathematics is calculated. Since the obtained CR (7.95) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for mathematics is calculated. Since the obtained CR (8.57) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for mathematics is calculated. Since the obtained CR (6.73) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for mathematics is calculated. Since the obtained CR (4.91) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for mathematics is calculated. Since the obtained CR (3.07) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for mathematics is calculated. Since the obtained CR (4.20) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for mathematics is calculated. Since the obtained CR (6.20) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The Table reveals that there is significant difference for the variable in mathematics for total sample.

30. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Mathematics for Boys Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in mathematics for boys sample is presented below in Table 30.

TABLE 30

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Mathematics for Boys Sample

Dimension	High Achievement (N=71)	Low Achievers (N=92)	SD			
			σ_2	σ_1	CR	
Education	15.63	13.26	5.21	5.62	2.79	S
Occupation	13.59	12.28	5.42	4.71	1.62	NS
Income	14.08	10.60	5.87	5.83	3.96	S
Totses	43.31	38.30	12.68	12.81	2.49	NS
HLF	13.25	11.48	3.49	3.29	3.30	S
FAEdn	37.37	34.71	4.37	5.31	3.51	S
CL of Family	28.99	27.61	3.92	4.63	2.05	NS
CL family neighbourhood	28.99	27.61	3.92	4.63	2.05	NS
Total SFS	109.68	102.29	11.03	13.09	3.90	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for boys in mathematics is calculated as shown in the Table 30. For the variable education level the obtained CR (2.79) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for boys in mathematics is calculated. Since the obtained CR (1.62) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for boys in mathematics is calculated. Since the obtained CR (3.96) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for boys in mathematics is calculated. Since the obtained CR (2.49) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for boys in mathematics is calculated. Since the obtained CR (3.30) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for

boys in mathematics is calculated. Since the obtained CR (3.51) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for boys in mathematics is calculated. Since the obtained CR (2.05) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for boys in mathematics is calculated. Since the obtained CR (2.78) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for boys in mathematics is calculated. Since the obtained CR (3.90) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The Table reveals that there is significant difference for the variable in mathematics for total sample.

The Table reveals that there is significant difference for the variables Education, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education, Cultural Level of Family Neighbourhood and total socio familial status in mathematics except for the variables Occupation and Cultural level of family for boys sample.

31. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Mathematics for Girls Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in mathematics for girls sample is presented below in Table 31.

TABLE 31

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Mathematics for Girls Sample

Dimension	High Achievement (N=71)	Low Achievers (N=92)	SD			
			σ_2	σ_1	CR	
Education	20.11	13.49	7.07	5.14	8.15	S
Occupation	17.53	12.29	7.13	4.75	5.92	S
Income	16.94	10.52	6.92	4.84	8.46	S
Totses	54.57	36.30	18.10	10.21	8.51	S
HLF	15.23	12.17	3.49	3.51	6.01	S
FAEdn	38.26	35.81	4.22	5.88	3.29	S
CL of Family	29.37	28.05	3.66	4.56	2.19	NS
CL family neighbourhood	30.61	28.43	4.85	4.97	3.06	S
Total SFS	113.21	104.54	10.65	14.23	4.76	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for girls in mathematics is calculated as shown in the Table 30. For the variable education level the obtained CR (8.15) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for girls in mathematics is calculated. Since the obtained CR (5.92) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for girls in mathematics is calculated. Since the obtained CR (8.46) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for girls in mathematics is calculated. Since the obtained CR (8.51) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for girls in mathematics is calculated. Since the obtained CR (6.01) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for girls in mathematics is calculated. Since the obtained CR (3.29) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for girls in mathematics is calculated. Since the obtained CR (2.19) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for boys in mathematics is calculated. Since the obtained CR (3.06) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for girls in mathematics is calculated. Since the obtained CR (4.76) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The Table reveals that there is significant difference for the variables Education, Occupation, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education, Cultural Level of Family Neighbourhood and total socio familial status in mathematics except for the variable Cultural level of family for girls sample.

32. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Mathematics for Government Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in mathematics for government sample is presented below in Table 32.

TABLE 32

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Mathematics for Government Sample

Dimension	High Achievement (N=72)	Low Achievers (N=97)	SD			
			σ_2	σ_1	CR	
Education	17.71	13.20	5.99	5.26	5.10	S
Occupation	15.97	12.32	6.43	4.60	4.10	S
Income	14.93	10.77	6.36	5.51	4.45	S
Totses	48.75	36.34	15.26	11.87	5.73	S
HLF	13.95	11.63	3.59	3.49	4.41	S
FAEdn	37.30	34.80	4.35	5.25	3.48	S
CL of Family	28.33	27.58	4.08	4.93	1.12	NS
CL family neighbourhood	29.61	28.12	4.72	5.19	2.71	S
Total SFS	108.83	102.20	11.88	13.79	3.46	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for government in mathematics is calculated as shown in the Table 32. For the variable education level the obtained CR (5.10) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for government in mathematics is calculated. Since the obtained CR (4.10) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for government in mathematics is calculated. Since the obtained CR (4.45) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for government in mathematics is calculated. Since the obtained CR (5.73) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for government in mathematics is calculated. Since the obtained CR (4.41) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for government in mathematics is calculated. Since the obtained CR (3.48) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for government in mathematics is calculated. Since the obtained CR (1.12) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for government in mathematics is calculated. Since the obtained CR (2.71) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for government in mathematics is calculated. Since the obtained CR (3.46) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The Table reveals that there is significant difference for the variables Education, Occupation, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education, Cultural level of family and total socio familial status in mathematics except for the variable Cultural Level of Family Neighbourhood for girls sample.

33. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Mathematics for Private Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in mathematics for private sample is presented below in Table 33.

TABLE 33

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Mathematics for Private Sample

Dimension	High Achievement (N=92)	Low Achievers (N=91)	SD			
			σ_2	σ_1	CR	
Education	18.53	13.57	7.21	5.49	5.24	S
Occupation	15.71	12.25	6.98	4.85	3.89	S
Income	16.20	10.33	6.81	5.15	6.55	S
Totses	50.43	36.26	18.11	11.22	6.37	S
HLF	14.96	12.04	3.53	3.33	5.75	S
FAEdn	38.69	35.77	4.08	5.97	3.86	S
CL of Family	30.15	28.11	3.51	4.20	3.57	S
CL family neighbourhood	30.91	28.42	4.45	4.33	3.85	S
Total SFS	114.60	104.77	10.80	13.54	8.73	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for government in mathematics is calculated as shown in the Table 33. For the variable education level the obtained CR (5.24) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for private in mathematics is calculated. Since the obtained CR (3.89) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for private in mathematics is calculated. Since the obtained CR (6.55) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for private in mathematics is calculated. Since the obtained CR (6.37) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for private in mathematics is calculated. Since the obtained CR (5.75) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for private in mathematics is calculated. Since the obtained CR (3.86) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for government in mathematics is calculated. Since the obtained CR (3.57) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for private in mathematics is calculated. Since the obtained CR (3.85) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for private in mathematics is calculated. Since the obtained CR (8.73) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The Table reveals that there is significant difference for all the variables in mathematics for private sample.

34. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Mathematics for Rural Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in mathematics for rural sample is presented below in Table 34.

TABLE 34

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Mathematics for Rural Sample

Dimension	High Achievement (N=91)	Low Achievers (N=124)	SD			
			σ_2	σ_1	CR	
Education	15.93	13.27	5.67	5.60	3.43	S
Occupation	13.79	11.98	5.79	4.59	2.47	NS
Income	13.90	9.56	6.14	4.56	5.70	S
Totses	43.63	34.80	13.75	10.52	5.19	S
HLF	14.28	11.58	3.46	3.30	6.05	S
FAEdn	37.89	35.87	4.54	5.35	3.11	S
CL of Family	29.64	27.81	3.78	4.61	1.32	NS
CL family neighbourhood	30.64	28.30	3.94	4.40	4.27	S
Total SFS	112.14	103.93	11.38	13.28	5.07	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for rural in mathematics is calculated as shown in the Table 34. For the variable education level the obtained CR (3.43) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for rural in mathematics is calculated. Since the obtained CR (2.47) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for rural in mathematics is calculated. Since the obtained CR (5.70) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for rural in mathematics is calculated. Since the obtained CR (5.19) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for rural in mathematics is calculated. Since the obtained CR (6.05) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for rural in mathematics is calculated. Since the obtained CR (3.11) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for government in mathematics is calculated. Since the obtained CR (1.32) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for rural in mathematics is calculated. Since the obtained CR (4.27) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for rural in mathematics is calculated. Since the obtained CR (5.07) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The Table reveals that there is significant difference for the variables Education, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education, Cultural Level of Family Neighbourhood and total socio familial status in mathematics except for the variables Occupation and Cultural level of family.

35. The Test of significance For Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Mathematics for Urban Sample

Details regarding the test of significance for mean difference of the socio-familial variables of low achievers and high achievers in mathematics for urban sample is presented below in Table 35.

TABLE 35

Details Regarding the Test of Significance for Mean Difference of the Socio-Familial Variables of Low Achievers and High Achievers in Mathematics for Urban Sample

Dimension	High Achievement (N=73)	Low Achievers (N=64)	SD			
			σ_2	σ_1	CR	
Education	20.96	13.59	6.85	4.92	7.29	S
Occupation	18.36	12.89	6.97	54.94	5.21	S
Income	17.95	6.17	6.55	6.17	10.82	S
Totses	57.26	39.22	17.46	12.86	6.94	S
HLF	14.82	12.31	3.77	3.58	3.90	S
FAEdn	38.28	34.10	3.77	5.98	4.76	S
CL of Family	28.75	27.88	4.02	4.59	1.15	NS
CL family neighbourhood	29.76	28.22	5.52	5.46	1.61	NS
Total SFS	111.51	102.5	12.15	14.53	3.84	S

TotSES - Total Socio Economic Status
FAEdn - Family Acceptance Education
SFS - Socio Familial Status
CR - Critical Ratio
NS - Not significant
HLF - Home Learning Facility
CL - Cultural Level
SD - Standard Deviation
S - Significant

Test of significance of difference between mean scores of socio-familial status of low achievers and high achievers for urban in mathematics is calculated as shown in the Table 35. For the variable education level the obtained CR (7.29) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be substantiated.

The test of significance of difference between mean scores of occupation variable of low-achievers and high achievers for urban in mathematics is calculated. Since the obtained CR (5.21) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of income variable of low-achievers and high achievers for urban in mathematics is calculated. Since the obtained CR (10.82) is greater than the table value (2.58) as 0.01 level of significance the difference is found to be correct.

The test of significance of difference between mean scores of total socio-economic status score of low-achievers and high achievers for urban in mathematics is calculated. Since the obtained CR (6.94) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The test of significance of difference between mean scores of home learning facility variables of low-achievers and high achievers for urban in mathematics is calculated. Since the obtained CR (3.90) is greater than

the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of family acceptance of education variable of low-achievers and high achievers for urban in mathematics is calculated. Since the obtained CR (4.76) is greater than the table value (2.58) as required for 0.01 level of significance the difference is found to be significant.

The test of significance of difference between mean scores of cultural level of family variable of low-achievers and high achievers for urban in mathematics is calculated. Since the obtained CR (1.15) is less than the table value (2.58) as required for 0.01 level of significance the difference is not substantiated.

The test of significance of difference between mean scores of the variable cultural level of family neighbourhood of low-achievers and high achievers for urban in mathematics is calculated. Since the obtained CR (1.61) is less than the table value (2.58) as required for 0.01 level of significance the difference is not significant.

The test of significance of difference between mean scores of the variable total socio-family status of low-achievers and high achievers for urban in mathematics is calculated. Since the obtained CR (3.84) is greater than the table value (2.58) as required for 0.01 level of significance the difference is substantiated.

The Table reveals that there is significant difference for the variables Education, Occupation, Income, total socio Economic status, Home Learning Facility, Family Acceptance of Education and total socio

familial status in mathematics except for the variable Cultural level of family and Cultural Level of Family Neighbourhood.

II. THE TEST OF SIGNIFICANCE OF CORRELATION COEFFICIENT OF THE TOTAL SAMPLE OF HIGH ACHIEVERS

1. Relation between socio-familial variables and achievement in school subjects among high achievers.

The test of significance of correlation coefficient of the total sample of high achievers for various subjects were found out.

The results obtained are presented in Table 36.

TABLE 36

Data and Results of Test of Significance of 'r' for Total Sample of High Achievers

Variables	Malayalam (197)			English (160)			Social Studies(174)			General Science(175)			Mathematics(164)		
	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance
Education	0.29	0.12-045	S	019	-0.02-0.88	NS	0.32	0.12-0.49	S	0.16	-.05-0.35	NS	0.22	0.1-0.41	S
Occupation	0.25	0.08-0.41	S	0.24	0.03-0.42	S	0.23	0.02-0.4	S	0.12	-0.09-0.23	NS	0.09	-0.12-0.29	NS
Income	0.26	0.9-0.42	S	0.29	0.09-0.47	S	0.35	0.16-0.52	S	0.25	0.5-0.44	S	0.26	0.6-0.45	S
Total SES	0.33	0.16-0.48	S	0.29	0.09-0.07	NS	0.37	0.18-0.48	S	0.21	0-0.41	S	0.23	0.3-0.41	S
HLF	0.17	-0.1-0.34	NS	0.10	-0.11-0.30	NS	0.07	-0.14-0.27	NS	-0.14	-0.34-0.07	S	0.10	-.011-0.30	NS
FAEdn	0.03	-0.15-0.21	NS	0.16	-0.05-0.35	NS	0.04	-0.17-0.25	NS	-.012	-0.32-0.09	S	0.12	-0.09-0.32	NS
CLF	0.03	-0.1-0.26	NS	0.04	-0.17-0.75	NS	-0.01	-0.22-0.02	S	-0.10	-0.30-0.11	S	0.01	-0.02-0.22	NS
CLFN	0.07	-0.11-0.25	NS	0.10	-0.11 - 0.30	NS	0.10	-0.11 - 0.30	NS	0.08	-0.13-0.21	NS	0.10	-0.11- 0.30	NS
Total SFS	0.12	-0.06-0.29	NS	0.05	-0.16 - 0.25	NS	0.02	-0.10 - 0.24	NS	-0.09	-0.03-0.12	NS	0.13	-0.08 - 0.33	NS

NS – Not Significant
S – Significant

Table 36 shows that obtained correlation coefficient (0.29) lies with in 99 percent of confidence interval. 0.12 to 0.45 for the total sample of high achievers in Malayalam for the variable education the correlation is found to be significant of 0.01 level.

The correlation coefficient obtained (0.25) lies within 99 percent of confidence interval 0.08 to 0.41 for the total sample of high achievers in Malayalam for the variable Occupation the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.26) lies within 99 percent of confidence interval 0.9 to 0.42 for the total sample of high achievers in Malayalam for the variable Income the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.33) lies within 99 percent of confidence interval 0.16 to 0.48 for the total sample of high achievers in Malayalam for the variable Total socio-economic status the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.17 of high achievers for Total sample in Malayalam for variable Home Learning facility is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.03 of high achievers for Total sample in Malayalam for variable Family Acceptance of Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.03 of high achievers for Total sample in Malayalam for variable Cultural level of Family is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.07 of high achievers for Total sample in Malayalam for variable Family Neighbour Hood is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.12 of high achievers for Total sample in Malayalam for variable Total Socio-familial Status is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.19 of high achievers for Total sample in English for variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.24) lies within 99 percent of confidence interval 0.03 to 0.42 for the total sample of high achievers in English for the variable Occupation the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.29) lies within 99 percent of confidence interval 0.09 to 0.47 for the total sample of high achievers in English for the variable Income the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.29) of high achievers for total sample in English for the variable Total SES is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.10) of high achievers for total sample in English for the variable Home Learning Facility is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.16) of high achievers for total sample in English for the variable Family Acceptance of Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.04) of high achievers for total sample in English for the variable Cultural Level of Family is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.10) of high achievers for total sample in English for the variable Cultural Level of Family Neighbourhood is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.05) of high achievers for total sample in English for the variable Socio-familial status Level of Family Neighbourhood is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.) of high achievers for total sample in English for the variable Cultural Level of Family Neighbourhood is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.32) lies within 99 percent of confidence interval 0.12 to 0.49 for the total sample of high achievers in

social studies for the variable Education the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.23) lies within 99 percent of confidence interval 0.02 to 0.04 for the total sample of high achievers in social studies for the variable Occupation the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.35) lies within 99 percent of confidence interval 0.16 to 0.52 for the total sample of high achievers in social studies for the variable Income the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.37) lies within 99 percent of confidence interval 0.18 to 0.48 for the total sample of high achievers in social studies for the variable total Socio-economic status the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.07) of high achievers for total sample in Social studies for the variable Home Learning Facility is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.4) of high achievers for total sample in Social Studies for the variable Family Acceptance of Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (-0.01) lies within 99 percent of confidence interval 0.22 to 0.02 for the total sample of high achievers in social studies for the variable Cultural Level of Family the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.10) of high achievers for total sample in Social Studies for the variable Cultural Level of Family Neighbourhood of Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.10) of high achievers for total sample in Social Studies for the variable Cultural Level of Family Neighbourhood is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.03) of high achievers for total sample in Social Studies for the variable Total Socio-familial Status is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.16) of high achievers for total sample in General Science for the variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.12) of high achievers for total sample in General Science for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.25) lies within 99 percent of confidence interval 0.52 to 0.44 for the total sample of high achievers in General Science for the variable Income the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.21) lies within 99 percent of confidence interval 0 to 0.4 for the total sample of high achievers in

General Science for the variable Income the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.21) lies within 99 percent of confidence interval 0 to 0.40 for the total sample of high achievers in General Science for the variable Total Socio-economic Status the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (-0.14) lies within 99 percent of confidence interval -0.34 to 0.07 for the total sample of high achievers in General Science for the variable Home Learning Facility the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (-0.12) lies within 99 percent of confidence interval -0.32 to 0.09 for the total sample of high achievers in General Science for the variable Family Acceptance of Education the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (-0.10) lies within 99 percent of confidence interval -0.30 to 0.11 for the total sample of high achievers in General Science for the variable Cultural Level of Family the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.08) of high achievers for total sample in General Science for the variable Cultural Level of Family Neighbourhood is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (-0.09) of high achievers for total sample in General Science for the variable Total Socio-familial Status is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.22) lies within 99 percent of confidence interval 0.1 to 0.41 for the total sample of high achievers in Mathematics for the variable Education the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.09) of high achievers for total sample in Mathematics for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.26) lies within 99 percent of confidence interval 0.6 to 0.45 for the total sample of high achievers in Mathematics for the variable Income the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.23) lies within 99 percent of confidence interval 0.32 to 0.41 for the total sample of high achievers in Mathematics for the variable Total Socio-economic status the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.10) of high achievers for total sample in Mathematics for the variable Home Learning Facility is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.12) of high achievers for total sample in Mathematics for the variable Family Acceptance of Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.12) of high achievers for total sample in Mathematics for the variable Family Acceptance of Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.01) of high achievers for total sample in Mathematics for the variable Cultural Level of Family is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.10) of high achievers for total sample in Mathematics for the variable Cultural Level of Family Neighbourhood is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.13) of high achievers for total sample in Mathematics for the variable Total Socio-familial Status is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

2. The test of significance of correlation coefficient of high achievers for boys sample

The test of significance of correlation coefficient of the boys sample of high achievers for various subjects were found out.

The results obtained are presented in table 37.

TABLE 37

Data and Results Test of

Significance of 'r' for High Achievers for Boys Sample

Variables	Malayalam (70)			English (90)			Social Studies(72)			General Science(71)			Mathematics(71)		
	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	R	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance
Education	0.04	-0.26 - 0.34	NS	0.17	-0.11-0.42	NS	0.23	-0.08 - 0.49	NS	0.15	0.16-0.40	NS	0.03	-0.27-0.33	NS
Occupation	0.18	-0.13 - 0.46	NS	0.27	0 - 0.51	S	0.10	-0.21 - 0.39	NS	-0.01	-0.37-0.29	S	-0.05	-0.35-0.25	S
Income	0.17	-0.1 - 0.48	NS	0.44	0.19 - 0.64	S	0.33	0.3 - 0.57	S	0.29	-0.01-0.55	NS	0.26	-0.04-0.52	NS
Total SES	0.21	-0.27 - -0.33	NS	0.37	0.11 - 0.59	S	0.30	0 - 0.55	S	0.19	-0.12-0.46	NS	0.11	-0.2-0.40	NS
HLF	0.03	-0.27--0.33	NS	0.15	-0.13 - 0.41	NS	0.10	-0.21 - 0.39	NS	0.11	-0.02-0.40	NS	0.06	-0.25-0.35	NS
FA Edn.	-0.15	-0.43--0.16	S	0.16	-0.12 - 0.41	NS	0.02	-0.29-0.32	NS	0.02	-0.28-0.32	NS	0.19	-0.32-0.28	NS
CLF	0.01	-0.28--0.32	NS	0.11	-0.17 - 0.37	NS	0.01	-0.03-0.29	NS	-07	-0.36-0.24	S	0.01	-0.32-0.28	NS
CLFN	0.02	-0.26 - 0.26	NS	0.23	-0.08 - 0.45	NS	0.17	-0.32-0.28	NS	0.15	0.16-0.13	S	0.13	-0.26-0.35	NS
Total SFS	-0.04	-0.26 - 0.26	S	0.20	-0.08 - 0.45	Ns	0.06	-0.32-0.28	NS	0.04	-0.02-0.34	NS	0.18	-0.3-0.31	NS

NS - Not Significant
S - Significant

The table reveals that the obtained correlation coefficient (0.04) of high achievers for boys sample in Malayalam for the variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.18) of high achievers for boys sample in Malayalam for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.17) of high achievers for boys sample in Malayalam for the variable Income is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.21) of high achievers for boys sample in Malayalam for the variable Total Socio-economic status is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.03) of high achievers for boys sample in Malayalam for the variable Home Learning Facility is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (-0.15) lies within 99 percent of confidence interval 0.43 to 0.16 for the Boys sample of high achievers in Malayalam for the variable Family Acceptance of Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.01) of high achievers for boys sample in Malayalam for the variable Cultural Level of Family is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.02) of high achievers for boys sample in Malayalam for the variable Cultural Level of Family Neighbourhood is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (-0.04) lies within 99 percent of confidence interval -0.26 to 0.26 for the Boys sample of high achievers in Malayalam for the variable Total Socio-Familial Status, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.17) of high achievers for boys sample in English for the variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.27) lies within 99 percent of confidence interval 0 to 0.51 for the Boys sample of high achievers in English for the variable Occupation, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.44) lies within 99 percent of confidence interval 0.19 to 0.64 for the Boys sample of high achievers in English for the variable Income, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.37) lies within 99 percent of confidence interval 0.11 to 0.59 for the Boys sample of high achievers in English for the variable Total Socio-economic status, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.15) of high achievers for boys sample in English for the variable Home Learning Facility is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.16) of high achievers for boys sample in English for the variable Family Acceptance of Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.11) of high achievers for boys sample in English for the variable Cultural Level of Family is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.23) of high achievers for boys sample in English for the variable Cultural Level of Family Neighbourhood is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.20) of high achievers for boys sample in English for the variable Total Socio-familial status is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.23) of high achievers for boys sample in Social Studies for the variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.10) of high achievers for boys sample in Social Studies for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.33) lies within 99 percent of confidence interval 0.3 to 0.57 for the Boys sample of high achievers in

Social Studies for the variable Income, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.30) lies within 99 percent of confidence interval 0 to 0.55 for the Boys sample of high achievers in Social Studies for the variable Total socio-economic status, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.10) of high achievers for boys sample in Social Studies for the variable Home Learning Facility is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.02) of high achievers for boys sample in Social Studies for the variable Family Acceptance is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.01) of high achievers for boys sample in Social Studies for the variable Cultural Level of Family is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.17) of high achievers for boys sample in Social Studies for the variable Cultural Level of Family Neighbourhood is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.06) of high achievers for boys sample in Social Studies for the variable Total SFS is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.15) of high achievers for boys sample in General Science for the variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (-0.01) lies within 99 percent of confidence interval -0.37 to 0.29 for the Boys sample of high achievers in General Science for the variable Occupation, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.29) of high achievers for boys sample in General Science for the variable Income is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.19) of high achievers for boys sample in General Science for the variable Total SES is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.11) of high achievers for boys sample in General Science for the variable HLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.02) of high achievers for boys sample in General Science for the variable FAEdn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (-0.07) lies within 99 percent of confidence interval -0.36 to 0.24 for the Boys sample of high achievers in

General Science for the variable CLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.15) lies within 99 percent of confidence interval 0.16 to 0.43 for the Boys sample of high achievers in General Science for the variable CLFn, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.15) lies within 99 percent of confidence interval 0.16 to 0.43 for the Boys sample of high achievers in General Science for the variable CLFn, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.04) of high achievers for boys sample in General Science for the variable Total SFS is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.03) of high achievers for boys sample in Mathematics for the variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (-0.05) lies within 99 percent of confidence interval 0.35 to 0.25 for the Boys sample of high achievers in Mathematics for the variable Occupation, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.26) of high achievers for boys sample in Mathematics for the variable Income is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.11) of high achievers for boys sample in Mathematics for the variable Total SES is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.06) of high achievers for boys sample in Mathematics for the variable HLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.19) of high achievers for boys sample in Mathematics for the variable FAEdn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.01) of high achievers for boys sample in Mathematics for the variable CLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.13) of high achievers for boys sample in Mathematics for the variable CLFn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.18) of high achievers for boys sample in Mathematics for the variable Total SFS is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

3. The test of significance of correlation coefficient of high achievers for girls sample

The test of significance of correlation coefficient of the girls sample of high achievers for various subjects were found out.

The results obtained are presented in table 38.

TABLE 38

Data and Results Test of

Significance of 'r' for High Achievers for Girls Sample

Variables	Malayalam (127)			English (70)			Social Studies(102)			General Science(104)			Mathematics(71)		
	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	R	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance
Education	0.32	0.10-0.51	S	0.14	-0.17-0.42	NS	0.38	0.14-0.58	S	0.21	-0.05-0.44	NS	0.27	0-0.51	S
Occupation	0.24	0.01-0.44	S	0.13	-0.18-0.41	NS	0.30	0.05-0.52	S	0.22	-0.04-0.45	NS	0.10	-0.05-0.51	NS
Income	0.27	0.5-0.47	S	0.04	-0.27-0.34	NS	0.36	0.11-0.56	S	0.23	-0.03-0.46	NS	0.23	-0.18-0.36	NS
Total SES	0.34	0.11-0.32	NS	0.13	-0.18-0.41	NS	0.41	0.18-0.61	S	0.26	0.1-0.49	S	0.23	-0.05-0.47	NS
HLF	0.20	-0.03-0.41	NS	-0.08	-0.37-0.23	S	0.02	-0.24-0.27	NS	-0.01	-0.26-0.25	S	0.06	-0.22-0.33	NS
FA Edn.	0.11	0.12-0.33	S	-0.07	-0.36-0.24	S	0.06	-0.2-0.31	NS	-0.04	-0.05-0.21	S	0.19	-0.09-0.44	NS
CLF	0.13	-0.1-0.43	NS	-0.11	-0.40-0.20	S	0.01	-0.25-0.26	NS	-0.10	-0.16-0.35	S	0.01	-0.26-0.28	NS
CLFN	0.10	-0.13-0.32	NS	-0.08	-0.37-0.23	S	0.17	-0.09-0.41	NS	0.14	-0.12-0.38	NS	0.13	-0.15-0.30	NS
Total SFS	0.20	-0.03-0.41	NS	-0.14	-0.42-0.17	S	0.06	-0.2-0.31	NS	0.05	0.21-0.30	NS	0.18	0.1-0.43	S

NS - Not Significant
S - Significant

From the table it is clear that the correlation coefficient (0.32) lies within 99 percent of confidence interval -0.10 to 0.51 for the Girls sample of high achievers in Malayalam for the variable Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.24) lies within 99 percent of confidence interval 0.01 level to 0.44 for the Girls sample of high achievers in Malayalam for the variable Occupation, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.27) lies within 99 percent of confidence interval 0.5 to 0.47 for the Girls sample of high achievers in Malayalam for the variable Income, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.34) of high achievers for Girls sample in Malayalam for the variable Total SES is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.20) of high achievers for Girls sample in Malayalam for the variable HLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.11) lies within 99 percent of confidence interval 0.12 to 0.33 for the Girls sample of high achievers in Malayalam for the variable Income, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.13) of high achievers for Girls sample in Malayalam for the variable CLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.10) of high achievers for Girls sample in Malayalam for the variable CLFn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.20) of high achievers for Girls sample in Malayalam for the variable Total SFS is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.14) of high achievers for Girls sample in English for the variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.13) of high achievers for Girls sample in English for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.04) of high achievers for Girls sample in English for the variable Income is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.13) of high achievers for Girls sample in English for the variable Total SES is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (-0.08) lies within 99 percent of confidence interval -0.37 to 0.23 for the Girls sample of high achievers in

English for the variable HLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (-0.07) lies within 99 percent of confidence interval -0.36 to 0.24 for the Girls sample of high achievers in English for the variable FAEdn, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (-0.11) lies within 99 percent of confidence interval -0.40 to 0.20 for the Girls sample of high achievers in English for the variable CLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (-0.08) lies within 99 percent of confidence interval -0.37 to 0.23 for the Girls sample of high achievers in English for the variable CLFn, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (-0.14) lies within 99 percent of confidence interval -0.42 to 0.17 for the Girls sample of high achievers in English for the variable Total SFS, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.38) lies within 99 percent of confidence interval 0.14 to 0.58 for the Girls sample of high achievers in Social Studies for the variable Education, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.30) lies within 99 percent of confidence interval 0.05 level. to 0.52 for the Girls sample of high achievers in Social Studies for the variable Occupation, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.36) lies within 99 percent of confidence interval 0.11 to 0.56 for the Girls sample of high achievers in Social Studies for the variable Income, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.41) lies within 99 percent of confidence interval 0.18 to 0.61 for the Girls sample of high achievers in Social Studies for the variable Total SES, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.02) of high achievers for Girls sample in Social Studies for the variable HLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.06) of high achievers for Girls sample in Social Studies for the variable FAEdn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.01) of high achievers for Girls sample in Social Studies for the variable CLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.17) of high achievers for Girls sample in Social Studies for the variable CLFn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.06) of high achievers for Girls sample in Social Studies for the variable Total SFS is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.21) of high achievers for Girls sample in General Science for the variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.22) of high achievers for Girls sample in General Science for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.23) of high achievers for Girls sample in General Science for the variable Income is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.26) lies within 99 percent of confidence interval 0.1 to 0.49 for the Girls sample of high achievers in General Science for the variable Total SES, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (-0.01) lies within 99 percent of confidence interval -0.26 to 0.25 for the Girls sample of high achievers in General Science for the variable HLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (-0.04) lies within 99 percent of confidence interval -0.05 to 0.21 for the Girls sample of high achievers in General Science for the variable FAEdn, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained t (-0.10) lies within 99 percent of confidence interval -0.16 to 0.35 for the Girls sample of high achievers

in General Science for the variable CLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.14) of high achievers for Girls sample in General Science for the variable CLFn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.05) of high achievers for Girls sample in General Science for the variable Total SFS is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (027.) lies within 99 percent of confidence interval 0 to 0.51 for the Girls sample of high achievers in Mathematics for the variable Education, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.10) of high achievers for Girls sample in Mathematics for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.23) of high achievers for Girls sample in Mathematics for the variable Income is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.23) of high achievers for Girls sample in Mathematics for the variable Total SES is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.06) of high achievers for Girls sample in Mathematics for the variable HLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.19) of high achievers for Girls sample in Mathematics for the variable FAEdn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.01) of high achievers for Girls sample in Mathematics for the variable CLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.13) of high achievers for Girls sample in Mathematics for the variable CLFn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.18) lies within 99 percent of confidence interval 0.1 to 0.43 for the Girls sample of high achievers in Mathematics for the variable Total SFS, the correlation is found to be significant at 0.01 level.

4. The test of significance of correlation coefficient of high achievers for rural sample

The test of significance of correlation coefficient of the rural sample of high achievers for various subjects were found out.

The results obtained are presented in table 39.

TABLE 39

Data and Results Test of

Significance of 'r' for High Achievers for Rural Sample

Variables	Malayalam (120)			English (102)			Social Studies(100)			General Science(108)			Mathematics(91)		
	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance
Education	0.15	-0.08-0.36	NS	0.16	-0.9-0.39	NS	0.31	0.06-0.52	S	0.20	-0.06-0.43	NS	0.25	0.1-0.41	S
Occupation	0.15	-0.08-0.36	NS	0.26	0.02-0.48	S	0.24	-0.02-0.46	NS	0.12	0.14-0.36	NS	0.16	-0.12-0.29	NS
Income	0.10	0.13-0.32	NS	0.28	0.04-0.49	S	0.45	0.22-0.13	NS	0.33	0.08-0.33	S	0.28	0.6-0.45	S
Total SES	0.19	-0.17-0.28	NS	0.31	0.07-0.52	S	0.44	0.21-0.62	S	0.28	0.03-0.54	S	0.27	0.03-0.41	S
HLF	0.06	-0.17-0.28	NS	0.03	0.22-0.27	S	0.11	-0.15-0.35	NS	0.03	-0.23-0.28	NS	0.07	-0.11-0.30	NS
FA Edn.	-0.06	-0.28-0.17	S	0.04	-0.21-0.25	NS	0.02	-0.24-0.27	NS	-0.05	-0.30-0.21	S	0.19	-0.09-0.32	NS
CLF	0.04	-0.19-0.26	NS	-0.07	-0.31-0.18	S	-0.10	-0.35-0.11	S	-0.21	-0.30-0.21	S	0.05	-0.02-0.22	NS
CLFN	0.03	-0.2-0.25	NS	0.13	-0.12-0.31	NS	0.10	-0.16-0.35	NS	0.06	-0.2-0.31	NS	0.14	-0.11-0.30	NS
Total SFS	0.01	-0.22-0.24	NS	0.05	-0.3-0.29	NS	-0.01	-0.26-0.25	S	-0.08	-0.33-0.18	S	0.21	-0.08-0.33	NS

NS - Not Significant
S - Significant

The table shows that the obtained correlation coefficient (0.15) of high achievers for Rural sample in Malayalam for the variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.15) of high achievers for Rural sample in Malayalam for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.10) of high achievers for Rural sample in Malayalam for the variable Income is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.19) of high achievers for Rural sample in Malayalam for the variable Total SES is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.06) of high achievers for Rural sample in Malayalam for the variable HLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (-0.06) lies within 99 percent of confidence interval -0.28 to 0.17 for the Rural sample of high achievers in Malayalam for the variable FAEdn, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.04) of high achievers for Rural sample in Malayalam for the variable CLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.03) of high achievers for Rural sample in Malayalam for the variable CLFn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.01) of high achievers for Rural sample in Malayalam for the variable Total SFS is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.16) of high achievers for Rural sample in English for the variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.26) lies within 99 percent of confidence interval 0.02 to 0.48 for the Rural sample of high achievers in English for the variable Occupation, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.28) lies within 99 percent of confidence interval 0.4 to 0.49 for the Rural sample of high achievers in English for the variable Income, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.31) lies within 99 percent of confidence interval 0.07 to 0.52 for the Rural sample of high achievers in English for the variable Total SES, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.03) lies within 99 percent of confidence interval 0.22 to 0.27 for the Rural sample of high achievers in English for the variable HLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.04) of high achievers for Rural sample in English for the variable FAEdn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (-0.07) lies within 99 percent of confidence interval -0.31 to 0.18 for the Rural sample of high achievers in English for the variable CLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.13) of high achievers for Rural sample in English for the variable CLFn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.05) of high achievers for Rural sample in English for the variable Total SFS is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.31) lies within 99 percent of confidence interval 0.06 to 0.52 for the Rural sample of high achievers in Social Studies for the variable Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.24) of high achievers for Rural sample in Social Studies for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.45) of high achievers for Rural sample in Social Studies for the variable Income is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.44) lies within 99 percent of confidence interval 0.21 to 0.62 for the Rural sample of high achievers in Social Studies for the variable Total SES, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.11) of high achievers for Rural sample in Social Studies for the variable HLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.02) of high achievers for Rural sample in Social Studies for the variable FAEdn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (-0.10) lies within 99 percent of confidence interval 0.35 to 0.16 for the Rural sample of high achievers in Social Studies for the variable CLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (-0.10) lies within 99 percent of confidence interval 0.35 to 0.16 for the Rural sample of high achievers in Social Studies for the variable CLFn, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.10) of high achievers for Rural sample in Social Studies for the variable CLFn is not with in the

limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (-0.01) lies within 99 percent of confidence interval -0.26 to 0.25 for the Rural sample of high achievers in Social Studies for the variable Total SFS, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.20) of high achievers for Rural sample in General Science for the variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.12) of high achievers for Rural sample in General Science for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.33) lies within 99 percent of confidence interval 0.08 to 0.33 for the Rural sample of high achievers in General Science for the variable Income, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.28) lies within 99 percent of confidence interval 0.03 to 0.54 for the Rural sample of high achievers in General Science for the variable Total SES, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.03) of high achievers for Rural sample in General Science for the variable HLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (-0.05) lies within 99 percent of confidence interval -0.30 to 0.21 for the Rural sample of high achievers in General Science for the variable FAEdn, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (-0.21) lies within 99 percent of confidence interval -0.30 to 0.21 for the Rural sample of high achievers in General Science for the variable CLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.06) of high achievers for Rural sample in General Science for the variable CLFn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (-0.08) lies within 99 percent of confidence interval -0.33 to 0.18 for the Rural sample of high achievers in General Science for the variable Total SFS, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.25) lies within 99 percent of confidence interval 0.1 to 0.41 for the Rural sample of high achievers in Mathematics for the variable Education, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.16) of high achievers for Rural sample in Mathematics for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.28) lies within 99 percent of confidence interval 0.6 to 0.45 for the Rural sample of high achievers in

Mathematics for the variable Income, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.27) lies within 99 percent of confidence interval 0.03 to 0.41 for the Rural sample of high achievers in Mathematics for the variable Total SES, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.07) of high achievers for Rural sample in Mathematics for the variable HLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.19) of high achievers for Rural sample in Mathematics for the variable FAEdn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.05) of high achievers for Rural sample in Mathematics for the variable CLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.14) of high achievers for Rural sample in Mathematics for the variable CLFn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.21) of high achievers for Rural sample in Mathematics for the variable Total SFS is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

5. The test of significance of correlation coefficient of high achievers for urban sample

The test of significance of correlation coefficient of the urban sample of high achievers for various subjects were found out.

The results obtained are presented in table 40.

TABLE 40

Data and Results Test of

Significance of 'r' for High Achievers for Urban Sample

Variables	Malayalam (77)			English (58)			Social Studies(74)			General Science(67)			Mathematics(73)		
	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	R	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance
Education	0.37	0.11-0.59	S	0.16	-0.18-0.46	NS	0.25	-0.05-0.52	NS	0.13	-0.21-0.44	NS	0.26	-0.04-0.52	NS
Occupation	0.30	0.03-0.53	S	0.12	-0.22-0.43	NS	0.15	-0.16-0.43	NS	0.13	-0.21-0.44	NS	0.16	-0.15-0.45	NS
Income	0.39	0.13-0.60	S	0.25	-0.08-0.54	NS	0.22	-0.09-0.49	NS	0.15	0.02-0.26	S	0.28	-0.02-0.54	NS
Total SES	0.40	0.14-0.61	S	0.21	-0.13-0.50	NS	0.25	-0.05-0.52	NS	0.15	0.02-0.26	S	0.27	-0.03-0.53	NS
HLF	0.24	-0.04-0.48	NS	0.12	-0.22-0.43	NS	-0.03	-0.33-0.27	S	0.03	-0.1-0.16	NS	0.07	-0.24-0.36	NS
FA Edn.	0.17	-0.11-0.43	NS	0.33	0-0.15	S	0.03	-0.27-0.33	NS	-0.05	-0.18-0.18	S	0.19	-0.12-0.46	NS
CLF	0.16	-0.12-0.41	NS	0.19	-0.15-0.49	NS	0.09	-0.22-0.38	NS	-0.21	-0.33-0.08	S	0.05	-0.25-0.35	NS
CLFN	0.15	-0.13-0.41	NS	0.08	-0.26-0.40	NS	0.11	-0.02-0.40	NS	0.06	0.09-0.19	S	0.14	-0.17-0.42	NS
Total SFS	0.26	-0.02-0.49	NS	0.04	-0.03-0.36	NS	0.08	-0.23-0.37	NS	-0.08	-0.21-0.05	S	0.21	0.1-0.48	S

NS - Not Significant

S – Significant

The obtained correlation coefficient (0.37) lies within 99 percent of confidence interval 0.11 to 0.59 for the Urban sample of high achievers in Malayalam for the variable Education, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.30) lies within 99 percent of confidence interval 0.03 to 0.53 for the Urban sample of high achievers in Malayalam for the variable Occupation, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.39) lies within 99 percent of confidence interval 0.13 to 0.60 for the Urban sample of high achievers in Malayalam for the variable Income, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.40) lies within 99 percent of confidence interval 0.14 to 0.61 for the Urban sample of high achievers in Malayalam for the variable Total SES, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.24) of high achievers for Urban sample in Malayalam for the variable HLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.17) of high achievers for Urban sample in Malayalam for the variable FAEdn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.16) of high achievers for Urban sample in Malayalam for the variable CLF is not with in the limits

for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.15) of high achievers for Urban sample in Malayalam for the variable CLFn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.26) of high achievers for Urban sample in Malayalam for the variable Total SFS is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.16) of high achievers for Urban sample in English for the variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.12) of high achievers for Urban sample in English for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.25) of high achievers for Urban sample in English for the variable Income is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.21) of high achievers for Urban sample in English for the variable Total SES is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.12) of high achievers for Urban sample in English for the variable HLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.33) lies within 99 percent of confidence interval 0 to 0.59 for the Urban sample of high achievers in English for the variable FAEdn, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.19) of high achievers for Urban sample in English for the variable CLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.08) of high achievers for Urban sample in English for the variable CLFn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.04) of high achievers for Urban sample in English for the variable Total SFS is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.25) of high achievers for Urban sample in Social Studies for the variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.15) of high achievers for Urban sample in Social Studies for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.22) of high achievers for Urban sample in Social Studies for the variable Income is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.25) of high achievers for Urban sample in Social Studies for the variable Total SES is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (-0.03) lies within 99 percent of confidence interval -0.33 to 0.27 for the Urban sample of high achievers in Social Studies for the variable HLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.03) of high achievers for Urban sample in Social Studies for the variable FAEdn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.09) of high achievers for Urban sample in Social Studies for the variable CLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.11) of high achievers for Urban sample in Social Studies for the variable CLFn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.08) of high achievers for Urban sample in Social Studies for the variable Total SFS is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.13) of high achievers for Urban sample in General Science for the variable Education is not with in

the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.13) of high achievers for Urban sample in General Science for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.15) lies within 99 percent of confidence interval 0.02 to 0.26 for the Urban sample of high achievers in General Science for the variable Income, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.15) lies within 99 percent of confidence interval 0.02 to 0.26 for the Urban sample of high achievers in General Science for the variable Total SES, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (0.03) of high achievers for Urban sample in General Science for the variable HLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (-0.05) lies within 99 percent of confidence interval -0.18 to 0.18 for the Urban sample of high achievers in General Science for the variable FAEdn, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (-0.21) lies within 99 percent of confidence interval -0.33 to 0.08 for the Urban sample of high achievers in General Science for the variable CLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.06) lies within 99 percent of confidence interval 0.09 to 0.19 for the Urban sample of high achievers in General Science for the variable CLFn, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained (-0.08) lies within 99 percent of confidence interval -0.21 to 0.05 level. for the Urban sample of high achievers in General Science for the variable Total SFS, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient (0.26) of high achievers for Urban sample in Mathematics for the variable Education is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.16) of high achievers for Urban sample in Mathematics for the variable Occupation is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.28) of high achievers for Urban sample in Mathematics for the variable Income is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.27) of high achievers for Urban sample in Mathematics for the variable Total SES is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.07) of high achievers for Urban sample in Mathematics for the variable HLF is not with in the

limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.19) of high achievers for Urban sample in Mathematics for the variable FAEdn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.05) of high achievers for Urban sample in Mathematics for the variable CLF is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The correlation coefficient obtained (0.14) of high achievers for Urban sample in Mathematics for the variable CLFn is not with in the limits for 99 percent level the obtained correlation is not found to be significant.

The obtained correlation coefficient (0.21) lies within 99 percent of confidence interval 0.1 to 0.48 for the Urban sample of high achievers in Mathematics for the variable Total SFS, the correlation is found to be significant at 0.01 level.

III. THE TEST OF SIGNIFICANCE OF CORRELATION COEFFICIENT OF LOW ACHIEVERS FOR TOTAL SAMPLE

1. Relation between socio-familial variables and achievement in school subjects among low achievers for total sample

The test of significance of correlation coefficient of the total sample of low achievers for various subjects were found out.

The obtained results are shown in table 41.

TABLE 41

Data and Results Test of Significance of 'r' for Low Achievers for Total Sample

Variables	Malayalam (184)			English (143)			Social Studies(161)			General Science(164)			Mathematics(188)		
	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance
Education	0.06	-0.12-0.24	NS	0.19	0.02-0.22	S	0.14	-0.07-0.34	NS	-0.17	-0.36-0.04	S	-0.01	-0.19-0.17	S
Occupation	0.13	-0.05-0.30	NS	0.24	0.12-0.03	NS	0.04	-0.17-0.25	NS	0.08	-0.13-.28	NS	0.01	-0.17-0.19	NS
Income	0.05	0.13-0.23	S	0.29	-0.28-0.13	NS	0.03	-0.18-0.24	NS	-0.04	-0.25-.17	S	-0.01	-0.19-0.17	S
Total SES	0.10	-0.08-0.27	NS	0.29	-0.28-0.13	NS	0.08	-0.13-0.28	NS	-0.08	-0.28-0.13	S	-0.01	-0.19-0.17	S
HLF	0.20	-0.02-0.36	NS	0.10	-0.28-0.13	NS	-0.01	-0.22-0.20	S	-0.05	-0.25-.16	S	0.10	-0.08-0.27	NS
FA Edn.	0.28	0.11-0.44	S	0.16	-0.09-0.32	NS	0.12	0.09-0.32	S	0.01	-0.2-.22	NS	0.10	-0.08-0.27	NS
CLF	0.19	0.1-0.35	S	0.04	0.07-0.34	NS	-0.04	-0.17-0.25	S	-0.03	-0.24-.18	S	-0.03	-0.21-0.15	S
CLFN	0.20	0.02-0.36	S	0.10	0.11-0.30	NS	0.13	-0.08-0.33	NS	0.02	-0.19-.23	NS	0.01	-0.17-0.19	NS
Total SFS	0.31	0.14-0.46	S	0.05	-0.14-0.27	NS	0.12	-0.09-0.32	NS	-0.01	0.22-.20	S	0.27	-0.11-0.25	NS

NS - Not Significant

S - Significant

Tale 41 reveals that obtained correlation coefficient 0.06 of low achievers for Malayalam for variable Education is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.13 of low achievers for Malayalam for variable Occupation is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.05 lies within 99 percent of confidence interval 0.13 to 0.23 for the total sample of low achievers in Malayalam for the variable Income, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.10 of low achievers for Malayalam for variable Total SES is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.20 of low achievers for Malayalam for variable Home Learning Facility is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.28 lies within 99 percent of confidence interval 0.11 to 0.44 for the total sample of low achievers in Malayalam for the variable FA Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.04 of low achievers for English for variable CLF is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.20 lies within 99 percent of confidence interval 0.02 to 0.36 for the total sample of low achievers in

Malayalam for the variable CLFN, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.31 lies within 99 percent of confidence interval 0.14 to 0.46 for the total sample of low achievers in Malayalam for the variable SFS Total, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.19 lies within 99 percent of confidence interval 0.02 to 0.22 for the total sample of low achievers in English for the variable Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.24 of low achievers for English for variable Occupation is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.29 of low achievers for English for variable Income is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.29 of low achievers for English for variable Total SES is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.10 of low achievers for English for variable HLF is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.16 of low achievers for English for variable FA Education is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.04 of low achievers for English for variable CLF is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.10 of low achievers for English for variable CLFN is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.05 level. of low achievers for English for variable Total SFS is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.14 of low achievers for Social Studies for variable Education is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.04 of low achievers for Social Studies for variable Occupation is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.03 of low achievers for Social Studies for variable Income is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.08 of low achievers for Social Studies for variable Total SES is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient -0.01 lies within 99 percent of confidence interval -0.22 to 0.20 for the total sample of low achievers in Social Studies for the variable HLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.12 lies within 99 percent of confidence interval 0.09 to 0.32 for the total sample of low achievers in Social Studies for the variable FA Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.04 lies within 99 percent of confidence interval -0.17 to 0.25 for the total sample of low achievers in Social Studies for the variable CLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.13 of low achievers for Social Studies for variable CLFN is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.12 of low achievers for Social Studies for variable Total SFS is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained -0.17 lies within 99 percent of confidence interval -0.36 to 0.04 for the total sample of low achievers in General Science for the variable Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.08 of low achievers for General Science for variable Occupation is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained -0.04 lies within 99 percent of confidence interval -0.25 to 0.17 for the total sample of low achievers in General Science for the variable Income, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.08 lies within 99 percent of confidence interval -0.28 to 0.13 for the total sample of low achievers in General Science for the variable Total SES, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.05 lies within 99 percent of confidence interval -0.25 to 0.16 for the total sample of low achievers in General Science for the variable HLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.01 lies within 99 percent of confidence interval 0.2 to 0.22 for the total sample of low achievers in General Science for the variable FA Education, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.03 lies within 99 percent of confidence interval -0.24 to 0.18 for the total sample of low achievers in General Science for the variable CLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.02 of low achievers for General Science for variable CLFN is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained -0.01 lies within 99 percent of confidence interval -0.22 to 0.20 for the total sample of low achievers in General Science for the variable Total SFS, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.01 lies within 99 percent of confidence interval -0.19 to 0.17 for the total sample of low achievers in

Maths for the variable Education, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.01 of low achievers for Mathematics for variable Occupation is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient -0.01 lies within 99 percent of confidence interval -0.19 to 0.17 for the total sample of low achievers in Mathematics for the variable Income, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.01 lies within 99 percent of confidence interval -0.19 to 0.17 for the total sample of low achievers in Mathematics for the variable Total SES, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.10 of low achievers for Mathematics for variable HLF is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.10 of low achievers for Mathematics for variable FA Education is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient -0.03 lies within 99 percent of confidence interval -0.21 to 0.15 for the total sample of low achievers in Mathematics for the variable CLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.01 of low achievers for Mathematics for variable CLFN is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.07 of low achievers for Mathematics for variable SFS Total is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

2. Relation between socio-familial variables and achievement in school subjects among low achievers for boys sample

The test of significance of correlation coefficient of the boys sample of low achievers for various subjects were found out.

TABLE 42

Data and Results Test of Significance of 'r' for Low Achievers for Boys Sample

Variables	Malayalam (104)			English (73)			Social Studies(92)			General Science (95)			Mathematics(92)		
	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance
Education	0.08	0.16 – 0.35	S	0.08	-0.23 - .037	NS	0.19	-.09 - .044	NS	-.010	-.035 - .016	S	0.03	-.02 - .035	NS
Occupation	0.10	-.019 – 0.32	S	0.11	-0.02 – 0.40	NS	0.08	-0.02 – 0.35	NS	0.08	-0.02– 0.18	NS	0.05	-0.18 –0.36	S
Income	0.04	-0.25 – 0.26	NS	-0.02	0.31- 0.37	NS	0.08	-0.2 – 0.35	NS	-0.05	-0.15 – 0.5	S	0.26	-0.24 – 0.31	NS
Total SES	0.08	-0.17 – 0.34	NS	0.07	-0.24 0.32	NS	0.19	-0.09– 0.44	NS	-.04	-.014 – 0.4	S	0.11	-0.2 –0.35	NS
HLF	-0.01	-0.13 – 0.37	S	0.02	-0.29 –0.32	NS	0.02	-0.26-0.29	NS	-0.11	- 0.21 –0.1	S	0.06	-0.28 –0.26	NS
FA Edn.	0.07	-0.10 – 0.40	NS	0.22	0.09 – 0.49	S	0.22	- 0.06 –0.46	NS	0.09	-0.01 –0.19	NS	-0.02	-0.21 -.034	S
CLF	0.05	-0.13 –0.37	NS	0.19	-0.12 – 0.5	NS	-0.07	-.034 –0.21	S	0.01	-0.09 –0.11	NS	-0.02	-0.23 – 0.31	S
CLFN	0.04	-0.08 –0.41	S	0.10	-0.21 –0.39	NS	0.10	-0.18 –0.36	NS	0.04	-0.06 –0.14	NS	0.05	-0.31 – 0.24	NS
Total SFS	0.03	-0.06 –0.52	NS	0.03	-0.19 –0.41	NS	0.14	-0.14 –0.40	NS	0.11	0.1 –0.21	S	0.01	-0.25 –0.30	NS

NS – Not Significant
S – Significant

Table 42 shows that obtained correlation coefficient 0.08 lies with in 99 percent of confidence interval 0.16 to 0.35 for boys in Malayalam for the variable Education is found to be significant at 0.01 level.

The correlation coefficient obtained 0.10 of low achievers for boys in Malayalam for variable Occupation is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.04 of low achievers for boys in Malayalam for variable Income is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.08 of low achievers for boys in Malayalam for variable Total SES is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient -0.01 lies within 99 percent of confidence interval -0.13 to 0.37 for the Boys sample of low achievers in Malayalam for the variable HLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.07 of low achievers for boys in Malayalam for variable FA Education is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.05 of low achievers for boys in Malayalam for variable CLF is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained -0.04 lies within 99 percent of confidence interval -0.08 to 0.41 for the Boys sample of low achievers in

Malayalam for the variable CLFN, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.03 of low achievers for boys in Malayalam for variable Total SFS is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.08 of low achievers for boys in English for variable Education is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.11 of low achievers for boys in English for variable Occupation is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained -0.02 of low achievers for boys in English for variable Income is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.07 of low achievers for boys in English for variable Total SES is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.02 of low achievers for boys in English for variable HLF is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.22 lies within 99 percent of confidence interval 0.09 to 0.49 for the Boys sample of low achievers in English for the variable FA Education, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.19 of low achievers for boys in English for variable CLF is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.10 of low achievers for boys in English for variable CLFN is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.03 of low achievers for boys in English for variable Total SFS is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.19 of low achievers for boys in Social Studies for variable Education is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.08 of low achievers for boys in Social Studies for variable Occupation is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.08 of low achievers for boys in Social Studies for variable Income is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.19 of low achievers for boys in Social Studies for variable SES is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.02 of low achievers for boys in Social Studies for variable HLF is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.22 of low achievers for boys in Social Studies for variable FA Education is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient -0.07 lies within 99 percent of confidence interval -0.34 to 0.21 for the Boys sample of low achievers in Social Studies for the variable CLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.10 of low achievers for boys in Social Studies for variable CLFN is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.14 of low achievers for boys in Social Studies for variable Total SFS is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained -0.10 lies within 99 percent of confidence interval -0.35 to 0.16 for the Boys sample of low achievers in General Science for the variable Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.08 of low achievers for boys in General Science for variable Occupation is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained -0.05 lies within 99 percent of confidence interval -0.15 to 0.5 for the Boys sample of low achievers in General Science for the variable Income, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.04 lies within 99 percent of confidence interval -0.14 to 0.4 for the Boys sample of low achievers in General Science for the variable Total SES, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.11 lies within 99 percent of confidence interval -0.21 to 0.1 for the Boys sample of low achievers in General Science for the variable HLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.09 of low achievers for boys in General Science for variable FA Education is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.01 of low achievers for boys in General Science for variable CLF is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.04 of low achievers for boys in General Science for variable CLFN is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.11 lies within 99 percent of confidence interval 0.1 to 0.21 for the Boys sample of low achievers in General Science for the variable Total SFS, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.03 of low achievers for boys in Mathematics for variable Education is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient -0.05 lies within 99 percent of confidence interval -0.18 to 0.36 for the Boys sample of low achievers in Mathematics for the variable Occupation, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.26 of low achievers for boys in Mathematics for variable Income is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient 0.11 of low achievers for boys in Mathematics for variable Total SES is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.06 of low achievers for boys in Mathematics for variable HLF is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The obtained correlation coefficient -0.02 lies within 99 percent of confidence interval -0.21 to 0.34 for the Boys sample of low achievers in Mathematics for the variable FA Education, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.02 lies within 99 percent of confidence interval -0.23 to 0.31 for the Boys sample of low achievers in Mathematics for the variable CLF, the correlàtion is found to be significant at 0.01 level.

The obtained correlation coefficient 0.05 of low achievers for boys in Mathematics for variable CLFN is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

The correlation coefficient obtained 0.01 of low achievers for boys in Mathematics for variable Total SFS is not within the limits for 99 percent level, the obtained correlation is not found to be significant.

3. Relation between socio-familial variables and achievement in school subjects among low achievers for girls sample

The test of significance of correlation coefficient of the girls sample of low achievers for various subjects were found out. The data and results are presented below.

TABLE 43

Data and Results Test of Significance of 'r' for Low Achievers for Girls Sample

Variables	Malayalam (80)			English (70)			Social Studies(69)			General Science (69)			Mathematics(96)		
	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	R	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance
Education	0.01	-0.16 -0.38	NS	-0.09	-0.04 - 0.22	NS	-.01	-0.31 -0.29	S	-0.27	-0.53 -0.03	S	0.27	-0.33 - 0.18	NS
Occupation	0.19	-0.17 -0.37	NS	-0.27	-0.52 -0.04	S	-0.20	-0.47 -0.11	S	0.09	-0.22- 0.38	NS	0.10	-0.31 -0.20	NS
Income	0.09	-0.18 -0.36	NS	-0.02	-0.32 -0.28	S	-0.02	-0.32 -0.28	S	-.04	-0.34 - 0.26	S	0.23	-0.03 -0.22	NS
Total SES	0.11	-0.11 -0.42	NS	-0.13	0.42 -0.18	S	-0.02	-0.32 -0.28	S	-0.15	-0.43 - 0.16	S	0.23	-0.34 -0.17	NS
HLF	0.25	-0.06 -0.46	NS	-0.14	-0.52 -0.04	S	-0.02	-0.32 -0.29	S	0.03	-0.27- 0.33	NS	0.06	-0.06 -0.43	NS
FA Edn.	0.39	-0.17 -0.37	NS	0.05	-0.32 -0.28	NS	-0.04	-0.26 -0.34	S	-0.07	-0.36 -0.24	S	0.19	-0.12 -0.38	NS
CLF	0.41	-0.16 -0.38	NS	0.08	-0.42 -0.47	NS	-0.04	-0.34 -0.27	S	-0.07	-0.36 - 0.24	S	0.01	-0.33 -0.18	NS
CLFN	0.22	-0.22 -0.33	NS	0.10	-0.26 - 0.35	NS	0.16	-0.15 - 0.44	NS	0.01	-0.3 -0.31	NS	0.13	-0.21 -0.21	NS
Total SFS	0.44	-0.12 -0.41	NS	0.03	-0.23 -0.37	NS	0.11	-0.2 -0.40	NS	0.05	-0.35 -0.26	S	0.18	-0.14 -0.36	NS

The table 43 Shows that obtained correlation coefficient 0.01 of low achievers for girls in Malayalam for variable Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.19 of low achievers for girls in Malayalam for variable Occupation is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.09 of low achievers for girls in Malayalam for variable Income is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.11 of low achievers for girls in Malayalam for variable Total SES is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.25 of low achievers for girls in Malayalam for variable HLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.39 of low achievers for girls in Malayalam for variable FA Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.41 of low achievers for girls in Malayalam for variable CLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.22 of low achievers for girls in Malayalam for variable CLFN is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.44 of low achievers for girls in Malayalam for variable Total SFS is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.09 of low achievers for girls in English for variable Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained -0.27 lies within 99 percent of confidence interval -0.52 to 0.04 for the Girls sample of low achievers in English for the variable Occupation, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.02 lies within 99 percent of confidence interval -0.32 to 0.28 for the Girls sample of low achievers in English for the variable Income, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.13 lies within 99 percent of confidence interval -0.42 to 0.18 for the Girls sample of low achievers in English for the variable Total SES, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.14 lies within 99 percent of confidence interval -0.52 to 0.04 for the Girls sample of low achievers in English for the variable HLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.05. of low achievers for girls in English for variable FA Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.08 of low achievers for girls in English for variable CLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.10 of low achievers for girls in English for variable CLFN is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.03 of low achievers for girls in English for variable SFS Total is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained -0.01 lies within 99 percent of confidence interval -0.31 to 0.29 for the Girls sample of low achievers in Social Studies for the variable Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.20 lies within 99 percent of confidence interval -0.47 to 0.11 for the Girls sample of low achievers in Social Studies for the variable Occupation, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.02 lies within 99 percent of confidence interval -0.32 to 0.28 for the Girls sample of low achievers in Social Studies for the variable Income, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.02 lies within 99 percent of confidence interval -0.32 to 0.28 for the Girls sample of low achievers in Social Studies for the variable Total SES, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.02 lies within 99 percent of confidence interval -0.32 to 0.29 for the Girls sample of low achievers in Social Studies for the variable HLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.04 lies within 99 percent of confidence interval -0.26 to 0.34 for the Girls sample of low achievers in Social Studies for the variable FA Education, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.04 lies within 99 percent of confidence interval -0.34 to 0.27 for the Girls sample of low achievers in Social Studies for the variable CLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.16 of low achievers for girls in Social Studies for variable CLFN is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.11 of low achievers for girls in Social Studies for variable SFS Total is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.27 lies within 99 percent of confidence interval -0.53 to 0.03 for the Girls sample of low achievers in General Science for the variable Education, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.09 of low achievers for girls in General Science for variable Occupation is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.04 lies within 99 percent of confidence interval -0.34 to 0.26 for the Girls sample of low achievers in General Science for the variable Income, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.15 lies within 99 percent of confidence interval -0.43 to 0.16 for the Girls sample of low achievers in General Science for the variable Total SES, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.03 of low achievers for girls in General Science for variable HLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained -0.07 lies within 99 percent of confidence interval -0.36 to 0.24 for the Girls sample of low achievers in General Science for the variable FA Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.07 lies within 99 percent of confidence interval -0.36 to 0.24 for the Girls sample of low achievers in General Science for the variable CLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.01 of low achievers for girls in General Science for variable CLFN is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.05 lies within 99 percent of confidence interval -0.35 to 0.26 for the Girls sample of low achievers in General Science for the variable SFS Total, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.27 of low achievers for girls in Mathematics for variable Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.10 of low achievers for girls in Mathematics for variable Occupation is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.23 of low achievers for girls in Mathematics for variable Income is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.23 of low achievers for girls in Mathematics for variable Total SES is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.06 of low achievers for girls in Mathematics for variable HLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.19 of low achievers for girls in Mathematics for variable FA Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.01 of low achievers for girls in Mathematics for variable CLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.13 of low achievers for girls in Mathematics for variable CLFN is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.18 of low achievers for girls in Mathematics for variable Total SFS is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

4. Relation between socio-familial variables and achievement in school subjects among low achievers for rural sample

The test of significance of correlation coefficient of the rural sample of low achievers for various subjects were found out. The data and results are presented below.

TABLE 44

Data and Results Test of Significance of 'r' for Low Achievers for Rural Sample

Variables	Malayalam (124)			English (90)			Social Studies(93)			General Science (103)			Mathematics(124)		
	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance
Education	0.10	-0.24 -0.41	NS	0.06	-0.22 - 0.32	NS	0.41	-0.14 -0.40	NS	-0.11	-0.15 -0.15	S	0.10	-0.12 -0.32	NS
Occupation	-0.21	-0.50 -0.13	S	-0.02	-0.03 -0.25	S	-0.03	-0.30 -0.25	S	0.05	-0.21 -0.30	NS	0.09	-0.14 -0.31	NS
Income	-0.11	-0.42 -0.23	S	-0.07	-0.34 -0.21	S	0.05	-0.23-0.32	NS	0.04	-0.22-0.29	NS	0.04	-0.19 -0.26	NS
Total SES	-0.12	-0.43 -0.22	S	0.01	-0.28 -0.26	NS	0.14	-0.14 -0.40	NS	-0.04	-0.03 -0.22	S	0.10	-0.12 -0.33	NS
HLF	-0.17	-0.47 -0.17	S	-0.08	-0.35 -0.2	S	0.03	-0.30 -0.25	S	-0.01	-0.26 -0.25	S	0.10	-0.12-0.33	NS
FA Edn.	0.28	-0.05 -0.56	NS	0.21	-0.46 -0.07	NS	0.11	-0.17 -0.37	NS	0.04	-0.2-0.27	NS	0.10	-0.32 -0.13	NS
CLF	0.23	-0.10 -0.52	NS	0.15	-0.13 -0.41	NS	-0.15	-0.41-.13	S	-0.08	-0.35 -0.27	S	0.10	-0.32-0.13	S
CLFN	0.03	-0.30-0.35	NS	0.14	-0.14-0.40	S	0.17	-011-0.42	NS	0.07	-0.21-0.34	NS	-0.05	-0.27-0.18	S
Total SFS	0.21	-0.13-0.50	NS	0.12	-0.16-0.4	NS	0.08	-0.2-0.35	NS	0.04	-0.2-0.27	NS	-0.2	-0.21-0.25	NS

NS - Not Significant
S - Significant

Table 44 shows that the obtained correlation coefficient 0.10 of low achievers for Rural Sample in Malayalam for variable Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained -0.21 lies within 99 percent of confidence interval -0.50 to 0.13 for the Rural sample of low achievers in Malayalam for the variable Occupation, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.11 lies within 99 percent of confidence interval -0.42 to 0.23 for the Rural sample of low achievers in Malayalam for the variable Income, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.12 lies within 99 percent of confidence interval -0.43 to 0.22 for the Rural sample of low achievers in Malayalam for the variable Total SES, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.17 lies within 99 percent of confidence interval -0.47 to 0.17 for the Rural sample of low achievers in Malayalam for the variable HLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.28 of low achievers for Rural Sample in Malayalam for variable FA Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.23 of low achievers for Rural Sample in Malayalam for CLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.03 of low achievers for Rural Sample in Malayalam for variable CLFN is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.21 of low achievers for Rural Sample in Malayalam for variable Total SFS is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.06 of low achievers for Rural Sample in English for variable Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.02 lies within 99 percent of confidence interval -0.03 to 0.25 for the Rural sample of low achievers in English for the variable Occupation, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.07 lies within 99 percent of confidence interval -0.34 to 0.21 for the Rural sample of low achievers in Malayalam for the variable Income, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.01 of low achievers for Rural Sample in English for variable Total SES is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained -0.08 lies within 99 percent of confidence interval -0.35 to 0.20 for the Rural sample of low achievers in

English for the variable HLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.21 of low achievers for Rural Sample in English for variable FA Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.15 of low achievers for Rural Sample in English for variable CLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.14 lies within 99 percent of confidence interval 0.14 to 0.40 for the Rural sample of low achievers in English for the variable CLFN, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.12 of low achievers for Rural Sample in English for variable Total SFS is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.14 of low achievers for Rural Sample in Social Studies for variable Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained -0.03 lies within 99 percent of confidence interval -0.30 to 0.25 for the Rural sample of low achievers in Social Studies for the variable Occupation, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.05 level. of low achievers for Rural Sample in Social Studies for variable Income is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.14 of low achievers for Rural Sample in Social Studies for variable Total SES is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.03 lies within 99 percent of confidence interval -0.30 to 0.25 for the Rural sample of low achievers Social Studies for the variable HLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.11 of low achievers for Rural Sample in Social Studies for variable FA Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.15 lies within 99 percent of confidence interval -0.41 to 0.13 for the Rural sample of low achievers Social Studies for the variable CLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.17 of low achievers for Rural Sample in Social Studies for variable CLFN is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.08 of low achievers for Rural Sample in Social Studies for variable Total SFS is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained -0.11 lies within 99 percent of confidence interval -0.15 to 0.15 for the Rural sample of low achievers General Science for the variable Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.05 of low achievers for Rural Sample in General Science for variable Occupation is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.04 of low achievers for Rural Sample in General Science for variable Income is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.04 lies within 99 percent of confidence interval -0.30 to 0.22 for the Rural sample of low achievers in General Science for the variable Total SES, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.01 lies within 99 percent of confidence interval -0.26 to 0.25 for the Rural sample of low achievers in General Science for the variable HLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.04 of low achievers for Rural Sample in General Science for variable FA Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained -0.08 lies within 99 percent of confidence interval -0.35 to 0.27 for the Rural sample of low achievers in General Science for the variable CLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.07 of low achievers for Rural Sample in General Science for variable CLFN is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.04 of low achievers for Rural Sample in General Science for variable Total SFS is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.10 of low achievers for Rural Sample in Mathematics for variable Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.09 of low achievers for Rural Sample in Mathematics for variable Occupation is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.04 of low achievers for Rural Sample in Mathematics for variable Income is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.10 of low achievers for Rural Sample in Mathematics for variable Total SES is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.10 of low achievers for Rural Sample in Mathematics for variable HLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.10 of low achievers for Rural Sample in Mathematics for variable FA Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.10 lies within 99 percent of confidence interval -0.32 to 0.13 for the Rural sample of low achievers in Mathematics for the variable CLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.05 lies within 99 percent of confidence interval -0.27 to 0.18 for the Rural sample of low achievers in Mathematics for the variable CLFN, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.02 of low achievers for Rural Sample in Mathematics for variable Total SFS is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

5. Relation between socio-familial variables and achievement in school subjects among low achievers for urban sample

The test of significance of correlation coefficient of the urban sample of low achievers for various subjects were found out. The data and results are presented below.

TABLE 45

Data and Results Test of Significance of 'r' for Low Achievers for Urban Sample

Variables	Malayalam (60)			English (53)			Social Studies(68)			General Science (61)			Mathematics(64)		
	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance	r	Confidence Interval	Level of Significance
Education	0.04	-0.04-0.23	NS	-0.01	-0.43-0.25	S	0.08	-0.23-0.37	NS	-0.23	-0.52-0.11	S	-0.28	-0.56-0.05	S
Occupation	0.21	-0.02 -0.41	NS	-0.10	-0.42-0.26	S	-0.04	-34 -0.27	S	0.18	-0.16-0.48	NS	-0.14	-0.45-0.20	S
Income	0.15	-0.08-0.36	NS	-0.10	-037-0.32	S	0.04	-0.26 -0.34	NS	-0.08	-0.40 -0.25	S	-0.04	-0.36-0.29	S
Total SES	0.17	-0.06 -0.38	NS	0.18	-0.37 -0.32	NS	0.08	-0.28 -0.37	NS	-0.09	0.41-0.25	NS	-0.19	-0.49-0.15	S
HLF	0.25	-0.03-0.46	S	-0.09	-0.42-0.26	S	-0.07	-0.36-0.24	S	-0.07	-0.39-0.26	S	0.13	-0.21-0.21	NS
FA Edn.	0.27	0.05-0.47	S	-0.03	-0.57 -032	S	0.13	0.18 -0.41	NS	-0.05	-0.37-0.28	S	0.10	-0.24-0.41	NS
CLF	0.20	-0.03-0.41	NS	0.13	-0.23-0.46	NS	0.11	-0.12-0.46	NS	0.03	-0.30-0.35	NS	0.13	-0.21-0.44	NS
CLFN	0.27	-0.05-0.47	S	0.02	-0.33-.36	NS	0.10	-0.21-0.39	NS	0.04	-0.36-0.29	NS	0.11	-0.23-0.42	NS
Total SFS	0.34	0.12-0.52	S	-0.03	-0.37-0.32	S	0.20	-0.11-0.47	NS	0.06	-0.4-0.27	NS	-0.17	-0.17-0.47	NS

NS – Not Significant
S – Significant

Table 45 shows that the obtained correlation coefficient 0.04 of low achievers for Urban Sample in Malayalam for variable Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.21 of low achievers for Urban Sample in Malayalam for variable Occupation is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.15 of low achievers for Urban Sample in Malayalam for variable Income is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.17 of low achievers for Urban Sample in Malayalam for variable Total SES is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.25 lies within 99 percent of confidence interval 0.03 to 0.46 for the Urban sample of low achievers in Malayalam for the variable HLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.27 lies within 99 percent of confidence interval 0.05 to 0.47 for the Urban sample of low achievers in Malayalam for the variable FA Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.20 of low achievers for Urban Sample in Malayalam for variable CLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.27 lies within 99 percent of confidence interval 0.05 to 0.47 for the Urban sample of low achievers in Malayalam for the variable CLFN, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.09 lies within 99 percent of confidence interval -0.43 to 0.25 for the Urban sample of low achievers in English for the variable Education, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.10 lies within 99 percent of confidence interval -0.42 to 0.26 for the Urban sample of low achievers in English for the variable Occupation, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.10 lies within 99 percent of confidence interval -0.37 to 0.32 for the Urban sample of low achievers in English for the variable Income, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.18 of low achievers for Urban Sample in English for variable Total SES is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.09 liès within 99 percent of confidence interval -0.42 to 0.26 for the Urban sample of low achievers in English for the variable HLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.03 lies within 99 percent of confidence interval -0.37 to 0.32 for the Urban sample of low achievers in

English for the variable FA Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.13 of low achievers for Urban Sample in English for variable CLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.02 of low achievers for Urban Sample in English for variable CLFN is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.03 lies within 99 percent of confidence interval -0.37 to 0.32 for the Urban sample of low achievers in English for the variable Total SFS, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.08 of low achievers for Urban Sample in Social Studies for variable Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.04 lies within 99 percent of confidence interval -0.34 to 0.27 for the Urban sample of low achievers in Social Studies for the variable Occupation, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.04 of low achievers for Urban Sample in Social Studies for variable Income is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.08 of low achievers for Urban Sample in Social Studies for variable Total SES is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained -0.07 lies within 99 percent of confidence interval -0.36 to 0.24 for the Urban sample of low achievers in Social Studies for the variable HLF, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.13 of low achievers for Urban Sample in Social Studies for variable FA Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.19 of low achievers for Urban Sample in Social Studies for variable CLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.10 of low achievers for Urban Sample in Social Studies for variable CLFN is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.20 of low achievers for Urban Sample in Social Studies for variable Total SFS is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.23 lies within 99 percent of confidence interval -0.52 to 0.11 for the Urban sample of low achievers in General Science for the variable Education, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.18 of low achievers for Urban Sample in General Science for variable Occupation is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.08 lies within 99 percent of confidence interval -0.40 to 0.25 for the Urban sample of low achievers in General Science for the variable Income, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.09 of low achievers for Urban Sample in General Science for variable Total SES is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient -0.07 lies within 99 percent of confidence interval -0.39 to 0.26 for the Urban sample of low achievers in General Science for the variable HLF, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.05 lies within 99 percent of confidence interval -0.37 to 0.28 for the Urban sample of low achievers in General Science for the variable FA Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient 0.03 of low achievers for Urban Sample in General Science for variable CLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.04 of low achievers for Urban Sample in General Science for variable CLFN is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.06 of low achievers for Urban Sample in General Science for variable Total SFS is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained -0.28 lies within 99 percent of confidence interval -0.56 to 0.05 for the Urban sample of low achievers in Mathematics for the variable Education, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.14 lies within 99 percent of confidence interval -0.45 to 0.20 for the Urban sample of low achievers in Mathematics for the variable Occupation, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained -0.04 lies within 99 percent of confidence interval -0.36 to 0.29 for the Urban sample of low achievers in Mathematics for the variable Income, the correlation is found to be significant at 0.01 level.

The obtained correlation coefficient -0.19 lies within 99 percent of confidence interval -0.49 to 0.15 for the Urban sample of low achievers in Mathematics for the variable Total SES, the correlation is found to be significant at 0.01 level.

The correlation coefficient obtained 0.13 of low achievers for Urban Sample in Mathematics for variable HLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.10 of low achievers for Urban Sample in Mathematics for variable FA Education is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.13 of low achievers for Urban Sample in Mathematics for variable CLF is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The obtained correlation coefficient 0.11 of low achievers for Urban Sample in Mathematics for variable CLFN is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

The correlation coefficient obtained 0.17 of low achievers for Urban Sample in Mathematics for variable Total SFS is not with in the limits for 99 percent level, obtained correlation is not found to be significant.

IV. COMPARISON OF CORRELATION BETWEEN SOCIO-FAMILIAL VARIABLES AND ACHIEVEMENT IN SELECTED SUBJECTS AMONG HIGH ACHIEVERS BASED ON GENDER AND LOCALE

Comparison of correlation coefficient between socio-familial variables for high achievers

The correlation coefficient obtained for high achievers for the variables in different subjects are compared for the significant difference among the subsamples based on sex and locale.

The test of significance for correlation coefficient was done. The data and results for the subsamples are presented below.

1. Comparison of Correlation Coefficient for High Achievers in Malayalam for Boys & Girls and Rural & Urban Sample

The test of significance of difference in correlation coefficient obtained for high achievers in Malayalam between boys and girls was done. The result of the analysis is presented in Table 46.

TABLE 46

Comparison of Correlation Coefficient between Socio-Familial Variables for High Achievers in Malayalam for Boys and Girls, Rural and Urban

Variables	Boys		Girls		CR	Rural		Urban		CR
	r	Z	R	Z		r	Z	r	Z	
Education	0.29	0.30	0.04	0.04	1.73	0.15	0.15	0.37	0.39	0.92
Occupation	0.25	0.26	0.18	0.18	0.53	0.15	0.15	0.30	0.31	0.62
Income	0.17	0.17	0.27	0.28	0.73	0.10	0.10	0.39	0.41	1.19
Total Socio-economic Status	0.21	0.21	0.33	0.34	0.87	0.19	0.19	0.40	0.42	0.88
Home Learning Facility	0.03	0.03	0.20	0.20	1.13	0.06	0.06	0.24	0.24	0.69
Family Acceptance of Education	-0.15	-0.15	0.11	0.11	1.73	-0.06	-0.06	0.17	0.17	0.88
Cultural Level of Family	0.01	0.01	0.13	0.13	-0.8	0.04	0.04	0.16	0.16	0.46
Cultural Level of Family Neighbourhood	0.02	0.02	0.10	0.10	0.53	0.03	0.03	0.15	0.15	0.46
Total Socio-familial status	-0.04	-0.04	0.20	0.20	1.6	0.01	0.01	0.26	0.27	1

* denotes 0.05 level of significance
** denotes 0.01 level of significance

In the table 46 the obtained critical ratio 1.73 for boys and girls for high achievers in Malayalam for the variable education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.94 for rural and urban for high achievers in Malayalam for the variable education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.53 for boys and girls for high achievers in Malayalam for the variable Occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.62 for rural and urban for high achievers in Malayalam for the variable Occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.73 for boys and girls for high achievers in Malayalam for the variable Income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.19 for rural and urban for high achievers in Malayalam for the variable Occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.87 for boys and girls for high achievers in Malayalam for the variable total socio economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.88 for rural and urban for high achievers in Malayalam for the variable total socio economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.13 for boys and girls for high achievers in Malayalam for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.69 for rural and urban for high achievers in Malayalam for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.73 for boys and girls for high achievers in Malayalam for the variable family acceptance of education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.88 for rural and urban for high achievers in Malayalam for the variable family acceptance of education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.8 for boys and girls for high achievers in Malayalam for the variable cultural level of family is less than the table

value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.46 for rural and urban for high achievers in Malayalam for the variable cultural level of family is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.53 for boys and girls for high achievers in Malayalam for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.46 for rural and urban for high achievers in Malayalam for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.6 for boys and girls for high achievers in Malayalam for the variable total socio familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.0 for rural and urban for high achievers in Malayalam for the variable socio familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

2. Comparison of Correlation Coefficient for High achievers in English for boys & girls and rural & urban sample

The test of significance of difference in correlation coefficient obtained for high achievers in English between boys & girls and rural & urban was done. The result of the analysis is presented in table 47.

TABLE 47

Comparison of Correlation Coefficient between Socio-Familial Variables for High Achievers in English for Boys and Girls, Rural and Urban

Variables	Boys		Girls		CR	Rural		Urban		CR
	r	Z	R	Z		r	Z	r	Z	
Education	0.17	0.17	0.14	0.14	0.19	0.16	0.16	0.16	0.16	0
Occupation	0.27	0.28	0.13	0.13	0.94	0.26	0.27	0.12	0.12	0.94
Income	0.44	0.47	0.04	0.04	2.69**	0.28	0.29	0.25	0.26	0.19
Total Socio-economic Status	0.37	0.39	0.13	0.13	1.63	0.31	0.32	0.21	0.21	0.61
Home Learning Facility	0.15	0.15	-0.08	-0.08	1.44	0.03	0.03	0.12	0.12	0.56
Family Acceptance of Education	0.16	0.16	-0.07	-0.07	1.44	0.04	0.04	0.33	0.34	1.88
Cultural Level of Family	0.11	0.11	-0.11	-0.11	1.38	-0.07	-0.07	0.19	0.19	1.63
Cultural Level of Family Neighbourhood	0.23	0.23	-0.08	-0.08	1.94	0.13	0.13	0.08	0.08	0.31
Total Socio-familial status	0.20	0.20	-0.14	-0.14	2.13*	0.05	0.05	0.04	0.04	0.06

* denotes 0.05 level of significance
** denotes 0.01 level of significance

It is seen from the table 47 that the obtained critical ratio 0.19 for boys and girls in English for the variable education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio 0 obtained for rural and urban in English for the variable education is less than 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.94 for boys and girls in English for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio 0.94 obtained for rural and urban in English for the variable occupation is less than 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 2.69 for boys and girls in English for the variable income is greater than the table value required for 99 percent of level of significance. The difference is significant at 0.01 level.

The critical ratio 0.19 obtained for rural and urban in English for the variable income is less than 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.63 for boys and girls in English for the variable total socio-economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio 0.69 obtained for rural and urban in English for the variable total socio-economic status is less than 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.44 for boys and girls in English for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio 0.56 obtained for rural and urban in English for the variable home learning facility is less than 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.44 for boys and girls in English for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio 1.88 obtained for rural and urban in English for the variable family acceptance of Education is less than 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.38 for boys and girls in English for the variable cultural level of family is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio 1.63 obtained for rural and urban in English for the variable cultural level of family is less than 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.94 for boys and girls in English for the variable cultural level of family neighbourhood is less than the table value

required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio 0.31 obtained for rural and urban in English for the variable cultural level of family neighbourhood is less than 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 2.13 for boys and girls in English for the variable total socio-familial status is greater than the table value required for 95 percent level of significance. The difference is significant at 0.05 level.

The critical ratio 0.06 obtained for rural and urban in English for the variable total socio-familial status is less than 95 percent level of significance. The difference is not significant at 0.05 level.

3. Comparison of Correlation Coefficient for High achievers in social studies for boys & girls and rural & urban sample

The test of significance of difference in correlation co-efficient obtained for high achievers in social studies between boys and girls and rural and urban was done. The result of the analysis is presented in table 48.

TABLE 48

Comparison of Correlation Coefficient between Socio-Familial Variables for High Achievers in Social Studies for Boys and Girls, Rural and Urban

Variables	Boys		Girls		CR	Rural		Urban		CR
	r	Z	r	Z		r	Z	r	Z	
Education	0.23	0.23	0.38	0.40	1.13	0.25	0.26	0.31	0.32	0.4
Occupation	0.10	0.10	0.30	0.31	1.4	0.15	0.15	0.24	0.24	0.6
Income	0.33	0.34	0.36	0.37	0.2	0.22	0.22	0.45	0.48	1.73
Total Socio-economic Status	0.30	0.31	0.41	0.44	0.87	0.25	0.26	0.44	0.47	1.4
Home Learning Facility	0.10	0.10	0.02	0.02	0.53	-0.03	-0.03	0.11	0.11	0.93
Family Acceptance of Education	0.02	0.02	0.06	0.06	0.27	0.03	0.03	0.02	0.02	0.07
Cultural Level of Family '	0.01	0.01	0.01	0.01	0	0.09	0.09	-0.10	-0.10	1.27
Cultural Level of Family Neighbourhood	-0.02	-0.02	0.17	0.17	1.26	0.11	0.11	0.10	0.10	0.07
Total Socio-familial status	-0.02	-0.02	0.06	0.06	0.53	0.08	0.08	-0.01	-0.01	0.6

* denotes 0.05 level of significance
** denotes 0.01 level of significance

It is seen from the table 48 that the obtained critical ratio 1.13 for boys and girls in social studies for the variable education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.4 for rural and urban in social studies for the variable education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.4 for boys and girls in social studies for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.6 for rural and urban in social studies for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.2 for boys and girls in social studies for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.73 for rural and urban in social studies for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.87 for boys and girls in social studies for the variable socio-economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.40 for rural and urban in social studies for the variable socio-economic status is less than the table value required

for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.53 for boys and girls in social studies for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.93 for rural and urban in social studies for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.27 for boys and girls in social studies for the variable family acceptance of education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.07 for rural and urban in social studies for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0 for boys and girls in social studies for the variable cultural level of family is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.27 for rural and urban in social studies for the variable cultural level of family is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.26 for boys and girls in social studies for the variable cultural level of family neighbour hood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.07 for rural and urban in social studies for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.53 for boys and girls in social studies for the variable total socio familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.6 for rural and urban in social studies for the variable total socio-familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

4. Comparison of Correlation Coefficient for High achievers in General Science for boys & girls and rural & urban sample

The test of significance of difference in correlation co-efficient obtained for high achievers in general science between boys and girls and rural and urban was calculated. The results of analysis presented in table 49.

TABLE 49

Comparison of Correlation Coefficient between Socio-Familial Variables for High Achievers in General Science for Boys and Girls, Rural and Urban

Variables	Boys		Girls		CR	Rural		Urban		CR
	r	Z	r	Z		r	Z	r	Z	
Education	0.15	0.15	0.21	0.21	0.4	0.20	0.20	0.13	0.13	0.47
Occupation	-0.01	-0.01	0.22	0.22	1.53	0.12	0.12	0.13	0.13	0.074
Income	0.29	0.30	0.23	0.23	0.47	0.33	0.34	0.15	0.15	1.27
Total Socio-economic Status	0.19	0.19	0.26	0.27	0.53	0.28	0.29	0.15	0.15	0.93
Home Learning Facility	0.11	0.11	-0.01	-0.01	0.08	0.03	0.03	0.03	0.03	0
Family Acceptance of Education	0.02	0.02	-0.04	-0.04	0.04	-0.05	-0.05	-0.05	-0.05	0
Cultural Level of Family	-0.07	-0.07	-0.10	-0.10	0.2	-0.21	-0.21	-0.21	-0.21	0
Cultural Level of Family Neighbourhood	0.15	0.15	0.14	0.14	0.2	0.06	0.06	-0.08	-0.08	0
Total Socio-familial status	0.04	0.04	0.05	0.05	0.07	-0.08	-0.08	-0.08	-0.08	0

* denotes 0.05 level of significance

** denotes 0.01 level of significance

Table 49 reveals that the obtained critical ratio 0.4 boys and girls in general science for the variable education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.47 for rural and urban in General Science for the variable Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.53 boys and girls in general science for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.07 for rural and urban in General Science for the variable Occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.47 boys and girls in general science for the variable Income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.27 for rural and urban in General Science for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.53 boys and girls in general science for the variable socio-economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.93 for rural and urban in General Science for the variable socio-economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.8 boys and girls in general science for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0 for rural and urban in General Science for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.4 boys and girls in general science for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0 for rural and urban in General Science for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.2 boys and girls in general science for the variable cultural level of family is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0 for rural and urban in General Science for the variable cultural level of family is less than the table value

required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.07 boys and girls in general science for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0 for rural and urban in General Science for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.07 boys and girls in general science for the variable total socio-familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0 for rural and urban in General Science for the variable total socio-familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

5. Comparison of Correlation Coefficient for High achievers in Mathematics for boys & girls and rural & urban sample

The test of significance of difference in correlation coefficient obtained for high achievers in mathematics between boys and girls and rural and urban was done. The results of the analysis is presented in table 50.

TABLE 50

Comparison of Correlation Coefficient between Socio-Familial Variables for High Achievers in Mathematics for Boys and Girls, Rural and Urban

Variables	Boys		Girls		CR	Rural		Urban		CR
	r	Z	r	Z		r	Z	r	Z	
Education	0.03	0.03	0.27	0.28	1.67	0.25	0.26	0.26	0.27	0.07
Occupation	-0.05	-0.05	0.10	0.10	1	0.06	0.06	0.16	0.16	0.67
Income	0.26	0.27	0.23	0.23	0.27	0.30	0.31	0.28	0.29	0.13
Total Socio-economic Status	0.11	0.11	0.23	0.23	0.8	0.26	0.27	0.27	0.28	0.07
Home Learning Facility	0.06	0.06	0.06	0.06	0	0.13	0.13	0.07	0.07	0.4
Family Acceptance of Education	-0.02	-0.02	0.19	0.19	1.4	0.06	0.06	0.19	0.19	0.87
Cultural Level of Family	-0.02	-0.02	0.01	0.01	0.2	-0.05	-0.05	-0.05	-0.05	0
Cultural Level of Family Neighbourhood	0.05	0.05	0.13	0.13	0.53	0.06	0.06	0.14	0.14	0.53
Total Socio-familial status	0.01	0.01	0.18	0.18	1.13	0.06	0.06	0.21	0.21	1

* denotes 0.05 level of significance

** denotes 0.01 level of significance

It is seen from the table 50 that the obtained critical ratio 1.67 boys and girls in Mathematics for the variable education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.07 for rural and urban in Mathematics for the variable education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.0 boys and girls in Mathematics for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.67 for rural and urban in Mathematics for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.27 boys and girls in Mathematics for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.13 for rural and urban in Mathematics for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.8 boys and girls in Mathematics for the variable total socio-economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.07 for rural and urban in Mathematics for the variable total socio-economic status is less than the table value

required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0 boys and girls in Mathematics for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.40 for rural and urban in Mathematics for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.4 boys and girls in Mathematics for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.87 for rural and urban in Mathematics for the variable family acceptance of education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.02 boys and girls in Mathematics for the variable cultural level of family is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0 for rural and urban in Mathematics for the variable cultural level of family is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.53 boys and girls in Mathematics for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.53 for rural and urban in Mathematics for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.13 boys and girls in Mathematics for the variable total socio-familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.0 for rural and urban in Mathematics for the variable total socio-economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

V. COMPARISON OF CORRELATION BETWEEN SOCIO-FAMILIAL VARIABLES AND ACHIEVEMENT IN SELECTED SUBJECTS AMONG LOW ACHIEVERS BASED ON GENDER AND LOCALE

Comparison Of Correlation Coefficient Of Socio-Familial Variables For Low Achievers

The correlation coefficient obtained for low achievers for the variables in different subjects are compared for the significant difference among the subsamples based on sex and locale.

The test of significance for correlation coefficient for the subsamples selected for the study were calculated and the data and results are presented below.

1. Comparison of Correlation Coefficient for Low achievers in Malayalam for Boys & Girls and Rural & Urban Sample

The test of significance of difference in correlation co-efficient obtained for low achievers in Malayalam between boys & girls and rural & urban was calculated. The results of the analysis is presented in table 51.

TABLE 51

Comparison of Correlation Coefficient between Socio-Familial Variables for Low Achievers in Malayalam for Boys and Girls, Rural and Urban

Variables	Boys		Girls		CR	Rural		Urban		CR
	r	Z	r	Z		r	Z	r	Z	
Education	0.10	0.10	0.01	0.01	0.6	0.10	0.10	0.04	0.04	0.12
Occupation	0.07	0.07	0.19	0.19	0.8	-0.21	-0.21	0.21	0.21	0.84
Income	0.01	0.01	0.09	0.09	0.53	-0.11	-0.11	-0.15	-0.15	0.08
Total Socio-economic Status	0.09	0.09	0.09	0.09	0.13	0.11	0.11	-0.12	-0.12	0.58
Home Learning Facility	0.13	0.13	0.25	0.26	0.87	-0.17	-0.17	0.25	0.26	0.86
Family Acceptance of Education	0.16	0.16	0.34	0.41	1.66	-0.28	-0.29	0.27	0.28	1.14
Cultural Level of Family	0.13	0.13	0.30	0.31	1.2	0.23	0.23	0.20	0.20	0.06
Cultural Level of Family , Neighbourhood	0.18	0.18	0.22	0.22	0.27	0.03	0.03	0.27	0.28	0.5
Total Socio-familial status	0.20	0.20	0.44	0.47	1.8	0.21	0.21	0.34	0.35	0.28

* denotes 0.05 level of significance
** denotes 0.01 level of significance

Table 51 reveals that obtained critical ratio 0.6 for boys and girls for low achievers in Malayalam for the variable Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.12 for rural and urban in Malayalam for the variable education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.8 for boys and girls for low achievers in Malayalam for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.84 for rural and urban in Malayalam for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.53 for boys and girls for low achievers in Malayalam for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.08 for rural and urban in Malayalam for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.13 for boys and girls for low achievers in Malayalam for the variable total socio-economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.58 for rural and urban in Malayalam for the variable total socio-economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.87 for boys and girls for low achievers in Malayalam for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.86 for rural and urban in Malayalam for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.66 for boys and girls for low achievers in Malayalam for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.14 for rural and urban in Malayalam for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.20 for boys and girls for low achievers in Malayalam for the variable cultural level of family is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.06 for rural and urban in Malayalam for the variable cultural level of family is less than the table value

required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.27 for boys and girls for low achievers in Malayalam for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.50 for rural and urban in Malayalam for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.80 for boys and girls for low achievers in Malayalam for the variable total socio-familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.28 for rural and urban in Malayalam for the variable total socio-familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

2. Comparison of Correlation Coefficient for Low achievers in English for Boys & Girls and Rural & Urban sample

The test of significance of difference in correlation co-efficient obtained for low achievers in English between boys & girls and rural & urban were calculated. The result of the analysis is presented in table 52.

TABLE 52

Comparison of Correlation Coefficient between Socio-Familial Variables for Low Achievers in English for Boys and Girls, Rural and Urban

Variables	Boys		Girls		CR	Rural		Urban		CR
	r	Z	r	Z		r	Z	r	Z	
Education	0.08	0.08	-0.09	-0.09	1.06	0.06	0.06	-0.09	-0.09	0.88
Occupation	0.11	0.11	-0.27	-0.28	2.44*	-0.02	-0.02	-0.10	-0.10	0.47
Income	-0.02	-0.02	0.02	0.02	0.25	-0.07	-0.07	-0.10	-0.10	0.18
Total Socio-economic Status	0.07	0.07	-0.13	-0.13	1.25	-0.01	-0.01	-0.18	-0.18	1
Home Learning Facility	0.02	0.02	-0.14	-0.14	1	-0.08	-0.08	-0.09	-0.09	0.06
Family Acceptance of Education	0.22	0.22	0.05	0.05	1.06	0.21	0.21	-0.03	-0.03	1.41
Cultural Level of Family	0.19	0.19	0.08	0.08	0.69	0.15	0.15	0.13	0.13	0.12
Cultural Level of Family Neighbourhood	0.10	0.10	0.10	0.10	0	0.14	0.14	0.02	0.02	0.71
Total Socio-familial status	0.12	0.12	0.03	0.03	0.56	0.12	0.12	-0.03	-0.03	0.88

* denotes 0.05 level of significance
** denotes 0.01 level of significance

It is seen from the table 52 that the obtained critical ratio 1.06 for boys and girls for low achievers in English for the variable education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.88 for rural and urban in English for the variable education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 2.44 for boys and girls for low achievers in English for the variable occupation is greater than the table value required for 95 percent level of significance. The difference is significant at 0.05 level.

The critical ratio obtained 0.47 for rural and urban in English for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.25 for boys and girls for low achievers in English for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.18 for rural and urban in English for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.25 for boys and girls for low achievers in English for the variable total socio-economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.0 for rural and urban in English for the variable socio-economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.0 for boys and girls for low achievers in English for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.06 for rural and urban in English for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.06 for boys and girls for low achievers in English for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.41 for rural and urban in English for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.69 for boys and girls for low achievers in English for the variable cultural level of family is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.12 for rural and urban in English for the variable cultural level of family is less than the table value required

for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.0 for boys and girls for low achievers in English for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.71 for rural and urban in English for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.56 for boys and girls for low achievers in English for the variable total socio-familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.88 for rural and urban in English for the variable total socio-familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

3. Comparison of Correlation Coefficient for Low achievers in Social Studies for Boys & Girls and Rural & Urban sample

The test of significance of difference in correlation co-efficient obtained for low achievers in Social Studies between boys & girls and rural & urban were calculated. The result of the analysis is presented in table 53.

TABLE 53

Comparison of Correlation Coefficient between Socio-Familial Variables for Low Achievers in Social Studies for Boys and Girls, Rural and Urban

Variables	Boys		Girls		CR	Rural		Urban		CR
	r	Z	r	Z		r	Z	r	Z	
Education	0.19	0.19	-0.01	-0.01	1.33	0.14	0.14	0.08	0.08	0.38
Occupation	0.08	0.08	-0.20	-0.20	1.87	-0.03	-0.03	-0.04	-0.04	0.06
Income	0.08	0.08	-0.02	-0.02	0.66	-0.05	-0.05	0.04	0.04	0.06
Total Socio-economic Status	0.19	0.19	-0.02	-0.02	1.4	0.14	0.14	0.08	0.08	0.38
Home Learning Facility	0.02	0.02	-0.02	-0.02	0.27	-0.03	-0.03	0.07	0.07	0.63
Family Acceptance of Education	0.22	0.22	0.04	0.04	1.2	0.11	0.11	0.13	0.13	0.13
Cultural Level of Family	-0.07	-0.07	-0.04	-0.04	0.2	-0.15	-0.15	-0.19	-0.19	0.25
Cultural Level of Family Neighbourhood	0.10	0.10	0.16	0.16	0.4	0.17	0.17	0.10	0.10	0.44
Total Socio-familial status	0.14	0.14	0.11	0.11	0.2	0.08	0.08	0.20	0.20	0.75

* denotes 0.05 level of significance
** denotes 0.01 level of significance

Table 53 reveals that obtained critical ratio 1.33 for boys and girls for low achievers in Social Studies for the variable Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.38 for rural and urban in Social Studies for the variable education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.87 for boys and girls for low achievers in Social Studies for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.06 for rural and urban in Social Studies for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.66 for boys and girls for low achievers in Social Studies for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.06 for rural and urban in Social Studies for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.4 for boys and girls for low achievers in Social Studies for the variable total socio-economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.38 for rural and urban in Social Studies for the variable socio-economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.27 for boys and girls for low achievers in Social Studies for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.63 for rural and urban in Social Studies for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.2 for boys and girls for low achievers in Social Studies for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.13 for rural and urban in Social Studies for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.2 for boys and girls for low achievers in Social Studies for the variable cultural level of family is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.25 for rural and urban in Social Studies for the variable cultural level of family is less than the table value

required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.4 for boys and girls for low achievers in Social Studies for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.44 for rural and urban in Social Studies for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.2 for boys and girls for low achievers in Social Studies for the variable total socio-familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.75 for rural and urban in Social Studies for the variable total socio-familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

4. Comparison of Correlation Coefficient for Low achievers in General Science for Boys & Girls and Rural & Urban sample

The test of significance of difference in correlation co-efficient obtained for low achievers in General Science between boys & girls and rural & urban were calculated. The result of the analysis is presented in table 54.

TABLE 54

Comparison of Correlation Coefficient between Socio-Familial Variables for Low Achievers in General Science for Boys and Girls, Rural and Urban

Variables	Boys		Girls		CR	Rural		Urban		CR
	r	Z	r	Z		r	Z	r	Z	
Education	-0.10	-0.10	0.27	0.27	1.13	-0.11	-0.11	-0.23	-0.23	0.75
Occupation	0.08	0.08	0.09	0.09	0.07	0.05	0.05	0.18	0.18	0.81
Income	-0.05	-0.05	-0.04	-0.04	0.07	0.04	0.04	-0.08	-0.08	0.75
Total Socio-economic Status	-0.04	-0.04	-0.15	-0.15	0.73	-0.04	-0.04	-0.09	-0.09	0.31
Home Learning Facility	-0.11	-0.11	0.03	0.03	0.93	-001	-001	-0.07	-0.07	0.38
Family Acceptance of Education	0.09	0.09	0.07	0.07	0.13	0.07	0.07	-0.05	-0.05	0.56
Cultural Level of Family '	0.01	0.01	-0.07	-0.07	0.53	-0.08	-0.08	0.03	0.03	0.69
Cultural Level of Family Neighbourhood	0.04	0.04	0.01	0.01	0.2	0.07	0.07	-0.04	-0.04	0.69
Total Socio-familial status	0.11	0.11	-0.05	-0.05	1.06	0.04	0.04	-0.06	-0.06	0.63

* denotes 0.05 level of significance
** denotes 0.01 level of significance

Table 54 reveals that obtained critical ratio 1.13 for boys and girls for low achievers in General Science for the variable Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.75 for rural and urban in General Science for the variable education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.07 for boys and girls for low achievers in General Science for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.81 for rural and urban in General Science for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.07 for boys and girls for low achievers in General Science for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.75 for rural and urban in General Science for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.73 for boys and girls for low achievers in General Science for the variable total socio-economic status is less than

the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.31 for rural and urban in General Science for the variable socio-economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.93 for boys and girls for low achievers in General Science for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.38 for rural and urban in General Science for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.13 for boys and girls for low achievers in General Science for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.56 for rural and urban in General Science for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.53 for boys and girls for low achievers in General Science for the variable cultural level of family is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.69 for rural and urban in General Science for the variable cultural level of family is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.2 for boys and girls for low achievers in General Science for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.69 for rural and urban in General Science for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.06 for boys and girls for low achievers in General Science for the variable total socio-familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.63 for rural and urban in General Science for the variable total socio-familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

5. Comparison of Correlation Coefficient for Low achievers in Mathematics for Boys & Girls and Rural & Urban sample

The test of significance of difference in correlation co-efficient obtained for low achievers in Mathematics between boys & girls and rural & urban were calculated. The result of the analysis is presented in table 55.

TABLE 55

Comparison of Correlation Coefficient between Socio-Familial Variables for Low Achievers in Mathematics for Boys and Girls, Rural and Urban

Variables	Boys		Girls		CR	Rural		Urban		CR
	r	Z	r	Z		r	Z	r	Z	
Education	0.08	0.08	-0.08	-0.08	1.14	0.10	0.10	-0.28	-0.29	2.6*
Occupation	0.10	0.10	-0.06	-0.06	1.14	0.09	0.09	-0.14	-0.14	1.53
Income	0.04	0.04	-0.04	-0.04	0.57	0.04	0.04	-0.04	-0.04	0.53
Total Socio-economic Status	0.08	0.08	-0.09	-0.09	1.21	0.11	0.11	-0.19	-0.19	2.00*
Home Learning Facility	-0.01	-0.01	0.20	0.20	1.50	0.10	0.10	0.13	0.13	0.2
Family Acceptance of Education	0.07	0.07	0.14	0.14	0.5	0.10	0.10	0.10	0.10	0
Cultural Level of Family	0.05	0.05	-0.08	-0.08	0.93	-0.10	-0.10	0.10	0.10	1.33
Cultural Level of Family Neighbourhood	-0.4	-0.4	0.05	0.05	0.64	-0.05	-0.05	0.11	0.11	1.07
Total Socio-familial status	0.03	0.03	0.12	0.12	0.64	0.02	0.02	0.17	0.17	1

* denotes 0.05 level of significance
** denotes 0.01 level of significance

Table 55 reveals that obtained critical ratio 1.14 for boys and girls for low achievers in Mathematics for the variable Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 2.60 for rural and urban in Mathematics for the variable education is greater than the table value required for 99 percent level of significance. The difference is significant at 0.01 level.

The obtained critical ratio 1.14 for boys and girls for low achievers in Mathematics for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.53 for rural and urban in Mathematics for the variable occupation is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.57 for boys and girls for low achievers in Mathematics for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.53 for rural and urban in Mathematics for the variable income is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 1.21 for boys and girls for low achievers in Mathematics for the variable total socio-economic status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 2.0 for rural and urban in Mathematics for the variable socio-economic status is greater than the table value required for 95 percent level of significance. The difference is significant at 0.05 level.

The obtained critical ratio 1.50 for boys and girls for low achievers in Mathematics for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0.2 for rural and urban in Mathematics for the variable home learning facility is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.5 for boys and girls for low achievers in Mathematics for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 0 for rural and urban in Mathematics for the variable family acceptance of Education is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.93 for boys and girls for low achievers in Mathematics for the variable cultural level of family is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.33 for rural and urban in Mathematics for the variable cultural level of family is less than the table value

required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.64 for boys and girls for low achievers in Mathematics for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.07 for rural and urban in Mathematics for the variable cultural level of family neighbourhood is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The obtained critical ratio 0.64 for boys and girls for low achievers in Mathematics for the variable total socio-familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

The critical ratio obtained 1.0 for rural and urban in Mathematics for the variable total socio-familial status is less than the table value required for 95 percent level of significance. The difference is not significant at 0.05 level.

SUMMARY OF PROCEDURE, FINDINGS AND SUGGESTIONS

K. T. Showkath Hussiain "An analytical study of the socio-familial status of low achievers among the secondary school students of Kerala state" Thesis. Department of Education, University of Calicut, 2002

SUMMARY OF PROCEDURE, FINDINGS AND SUGGESTIONS

- The study in Retrospect
- Major Findings
- Tenability of Hypotheses
- Suggestion for Educational Practices
- Suggestion for Further Research

SUMMARY OF PROCEDURE, FINDINGS AND SUGGESTIONS

THE STUDY IN RETROSPECT

Restatement of the Problem

The present study has stated earlier was to analyse the socio-familial status of low achievers among secondary school students of Kerala state. The study has been designed with achievements in different school subjects as dependent variable and socio-familial variables as independent variables. The variables used for the present study are classified and presented below.

VARIABLES

a) Dependent Variable

The following are the dependent variables selected for the study.

i. Achievement in Malayalam

ii. Achievement in English

iii. Achievement in Social Studies

iv. Achievement in General Science

v. Achievement in Mathematics

b) Independent Variables

The following socio-familial variables have been taken as independent variables for the study.

1. Parental education level
2. Parental occupation level
3. Parental income level
4. Socio-economic status
5. Cultural level of family
6. Family Acceptance of education
7. Learning facilities at home
8. Cultural level of family neighbourhood
9. Socio-familial status

OBJECTIVES OF THE STUDY

The following are the objectives of the study:

1) To compare the mean scores in each of the nine socio-familial variables obtained by low achievers and high achievers (so classified on the basis of total achievement in the five school subjects) among secondary school students with a view to identify the socio-familial variables associated with the two achievement levels.

2) To explore the nature of the correlation of each of the socio-familial variables selected, with each of the school subjects among the high achievers students and the relevant sub groups therein.

3) To explore the nature of the correlation of each of the socio-familial variables selected, with each of the school subjects among the low achievers students and the relevant sub groups therein.

4) To compare the coefficient of correlation obtained in socio-familial variables for high achievers in each of the school subjects selected for the study based on gender and locale.

5) To compare the coefficient of correlation obtained in socio-familial variables for low achievers in each of the school subjects selected for the study based on gender and locale.

HYPOTHESES

1) There will be significant difference between the mean scores in each of the nine socio-familial variables obtained by the low achievers and high achievers when they are compared.

2) There will be significant correlation between each of the nine socio-familial variables selected with the achievements in each of the five school subjects among high achievers and the sub groups therein.

3) There will be significant correlation between each of the nine socio-familial variables selected with the achievements in each of

the five school subjects among low achievers and the sub groups therein.

4) To compare the coefficient of correlation obtained in socio-familial variables obtained by high achievers in each of the school subjects selected for the study based on gender and locale.

5) To compare the coefficient of correlation obtained in socio-familial variables obtained by low achievers in each of the school subjects selected for the study based on gender and locale.

PROCEDURES

In order to identify low achievers from the total sample achievement test in five school subjects were conducted for 1000 samples in 23 schools of IXth standard students. Socio-familial status of the parents were found out by giving general data sheet and socio-familial inventory. The achievement tests were developed and standardised by the investigator with the help of subject experts. The data were analysed using the following techniques:

i) Test of significance of difference between means for high achievers and low achievers in selected school subjects.

ii) Test of significance of correlation coefficient in achievement and Socio-familial status of high achievers based on gender and locale

with in the group.

iii) Test of significance of correlation coefficient in achievement and socio-familial status of low achievers based on gender and locale with in the group.

iv) Test of significance of comparison of correlation between Socio-familial variables and achievement of high achievers in selected subjects based on gender and locale.

v) Test of significance of comparison of correlation of Socio-familial status and achievement of low achievers in selected subjects based on gender and locale.

MAJOR FINDINGS

I. Test of significance of mean difference of socio-familial correlates of the low achievement and high achievers in selected subjects for the study

1. The nature of socio-familial status of low achievers was compared with high achievers for the selected subjects with respect to their means scores. The following conclusion were made a) in the case of total sample it was found that the difference in total socio-familial status between high and low achievers in Malayalam is not significant for education of parents

and cultural level of family neighbourhood. The difference is found to be significant for occupational level, income level and total socio-economic status level, home learning facility, family acceptance of education, cultural level of family and total socio-familial status.

2. In the case of boys sample, it was found that the difference in total socio-familial status between high and low achievers in Malayalam is not significant for occupation of parents, home learning facility, family acceptance of education, cultural level of family and cultural family neighbourhood. The difference is found to be significant for educational level, income level and total socio-economic status level and total socio-familial status.
3. In the case of girls sample, it was found that the difference in total socio-familial status between high and low achievers in Malayalam is found to be significant for education, occupation, income and total socio-economic status, home learning facility, family acceptance of education, cultural level of family neighbourhood and total socio-familial status. The difference is not significant for cultural level of family.
4. In the case of government sample, it was found that the difference in total socio-familial status between high and low

achievers in Malayalam is found to be significant for education, occupation, income and total socio-economic status, home learning facility, family acceptance of education, cultural level of family neighbourhood and total socio-familial status. The difference is not significant for cultural level of family.

5. In the case of private sample for total socio-familial status between high and low achievers in Malayalam is found to be significant for education, occupation, income and total socio-economic status, home learning facility, family acceptance of education, cultural level of family neighbourhood and total socio-familial status. The difference is not significant for cultural level of family.
6. In the case of rural sample for total socio-familial status between high and low achievers in Malayalam is found to be significant for education, occupation, income and total socio-economic status, home learning facility, family acceptance of education and total socio-familial status. The difference is not significant for cultural level of family and cultural level of family neighbourhood.
7. In the case of urban sample for total socio-familial status between high and low achievers in Malayalam is found to be significant

for education, occupation, income and total socio-economic status, home learning facility, family acceptance of education and total socio-familial status. The difference is not significant for cultural level of family and cultural level of family neighbourhood.

8. In the case of total sample for English, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income and total socio-economic status, home learning facility, family acceptance of education, cultural level of family and total socio familial status. The difference is not significant for cultural level of family neighbourhood.
9. In the case of boys sample for English, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for home learning facility and total socio-familial status. The difference is not significant for education, occupation, income and total socio-economic status variable, family acceptance of education, cultural level of family and cultural level of family neighbourhood.
10. In the case of girls sample for English, it was found that the difference in total socio-familial status between high and low

achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family and total socio-familial status. The difference is not significant for cultural level of family neighbourhood.

11. In the case of Government sample for English, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, income, total socio-economic status, home learning facility, family acceptance of education and total socio-familial status. The difference is not significant for occupation, cultural level of family and cultural level of family neighbourhood.
12. In the case of private sample for English, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for total socio-economic status, home learning facility and cultural level of family. The difference is not significant for education,. occupation, income, cultural level of family neighbourhood and total socio-familial status.
13. In the case of rural sample for English, it was found that the difference in total socio-familial status between high and low

achievers is found to be significant for home learning facility, cultural level of family and total socio-familial status. The difference is not significant for education, occupation, income, total socio-economics status, Family acceptance of education and cultural level of family.

14. In the case of urban sample for English, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family and total socio-familial status. The difference is not significant for cultural level of family neighbourhood.

15. In the case of total sample for Social Studies, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family neighbourhood and total socio-familial status. The difference is not significant for cultural level of family.

16. In the case of boys sample for Social Studies, it was found that the difference in total socio-familial status between high and low

achievers is found to be significant for education, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family, cultural level of family neighbourhood and total socio-familial status. The difference is not significant for occupation.

17. In the case of girls sample for Social Studies, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status,
18. home learning facility, family acceptance of education, cultural level of family neighbourhood and total socio-familial status. The difference is not significant for cultural level of family.
19. In the case of government sample for Social Studies, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family neighbourhood and total socio-familial status. The difference is not significant for cultural level of family.
20. In the case of private sample for Social Studies, it was found that the difference in total socio-familial status between high and low

achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family neighbourhood and total socio-familial status. The difference is not significant for cultural level of family.

21. In the case of rural sample for Social Studies, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family, cultural level of family neighbourhood and total socio-familial status.
22. In the case of urban sample for Social Studies, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status variable, home learning facility, family acceptance of education and total socio-familial status. The difference is not significant for cultural level of family and cultural level of family neighbourhood.
23. In the case of total sample for General Science, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation,

income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family, cultural level of family neighbourhood and total socio-familial status.

24. In the case of boys sample for General Science, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, total socio-economic status, home learning facility, family acceptance of education, cultural level of family. The difference is not significant for income, cultural level of family neighbourhood and total socio-familial status.

25. In the case of girls sample for General Science, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family and total socio-familial status. The difference is not significant for cultural level of family neighbourhood.

26. In the case of government sample for General Science, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status, home learning

facility, family acceptance of education and total socio-familial status. The difference is not significant for cultural level of family and cultural level of family neighbourhood.

27. In the case of private sample for General Science, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family, cultural level of family neighbourhood and total socio-familial status.

28. In the case of rural sample for General Science, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family, cultural level of family significant and total socio-familial status.

29. In the case of urban sample for General Science, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education and total socio-familial status.

The difference is not significant for cultural level of family and cultural level of family neighbourhood.

30. In the case of total sample for Mathematics, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family, cultural level of family neighbourhood and total socio-familial status.
31. In the case of boys sample for Mathematics, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, income, home learning facility, family acceptance of education and total socio-familial status. The difference is not significant for occupation, total socio-economic status, cultural level of family and cultural level of family neighbourhood.
32. In the case of girls sample for Mathematics, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family

neighbourhood and total socio-familial status. The difference is significant for cultural level of family.

33. In the case of government sample for Mathematics, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family neighbourhood and total socio-familial status and the difference is not significant for cultural level of family.

34. In the case of private sample for Mathematics, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family, cultural level of family neighbourhood and total socio-familial status.

35. In the case of rural sample for Mathematics, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, income, total socio-economic status, home learning facility, family acceptance of education, cultural level of family neighbourhood and total socio-familial status variable except occupation and cultural level of family.

36. In the case of urban sample for Mathematics, it was found that the difference in total socio-familial status between high and low achievers is found to be significant for education, occupation, income, total socio-economic status, home learning facility, family acceptance of education and total socio-familial status variable except the cultural level of family and cultural level of family neighbourhood.

II. Relation between socio-familial variables and achievement in school subjects among high achievers.

1. The relationship between socio-familial status and high achievement for total sample, there is significant relation in education, occupation, income, total socio-economic status in Malayalam, relationship exist in occupation and income in English, relationship is found in education occupation, income, total socio-economic status, cultural level of family in social studies, income, total socio-economic status, home learning facility, family acceptance of education, cultural of family in general science, education, income and total socio economic status in mathematics is found to be significant.
2. The relationship between socio-familial status and high achievement for boys, there is significant relation in family acceptance of education, total socio-familial status in Malayalam, relationship

exists in occupation, income, total socio-economic status in English, relationship is found in income, total socio-economic status in social studies, occupation, cultural level of family and Cultural level of family neighbourhood in general science and occupation in mathematics is found to be significant.

3. The relationship between socio-familial status and high achievement for girls, there is significant relation in education, occupation, income and family acceptance of education in Malayalam, relationship exists in home learning facility, family acceptance education, cultural level of family, cultural level of family neighbourhood, total socio-familial status in English, relationship is found in education, occupation, income, total socio-economic status in social studies, total socio economic status, home learning facility, family acceptance of education, cultural level of family in general science and occupation and total socio-familial variable status in mathematics is found to be significant.
4. The relationship between socio-familial status and high achievement for rural, there is significant relation in family acceptance of education in Malayalam, relationship exists in occupation, income, total socio-economic status, home learning facility and cultural level of family in English, relationship is found in education, total socio-

economic status, cultural level of family, total socio-familial status in social studies, income, total socio economic status, family acceptance of education, cultural level of family in general science and education, income and total socio-economic status in mathematics is found to be significant.

5. The relationship between socio-familial status and high achievement for urban, there is significant relation in education, occupation, income and total socio-economic status in Malayalam, relationship exists in family acceptance of education in English, relationship is found in home learning facility in social studies, income, total socio economic status, home learning facility, family acceptance of education, cultural level of family and total socio-familial status variable in general science and total socio-familial status in mathematics is found to be significant.

III. Relation between socio-familial variables and achievement in school subjects among low achievers

1. The relationship between socio-familial status and achievement for low achievers in total sample, there is significant relation in income, family acceptance of education, cultural level of family, cultural level of family neighbourhood and total socio-familial status and variable in Malayalam, relationship exists in education in English, relationship is found in home learning facility, family acceptance of

education and cultural level of family in social studies, education, income, total socio-economic status and home learning facility, cultural level of family and total socio-familial status variable in general science and education, income, total socio-economic status and cultural level of family in mathematics is found to be significant.

2. The relationship between socio-familial status and achievement for low achievers in boys sample there is significant relation in education, occupation, home learning facility and cultural level of family neighbourhood in Malayalam, relationship exists in family acceptance of education in English, relationship is found in cultural level of family variable in social studies, education, income, total socio-economic status and home learning facility and total socio-familial status in general science and occupation, home learning facility and cultural level of family in mathematics is found to be significant.
3. The relationship between socio-familial status and achievement for low achievers in girls sample there is significant relation in occupation, income, total socio-economic status, home learning facility in English, relationship is found in education, occupation, income, total socio-economic status, home learning facility, family acceptance of education and cultural level of family in social studies,

education, income, total socio-economic status, family acceptance of education, cultural level of family and total socio-familial status variable in general science is found to be significant. There is no significant relation for in Malayalam and mathematics.

4. The relationship between socio-familial status and achievement for low achievers in rural sample there is significant relation in occupation, income, total socio-economic status, home learning facility in Malayalam, occupation, income, home learning facility, cultural level of family neighbourhood in English, relationship is found in occupation, home learning facility cultural level of family variables in social studies, education, total socio-economic status, home learning facility and cultural level of family in general science, cultural level of family and cultural level of family neighbourhood in mathematics is found to be significant.
5. The relationship between socio-familial status and achievement for low achievers in urban sample there is significant relation in home learning facility, family acceptance of education, cultural level of family neighbourhood and total socio-familial status in Malayalam, education, occupation, income, home learning facility, family acceptance of education, total socio-familial status in English, relationship is found in occupation and home learning facility

variables in social studies, education, income, home learning facility, family acceptance of education in general science, education, occupation, income and total socio-economic status in mathematics is found to be significant.

IV. Comparison of correlation between socio-familial variables and achievement in selected subjects among high achievers based gender and locale and the following are its major findings

1. There is no significant difference between high achievers in Malayalam based on gender and locale.
2. There is significant difference in income and total socio-familial status variable between boys and girls in high achievers in English.
3. There is no significant difference between high achievers in social studies based on gender and locale.
4. There is no significant difference between high achievers in general science based on gender and locale.
5. There is no significant difference between high achievers in mathematics based on gender and locale.

V. Comparison of correlation between socio-familial variables and achievement in selected subjects among low achievers based on general and locale and the following are its major findings.

1. There is no significant difference between high achievers in Malayalam based on gender and locale.
2. There is significant difference in income variable between boys and girls in low achievers in English.
3. There is no significant difference between low achievers in social studies based on gender and locale.
4. There is no significant difference between low achievers in general science based on gender and locale.
5. There is significant difference in education, total socio-economic status variable between rural and urban of low achievers in mathematics.

TENABILITY OF THE HYPOTHESES

The study throws light on the tenability of the hypotheses.

A. There will be significant difference between mean scores in each of the nine socio-familial variables obtained by low achievers and high achievers when they are compared.

The first hypothesis states that there will be significant difference in means in achievement in the subjects selected for the study and nine socio-familial variables. Out of nine socio-familial

variables selected for the study most of them have shown significant difference in achievement. Summing up of the results of the different types of analysis we may say that the hypothesis stands confirmed for most of the variables.

B. There will be significant correlation between each of the nine socio-familial variables selected with achievements in each of the five school subjects among high achievers and the subgroups therein.

The findings of the study reveals that there is significant relation between socio-familial variables and high achievment to a certain extent. So it is clear that the hypothesis is substantiated.

C. Relationship between socio-familial variables and achievement in school subjects among low achievers.

The third hypothesis is also states that there is significant relation between socio-familial variables and achievement in selected subjects. The correlation obtained shows significant relation between the variables and the third hypothesis is also substantiated.

D. Comparison of correlation between socio-familial variables and achievement in selected subjects among high achievers based on gender and locale.

Based on the fourth hypothesis from the study it is clear that there is significant difference between socio-familial status and

achievement in income and total socio-familial status between gender and locale for the high achievement group. There is no significant difference for the other subjects. So the fourth hypothesis is not substantiated.

E. Comparison of correlation between socio-familial variables and achievment in selected subjects among the low achievers based on gender and locale.

The study reveals that there is no significant difference between socio-familial variables and achievement in selected subjects based on gender and locale. There is only slight significant difference in mathematics subjects. So the fifth hypothesis is also not substantiated.

CONCLUSION

From the detailed analysis of the socio-familial status among low achievers and high achievers in secondary school students as low and high in terms of their achievement. Some socio-familial variables like cultural level of family neighbourhood is not so much affecting the achievement. But socio-economic status is an important variable which is affecting achievement. So the economic conditions of the parents should be improved for the development of the low achievers.

SUGGESTIONS FOR IMPROVING CURRENT PRACTICES

The study has been intended to identify low achievers among secondary schools and to analyse their socio-economic status and socio-familial conditions.

The results of the study states that socio-economic status and socio-familial conditions are very much influencing the achievement of the students.

The students who are stated as low achievers are coming from poor socio-economic status group. The socio-familial status is also another important criterion.

a. Compensatory steps should be taken for improving in school achievement by way of remedial teaching and special classes.
b. Trained teachers should be appointed in subjects like mathematics and English etc. Awareness camps for parents should be organised. Incentives like financial assistance, mid day meal, free uniforms, study materials, textbooks should be provided.
c. Since the teacher cannot do much for the development of socio-economic status of the students, he has to take steps to compensate for deficiency in socio-economic status. The teacher should visit the houses of the students who are academically in low position and should have a close contact with their parents.
d. The steps are also taken by the administers and planners for strengthening the existing quality improvement programme.

e. Steps are also have to be taken for conducting continuous comprehensive evaluation in all teaching learning programmes at secondary level. Teachers have to be given proper orientation and refresher courses in this regard.

f. In the state of Kerala administration and management of education has already decentralised and hence proper steps have to be taken by the authorities for the total involvement of local bodies in all aspects of education.

g. School authorities and the Panchayath have to take joint steps in convening meetings for PTA and mother PTA regularly. A monitoring committee among school teachers and local body have to be constituted for monitoring regular academic programmes of the school. Students coming from deprived and weaker sections tribal areas, religious, linguistic and cultural minorities may also have to be identified and steps are to be taken for giving proper compensatory educational programmes.

SUGGESTIONS FOR FURTHER RESEARCH

1. A study in the relationship between academic achievement aspiration interest and aptitude of school children may be undertaken.
2. A study on how the different attitudes, values and beliefs of

parents effect the child's attitude towards school or his achievement may taken up.

3. Comparative study of socio-familial status can be conducted on the different sections of the community namely people belongs to the slum and tribals.
4. Study was conducted only for secondary school students. Study can be conducted among primary schools students.

REFERENCES

REFERENCES

Ajeh, A. O. 1991. The home effects on academic achievement. *New Frontiers in Education*. xxi: 380-387.

Al-najjar-Ahmed, A. (1996). *Adolescent perception of family functioning in the United Arab Emirates.* (ERIC Document Reproduction Service).

Alwin, D. F. and Thornton, Arland (1984) Family Origins and the Schooling Process: Early versus Late Influence of Parental Characteristics. (ERIC Journal Reproduction Service, No. EJ313131)

Andrews, J. A. *et al.* (1994). *Explaining the Relation between Academic Motivation and Substance Use: Effects of Family Relationships and Self Esteem.* (ERIC Document Reproduction Service, No. ED375366)

Annegret, Harnischfeger et al. (1975). *Early childhood socialization and social class environment.* (ERIC Document Reproduction Service, No: ED135457).

Arora, P.K. 1992. International effect of creativity and intelligence on emotional stability. Personality adjustment and academic achievment. *Indian Educational Review.*

Battle, Juan (1997). *The relative effects of married versus divorced family configuration and socio-economic status on the educational achievment of African American middle grade students.* (ERIC Journal Reproduction Service, No. EJ566958).

Bhatnagar, J. K. and M. Sharma. 1992. A study of the relationship between parental education and academic achievement in semi-rural setting. *Psychological Studies*. **37**: 126-129.

Caldas Stephen, J. and Bankston, Carl (1997). *Effect of school population, socio-economic status on individual academic achievement*. (ERIC Journal Reproduction Service, No. EJ549950).

Chen, X. 1997. Students peers groups in high school: the pattern and relationship to educational outcomes. *Journal of Educational Research*, **143**(4): 197-199.

Daniel, Larry G and King Debra, A. (1995). *Relationships among various dimensions of self-esteem and academic achievement in Elementary students*. (ERIC Document Reproduction Service, No. ED403008).

Davis, D., E. James and N.J. Jordon. (1994). The effect of school context structure and experiences on African, American males in middle and high school. *Journal of Negro Education*. **63**(4): 570-587. [ERIC Journal Reproduction Service No. EJ 426398].

Deslandes, R., E. Roger and D. Turcotte. 1997. school achievement at the secondary level. Influence of parenting style and parental involvement in schooling. *Mc Gill Journal of Education*. **32**(3): 191-207. [ERIC, Journal Reproduction Service, No. EJ 456328].

Douglas, J. W. B. (1964). *The home and the school*. London: Mac Gibbon and Kee.

Ed Watch Online (2001). *State summary of Vermont.* (ERIC Document Reproduction Service, No. ED459266).

Ed Watch Online (2001). *State summary of Virginia.* (ERIC Document Reproduction Service, NO. ED459267).

Entwisle, D.R. and K. Alexander. 1995. A parent economic shadow. Family structure versus family resources as influence on early school achievement. MG University. ERIC.

Epstein, Michael H., Jayanthi, Madhavi, Dennis, Karl, Dennis, Kathy L., Hardy, Ron Fueyo, Vivian (1998). Educational status of children who are receiving services in an urban family preservation and reunification setting. *Journal of emotional and behavioural disorders,* Vol. 6 (3), p.162-69.

Folman, Rosalind and Budoff, Milton (1971) *Learning Potential and* ***Family Status*** *Among Special (EMR) and Regular Class Adolescents* (ERIC Document Reproduction Service, No. ED085972).

Ganguly and Malabika. (1989). Socio-economic status and scholastic achievement. *Indian education review.* Vol. 24 (1), pp84-94.

Garg, V. P. and Chathurvedi, S. (1992). Intelligence and socio-economic status as correlates of academic performance. Some field evidences. *Indian educational review.* Vol. 27 (3), pp.107-10.

Gordon, C. Wayne et al. (1968). *Education achievement and aspirations of Mexican-American youth in a Metropolitan context.* (ERIC Document Reproduction Service, No. ED028012).

Harnischfeger, Annegret and *et al.* (1975) *Early Childhood Socialization and Social Class Environment.* (ERIC Document Reproduction Service, No. ED135457)

Honig-AliCe, S and Lim-Swee-Eng (1993). *Singapore preschoolers play in relation to social class sex and setting.* (ERIC Document Reproduction).

Hunter-Grundin, Elizabeth (1997). *Are reading standards falling?* (ERIC Journal Reproduction Service, No. EJ556763).

Kapoor, Rita (1987). Study of factors responsible for high and low achievement at the junior high school level. In M. B. Buch (Ed) *Fourth Survey of Research in Education.* New Delhi: NCERT.

Kelu, P. (1989). Some socio-familial correlates of basic language skills in the mother-tongue of secondary school pupils of Kerala. Doctoral dissertation. Department of Education, University of Calicut.

Kifer, Edward. (1976). *The relationship between the home and school in influencing the learning of children.* (ERIC Document Reproduction Service No.: ED133073).

Koteswara, Narayana M. (1991). A comparative study of the characteristics of high achievers and low achievers in reading of class VIII pupils with species reference to school and home factors. M. Phil. Education, SV University.

Lohani, I. and Mohita. 1990. Link between selected family demographic factors, home environment and academic performance. *Perspectives in Education*. **6**: 119-124.

Marcus, M. M. and Sheehan D. S. (1978). *Relationships Between Student Attitudes and Selected Background and Achievement Characteristics.* (ERIC Document Reproduction Service, No. ED154078)

Marjoribanks, K. 1995. Factors affecting learning environment and school related outcomes of Australian adolescents. *Journal of Social Psychology*. **135**(1): 89-95. [ERIC, Journal Reproduction Service, No. EJ 515384].

Massey Douglas, S. (1993). Latinos poverty and underclass: A new agenda for research. *Hispanic journal of behavioural sciences*. Vol 15, pp449-75.

McCoy, L.P. (ed.). 1999. Contextual effect on educational accountability in Kentucky. *Journal of Research in Education*. **15**(1): 31-46.

Misra M. 1986. A critical study of the influence of socio-economic status on achievement of higher secondary art students of Kanpur. Buch (ed.) *Fourth Survey of Research in Education*. New Delhi: NCERT, pp. 954.

Nambiar, A.M.D. 1988. A comparative study of educational performance of secondary school children of educationally forward and backward areas of Kerala. Unpublished Doctoral Dissertation. University of Calicut.

Persidsky Igor, V., Kelly James, J. (1992). *Educational perspectives for entirely migrants: A case of society refugees.* (ERIC Document Reproduction Service).

Phillips, N and C. Lerac. 1992. Parent involvement: relationship of expectations, goals to student achievement among minority, socio-economic and gender groups. *Research Reportsn (143).* US California.

Rhoda, C. N. and Virginia, H. (1986) ***Family Status*** and School Achievement. (ERIC Document Reproduction Service, No. ED277139).

Roberts Leonard, H. (1997). *Mary Wolstonecraft's "Rational Education" agenda and the status of women in Eighteenth century England.* (ERIC Document Reproduction Service).

Ronald, H. H. (1978) Overview of Report No. 3: Student Economic and Educational Status and Receipt of Educational Services. Technical Report No. 3 from the Study of the Sustaining Effects of Compensatory Education on Basic Skills. (ERIC Document Reproduction Service, No. ED163129).

Rothschild, Susan J. S. and Lichtman, Marilyn (1980). *Factors related to white, black and Hispanic women's mathematics attainments*: A descriptive study. (ERIC Document Reproduction Service No., ED195570).

Samal, N. (1990). Relationship between planning and academic achievement of boys and girls: Effect of home environment variables. M. Phil dissertation in psychology, Utkal University, Orissa.

Secules, Teresa and Neisser, Ulric (1993). *Mother-child interaction in reading and telling: Are there social group difference?* (ERIC Document Reproduction Service).

Seethamani, D. (1988). Familial and social factors associated with under achievement in school subjects. Doctoral dissertation, University of Kerala.

Signer, Barbarra *et al.* (1996) *A study of the interaction of ethnicity, math achievement, socio-economic status and gender on math attitudes of high school students.* (ERIC Document Reproduction Service, No. ED:400302)

Snipp Mathew, C. (1995). *American Indian studies.* (ERIC Document Reproduction Service).

Sood, R. 1990. A study of academic achievement of pre-engineering students, in relation to socio-economic status. *Journal of Educational Research and Extension.* **26**: 223-230.

Soremsen Clark, W. (1994). *Success and education in South Korea.* (ERIC Document Reproduction Service).

Taube, Sylvia (1997). *Unit partitioning as mechanism for constructing basic fraction knowledge. Test a hypothesis.* Reports research. (ERIC Document Reproduction Service).

Trusty, Jerry *et al.* (1994). *Achievement, socio-economic status and self-concept of fourth grade students.* (ERIC Journal Reproduction Service, No. EJ501942).

Tudge, J., Hogan, D., Tammerveski, P., Kulakova, N., Meltsas, M. (1997) Social change, socio-economic status and the development of self-direction in children: A comparison of Russia, Estonia and the United States. (ERIC Document Reproduction Service).

Usha, P. 1991. A study of certain socio-familial correlates of secondary school science achievement. Unpublished Doctoral Dissertation. University of Calicut.

Verma S. 1992. Value orientation of socially disadvantaged adolescents. *Indian Educational Review*. **23**: 96-97.

APPENDICES

APPENDIX I
UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

Achievement Test in Malayalam for Standard IX Pupils

ഡോ. പി. കേളു
പ്രൊഫസർ & ഹെഡ്
ഡിപ്പാർട്ട്മെന്റ് ഓഫ് എഡ്യൂക്കേഷൻ
കാലിക്കറ്റ് യൂണിവേഴ്സിറ്റി

കെ.ടി. ഷൗക്കത്ത് ഹുസൈൻ
റിസർച്ച് സ്കോളർ
ഡിപ്പാർട്ട്മെന്റ് ഓഫ് എഡ്യൂക്കേഷൻ
കാലിക്കറ്റ് യൂണിവേഴ്സിറ്റി

Time : 45 minutes **മലയാളം** Marks : 50

നിർദ്ദേശങ്ങൾ

താഴെ കൊടുത്തിട്ടുള്ള ഓരോ ചോദ്യങ്ങൾക്കും നാലു വീതം ഉത്തരങ്ങൾ കൊടുത്തിരിക്കുന്നു. തന്നിരിക്കുന്ന ഉത്തരക്കടലാസ്സിൽ ആ ഉത്തരത്തെ സൂചിപ്പിക്കുന്ന ഇംഗ്ലീഷ് അക്ഷരത്തിന് ചുവടെയുള്ള വൃത്തത്തിൽ ഈ ചിഹ്നം (X) അടയാളപ്പെടുത്തുക.

മാതൃക :

തുഞ്ചത്തെഴുത്തച്ഛന്റെ ജന്മദേശം?
a. കാലടി b. തൃശൂർ c. തിരൂർ d. പേരൂർ

A	B	C	D
◯	◯	Ⓧ	◯

1. മാതൃദേവോ ഭവ എന്ന ഉപദേശം ഏതു കൃതിയിലുള്ളതാണ്?
   a. കഠോപനിഷത്ത് b. തൈത്തിരിയോപനിഷത്ത്
   c. പ്രശ്നോപനിഷത്ത് d. ഈശാവാസ്യോപനിഷത്ത്
2. ഭാഷയുടെ ശ്രാവ്യരൂപത്തിന്റെ എല്ലാ സാധ്യതകളെയും ചൂഷണം ചെയ്യുന്ന ബഹുജന മാധ്യമമേത്?
   a. റേഡിയോ b. ടെലിവിഷൻ c. കംപ്യൂട്ടർ d. വർത്തമാനപത്രം
3. ഉറൂബിന്റെ ഏതു കൃതിക്കാണ് കേന്ദ്രസാഹിത്യ അക്കാദമി അവാർഡ് ലഭിച്ചത്?
   a. ഉമ്മാച്ചു b. സുന്ദരികളും സുന്ദരന്മാരും c. മിണ്ടാപ്പെണ്ണ് d. അമ്മിണി
4. മാനവസമുദായം എന്ന ആദർശത്തിലേക്കുള്ള യാത്ര എവിടെ നിന്നും ആരംഭിക്കാമെന്നാണ് ലേഖകൻ അഭിപ്രായപ്പെടുന്നത്.
   a. പ്രാഥമിക വിദ്യാലയം മുതൽ b. മുതിർന്ന തലമുറയിൽ നിന്ന്
   c. സർവ്വകലാശാലാ വിദ്യാഭ്യാസം മുതൽ d. യുവാക്കളുടെ ഇടയിൽ നിന്ന്
5. ഏകലോകദർശനം എന്ന ആശയം കുട്ടികളിൽ വളർത്താൻ ഏതു പഠനമാണ് ഏറ്റവും കൂടുതൽ ഉപകരിക്കുന്നത്?
   a. ശാസ്ത്രപഠനം b. ചരിത്ര പഠനം c. ഗണിത പഠനം d. ഭാഷാപഠനം

6. പാലസ്തീൻ ജനതയിൽ കണ്ട ഏതു സ്വഭാവവിശേഷമാണ് യേശുവിനെ സന്തോഷിപ്പിച്ചിരുന്നത്?
a. ധൈര്യവും ആത്മവിശ്വാസവും b. നാടിനെ റോമക്കാരിൽ നിന്നും രക്ഷിക്കാനുള്ള ശ്രമം c. ജനങ്ങളിൽ കണ്ടിരുന്ന ഈശ്വരവിശ്വാസം

7. യേശുവിന്റെ കാലത്ത് ഗലീലായിലെ ജനങ്ങൾ ഉപയോഗിച്ചിരുന്ന ഭാഷ ഏതായിരുന്നു?
a. ലാറ്റിൻ b. ഹിബ്രു c. അരാമ്യഭാഷ d. ഗ്രീക്കുഭാഷ

8. യതോധർമ്മസ്തതോ ജയ - മഹാഭാരതത്തിലെ ഈ ഉദ്ധരണി ആര് പറഞ്ഞതാണ്?
a. കൃഷ്ണൻ b. കുന്തി c. ഗാന്ധാരി d. ഭീഷ്മർ

9. കർണ്ണൻ ദ്വൈരഥം കാംക്ഷിക്കുന്നത് ആരുമായിട്ടാണ്?
a. ഭീമൻ b. ദുര്യോധനൻ c. യുധിഷ്ഠിരൻ d. അർജ്ജുനൻ

10. കന്നൽക്കണ്ണികൾ മൗലീരത്നകലികാരൂപം ധരിച്ചു വന്നതാര്?
a. ഉർവ്വശി b. ഗോപികമാർ c. പൂതന d. ശ്രീകൃഷ്ണൻ

11. പച്ചയാം വിരിപ്പിച്ച സഹ്യനിൽ തലവെച്ചും - ഈ ഉദ്ധരണി അരുടെ രചനയിൽ നിന്നാണ് എടുത്തിട്ടുള്ളത്?
a. ഉള്ളൂർ b. ആശാൻ c. വള്ളത്തോൾ d. ജി. ശങ്കരക്കുറുപ്പ്

12. വാക്യഘടനയിൽ അന്യഭാഷാസ്വാധീനം അധികം കാണാത്ത ഭാഷ ഏതാണ്?
a. മലയാളം b. തമിഴ് c. കന്നട d. ബംഗാളി

13. സാമൂഹിക നാടകം ഏത്?
a. ലക്ഷാലക്ഷ്മി b. കാഞ്ചനസീത c. ഏട്ടിലെ പശു d. സാകേതം

14. കാവ്യനർത്തകി എന്ന കവിതയിൽ ഉടനീളം കാണുന്ന ഭാവം എന്ത്?
a. അതിശയം b. ഉത്സാഹം c. വിഷാദം d. ഭക്തി

15. കാവ്യനർത്തകിയുടെ നൃത്തത്തിന് മണിവീണ മീട്ടിയതാര്?
a. അപ്സര രമണികൾ b. ഉഡുകന്യകൾ c. കവി d. കവിത

16. അച്ഛൻ കൊടുത്തോരു കൊടുംകഠാരം മകന്റെ നേർക്കഷണമാഞ്ഞു വിട്ടു - ആര്?
a. ഗണപതി b. സുബ്രഹ്മണ്യൻ c. പരശുരാമൻ d. പരമശിവൻ

17. വിദ്യാർപ്പണം പാത്രമറിഞ്ഞു വേണം - എന്നു പറഞ്ഞതാര്?
a. സുബ്രഹ്മണ്യൻ b. പരമശിവൻ c. പാർവ്വതി d. ഗണപതി

18. കണ്ണേറു തട്ടി കാൽ മുടന്തിയതാർക്കാണ്?
a. അമ്മച്ചിത്താറാവിന് b. മഞ്ഞക്കിളിപ്പെണ്ണിന്
c. തത്തമ്മപ്പെണ്ണിന് d. കുളക്കോഴിപ്പെണ്ണിന്

19. പൂവിന് താരാട്ട് പാടിയതാര്?
a. പല്ലവം b. ദലമർമ്മരങ്ങൾ c. കിളികൾ d. ആലോലവായു

20. അധികതുംഗപദത്തിൽ രാജ്ഞിയെപ്പോലെ ശോഭിച്ചിരുന്നതാര്?
a. ലത b. പല്ലവം c. പുഷ്പം d. താരാജാലം

21. കഴലിൽ ചിറകുള്ള സഞ്ചാരപ്രിയർ എന്നു വിശേഷിപ്പിക്കുന്നതാരെ?
a. കാലത്തെ b. ചക്രവർത്തിയെ c. നദിയെ d. ശരത്ക്കാല പൗർണ്ണമിയെ

22. കാലമാകുന്ന ചക്രവർത്തിക്ക് താലം പിടിക്കുന്നതാര്?
a. വൃക്ഷം b. നദികൾ c. വനദേവത d. ഋതുകന്യകൾ

23. സഭാപ്രവേശം തുള്ളൽ ഏതു വിഭാഗത്തിൽ പെട്ടതാണ്?
a. ഓട്ടൻതുള്ളൽ b. ശീതങ്കൻതുള്ളൽ c. പറയൻ തുള്ളൽ

24. ധാർത്തരാഷ്ട്രൻ ആര്?
a. ഭീമൻ b. ദുര്യോധനൻ c. അർജ്ജുനൻ d. യുധിഷ്ഠിരൻ

25. ശ്യാമയം ഇരവിന്റെ ഖിന്നയാം പുത്രി ആര്?
a. സന്ധ്യ b. രാത്രിമഴ c. പുലരി d. ഭ്രാന്തി

26. സുഗതകുമാരിക്ക് കേന്ദ്രസാഹിത്യ അക്കാദമി അവാർഡ് നേടിക്കൊടുത്ത കൃതിയേത്?
a. അമ്പലമണി b. പാവം മാനവ ഹൃദയം c. രാത്രിമഴ d. മുത്തുച്ചിപ്പി

27. എന്റെ വേളി എന്ന പാഠഭാഗം ഏതു പുസ്തകത്തിൽ നിന്നെടുത്തതാണ്?
a. ഓടക്കുഴൽ b. വിശ്വദർശനം c. പാഥേയം d. നിമിഷം

28. ലംഘിക്കാൻ കഴിയാത്ത സനാതന നിയമം ഏത്?
a. വിവാഹം b. മരണം c. വിരഹദുഃഖം d. ജീവിതം

29. ആദ്യത്തെ പ്രാമാണിക നിയമസംഹിതയായി കണക്കാക്കപ്പെടുന്ന കൃതിയേത്?
a. തൈത്തിരീയം b. ഋഗ്വേദം c. മനുസ്മൃതി d. അഥർവ്വ വേദം

30. വിശ്വചരിത്രാവലോകനം എന്ന പുസ്തകം രചിച്ചതാര്?
a. എച്ച്.ജി. വെൽസ് b. റൂസ്സോ c. വെൽഡൻവിൽക്കി d. ജവഹർലാൽ നെഹ്റു

31. ലോപസന്ധിക്കുദാഹരണമേത്?
a. തിങ്ങിക്കൂടി b. എണ്ണിയിരിക്കും c. കണ്ടറിയുക d. കണ്ണീർ

32. കേരളകലാമണ്ഡലം സ്ഥാപിച്ചതാര്?
a. ഉള്ളൂർ b. വള്ളത്തോൾ c. ആശാൻ d. ബാലാമണിയമ്മ

33. മലയാള ഭാഷയിൽ കർമ്മണി പ്രയോഗത്തിന് തുടക്കമിട്ടത് ഏതു ഭാഷയാണ്?
a. കർണ്ണാടക b. തമിഴ് c. സംസ്കൃതം d. മലയാളം

34. സാകേതം എന്ന കൃതി ഏത് വിഭാഗത്തിൽപ്പെടുന്നു?
a. ഖണ്ഡകാവ്യം b. ഗദ്യനാടകം c. നോവൽ d. ചെറുകഥ

35. പെറ്റെഴുന്നേറ്റ് വേറിട്ടു കുളിച്ചൊരു പെൺമണിയേക്കാൾ നിറഞ്ഞു നിന്നു. അലങ്കാരം?
a. ഉൽപ്രേക്ഷ b. ഉപമ c. രൂപകം d. സ്വഭാവോക്തി

36. ജ്ഞാനപീഠം അവാർഡ് നേടിയ ആദ്യത്തെ മലയാള സാഹിത്യകാരൻ ആര്?
a. എം.ടി. വാസുദേവൻ നായർ b. എസ്.കെ. പൊറ്റക്കാട്
c. ജി. ശങ്കരക്കുറുപ്പ് d. തകഴി

37. ആസന്നഭാവിയിൽ കേരളം നേരിടേണ്ടി വരുന്ന മഹാവിപത്ത് ഏത്?
a. ദാരിദ്ര്യം b. തൊഴിലില്ലായ്മ c. ഊർജ്ജക്ഷാമം d. ജനപ്പെരുപ്പം

38. ഈ തഴമ്പിച്ച കൈ ഇന്നു തളരുന്നു - ഈ വാക്കുകൾ പറഞ്ഞതാര്?
a. ദശരഥൻ b. സുമന്ത്രർ c. ഭീഷ്മർ d. ശ്രീരാമൻ

39. വള്ളത്തോളിന്റെ മഹാകാവ്യമേത്?
a. ഉമാകേരളം b. ചിത്രയോഗം c. അച്ഛനും മകനും d. ശിഷ്യനും മകനും

41. കാർഷിക വികസനത്തിനും ഗ്രാമങ്ങളുടെ വികസനത്തിനും വേണ്ടി ദീർഘകാല വായ്പ നൽകുന്ന സ്ഥാപനത്തിന്റെ പേര്?

a. സ്റ്റേറ്റ് ബാങ്ക് b. സൗത്ത് ഇന്ത്യൻ ബാങ്ക് c. നബാർഡ് d. ഗ്രാമീണ ബാങ്ക്

42. കേരളത്തിലെ തിരാവൈദ്യുതോല്പാദന കേന്ദ്രമാണ്?

a. കോഴിക്കോട് b. കൊച്ചി c. വിഴിഞ്ഞം d. കോവളം

43. ചൈനയുടെ ദുഃഖം എന്നറങിയപ്പെടുന്നത്?

a. യാങ്ങ്ടീസ് b. ഹൊയാങ്ഹോ c. സിക്കിയാ d. ഗംഗ

44. ലോക ജനസംഖ്യാദിനം എന്നാണ് ആചരിക്കുന്നത്?

a. ജൂൺ 21 b. ഏപ്രിൽ 11 c. ജൂലൈ 11 d. ഡിസംബർ 5

45. ലോകത്തിലെ അതിപ്രധാന മത്സ്യബന്ധന കേന്ദ്രങ്ങളിലൊന്നാണ്?

a. ഗ്രാൻഡ് ബാങ്ക്സ് b. സാവോറോക് മുനമ്പ്

c. മൃതതടാകം d. ഗ്രേറ്റ് സാൾട്ട് ലേക്ക്

46. ഏറ്റവും കൂടുതൽ കൽക്കരി കയറ്റുമതി ചെയ്യുന്ന രാജ്യം ഏത്?

a. ഇന്ത്യ b. അമേരിക്ക c. റഷ്യ d. ആസ്ത്രേലിയ

47. കേന്ദ്ര നിയമനിർമ്മാണ സഭയാണ്?

a. പാർലമെന്റ് b. രാജ്യസഭ c. സുപ്രീംകോടതി d. ലോകസഭ

48. ഇന്ത്യൻ ഭരണഘടനയുടെ രക്ഷാകർത്താവും വ്യാഖ്യാതാവും ആണ്?

a. പ്രസിഡണ്ട് b. സുപ്രീംകോടതി c. മന്ത്രിസഭ d. പാർലമെന്റ്

49. കപ്പലുകളുടെ ശ്മശാനം എന്ന് വിശേഷിപ്പിക്കുന്നത്?

a. ഇന്ത്യൻ സമുദ്രം b. ന്യൂ ഫൗണ്ട് ലാന്റ്

c. സർഗാസോ കടൽ d. ചലഞ്ജർ ഗർത്തം

50. താഴെ പറയുന്നവയിൽ ആദ്യത്തെ ദേശീയ രാഷ്ട്രം ഏത്?

a. ഫ്രാൻസ് b. ഇറ്റലി c. അമേരിക്ക d. ഇംഗ്ലണ്ട്

APPENDIX II

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ACHIEVEMENT TEST IN ENGLISH FOR STANDARD IX STUDENTS

Dr. P. Kelu
Professor & Head
Department of Education
Calicut University

K. T. Showkath Hussiain
Research Scholar
Department of Education
Calicut University

Std IX

Time: 45 Mins. Marks: 50

Instructions:

This is a test in English write the answers in the sheet provided. For each questions there are four answers. Chose the correct answer and put a mark (×) against the correct answer in the corresponding circle.

Model:

Q: Gandhiji was born in _____?

A. Gujarat (×) B. Punjab ( ) C. Maharastra ( ) D. Orissa ( )

I. Choose the correct answer from among the multiple choices given below:

1. The reason for Gandhiji's dislike of gymnastics was _____
   a) his dislike of exercise
   b) his keen desire to nurse his father
   c) his father did not allow him to go for gymnastics
   d) his lazyness

2. Gandhiji had lost one year at school because of
   a) his bad health
   b) his fathers illness
   c) his marriage
   d) his failure in the examination

33. The state of being unfriendly

a) friendship b) neighbour c) rival d) hostility

V. Find out the word opposite in meaning

34. Formal

a) Unformal b) informal c) nonformal d) disformal

35. Worthy

a) unworthy b) nonworthy c) costly d) cheap

36. Sure

a) ensure b) nonsure c) doubtful d) unsure

37. awake

a) sleep b) asleep c) disturb d) despair

VI. Choose the word or phrase that is similar in meaning to the numbered word

38. gleam

a) very weak b) faint glow c) tined d) interested

39. Track

a) path b) sports c) ground d) area

40. gale

a) shade b) beautiful c) unable to d) strong wind

41. Chamber

a) house b) lodge c) room d) kitchen

VII. Find out the correct word that complete the sentence

42. Issac possessed a wonderful ____ of acquiring knowledge by the simplest means.

a) Part b) faculty c) adorn d) mystery

43. Booto was a _____ dog

a) large b) sick c) wild d) handsome

44. Gandhiji was _____ of lying that deeply pained him

a) pardoned b) convicted c) escaped d) trusted

VIII. Find out the suitable prepositions

45. One evening I went out ____ a walk

a) with b) on c) for d) at

46. I climbed a small hill _____ the river and sat under a tree

a) under b) on c) at d) beside

47. I saw a house _____ a beautiful garden in front of it.

a) with b) and c) under d) beside

48. A tall man was standing ____ the gate

a) in b) on c) at d) with

49. Schools begin _____ ten O′ clock

a) with b) on c) at d) in

50. Schatz looked ill because he was suffering from

a) flue b) typhoid c) pneumonia d) headache

APPENDIX III

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

Achievement Test in Social Studies for Standard IX Pupils

ഡോ. പി. കേളു
പ്രൊഫസർ & ഹെഡ്
ഡിപ്പാർട്ട്മെന്റ് ഓഫ് എഡ്യൂക്കേഷൻ
കാലിക്കറ്റ് യൂണിവേഴ്സിറ്റി

കെ.ടി. ഷൗക്കത്ത് ഹുസൈൻ
റിസർച്ച് സ്കോളർ
ഡിപ്പാർട്ട്മെന്റ് ഓഫ് എഡ്യൂക്കേഷൻ
കാലിക്കറ്റ് യൂണിവേഴ്സിറ്റി

Time : 45 minutes Marks : 50

നിർദ്ദേശങ്ങൾ

താഴെ കൊടുത്തിട്ടുള്ള ഓരോ ചോദ്യങ്ങൾക്കും നാലു വീതം ഉത്തരങ്ങൾ കൊടുത്തിരിക്കുന്നു. തന്നിരിക്കുന്ന ഉത്തരക്കടലാസ്സിൽ ആ ഉത്തരത്തെ സൂചിപ്പിക്കുന്ന ഇംഗ്ലീഷ് അക്ഷരത്തിന് ചുവടെയുള്ള വൃത്തത്തിൽ ഈ ചിഹ്നം (X) അടയാളപ്പെടുത്തുക.

മാതൃക :

അറബികൾ ഏത് വർഗ്ഗത്തിൽപ്പെട്ടതാണ്?
a. സെമിറ്റിക് b. ആര്യവംശം c. നീഗ്രോ d. മംഗോൾ

A	B	C	D
(X)	( )	( )	( )

1. ഏത് രാജ്യമാണ് രണ്ട് നദികൾക്കിടയിലായി സ്ഥിതി ചെയ്യുന്നത്?
   a. ഫ്രാൻസ് b. മെസപ്പെട്ടോമിയ c. ഈജിപ്ത് d. സുഡാൻ
2. നഹ്വാട്ടീൽ എന്ന ഭാഷ ഏത് വർഗ്ഗക്കാരുടേതായിരുന്നു?
   a. ആസ്ട്രെക് b. ഇൻകൻമാർ c. മായൻമാർ d. സുഡാനികൾ
3. മനുഷ്യനോട് ഏറ്റവും സാമ്യമുള്ള പുരാതന മനുഷ്യൻ?
   a. ക്രോമഗ്നോൻ b. നിയാണ്ടർതാൽ c. സുമേറിയൻ d. മായൻ
4. ബുദ്ധചരിതത്തിന്റെ കർത്താവ് ആര്?
   a. കനിഷ്കൻ b. അശ്വഘോഷൻ c. വസുമിത്രൻ d. അശോകൻ
5. ഹാൻവംശം അധികാരത്തിൽ വന്ന വർഷം ഏത്?
   a. ബി.സി. 202 b. ബി.സി. 102 c. എ.ഡി. 202 d. എ.ഡി. 102
6. ഭൂകമ്പമാപിനി ആദ്യം ആവിഷ്ക്കരിച്ചത് ഏതു രാജ്യക്കാരണ്?
   a. ചൈനക്കാർ b. പേർഷ്യക്കാർ c. ഗ്രീക്കുകാർ d. സുമേറിയൻ
7. മോഹൻജെദാരോ, ഹാരപ്പ എന്നീ സ്ഥലങ്ങൾ ഇന്ന് ഏത് രാജ്യത്താണ് സ്ഥിതി ചെയ്യുന്നത്?
   a. ഇന്ത്യ b. ചൈന c. ബംഗ്ലാദേശ് d. പാക്കിസ്ഥാൻ

25. ഏറ്റവും ആഴം കൂടിയതും വിസ്തൃതി കൂടിയതുമായ സമുദ്രമേത്?
a. പസഫിക്ക് സമുദ്രം b. ആർട്ടിക് സമുദ്രം
c. അറ്റ്ലാന്റിക് സമുദ്രം d. ഇന്ത്യൻ മഹാസമുദ്രം

26. പഞ്ചായത്തിന്റെ തീരുമാനങ്ങൾ നടപ്പിലാക്കുന്നത്?
a. പഞ്ചായത്ത് പ്രസിഡന്റ് b. പഞ്ചായത്ത് എക്സിക്യൂട്ടിവ് ഓഫീസർ
c. പഞ്ചായത്ത് മെമ്പർ d. ബ്ലോക്ക് ഓഫീസർ

27. കേരളത്തിലെ സാക്ഷരതാ നിരക്ക് എത്ര ശതമാനം?
a. 85% b. 52.11% c. 90.59% d. 100%

28. മർദ്ദം അളക്കുന്നതിനുള്ള ഉപകരണം?
a. ബാരോമീറ്റർ b. തെർമോമീറ്റർ c. ലാക്ടോമീറ്റർ d. ഹൈഗ്രോമീറ്റർ

29. ഇന്ത്യയിൽ ഏറ്റവും അധികം പെട്രോളിയം, വാതകം എന്നിവ ലഭിക്കുന്ന പ്രദേശം?
a. ഡൽഹി b. ഗുജറാത്ത് c. ബോംബെ d. കൊച്ചി

30. ലോക ജനസംഖ്യ 50 കോടി കവിഞ്ഞത് ഏതു വർഷത്തിലാണ്?
a. 1990 b. 1995 c. 1987 d. 1857

31. ലോകത്ത് അറിയപ്പെട്ടിട്ടുള്ളതിൽ ഏറ്റവും താഴ്ചയുള്ള ഭാഗമാണ്?
a. വാർട്ടൻ ഗർത്തം b. ചലഞ്ചർ ഗർത്തം
c. പ്യൂർട്ടോ റിക്കോട്രഞ്ച് d. ബറിംഗ് കടലിടുക്ക്

32. കേരളത്തിലെ പ്രമുഖ വ്യവസായ മേഖല ഏത്?
a. എറണാകളും b. തിരുവനന്തപുരം c. കോഴിക്കോട് d. ആലപ്പുഴ

33. പരന്ന ശിഖരമുള്ള സമുദ്രാചലം?
a. ഗയോട്ടുകൾ b. റിഡ്ജസ് c. സമതലങ്ങൾ d. പവിഴദ്വീപ്

34. ജപ്പാൻ ദ്വീപുകളുടെ തീരത്ത് കൂടി ഒഴുകുന്ന ഉഷ്ണജല പ്രവാഹം?
a. യൊഷിയോ b. ഒഘോടസ്ക് c. ഹംബോൾട്ടം d. കുറോഷിവോ

35. ദൈവം മോസ്സസിന് വെളിപ്പെടുത്തിയതായി വിശ്വസിക്കപ്പെടുന്ന ഗ്രന്ഥം ഏത്?
a. പത്ത് കൽപ്പനകൾ b. ഖുർ ആൻ c. കോഡിസ് d. ഗീത

36. മുഹമ്മദ് നബി മദീനയിലേക്ക് പ്രയാണം നടത്തിയ വർഷം?
a. എ.ഡി. 632 b. എ.ഡി. 522 c. എ.ഡി. 622 d. എ.ഡി. 262

37. കൺകറന്റ് ലിസ്റ്റിൽ ഉൾപ്പെട്ട ഭരണവിഷയം താഴെ പറയുന്നതിൽ ഏതാണ്?
a. റെയിൽവെ b. വിദ്യാഭ്യാസം c. അണുശക്തി d. പൊതുജനാരോഗ്യം

38. ഭൂമിയുടെ കൈവശക്കാർ?
a. ഫീഫ് b. വാസൽ c. മാനർ d. യജമാനൻ

39. കഥക്കിന്റെ പ്രശസ്തനായ ഒരു വ്യാഖ്യാതാവ്?
a. വരാഹമിരഹൻ b. ശംഭുമഹാരാജാവ്
c. ചരകൻ d. ഷഡ്കാല ഗോവിന്ദമാരാർ

40. സമുദ്രജലത്തിന്റെ ശരാശരി ലവണത്വം?
a. 50 സഹസ്രാംശം b. 25 സഹസ്രാംശം c. 35 സഹസ്രാംശം d. 15 സഹസ്രാംശം

41. കാർഷിക വികസനത്തിനും ഗ്രാമങ്ങളുടെ വികസനത്തിനും വേണ്ടി ദീർഘകാല വായ്പ നൽകുന്ന സ്ഥാപനത്തിന്റെ പേര്?

a. സ്റ്റേറ്റ് ബാങ്ക് b. സൗത്ത് ഇന്ത്യൻ ബാങ്ക് c. നബാർഡ് d. ഗ്രാമീണ ബാങ്ക്

42. കേരളത്തിലെ തിരാവൈദ്യുതോല്പാദന കേന്ദ്രമാണ്?

a. കോഴിക്കോട് b. കൊച്ചി c. വിഴിഞ്ഞം d. കോവളം

43. ചൈനയുടെ ദുഃഖം എന്നറിയപ്പെടുന്നത്?

a. യാങ്ങ്ടീസ് b. ഹൊയാങ്ങ്ഹോ c. സിക്കിയാ d. ഗംഗ

44. ലോക ജനസംഖ്യാദിനം എന്നാണ് ആചരിക്കുന്നത്?

a. ജൂൺ 21 b. ഏപ്രിൽ 11 c. ജൂലൈ 11 d. ഡിസംബർ 5

45. ലോകത്തിലെ അതിപ്രധാന മത്സ്യബന്ധന കേന്ദ്രങ്ങളിലൊന്നാണ്?

a. ഗ്രാൻഡ് ബാങ്ക്സ് b. സാവോറോക് മുനമ്പ്

c. മൃതതടാകം d. ഗ്രേറ്റ് സാൾട്ട് ലേക്ക്

46. ഏറ്റവും കൂടുതൽ കൽക്കരി കയറ്റുമതി ചെയ്യുന്ന രാജ്യം ഏത്?

a. ഇന്ത്യ b. അമേരിക്ക c. റഷ്യ d. ആസ്ത്രേലിയ

47. കേന്ദ്ര നിയമനിർമ്മാണ സഭയാണ്?

a. പാർലമെന്റ് b. രാജ്യസഭ c. സുപ്രീംകോടതി d. ലോകസഭ

48. ഇന്ത്യൻ ഭരണഘടനയുടെ രക്ഷാകർത്താവും വ്യാഖ്യാതാവും ആണ്?

a. പ്രസിഡണ്ട് b. സുപ്രീംകോടതി c. മന്ത്രിസഭ d. പാർലമെന്റ്

49. കപ്പലുകളുടെ ശ്മശാനം എന്ന് വിശേഷിപ്പിക്കുന്നത്?

a. ഇന്ത്യൻ സമുദ്രം b. ന്യൂ ഫൗണ്ട് ലാന്റ്

c. സർഗാസോ കടൽ d. ചലഞ്ജർ ഗർത്തം

50. താഴെ പറയുന്നവയിൽ ആദ്യത്തെ ദേശീയ രാഷ്ട്രം ഏത്?

a. ഫ്രാൻസ് b. ഇറ്റലി c. അമേരിക്ക d. ഇംഗ്ലണ്ട്

APPENDIX IV

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ACHIEVEMENT TEST IN
SOCIAL STUDIES FOR STANDARD IX PUPILS

Dr. P. Kelu
Professor & Head
Department of Education
Calicut University

K. T. Showkath Hussiain
Research Scholar
Department of Education
Calicut University

Std IX

Time: 45 Mins. Marks: 50

Instructions:

This is a test in Social Studies write the answers in the sheet provided. For each questions there are four answers. Chose the correct answer and put a mark (×) against the correct answer in the corresponding circle.

Model:

Q: Which race do the Arabs belong?

A. Semitic B. Aryans C. Negro D. Mongol

⊗ ○ ○ ○

1. Which country is situating in between two rivers?
   a. France b. Mesopotamia c. Egypt d. Sudan
2. Which tribe is using the language Nouhatil?
   a. Astreck b. Inkons c. Mayans d. Sudanese
3. The man who is more similar to early man?
   a. Cro-Magnon b. Neanderthal
   c. Sumerians d. Mayans
4. Who is the author of Budha Charitha?
   a. Kanishkan b. Aswaghoshan
   c. Vasumithran c. Asokan
5. In which year Han dynasty came into existence?
   a. BC 202 b. BC 102 c. AD 202 d. AD 102
6. Which country discovered seismograph?
   a. Chinese b. Persians c. Greeks d. Sumerians

7. Where is the place Mohanjodaro Harappa is seeing situated today?
   a. India b. China c. Bangladesh d. Pakistan

8. What is the name of Holy script of Parsis?
   a. Gurgardha saheb b. Quran c. Sent d. Bible

9. Who was the well known Greek tragedian.
   a. Pindar b. Aeschylus c. Sapo d. Sofoclis

10. Well known city of Mesopotamia?
    a. Nannar b. Ur c. Rupar d. Banavali

11. Which is the most prominent culture among South America?
    a. Shavin b. Moccica c. Parakas d. Naska

12. The cradle of social living
    a. School b. Government c. Family d. Individual

13. Which country coined the idea Republic
    a. Greece b. Rome c. China d. Egypt

14. Which is the old religion of Japan like budhism?
    a. Hindu b. Jina c. Schinotism d. Christian

15. From which Asoka pillar Indian national emblem has received
    a. Saranath b. Sanchi c. Prayaga d. Padaliputhra

16. Who was the Mughal emperor built Taj Mahal
    a. Babar b. Humayoon c. Shajahan d. Akbar

17. Which state is most populated in India
    a. Kerala b. West Bengal c. Maharashtrad d. Uttar Pradesh

18. Which equipment is used to measure rain?
    a. Thermometer b. Raingage c. Hygrometer d. Barometer

19. Who is the author of Geethagovinda?
    a. Kalidasan b. Sudrakan c. Jayadevan d. Bhavaboothi

20. In which place Sree Sankaracharya was born?
    a. Kaladi b. Puri c. Thiruvananthapuram d. Kollam

21. Which gas is more to see in atmosphere?
    a. Carbondyoxide b. Oxygen c. Argon d. Nitrogen

22. Where is the ancient man Zinchophopus who can make weapon lived?
    a. Ghana b. Tanzania c. Sudan d. Mali
23. Who profounded the decimal system and zero system?
    a. Greeks b. Arabian c. Chinese d. Germans
24. Which instrument is used to measure the relative humidity?
    a. Thermometer b. Barometer c. Raingage d. Hygrometer
25. Which is the deepest and widest ocean?
    a. Pacific Ocean b. Artic Ocean
    c. Atlantic Ocean d. Indian Ocean
26. Who execute the resolution of Panchayath?
    a. President of Panchayath b. Executive officer
    c. Member of Panchayath d. Block officer
27. What is the literary rate of Kerala?
    a. 85% b. 52.11% c. 90.59% d. 100%
28. The equipment used to measure humidity?
    a. Barometer b. Thermometer
    c. Lactometer d. Hygrometer
29. Where is the place Petrolearn and natural gas is more available in India?
    a. Delhi b. Gujarat c. Bombay d. Cochin
30. In which year world population over limiter 50 crores?
    a. 1990 b. 1995 c. 1987 d. 1857
31. Which is the deepest place in the world?
    a. Wharton trench b. Challenger deep
    c. Puertrico d. Berring strait
32. The well famous industrial area in Kerla
    a. Ernakulam b. Thiruvananthapuram
    c. Kozhikkode d. Alappuzha
33. Flat topped sea mounts?
    a. Gayotts b. Ridjes c. Plato d. Corel Island
34. The warm ocean current which flows near the Japanese Island?
    a. Oyashio b. Okhotsk c. Humbolts d. Kuroshivo
35. The book that revealed to Mosses by god.
    a. Ten commandments b. Quran
    c. Kodis d. Bhagavath Geetha
36. In which year Prophet Mohamed went to 'Hijra' to Madeena.
    a. AD 632 b. AD 522
    c. AD622 d. AD 262

37. Which subject included in the concurrent first.
    a. Railway b. Education c. Atomic energy d. Public health

38. Whom were the land owners?
    a. Feef b. Vassal C. Manar d. Master

39. Who is the exponent of 'Kathak'
    a. Varahomihran b. Sambu c. Chorakan d. Shatkalagovinda Mara

40. The average salinity of sea water.
    a. 50% b. 25% c. 35% d. 15%

41. The bank which gives long term credit for agriculture and rural development.
    a. State bank b. South Indian Bank
    c. National d. Gramin bank

42. Where is the sea wave power project in Kerala situated?
    a. Kozhikode b. Cochin c. Vishinjam d. Kovalam

43. 'Sorrow 'of China?
    a. Yangtis b. Hoyangho c. Sikiya d. Ganga

44. World population day
    a. June 21 b. April 11 c. July 11 d. December 5

45. The most important fishing centres of the world?
    a. Grand banks b. Cape savo rock
    c. Dead sea d. Great salt lake.

46. Which country is the largest coal exporter in the world?
    a. India b. America c. Russia d. Australia.

47. The central legislative council is?
    a. Parliament b. Rajyasabha c. Supreme court d. Lok sabha

48. Who is the guardian and interpreter of Indian constitution?
    a. President b. Supreme court c. Ministry d. Parliament

49. Grave yard of ships
    a. Indian ocean b. New found land
    c. Sargaso sea d. Challenger trench.

50. Which is the first national state in the world.
    a. France b. Italy c. America d. England

APPENDIX V

UNIVERSITY OF CALICUT

DEPARTMENT OF EDUCATION

Achievement Test in General Science for Standard IX Pupils

ഡോ. പി. കേളു
പ്രൊഫസർ & ഹെഡ്
ഡിപ്പാർട്ട്മെന്റ് ഓഫ് എഡ്യൂക്കേഷൻ
കാലിക്കറ്റ് യൂണിവേഴ്സിറ്റി

കെ.ടി. ഷൗക്കത്ത് ഹുസൈൻ
റിസർച്ച് സ്കോളർ
ഡിപ്പാർട്ട്മെന്റ് ഓഫ് എഡ്യൂക്കേഷൻ
കാലിക്കറ്റ് യൂണിവേഴ്സിറ്റി

Time : 45 minutes Marks : 50

നിർദ്ദേശങ്ങൾ

താഴെ കൊടുത്തിട്ടുള്ള ഓരോ ചോദ്യങ്ങൾക്കും നാലു വീതം ഉത്തരങ്ങൾ കൊടുത്തിരിക്കുന്നു. തന്നിരിക്കുന്ന ഉത്തരക്കടലാസ്സിൽ ആ ഉത്തരത്തെ സൂചിപ്പിക്കുന്ന ഇംഗ്ലീഷ് അക്ഷരത്തിന് ചുവടെയുള്ള വൃത്തത്തിൽ ഈ ചിഹ്നം (X) അടയാളപ്പെടുത്തുക.

മാതൃക :

ജന്തുക്കൾ ശ്വസിക്കുന്നതിന് ഉപയോഗിക്കുന്ന വാതകം?
a. കാർബൺഡൈഓക്സൈഡ് b. ഹൈഡ്രജൻ c. ഓക്സിജൻ d. നൈട്രജൻ

A	B	C	D
○	○	(X)	○

1. ഗുരുത്വാകർഷണ നിയമത്തിന്റെ ഉപജ്ഞാതാവ്?
   a. ഐൻസ്റ്റീൻ b. ന്യൂട്ടൺ c. ഫാരഡെ d. ഗലീലിയോ
2. പവറിന്റെ യൂണിറ്റാണ് .....?
   a. വാട്ട് b. വോൾട്ട് c. ജൂൾ d. ന്യൂട്ടൺ
3. ത്വരണത്തിന്റെ യൂണിറ്റ്?
   a. മീറ്റർ/സെക്കന്റ് b. മീറ്റർ സ്ക്വയേർസ്/സെക്കന്റ്
   c. മീറ്റർ/സെക്കന്റ് സ്ക്വയേർസ് d. മീറ്റർ സ്ക്വയേർസ്/സെക്കന്റ് സ്ക്വയേർസ്
4. വിസ്കസ് ദ്രാവകത്തിന് ഉദാഹരണമാണ്?
   a. മണ്ണെണ്ണ b. ജലം c. ഗ്ലിസറിൻ d. പെട്രോൾ
5. 10 കി.ഗ്രാം. പിണ്ഡമുള്ള ഒരു വസ്തുവിന് 5 യൂണിറ്റ് ത്വരണം ഉണ്ടാക്കുന്നതിന് ആവശ്യമായ ജലം?
   a. 2 N b. 1/2 N c. 50 N d. 5000 N
6. മൂന്നാം വർഗ്ഗ ഉത്തോലകമാണ്?
   a. കത്രിക b. കുടിൽ c. കപ്പി d. പ്ലയേഴ്സ്

7. രണ്ടു വസ്തുക്കൾക്കിടയിലുള്ള അകലം മൂന്ന് മടങ്ങാകുമ്പോൾ അവ തമ്മിലുള്ള ഗുരുത്വാകർഷണബലം
   a. മൂന്ന് മടങ്ങാകുന്നു b. 1/4 ആയി കുറയുന്നു
   c. 1/3 ആയി കുറയുന്നു d. 1/2 ആയി കുറയുന്നു
8. സൗരോർജ്ജത്തിന്റെ അടിസ്ഥാനം?
   a. രാസപ്രവർത്തനങ്ങളാണ് b. ഹീലിയം ന്യൂക്ലിയസ്സുകളുടെ സംയോജനമാണ്
   c. ന്യൂക്ലിയർ ഫിഷനാണ് d. ന്യൂക്ലിയർ ഫ്യൂഷനാണ്
9. അനിശ്ചിതത്വ തത്വം ആരുടേതാണ്?
   a. ബോർ b. ഹൈസൻബർഗ്ഗ് c. ഷ്റോഡിംഗർ d. ഡിബ്രോളി
10. താഴെ കൊടുത്തതിൽ ശരിയല്ലാത്തതേത്?
    a. $2f^2$ b. $2s^2$ c. $3d^2$ d. $4f^2$
11. വിദ്യുത്ഋണത ഏറ്റവും കൂടിയ മൂലകം?
    a. ഹൈഡ്രജൻ b. ഫ്ളൂറിൻ c. ക്ലോറിൻ d. സീസിയം
12. $2\ CuO + C \longrightarrow 2\ Cu + CO_2$ ഈ പ്രവർത്തനത്തിൽ ഓക്സീകാരി ഏത്?
    a. കാർബൺ b. കാർബൺഡൈ ഓക്സൈഡ്
    c. കോപ്പർ d. കുപ്രിക് ഓക്സൈഡ്
13. ആവർത്തന പട്ടികയിൽ എത്ര പീരീഡുകൾ ഉണ്ട്?
    a. 4 b. 7 c. 8 d. 6
14. ജലത്തിന്റെ തന്മാത്രാഭാരം?
    a. 3 b. 8 c. 18 d. 16
15. ദ്രാവകാവസ്ഥയിൽ സാധാരണ ഊഷ്മാവിൽ സ്ഥിതി ചെയ്യുന്ന ലോഹം?
    a. വനേഡിയം b. ബ്രോമിൻ c. രസം d. അയേൺ
16. 44 ഗ്രാം CO_2 = ...
    a. 1 മോൾ CO_2 b. 2 മോൾ CO_2 c. 1/2 മോൾ CO_2 d. 4 മോൾ CO_2
17. M ഷെല്ലിന് ഉൾക്കൊള്ളാൻ കഴിയുന്ന ഇലക്ട്രോണുകളുടെ എണ്ണം?
    a. 8 b. 18 c. 32 d. 14
18. ചുവന്ന രക്താണുക്കൾ ഉല്പാദിപ്പിക്കുന്നത്?
    a. തലച്ചോറിൽ b. അസ്ഥിമജ്ജയിൽ c. ഹൃദയത്തിൽ d. കരളിൽ
19. വിറ്റാമിൻ-ഡി യുടെ കുറവു മൂലം ഉണ്ടാകുന്ന രോഗം?
    a. ഗോയിറ്റർ b. സ്ക്കർവി c. റിക്കറ്റ് d. തിമിരം
20. മനുഷ്യന്റെ നട്ടെല്ലിലെ കശേരുക്കളുടെ എണ്ണം?
    a. 24 b. 28 c. 26 d. 33
21. ആഹാര പദാർത്ഥങ്ങൾ മുഖ്യമായും ആഗിരണം ചെയ്യുന്നത്?
    a. കരൾ b. ആമാശയം c. ചെറുകുടൽ d. വൻകുടൽ
22. പുഷ്പങ്ങളിൽ നിന്ന് കേസരങ്ങൾ നീക്കം ചെയ്യുന്ന പ്രവർത്തനമാണ്?
    a. ഉൽപ്പരിവർത്തന വർഗ്ഗപാലനം b. വർഗ്ഗസങ്കരണം
    c. നിർദ്ദാരണം d. പുരുഷത്വ വിച്ഛേദം

23. ജനിതക ശാസ്ത്രത്തിന്റെ പിതാവാര്?

a. ഗ്രിഗർ മെന്റൽ b. വാൾട്ടർ സൂൾ c. ലൂയി പാസ്റ്റർ d. ഡാർവിൻ

24. ഒരു സങ്കര ഇനം കന്നുകാലിക്ക് ഉദാഹരണമാണ്?

a. അശ്വതി b. ബ്ളാക്ക് മൈനോർക്ക c. സുനന്ദിനി d. വൈറ്റ്ലഗോൺ

25. പഴങ്ങളുടെ രാജാവെന്ന് അറിയപ്പെടുന്നത്?

a. ആപ്പിൾ b. മുന്തിരി c. മാമ്പഴം d. ഓറഞ്ച്

26. കാപ്പിയിലടങ്ങിയിരിക്കുന്ന ആൽക്കലോയിഡ്?

a. കഫീൻ b. തേയിൻ c. ബ്രോമിൻ d. അയോഡിൻ

27. ചോളത്തിൽ നിന്ന് വേർതിരിച്ചെടുക്കുന്ന എണ്ണയേത്?

a. പാമോയിൽ b. ഒലിവ് ഓയിൽ c. മാർഗ്ഗറിൻ d. നല്ലെണ്ണ

28. മാങ്കൊമ്പിലെ നെല്ലു ഗവേഷണ കേന്ദ്രത്തിൽ വികസിപ്പിച്ചെടുത്ത സങ്കരയിനം നെൽവിത്ത്?

a. കാർത്തിക b. ത്രിവേണി c. രോഹിണി d. അശ്വതി

29. ഹൈഡ്രയിൽ നടക്കുന്ന പ്രത്യുല്പാദന രീതി ഏത്?

a. ദ്വിവിഭജനം b. മുകുളനം c. പുനരുൽപ്പത്തി d. ബഹുഭംഗം

30. കടലിൽ എണ്ണ കലരുന്നതു മൂലമുണ്ടാകുന്ന ജല മലിനീകരണം പരിഹരിക്കാൻ ഉപയോഗിക്കുന്ന ബാക്ടീരിയ ഏത്?

a. ഇൻസെക്റ്റി സയിസസും b. പെസ്റ്റിസെയിസസും

c. സൂപ്പർ ബഗ്സും d. ഡി.ഡി.റ്റി.

31. തേനിൽ അടങ്ങിയിരിക്കുന്ന ഒരു ജീവകം?

a. ജീവകം-എ b. ജീവകം-സി. c. ജീവകം-ഇ d. ജീവകം-കെ

32. ഒരു കൃത്രിമ സസ്യഹോർമോണിന് ഉദാഹരണം?

a. ഹോർട്ടോനേൺ b. ഗ്രിർബലിക് ആസിഡ് c. സൈറ്റോ കിനിൻസ് d. എതിലിൻ

33. അനിഷേകജനനം നടക്കുന്ന ഒരു ജീവിക്ക് ഉദാഹരണം?

a. തേനീച്ച b. ചെല്ലി c. ചിലന്തി d. വണ്ട്

34. അണ്ഡം അണ്ഡാശയത്തിന് പുറത്ത് വരുന്ന പ്രക്രിയയ്ക്ക് പറയുന്ന പേര്?

a. ബീജസംയോഗം b. പരാഗണം

c. പ്രത്യുല്പാദനം d. അണ്ഡോത്സർജ്ജനം

35. സങ്കരയിന് കുരുമുളകാണ്

a. ടി x ഡി b. സി.ഒ. 997 c. ത്രിവേണി d. പന്നിയൂർ 1

36. വിപരീത ഗുണങ്ങൾ കൂടിച്ചേരുമ്പോൾ അവയിൽ ഒരു ഗുണം മാത്രം പ്രകടമാവുകയും അപരഗുണം മറഞ്ഞിരിക്കുകയും ചെയ്യും.

a. സ്വതന്ത്ര അപവ്യൂഹ നിയമം b. ജനിതക എഞ്ചിനിയറിംഗ്

c. പ്രകടസ്വഭാവ നിയമം d. വിവേചന നിയമം

37. സസ്യലോകത്തിലെ മാംസ്യസംരംഭകർ ഏത് വർഗ്ഗത്തിൽപ്പെട്ട സസ്യങ്ങളാണ്?

a. പച്ചക്കറികൾ b. പയറുവർഗ്ഗങ്ങൾ c. എണ്ണക്കുരുക്കൾ d. ധാന്യങ്ങൾ

38. രക്താർബുദത്തിന് ഫലപ്രദമായ വിൻകിസ്റ്റിൻ എന്ന ഔഷധം ഏത് സസ്യങ്ങളിൽ നിന്ന് നിർമ്മിക്കുന്നു?

a. സർപ്പഗന്ധി b. ശവംനാറി c. സിങ്കോണ d. ആടലോടകം

39. പുഷ്പോദ്പാദനത്തിന് ഉപയോഗിക്കുന്ന അലൈംഗിക പ്രത്യുത്പാദന രീതി ഏത്?

a. ടിഷ്യു കൾച്ചർ b. അക്വാകൾച്ചർ

c. സെറികൾച്ചർ d. ഫ്ളോറികൾച്ചർ

40. ഒരു സമ്പൂർണ്ണ ആഹാരത്തിന് ഉദാഹരണമായ പയറുചെടി?

a. എള്ള് b. ചെറുപയർ c. നിലക്കടല d. 15 സോയാബീൻ

41. നിലക്കടലയെ എണ്ണക്കുരുക്കളുടെ കൂട്ടത്തിൽ ഉൾപ്പെടുത്താൻ കാരണം അതിൽ അടങ്ങിയിരിക്കുന്ന ..... ആണ്.

a. സെല്ലുലോസ് b. ധാതുലവണങ്ങൾ c. അമിനോ ആസിഡ് d. കൊഴുപ്പ്

42. ഹൃദ്രോഗ ചികിത്സയ്ക്ക് ഉപയോഗിക്കുന്ന ഔഷധമാണ്

a. റിസർപ്പിൻ b. വിൻകിസ്റ്റിൻ c. ഡിഗോക്സിൻ d. ബ്യൂട്ടൈൽ

43. കറുത്ത പൊന്ന് എന്നറിയപ്പെടുന്ന സുഗന്ധവ്യഞ്ജനമാണ്?

a. ഇഞ്ചി b. ഏലക്ക c. കുരുമുളക് d. ഗ്രാമ്പു

44. ചിപ്സ് സ്വാദിഷ്ടമാകാൻ കാരണം അത് ഉണ്ടാക്കുന്ന പച്ചക്കറികളിൽ എന്ത് അടങ്ങിയിരിക്കുന്നതിനാലാണ്?

a. കൊഴുപ്പ് b. അന്നജം c. മാംസ്യം d. ജീവകങ്ങൾ

45. ഭ്രൂണം വളരുന്ന ദ്രാവകമാധ്യമം ഏത്?

a. കോറിയോട്ടിക് ദ്രവം b. അമ്നിയോട്ടിക് ദ്രവം

c. പ്ളാസെൻറാ d. പൊക്കിൾ കൊടി

46. ഒരു നെഫ്രോണിന്റെ അടഞ്ഞ അറ്റം ഇരട്ട ഭിത്തിയോടുകൂടിയ കപ്പു പോലെയുള്ള ഭാഗമാണ്.

a. കാപ്സുലാർ സ്പെയ്സ് b. ബോമാൻസ് ക്യാപ്സൂൾ

c. ഗ്ളോമറുലസ് d. റീനൽ ട്യൂബ്യൂൾസ്

47. ആവൃത്തിയുടെ യൂണിറ്റ് ഏത്?

a. മീറ്റർ b. കിലോമീറ്റർ c. ഹെർട്സ് d. ബെൽ

48. ജലം ഗ്ലാസ്സിൽ പറ്റിപ്പിടിച്ചിരിക്കുന്നതിന് സഹായകമായ ബലം ഏത്?

a. ഇലാസ്റ്റിക് ബലം b. കൊഹിഷൻ ബലം

c. അഡ്ഹിഷൻ ബലം d. വിസ്കസ് ബലം

49. ചന്ദ്രനിൽ പലായന പ്രവേഗം എത്ര?

a. 2.37 **Km/s** b. 8 **Km/s** c. 11.2 **Km/s** d. 36 **Km/s**

50. യൂണിറ്റ് സമയത്തിൽ ചെയ്യുന്ന പ്രവൃത്തിയുടെ അളവാണ് .....

a. ബലം b. ആക്കം c. പവർ d. ഊർജ്ജം

APPENDIX VI

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ACHIEVEMENT TEST IN
GENERAL SCIENCE FOR STANDARD IX STUDENTS

Dr. P. Kelu
Professor & Head
Department of Education
Calicut University

K. T. Showkath Hussiain
Research Scholar
Department of Education
Calicut University

Time : 45 mins.
Std. IX **Marks : 50**

Instructions:

This is a test in General Science write the answers in the sheet provided. For each questions there are four answers. Chose the correct answer and put a mark (×) against the correct answer in the corresponding circle.

Model:

Q: The gas need for breathing in animals?

A. Carbon dioxide B. Hydrogen C. Oxygen D. Nitrogen

○ ○ (X) ○

1. The inventor of law of gravitation?
   a) Einstein b) Newton c) Faraday d) Galileo
2. The unit of power is .....?
   a) Watt b) Voltc) Joule d) Newton
3. Unit of Acceleration?
   a) Metre/second b) Metre squired/ second
   c) Metre /second squared d) Metre squared/second
4. An example for viscous liquid?
   a) Kerosene b) Water c) Glycerine d) Petrol
5. What is the force required by an object of 10kg mass to have an acceleration of 5 units.
   a) 2N b) ½ N c) 50N d) 5000N

6. Lever of third order?
   a) Scissorsb) Forceps c) Pulley d) Players

7. The gravitational force between two objects when the distance between them is increased by three times?
   a) Increase by three times b) Decrease by ¼
   c) decrease by 1/3 d) decrease by ½

8. Source of solar energy is due to
   a) Chemical reaction c) Nuclear fission
   b) Fusion of helium nuclei d) nuclear fusion

9. Law of uncertainty is proposed by
   a) Bohr b) Heisenburg c) Strodinger d) Debroli

10. Which is the correct those given below:
    a) $2f^2$ b) $2s^2$ c) $3d^2$ d) $4f^2$

11. The most electronegative element.
    a) Hydrogen b) Fluorine c) Chlorine d) Caesium

12. $2CuO + C \rightarrow 2Cu + CO_2$: The oxidiser in this reaction is:
    a) Carbon b) Carbon dioxide
    c) Copper d) Cupric oxide

13. How many periods are there in the periodic table?
    a) 4 b) 7 c) 8 d) 6

14. Molecular weight of water
    a) 3 b) 8 c) 18 d) 16

15. The liquid state metal at normal temperature is
    a) Venadium b) Bromine c) Mercury d) Iron

16. 44 gram CO_2 =
    a) 1 Mol CO_2 b) 2Mol CO_2 c) ½ Mol CO_2 d) 4 Mol CO_2

17. The maximum number of electrons that can be included in the M Shell.
    a) 8 b) 18 c) 2 d) 14

18. Red corpuscles are produced by
    a) In the brain b) Bone marrow c) In the heart d) In the lever

19. The disease caused by the deficiency of vitamin B.
    a) Goitre b) Scurvey c) Ricket d) Cataract

20. The number of vertebrae in man is
    a) 24 b) 28 c) 26 d) 33

21. Food substances are mainly absorbed at
    a) Liver b) Stomach c) Small intestine d) Big intestine

A6

22. The process of removal of Stamens from the flower
a) Mutation breeding b) Hybridisation
c) Selection d) Emasculation

23. Father of genetics
a) Griger mental b) Vater sule
c) Luipasture d) Darvine

24. An example for cattle hybrid.
a) Aswathi b) Black minork c) Sunandini d) White Logone

25. The king of fruits
a) Apple b) grape c) Mango d) Orange

26. The Alkaloid contained in coffee is
a) Coffine b) Thayin c) Bromin d) Iodine

27. The Oil extracted from maze
a) Pamolene b) Olive oil c) Merganne c) Gingelly oil

28. Hybrid paddy seed developed at Mankump Paddy Research Centre
a) Karthika b) Thriveni c) Rohini d) Aswathi

29. Type of reproduction taking place in Hydra
a) Binary fission b) Budding c) Regeneration d) Multiple fission

30. The bacteria used as remedy for water pollution due to the spreading of the oil in sea.
a) Insecticism b) Pesticise c) Super bugs d) D. D. T.

31. Vitamin contained in honey?
a) Vitamin A b) Vitamin C c) Vitamin E d) Vitamin K

32. An example for artificial plant hormone
a) Hortonene b) Gibbarlic Acid c) Cytokinins d) Ethylene

33. Example of an insect showing Parthenogenesis
a) Honey bee b) Rhinocerous beetle c) Spider d) Beetle

34. The name of the process of releasing of ovum from ovary
a) Fertilization b) Pollination c) Reproduction d) Ovulation

35. Hybrid pepper
a) TXD b) GO 997 c) Thriveni d) Panniyoor

36. The process of domination of one character on the recessive character
a) Law of independent assortment b) Genetic engineering
c) Law of domination d) Law of segregation

37. Food storage plants belongs to the group
a) Vegetables b) Beans c) Oil seeds d) Cereals

38. The medicine vinkistin effective for Leukaemia is produced from the plant
a) Sepertina b) Vinca rosea c) Cinonna d) Adatoda

39. Asexual reproductive system used for flower production
a) Tissue culture b) Aqua culture
a) Sericulture d) Floriculture

40. Which pea plant is an example of a complete food?
a) Gingelly b) Green gram c) ground nut d) Soya bean

41. Ground nut is included coming oil seeds became it contains
a) Cellulose b) Mineral salts c) Amino acid d) Fats

42. Medicine for treatment of heart diseases
a) Reserpin b) Vinkistin c) Digoxin d) Butyle

43. The species popular as black gold
a) Ginger b) Cardamom c) Pepper d) Gramboo

44. Chips are tasty because the related vegetables contained
a) Fat b) Starch c) Protein d) Vitamins

45. Embryo grows in the fluid medium
a) Karyotic fluid b) Amniotic fluid c) Placenta d) Umbilical cord

46. The double walled end of Nephron which have cup shape
a) Capsular space b) Bowmans capsule c) Gomerulus d) Renal tubule

47. Unit of frequency is
a) Meter b) Kilo meter c) Hertz d) Bell

48. The force responsible for adhering water to the glass is
a) Elasticity b) Cohesive force c) Adhesion force d) Viscous force

49. Escape velocity in the moon is
a) 2.37km/s b) 8km/S c) 11.2Km/s d) 36km/s

50. The work done in unit time is .....
a) Force b) Momentum c) Power d) Energy

APPENDIX VII

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

Achievement Test in Mathematics for Standard IX Pupils

ഡോ. പി. കേളു
പ്രൊഫസർ & ഹെഡ്
ഡിപ്പാർട്ട്മെന്റ് ഓഫ് എഡ്യൂക്കേഷൻ
കാലിക്കറ്റ് യൂണിവേഴ്സിറ്റി

കെ.ടി. ഷൗക്കത്ത് ഹുസൈൻ
റിസർച്ച് സ്കോളർ
ഡിപ്പാർട്ട്മെന്റ് ഓഫ് എഡ്യൂക്കേഷൻ
കാലിക്കറ്റ് യൂണിവേഴ്സിറ്റി

Time : 45 minutes Marks : 50

നിർദ്ദേശങ്ങൾ

താഴെ കൊടുത്തിട്ടുള്ള ഓരോ ചോദ്യങ്ങൾക്കും നാലു വീതം ഉത്തരങ്ങൾ കൊടുത്തിരിക്കുന്നു. തന്നിരിക്കുന്ന ഉത്തരക്കടലാസ്സിൽ ആ ഉത്തരത്തെ സൂചിപ്പിക്കുന്ന ഇംഗ്ലീഷ് അക്ഷരത്തിന് ചുവടെയുള്ള വൃത്തത്തിൽ ഈ ചിഹ്നം (X) അടയാളപ്പെടുത്തുക.

മാതൃക :

ഒരു ക്യൂബിന്റെ വ്യാപ്തം?

a. $6a^2$ b. a^3 c. $3a^2$ d. $4a^2$

A	B	C	D
○	(X)	○	○

1. താഴെ പറയുന്നവയിൽ {0, 3) ന്റെ ഉപഗണമല്ലാത്തതേത്?
   a. ϕ b. {0} c. {4} d. {3}
2. $A \subset B$ ആയാൽ താഴെ പറയുന്നവയിൽ എല്ലായിപ്പോഴും ശരിയേത്?
   a. $A - B = B$ b. $A \cap B = A$ c. $B - A = \phi$ d. $A \cup B = A$
3. $A = \{a, b, c, d\}$ $B = \{c, d, e, f\}$ ആയാൽ $(A \times B) \cap (B \times A)$ എന്ത്?
   a. { (a, e) (e, f) } b. { (b, c) (d, e) }
   c. { (d, d) (d, e) (e, f) } d. { (c, c) (c, d) (d, c) (d, d) }
4. $n(A) = p$ യും $n(B) = q$ വും ആയാൽ $n(A \times B)$ എന്ത്?
   a. $p + q$ b. $p - q$ c. $p \cdot q$ d. p/q
5. താഴെ കൊടുത്തിട്ടുള്ളവയിൽ ആവർത്തക ദശാംശ സംഖ്യ ഏത്?
   a. 1/2 N b. 1/3 c. 1/4 d. 1/5
6. അഭിന്നകസംഖ്യ ഏത്?
   a. 21/15 b. 17/20 c. 22/7 d. 41/9
7. $x + (y+z) = (x+y) + z$ ഇവിടെ ഉപയോഗിച്ച നിയമം ഏത്?
   a. ക്രമനിയമം b. സംയോജനനിയമം
   c. അനന്യനിയമം d. വിതരണനിയമം

8. $\Delta ABC \cong \Delta DEF$, AB = 6 cm. BC = 5 cm AC = 7 cm ആയാൽ EF എത്ര സെ.മി.?
   a. 4 b. 5 c. 6 d. 7

9. $\Delta PQR \cong \Delta XYZ$; $\angle X = 50^\circ$, $\angle Y = 50^\circ$ ആയാൽ $\angle R$ എത്ര?
   a. 50° b. 130° c. 40° d. 80°

10. ΔPQR , ΔABC എന്നിവയിൽ $\angle P \cong \angle A$, $\angle R \cong \angle C$, QR = BC ആയാൽ $\Delta PQR = \Delta ABC$ എന്നു തെളിയിക്കാനുള്ള സിദ്ധാന്തം?
   a. S.A.S. b. S.A.A. c. S.S.S. d. R.H.S.

11. രണ്ടു ത്രികോണങ്ങൾ തമ്മിലുള്ള പൊരുത്തങ്ങളുടെ എണ്ണം?
   a. 3 b. 5 c. 6 d. 9

12. ഒരു രൂപം അതിനോടു തന്നെ സർവ്വസമമാണ്. സർവ്വസമതയുടെ ഈ പ്രത്യേകതയാണ്?
   a. അനന്യസർവ്വസമത b. പ്രതിസാമ്യത
   c. അനന്യദം d. സംക്രാമികം

13. $(a+b+c)^2 = a^2 + b^2 + c^2 + ...$
   a. 3ab+3bc+3ac b. ab+bc+ac c. 2ab+2bc+2ca d. $3a^2b+3ab^2$

14. $(a+b)^3$ ന്റെ വിപുലീകരണത്തിലെ പദങ്ങളുടെ എണ്ണം?
   a. 2 b. 3 c. 4 d. 5

15. 5 മുഖങ്ങളുള്ള സ്തംഭത്തിന്റെ മൂലകളുടെ എണ്ണം?
   a. 4 b. 5 c. 6 d. 9

16. 10 മൂലകളുള്ള സ്തംഭത്തിന്റെ വക്കുകളുടെ എണ്ണം?
   a. 7 b. 8 c. 12 d. 15

17. 9 വക്കുകളുള്ള സ്തംഭത്തിന്റെ മുഖങ്ങളുടെ എണ്ണം?
   a. 5 b. 6 c. 7 d. 8

18. ഒരു സ്തംഭത്തിന്റെ ഛേദതലം പഞ്ചഭുജക്ഷേത്രമാണ്. അതിന്റെ മൂലകളുടെ എണ്ണം?
   a. 5 b. 10 c. 15 d. 7

19. ഒരു ഷഡ്ഭുജസ്തംഭത്തിന്റെ ഛേദതലത്തിന്റെ ആകൃതി എന്ത്?
   a. ചതുരം b. സമചതുരം c. ത്രികോണം d. ഷഡ്ഭുജം

20. ഒരു സമചതുരസ്തംഭത്തിന്റെ അഗ്രമുഖ വിസ്തീർണ്ണം a cm^2 , ഉയരം h cm ആയാൽ വ്യാപ്തം എത്ര
   a. ab b. a^2b c. 1/2 ab d. 1/2 a^2b

21. പാദവക്കിന്റെ നീളം a സെ.മി. ഉന്നതി b cm ഒരു സമചതുരസ്തംഭത്തിന്റെ ഉപരിതലവിസ്തീർണ്ണം എത്ര ച.സെ.മി.?
   a. 4 ah b. $2a^2+4ah$ c. a^2h d. $6a^2h$

22. പാർശ്വമുഖ വിസ്തീർണ്ണം 540 ച.സെ.മി. ആയ സ്തംഭത്തിന്റെ പാദചുറ്റളവ് 30 സെ.മി. ആയാൽ ഉന്നതി എത്ര?
   a. 50 സെ.മി. b. 30 സെ.മി. c. 18 സെ.മി. d. 15 സെ.മി.

23. വശത്തിന്റെ നീളം ഒരു യൂണിറ്റായ ക്യൂബിന്റെ ഉപരിതല വിസ്തീർണ്ണം എത്ര ചതുരശ്രയൂണിറ്റ്?
   a. 1 b. 18 c. 6 d. 4

24. വ്യാപ്തം 512 ഘ.സെ.മി. ആയ ക്യൂബിന്റെ ഉന്നതി എത്ര സെ.മി.?

a. 6 b. 8 c. 12 d. 21

25. 1, b, h അളവുകളുള്ള സ്തംഭത്തിന്റെ വ്യാപ്തം?

a. (1+b) h b. 2 (1+b) h c. 1 bh d. 2 lbh

26. സ്തംഭത്തിന്റെ വ്യാപ്തം?

a. പാർശ്വമുഖവിസ്തീർണ്ണം x ഉന്നതി b. പാദവിസ്തീർണ്ണം x ഉന്നതി

c. പാദചുറ്റളവ് x ഉന്നതി d. പാദചുറ്റളവ് x പാർശ്വമുഖവിസ്തീർണ്ണം

27. ആരം r , ഉന്നതി h ആയ സിലിണ്ടറിന്റെ ഉപരിതല വിസ്തീർണ്ണം?

a. $2\pi rh$ b. $2\pi r(h+r)$ c. πr^2h d. $2. \pi r^2h$

28. പാദപരിധി 20 സെ.മി., ഉന്നതി 40 സെ.മി. ആയ സിലിണ്ടറിന്റെ വക്രമുഖവിസ്തീർണ്ണം എത്ര cm^2?

a. 40 b. 60 c. 80 d. 800

29. $x = y + 3$ ന്റെ നിർദ്ദാരണമൂല്യം അല്ലാത്തതേത്?

a. (3, 0) b. (4, 1) c. (5, 2) d. (3, 3)

30. $a_1x+by = c$, $a_2x + b_2y = c_2$ എന്നീ സമവാക്യങ്ങളിൽ $a_1/a_2 \neq b_1/b_2$ എങ്കിൽ അവ ഏതു തരം സമവാക്യമാണ്?

a. സംഗതസമവാക്യം b. അസംഗതസമവാക്യം

c. നിസംഗസമവാക്യം d. പരസ്പരാശ്രിത സമവാക്യം

31. $a_1x + b_1y = c_1$; $a_2x + b_2y = c_2$ ഇവയിൽ $a_1/a_2 = b_1/b_2 = c_1/c_2$ ആയാൽ അവയുടെ നിർദ്ധാരണമൂല്യങ്ങളുടെ സ്വഭാവം

a. നിർദ്ധാരണമൂല്യം നിശ്ചിതസംഖ്യകളാണ് b. ഒരേ ഒരു നിർദ്ധാരണമൂല്യം

c. നിർദ്ധാരണമൂല്യം അനന്തമാണ് d. നിർദ്ധാരണമൂല്യം ഇല്ല

32. $x = y + 1$, $x + y = 5$ എന്നീ സമവാക്യങ്ങളുടെ നിർദ്ധാരണമൂല്യം?

a. $x = 2, y = 3$ b. $x = 3, y = 2$ c. $x = 4, y = 1$ d. $x = 1, y = 4$

33. രണ്ടു സംഖ്യകളുടെ തുക -2 , വ്യത്യാസം -4 ആയാൽ സംഖ്യകൾ?

a. -3, -1 b. -3, 1 c. 3, 1 d. 3, -1

34. താഴെ പറയുന്നവയിൽ ഏതു ജോഡി സമവാക്യങ്ങളാണ് പരസ്പരാശ്രിത സമവാക്യത്തിൽ ആകുന്നത്?

a. $x - y = 4$, $2x + 2y = 8$ b. $3x - 4y = 6$, $2x - 4y = 1$

c. $x + y = 5$, $x - y = 9$ d. $2x - 3y = 8$, $4x - 6y = 16$

35. താഴെ പറയുന്നവയിൽ ഏതു ബിന്ദുവാണ് X അക്ഷത്തിലുള്ളത്?

a. (3, 1) b. (0, 4) c. (1, 0) d. (0, 2)

36. $2x + y = 4$, $x - y = -1$ എന്നിവയുടെ ഗ്രാഫുകളുടെ സംഗമബിന്ദു?

a. (3, 1) b. (1, 2) c. (2, 1) d. (1, 3)

37. ഒറ്റസ്ഥാനത്തെ അക്കം x , പത്താംസ്ഥാനത്തെ അക്കം y ആയ സംഖ്യ ഏത്?

a. y + x b. 10x + y c. xy d. 10y + x

38. $p(x) = 5x^3-4x^2+2x-1$ ആയാൽ $p(1)$ ന്റെ വിലയെന്ത്?

a. 4 b. 12 c. 2 d. -2

39. $p(x) = x^4-6x+1$ ആയാൽ $p(x)$ ന്റെ സങ്കലനവിപരീതം ഏത്?

a. $x^{1/4}-6x+1$ b. $1/4x - 6/x + 1$

c. $-x^4+6x+1$ d. $-x^4+6x-1$

40. $p(x) = x^2+2$ ആയാൽ $p(2)/p(1)$ എത്ര?

a. 6 b. 3 c. 2 d. 1/2

41. $P(x)$ ന്റെ കൃതി 4 ഉം $Q(x)$ ന്റെ കൃതി 2 ഉം ആയാൽ $P(x)\ Q(x)$ ന്റെ കൃതി എത്ര?

a. 2 b. 4 c. 4 d. 8

42. രണ്ടു സദൃശത്രികോണങ്ങളുടെ സമാനവശങ്ങൾ തമ്മിലുള്ള അംശബന്ധം 2 : 1 ആയാൽ വിസ്തീർണ്ണങ്ങൾ തമ്മിലുള്ള അംശബന്ധമെന്ത്?

a. 1 : 2 b. 1 : 2 c. 4 : 1 d. 2 : 1

43. രണ്ടു സദൃശത്രികോണങ്ങളുടെ വിസ്തീർണ്ണങ്ങൾ 9 : 16 എന്ന അംശബന്ധത്തിലായാൽ അവയുടെ സമാനവശങ്ങൾ തമ്മിലുള്ള അംശബന്ധമെന്ത്?

a. 81 : 256 b. 3 : 4 c. 9 : 16 d. 27 : 64

44. എതിർവശം/സമീപവശം എന്നത് ഏത് ത്രികോണമിതി അംശബന്ധമാണ്?

a. Sin b. Cos c. Tan d. Cot

45. $\tan A = 1$ ആയാൽ A യുടെ വിലയെന്ത്?

a. 30° b. 60° c. 90° d. 45°

46. $\sin^2\theta + \cos^2\theta$ യുടെ വില

a. 0 b. 2 c. 1 d. 1/2

47. $2xyz$, $3x^2y$, $5x^2z$ ഇവയുടെ ഉ.സാ.ഘ.

a. xyz b. $6x$ c. x^2 d. $30\ x^2yz$

48. ഒരു രേഖയെ നിർണ്ണയിക്കാൻ ഏറ്റവും ചുരുങ്ങിയത് എത്ര ബിന്ദുക്കൾ വേണം?

a. 2 b. 1 c. 3 d. 4

49. $-5x^0$ ന്റെ വില

a. -5 b. 1 c. 5 d. 0

50. മൂലബിന്ദുവിന്റെ നിർദ്ദേശാങ്കങ്ങൾ ഏവ?

a. (1, 0) b. (0, 1) c. (0, 0) d. (1, 1)

APPENDIX VIII

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ACHIEVEMENT TEST IN MATHEMATICS FOR STD. IX STUDENTS

Dr. P. Kelu
Professor & Head
Department of Education
Calicut University

K. T. Showkath Hussiain
Research Scholar
Department of Education
Calicut University

Std. IX

Time: 45 mins.
Marks: 50

Instructions:

This is a test in Mathematics write the answers in the sheet provided. For each questions there are four answers. Chose the correct answer and put a mark (×) against the correct answer in the corresponding circle.

Model:

Q: The volume of a Cube?

A. $6a^2$ B. a^3 C. $3a^2$ D. $4a^2$

◯ (X) ◯ ◯

1. Which of the following is not a subset of {0, 3}?
   a) ϕ b) {0} c) {4} d) {3}

2. If ACB, which of the following in is always true?
   a) A - B = B b) A∩B = A c) B - A = ϕ (d) AUB = A

3. If A = {a, b, c, d} B= {c, d, e, f}, then what will be (AXB)∩(BXA)?
   a) {(a,e) (e,f)} b) {(b, c) (d, e)
   c) {(d, d), (d, e), (e, f)} d) {(c, c), (c, d), (d, c), (d, d)}

4. If n(A) - p and n(B) = q then n (AXB) = _____
   a) p + q b) p - q c) p.q d) p/q

5. Which of the following is a recurring decimal number?
   a) ½ b) 1/3 c) ¼ d) 1/5

6. Which of the following is an irrational number?
   a) 21/15 b) 17/20 c) 22/7 d) 41/9

7. x+(y+z) = (x+y) + z. The rule used here is
   a) commutative law b) Associative law
   c) Identity law d) Distributive law

8. If Δ ABC ≅ Δ DEF; AB = 6cm, BC =5cm and AC = 7cm; then, EF=__ cm
   a) 4 b) 5 c) 6 d) 7

9. If ΔPQR ≅ Δ XYZ; ∠x= 50^0, ∠y = 50^0; then ∠R = _____
   a) 50^0 b) 130^0 c) 40^0 d) 80^0

10. In ΔPQR and ΔABC, < P ≅ < A, <R ≅ < C, QR = BC. Then ΔPOR≅ΔABC. The theorem used here is .....
   a) S.A.S. b) S.A.A. c) S.S.S. d) R.H.S.

11. The number of correspondings between two triangles is
   a) 3 b) 5 c) 6 d) 9

12. A figure is congruent to itself. This property of congruency is called
   a) identity congruency b) symmetry
   c) identity d) transitive

13. $(a+b+c)^2 = a^2 + b^2 + c^2 +$.....
   a) 3ab + 3bc + 3ac b) ab + bc + ac
   c) 2ab + 2bc + 2ca d) $3a^2b + 3ab^2$

14. The number of terms in the expansion of $(a+b)^3$ is
   a) 2 b) 3 c) 4 d) 5

15. The number of corners of a prism having 5 faces
   a) 4 b) 5 c) 6 d) 9

16. The number of edges of a prism having 10 corners
   a) 7 b) 8 c) 12 d) 15

17. The number of faces of a prism having 9 edges
   a) 5 b) 6 c) 7 d) 8

18. The cross section of a prism is pentagon plane. Then, the number of corners of the prism is -------
   a) 5 b) 10 c) 15 d) 7

19. The shape of the cross section of a Hexagon prism is
   a) a rectangle b) square c) triangle d) hexagon

20. If the base area of a square prism is a cm^2, and height 'b' cm, volume will be ____ cm^3
   a) ab b) a^2 b c) ½ ab d) ½ a^2b

21. The total surface area (T.S.A) of a square prism, having base edge 'a' cm and height h cm is
    a) 4ahb b) $2a^2 + 4ah$ c) a^2h d) $6a^2h$

22. The height of a prism having lateral surface area $540cm^2$ and base perimeter 30 cm is
    a) 50cm b) 30cm c) 18cm d) 15cm

23. The total surface area (T.S.A.) of a cube having edge 1 unit is ____ square unit
    a) 1 b) 18 c) 6 d) 4

24. The height of a cube having volume $512cm^3$ is
    a) 6 b) 8 c) 12 d) 21

25. The volume of a prism having measures l, b, h is
    a) (l+b) h b) 2(l+b) h c) lbh d) 2lbh

26. The volume of a prism is
    a) lateral surface area x height b)base area x height
    c) base perimeter x height d) base perimeter x lateral surface area

27. The total surface area of a cylinder having radius r and height h
    a) $2\pi rh$ b) $2\pi r(h+r)$ c) πr^2h d) $2\pi r^2h$

28. The curved surface area of a cylinder having base perimeter 20cm and height 40cm is _____ cm^2
    a) 40 b) 60 c) 80 d) 800

29. Which of the following is not the roots of x = y + 3
    a) (3, 0) b) (4, 1) c) (5, 2) d) (3, 3)

30. In $a_1x+by = c$ and $a_2 x + b_2y = c_2$, $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$. Then these equations are:
    a) Consistent equations b) inconsistent equations
    c) detached equations d) dependent equations

31. In $a_1x+by = c_1$, $a_2x + b_2y = c_2$, $\frac{a_1}{a_2} = \frac{b_1}{b_2} = \frac{c_1}{c_2}$. Then the nature of the roots
    a) roots are fixed numbers b) only one root
    c) roots are infinite d) doesn't exist root

32. Roots of the equations x = y +1 and x + y = 5 are
    a) x = 2, y = 3 b) x = 3, y = 2
    c) x = 4, y = 1 d) x =1 , y = 4

33. Sum of two numbers in -2 and difference -4. Then, the number are
a) -3, -1 b) -3, 1 c) 3, 1 d) 3, -1

34. Which of the following pairs of equations is dependent equations?
a) $x - y = 4$, $2x + 2y = 8$ b) $3x - 4y = 6$, $2x - 4y = 1$
c) $x + y = 5$, $x - y = 9$ d) $2x - 3y = 8$, $4x - 6y = 16$

35. Which of the following is a point on the x-axis?
a) (3,1) b) (0, 4) c) (1, 0) d) (0, 2)

36. The point of intersection of the graphs 2x+y=4 and x-y= -1
a) (3, 1) b) (1, 2) c) (2, 1) d) (1, 3)

37. The digit on the unit place of a two-digit number is x and tensplace the other is y what will be the number?
a) y + x b) 10x + y c) xy d) 10y + x

38. If $p(x) = 5x^3 - 4x^2 + 2x - 1$, the value of p(1)
a) 4 b) 12 c) 2 d) -2

39. If $p(x) = x^4 - 6x + 1$, the additive inverse of p(x) is
a) $x^{1/4} - 6x + 1$ b) $x^{1/4} - \frac{6}{x} + 1$
c) $-x^4 + 6x + 1$ d) $-x^4 + 6x - 1$

40. If $p(x) = x^2 + 2$, value of $\frac{p(2)}{P(1)}$ is
a) 6 b) 3 c) 2 d) ½

41 The degree of p(x) is 4 and Q(x) is 2. Then, the degree of p(x). Q(x) is
a) 2 b) 4 c) 6 d) 8

42. The ratio of the corresponding sides of two similar triangles is 2:1. Then, the ratio of their area is
a) 1:2 b) $1:\sqrt{2}$ c) 4:1 d) 2:1

43. The ratio of the area of two similar triangles is 9:16. Then, the ratio of their corresponding sides is
a) 81:256 b) 3:4 c) 9:16 d) 27:64

44. The trignomertric ratio $\frac{Oppositeside}{Adjascentside}$ is
a) sin b) Cos c) Tan d) Cot

45. IF tanA = 1, the value of A is
    a) 30^0 b) 60^0 c) 90^0 d) 45^0

46. value of $Sin^2\theta + Cos^2\theta$
    a) 0 b) $\sqrt{2}$ c) 1 d) ½

47. The HCF (Highest Common Factor) of $2xyz$, $3x^2y$, $5x^2z$ is
    a) xyz b) 6x c) x^2 d) $30x^2yz$

48. The shortest number of points required to form a line is
    a) 2 b) 1 c) 3 d) 4

49. The value of $-5x^0$ is
    a) - 5 b) 1 c) 5 d) 0

50. Co-ordinates of the origin is
    a) (1, 0) b) (0, 1) c) (0,0) d) (1, 1)

APPENDIX IX

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ACHIEVEMENT TEST FOR STANDARD IX STUDENTS

RESPONSE SHEET

Name of the Student: Boys/Girls

No.	A	B	C	D
1.	○	○	○	○
2.	○	○	○	○
3.	○	○	○	○
4.	○	○	○	○
5.	○	○	○	○
6.	○	○	○	○
7.	○	○	○	○
8.	○	○	○	○
9.	○	○	○	○
10.	○	○	○	○
11.	○	○	○	○
12.	○	○	○	○
13.	○	○	○	○
14.	○	○	○	○
15.	○	○	○	○
16.	○	○	○	○
17.	○	○	○	○
18.	○	○	○	○
19.	○	○	○	○
20.	○	○	○	○
21.	○	○	○	○
22.	○	○	○	○
23.	○	○	○	○
24.	○	○	○	○
25.	○	○	○	○

No.	A	B	C	D
26.	○	○	○	○
27.	○	○	○	○
28.	○	○	○	○
29.	○	○	○	○
30.	○	○	○	○
31.	○	○	○	○
32.	○	○	○	○
33.	○	○	○	○
34.	○	○	○	○
35.	○	○	○	○
36.	○	○	○	○
37.	○	○	○	○
38.	○	○	○	○
39.	○	○	○	○
40.	○	○	○	○
41.	○	○	○	○
42.	○	○	○	○
43.	○	○	○	○
44.	○	○	○	○
45.	○	○	○	○
46.	○	○	○	○
47.	○	○	○	○
48.	○	○	○	○
49.	○	○	○	○
50.	○	○	○	○

APPENDIX X

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ACHIEVEMENT TEST IN MALAYALAM FOR STD. IX STUDENTS

FINAL TEST

SCORING KEY

1.	B
2.	A
3.	B
4.	A
5.	B
6.	A
7.	C
8.	C
9.	D
10.	C
11.	C
12.	B
13.	C
14.	B
15.	B
16.	C
17.	C
18.	D
19.	B
20.	C
21.	C
22.	D
23.	C
24.	B
25.	B

26.	C
27.	B
28.	B
29.	C
30.	D
31.	C
32.	B
33.	C
34.	B
35.	B
36.	C
37.	D
38.	B
39.	B
40.	B
41.	A
42.	C
43.	D
44.	A
45.	B
46.	A
47.	D
48.	A
49.	B
50.	D

APPENDIX XI

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ACHIEVEMENT TEST IN ENGLISH FOR STD. IX STUDENTS

FINAL TEST

SCORING KEY

1.	B
2.	C
3.	A
4.	C
5.	A
6.	B
7.	C
8.	D
9.	B
10.	C
11.	C
12.	B
13.	A
14.	C
15.	D
16.	D
17.	A
18.	B
19.	D
20.	B
21.	C
22.	B
23.	D
24.	C
25.	B

26.	D
27.	D
28.	A
29.	D
30.	D
31.	A
32.	B
33.	B
34.	B
35.	A
36.	D
37.	B
38.	B
39.	D
40.	D
41.	C
42.	B
43.	C
44.	B
45.	C
46.	D
47.	A
48.	C
49.	C
50.	A

APPENDIX XII

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ACHIEVEMENT TEST IN
SOCIAL STUDIES FOR STD. IX STUDENTS

FINAL TEST

SCORING KEY

1.	B
2.	A
3.	B
4.	B
5.	A
6.	A
7.	D
8.	C
9.	D
10.	B
11.	A
12.	C
13.	B
14.	C
15.	A
16.	C
17.	D
18.	C
19.	C
20.	A
21.	D
22.	B
23.	C
24.	D
25.	A

26.	B
27.	C
28.	A
29.	C
30.	D
31.	B
32.	A
33.	A
34.	D
35.	A
36.	C
37.	B
38.	B
39.	B
40.	C
41.	C
42.	C
43.	D
44.	C
45.	A
46.	D
47.	A
48.	B
49.	C
50.	D

APPENDIX XIII

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ACHIEVEMENT TEST IN GENERAL SCIENCE FOR STD. IX STUDENTS

FINAL TEST

SCORING KEY

1.	B
2.	A
3.	C
4.	C
5.	C
6.	B
7.	B
8.	D
9.	B
10.	A
11.	B
12.	A
13.	B
14.	C
15.	C
16.	A
17.	B
18.	B
19.	C
20.	D
21.	C
22.	D
23.	A
24.	C
25.	C

26.	A
27.	C
28.	A
29.	B
30.	C
31.	B
32.	A
33.	A
34.	D
35.	D
36.	C
37.	B
38.	B
39.	D
40.	D
41.	D
42.	C
43.	C
44.	B
45.	B
46.	B
47.	C
48.	C
49.	A
50.	C

APPENDIX XIV

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ACHIEVEMENT TEST IN MATHEMATICS FOR STD. IX PUPIL

FINAL TEST

SCORING KEY

1.	C
2.	B
3.	D
4.	C
5.	B
6.	C
7.	B
8.	B
9.	D
10.	B
11.	C
12.	A
13.	C
14.	C
15.	C
16.	D
17.	A
18.	B
19.	D
20.	A
21.	B
22.	C
23.	C
24.	B
25.	C

26.	B
27.	B
28.	C
29.	D
30.	A
31.	C
32.	B
33.	B
34.	D
35.	C
36.	B
37.	D
38.	C
39.	D
40.	C
41.	C
42.	C
43.	B
44.	C
45.	D
46.	C
47.	D
48.	A
49.	A
50.	C

APPENDIX XV

DEPARTMENT OF EDUCATION

UNIVERSITY OF CALICUT

GENERAL DATA SHEET

നിർദ്ദേശങ്ങൾ : ഗവേഷണത്തിനുപയോഗിക്കാൻ നിങ്ങളുടെ വ്യക്തിപരമായ വിവരങ്ങൾ ശേഖരിക്കാനാണ് ഇതുകൊണ്ട് ഉദ്ദേശിക്കുന്നത്. കൂടുബാംഗങ്ങളെക്കുറിച്ചുള്ള വിവരങ്ങൾ കഴിയുന്നിടത്തോളം ശരിയായി രേഖപ്പെടുത്തുക.

1 പേര് .....
2 ആൺകുട്ടി/പെൺകുട്ടി .....
3 വയസ്സ് .....
4 മതം .....
5 ജാതി .....
6 മൂത്ത സഹോദരങ്ങളുടെ എണ്ണം .....
7 ഇളയ സഹോദരങ്ങളുടെ എണ്ണം .....
8 സ്റ്റാൻഡേർഡ് .....
9 ഡിവിഷൻ .....
10 സ്കൂളിന്റെ പേര് .....
11 സ്കൂൾ സ്ഥിതിചെയ്യുന്ന സ്ഥലം .....
പഞ്ചായത്ത്/മുനിസിപ്പാലിറ്റി/കോർപ്പറേഷൻ .....
12 കൂടുംബാംഗങ്ങളെ കുറിച്ചുള്ള വിവരം .....
(വിവരങ്ങൾ × അടയാളംകൊണ്ട് രേഖപ്പെടുത്തുക)

		പിതാവ്/ രക്ഷാകർത്താവ്	മാതാവ്	സഹോദരി/ സഹോദരങ്ങൾ
A	വിദ്യാഭ്യാസം			
	അക്ഷരാഭ്യാസം ഇല്ല			
	പ്രൈമറി വിദ്യാഭ്യാസം			
	അപ്പർ പ്രൈമറി വിദ്യാഭ്യാസം			
	ഹൈസ്കൂൾ വിദ്യാഭ്യാസം			
	ഇൻറർമീഡിയറ്റ് റ്റി. റ്റി. സി. പ്രീഡിഗ്രി മുതലായവ			
	ബി. എ, ബി. എസ്. സി, ബികോം, എൻജിനീയറിംഗ് ഡിപ്ലോമ തുടങ്ങിയവ			
	എം. എ., എം. എസ്.സി., എംകോം. എം.ബി.ബി.എസ്., എൻജിനീയറിംഗ്ഡിഗ്രി മുതലായവ			
B	ജോലി			
C	രക്ഷാകർത്താവിന്റെ പ്രതിമാസ വരുമാനം 300 രൂപക്ക് താഴെ 301 രൂപക്കും 700 രൂപക്കും ഇടക്ക് 701 രൂപക്കും 1500 രൂപക്കും ഇടക്ക് 1500 രൂപക്കും 2500 രൂപക്കും ഇടക്ക് 2500 രൂപക്ക് മുകളിൽ			

UNIVERSITY OF CALICUT

SOCIO-FAMILIAL INVENTORY

SCORE SHEET

Name.....Standard/Division.....

School..... Age.....

Class No.....Boy/Girl.....

A

	ഉണ്ട്	ഇല്ല		ഉണ്ട്	ഇല്ല		ഉണ്ട്	ഇല്ല
1	[ ]	[ ]	9	[ ]	[ ]	17	[ ]	[ ]
2	[ ]	[ ]	10	[ ]	[ ]	18	[ ]	[ ]
3	[ ]	[ ]	11	[ ]	[ ]	19	[ ]	[ ]
4	[ ]	[ ]	12	[ ]	[ ]	20	[ ]	[ ]
5	[ ]	[ ]	13	[ ]	[ ]	21	[ ]	[ ]
6	[ ]	[ ]	14	[ ]	[ ]	22	[ ]	[ ]
7	[ ]	[ ]	15	[ ]	[ ]	23	[ ]	[ ]
8	[ ]	[ ]	16	[ ]	[ ]			

B

	എല്ലായ്പ്പോഴും	ചിലപ്പോഴൊക്കെ	ഒരിക്കലുംഇല്ല		എല്ലായ്പ്പോഴും	ചിലപ്പോഴൊക്കെ	ഒരിക്കലുംഇല്ല
1	( )	( )	( )	9	( )	( )	( )
2	( )	( )	( )	10	( )	( )	( )
3	( )	( )	( )	11	( )	( )	( )
4	( )	( )	( )	12	( )	( )	( )
5	( )	( )	( )	13	( )	( )	( )
6	( )	( )	( )	14	( )	( )	( )
7	( )	( )	( )	15	( )	( )	( )
8	( )	( )	( )	16	a ( )	b ( )	c ( )

C

	വളരെയധികം	കുറച്ച്	ഒട്ടും ഇല്ല		എല്ലായ്പ്പോഴും	ചിലപ്പോഴൊക്കെ	ഒരിക്കലുംഇല്ല
1	[ ]	[ ]	[ ]	8	[ ]	[ ]	[ ]
2	[ ]	[ ]	[ ]	9	[ ]	[ ]	[ ]
3	[ ]	[ ]	[ ]	10	[ ]	[ ]	[ ]
4	[ ]	[ ]	[ ]	11	[ ]	[ ]	[ ]
5	[ ]	[ ]	[ ]	12	[ ]	[ ]	[ ]
6	[ ]	[ ]	[ ]	13	[ ]	[ ]	[ ]
7	[ ]	[ ]	[ ]				

D

	ധാരാളം	കുറച്ച്	ഇല്ല		ധാരാളം	കുറച്ച്	ഇല്ല
1	( )	( )	( )	8	( )	( )	( )
2	( )	( )	( )	9	( )	( )	( )
3	( )	( )	( )	10	( )	( )	( )
4	( )	( )	( )	11	( )	( )	( )
5	( )	( )	( )	12	( )	( )	( )
6	( )	( )	( )	13	( )	( )	( )
7	( )	( )	( )	14	( )	( )	( )

APPENDIX XVI

SOCIO-FAMILIAL INVENTORY

By
Dr. A. SUKUMARAN NAIR
Dean
Faculty of Education
University of Calicut

താഴെകൊടുത്തിരിക്കുന്ന ചോദ്യങ്ങളം ശ്രദ്ധാപൂർവ്വം വായിച്ച് തന്നിരിക്കുന്ന ഉത്തരക്കടലാസ്സിൽ ശരിയായ ഉത്തരത്തിനു നേരെ ശരി അടയാളം ഇടുക. ഈ പുസ്തകത്തിൽ യാതൊന്നും രേഖപ്പെടുത്തരുത്.

A

പഠനത്തിനുള്ള ഏതാനും സൗകര്യങ്ങളം താഴെതന്നിരിക്കുന്നു. ഇതിൽ ഏതല്ലാമാണ് നിങ്ങളുടെ വീട്ടിൽ ഉള്ളത്.

1 പ്രത്യേക മുറി
2 പ്രത്യേക മേശ
3 പ്രത്യേക കസേര
4 പ്രത്യേക ഷെൽഫ്
5 പ്രത്യേക വിളക്ക്
6 പുസ്തക ശേഖരം

താഴെ തന്നിരിക്കുന്ന റഫറൻസ് പുസ്തകങ്ങളം/പഠനോപകരണങ്ങളം നിങ്ങളുടെ വീട്ടിൽ ഉണ്ടോ?

7 ഇംഗ്ലീഷ് നിഘണ്ടു
8 ഇംഗ്ലീഷ് - മലയാളം നിഘണ്ടു
9 ഹിന്ദി - മലയാളം നിഘണ്ടു
10 ലോഗരിതം പട്ടിക
11 കേരളത്തിന്റെ ഭൂപടം
12 ലോക ഭൂപടം
13 അറ്റ്ലസ്
14 ജ്യാമിതീയപ്പെട്ടി (ഇൻസ്ട്രു മെൻറ് ബോക്സ്)

15 വീട്ടിൽ നിങ്ങളുടെ പഠനത്തിനായി ഒരു നിശ്ചിതസമയം അച്ഛനമ്മമാർ നിശ്ചയിച്ചിട്ടുണ്ടോ?

16 അച്ഛനോ, അമ്മയോ മറ്റു കുടുംബാംഗങ്ങളോ നിങ്ങളുടെ പഠനസമയത്ത് പത്രങ്ങളം,പുസ്തകങ്ങളം തുടങ്ങിയവ വായിക്കാറുണ്ടോ?

17 പഠിക്കുന്ന സമയത്ത് നിങ്ങളെ ആരെങ്കിലും ശല്യപ്പെടുത്താറുണ്ടോ?

18 ഗൃഹപാഠങ്ങളം ചെയ്തുതീർക്കാൻ വീട്ടിലെ മുതിർന്നവർ നിങ്ങളെ സഹായിക്കാറുണ്ടോ?

19 മാതാപിതാക്കളം നിങ്ങളുടെ പുസ്തകങ്ങളം പരിശോധിച്ച് തെറ്റുകണ്ടാൽ തിരുത്താറുണ്ടോ?

20 നിങ്ങളം പാഠങ്ങളെല്ലാം അതാത് സമയത്ത് തന്നെ പഠിക്കാറുണ്ടോ എന്നു മാതാപിതാക്കളം പരിശോധിക്കാറുണ്ടോ?

21 നിങ്ങളുടെ പുസ്തകങ്ങളും, മറ്റു പഠനോപകരണങ്ങളും വൃത്തിയായി വെക്കാൻ അച്ഛനമ്മമാർ സഹായിക്കാറുണ്ടോ?

22 കൃത്യസമയത്തുതന്നെ പഠനം തുടങ്ങാൻ അച്ഛനമ്മമാർ നിർബന്ധിക്കുണ്ടോ?

23 പഠിച്ചുകൊണ്ടിരിക്കുമ്പോളം തടസ്സങ്ങളം ഉണ്ടാകുക പതിവാണോ?

B

സ്കൂൾ കാര്യങ്ങളിൽ അച്ഛനമ്മമാർ നിങ്ങളെ എത്രത്തോളം സഹായിക്കാറുണ്ട് എന്നറിയാനുള്ള ചില പ്രസ്താവനകൾ താഴെ കൊടുത്തിരിക്കുന്നു.

1 നിങ്ങളുടെ ക്ലാസ്സിലെ നോട്ടുകളും മറ്റും അച്ഛനമ്മമാർ പരിശോധിക്കാറുണ്ട്

2 നിങ്ങൾ മാർക്ക് കുറഞ്ഞ വിഷയങ്ങൾ ഏതെന്നു മനസ്സിലാക്കി ആ വിഷയങ്ങൾ മാതാപിതാക്കൾ നിങ്ങളെ പഠിപ്പിക്കാറുണ്ട്

3 അച്ഛനമ്മമാർ അദ്ധ്യാപകരെ ഇടക്കിടക്ക് ചെന്നു കണ്ട് നിങ്ങളുടെ പഠിപ്പിലുള്ള പുരോഗതി അന്വേഷിക്കാറുണ്ട്

4 മാതാപിതാക്കൾ സ്കൂൾ കാര്യങ്ങളേപ്പറ്റി നിങ്ങളുടെ സഹപാഠികളോട് അന്വേഷിക്കാറുണ്ട്

5 സ്കൂളിലെ അദ്ധ്യാപക രക്ഷാകർത്തൃസമിതിയുടെ മീറ്റിങ്ങുകളിലും, പ്രവർത്തനങ്ങളിലും അച്ഛനമ്മമാർ പങ്കെടുക്കാറുണ്ട്

6 സ്കൂളിന്റെ നിലവാരം ഉയർത്താനുള്ള എല്ലാ പരിപാടികളിലും നിങ്ങളുടെ അച്ഛനമ്മമാർ സഹകരിക്കാറുണ്ട്.

7 മാർക്കു കുറഞ്ഞ വിഷയങ്ങളിൽ നിങ്ങൾക്ക് രക്ഷിതാക്കൾ ട്യൂഷൻ ഏർപ്പാട് ചെയ്യാറുണ്ട്

8 ഒരദ്ധ്യായന വർഷത്തിൽ എന്തെല്ലാം വിഷയങ്ങൾ എങ്ങനെയെല്ലാം പഠിക്കണമെന്ന് കാലേക്കൂട്ടി ആസൂത്രണം ചെയ്യാൻ അച്ഛനമ്മമാർ നിങ്ങളെ സഹായിക്കാറുണ്ട്.

9 പാഠപുസ്തകങ്ങൾ യഥാസമയം വാങ്ങിത്തരാറുണ്ട്.

10 നിങ്ങൾക്ക് പ്രത്യേക താൽപര്യമുള്ള വിഷയങ്ങളെപ്പറ്റിയുള്ള മറ്റു പുസ്തകങ്ങൾ നിങ്ങൾക്ക് രക്ഷിതാക്കൾ വാങ്ങിത്തരാറുണ്ട്.

11 വിദ്യാഭ്യാസ കാര്യങ്ങൾക്ക് മറ്റെന്തൊരു കാര്യത്തേക്കാളും പ്രധാന്യം നിങ്ങളുടെ അച്ഛനമ്മമാർ നൽകാറുണ്ട്.

12 നല്ലകൂട്ടികളുമായി സൗഹൃദം സ്ഥാപിക്കാൻ അച്ഛനമ്മമാർ നിങ്ങളെ നിർബ്ബന്ധിക്കാറുണ്ട്.

13 വിനോദയാത്രകളിലും, പഠനയാത്രകളിലും പങ്കെടുക്കാൻ അച്ഛനമ്മമാർ നിങ്ങളെ പ്രോത്സാഹിപ്പിക്കാറുണ്ട്.

14 സ്കൂളിൽ നടക്കുന്ന കളികൾ, സ്പോർട്ട്സ്, എന്നിവയിൽ പങ്കെടുക്കാൻ അച്ഛനമ്മമാർ നിങ്ങളെ പ്രോത്സാഹിപ്പിക്കാറുണ്ട്.

15 പരീക്ഷയ്ക്ക് കൂട്ടുതൽമാർക്ക് വാങ്ങണമെന്ന് നിങ്ങളുടെ മാതാപിതാക്കൾ നിങ്ങളോട് പറയാറുണ്ട്.

16 നിങ്ങളെ ഏതുവരെ പഠിപ്പിക്കണമെന്നാണ് അച്ഛനും അമ്മയും ആഗ്രഹിക്കുന്നത്.

a. യൂനിവേഴ്സിറ്റി / b. സാങ്കേതിക വിദ്യാഭ്യാസം / c. S S L C വരെ

C

1 നിങ്ങളുടെ കുടുംബത്തിൽ വരുത്താറുള്ള പത്രങ്ങളുടെ എണ്ണം.

2 നിങ്ങളുടെ വീട്ടിൽ വാങ്ങുന്ന വാരികകളും / മാസികകളും ഇവയുടെ എണ്ണം.

3 നിങ്ങളും അംഗങ്ങളായ സാംസ്കാരിക സംഘടനകളുടെ എണ്ണം.

4 ഒരു മാസത്തിൽ നിങ്ങളും കാണുന്ന സിനിമകളുടെ എണ്ണം.

5 നിങ്ങളും കാണുന്ന നാടകങ്ങളും / നൃത്തങ്ങളും ഇതുപോലുള്ള മറ്റിനങ്ങളും.

6 നിങ്ങളോ, നിങ്ങളുടെ കുടുംബാംഗങ്ങളോ അംഗങ്ങളായ ലൈബ്രറികളുടെ എണ്ണം.

7 നിങ്ങളുടെ വീട്ടിലുള്ള റേഡിയോ / ടേപ്പ്റിക്കോർഡർ / ടെലിവിഷൻ തുടങ്ങിയവയുടെ എണ്ണം.

8 നിങ്ങളും ഭാഷ തെറ്റായി സംസാരിക്കുമ്പോളും മാതാപിതാക്കളും തിരുത്താറുണ്ട്.

9 മറ്റുള്ളവർക്ക് തൃപ്തികരമല്ലാത്ത രീതിയിൽ പെരുമാറുമ്പോളും നിങ്ങളെ തിരുത്താറുണ്ട്.

10 അന്യരുമായി ഇടപഴകുമ്പോളും നല്ല രീതിയിൽ പെരുമാറാൻ നിങ്ങളെ പഠിപ്പിക്കാറുണ്ട്.

11 പത്രം വായിക്കണമെന്ന് നിങ്ങളോട് മാതാപിതാക്കളും ആവശ്യപ്പെടാറുണ്ട്.

12 വായിക്കുന്ന കാര്യങ്ങളെപ്പറ്റി ചെറുകുറിപ്പുകളും എഴുതാൻ നിങ്ങളോടാവശ്യപ്പെടാറുണ്ട്.

13 റേഡിയോ വാർത്തകളും, വിദ്യാഭ്യാസ പരിപാടികളും ശ്രദ്ധിക്കാൻ നിങ്ങളോടാവശ്യപ്പെടാറുണ്ട്

D

1 നിങ്ങളുടെ വീടിനുചുറ്റുമുള്ള വിദ്യാസമ്പന്നരായ കുടുംബങ്ങളുടെ എണ്ണം.
2 നിങ്ങളുടെ ചുറ്റുപാടുകളിൽ താമസിക്കുന്ന ഉന്നത ഉദ്യോഗമുള്ളവരുടെ എണ്ണം.
3 ആ പ്രദേശത്തുള്ള വലിയ കെട്ടിടങ്ങളുടെ എണ്ണം.
4 ആ പ്രദേശത്തുള്ള സാമൂഹ്യസാംസ്കാരിക സംഘടനകളുടെ എണ്ണം.
5 കുട്ടികളുടെത് മാത്രമായ ക്ലബ്ബുകളുടേയും, സംഘടനകളുടെയും എണ്ണം.
6 ആ പ്രദേശത്തുള്ള വായനശാലകളുടെയും, ഗ്രന്ഥശാലകളുടെയും എണ്ണം.
7 ആ പ്രദേശത്തുള്ള നഴ്സറി സ്കൂളുകളുടെ / ക്രഷുകളുടെ എണ്ണം.
8 അവിടെയുള്ള കമ്മ്യൂണിറ്റി ഹാളുകളുടെ എണ്ണം.
9 ആ പ്രദേശത്തുള്ള വിലപിടിച്ച ഗൃഹോപകരണങ്ങളുള്ള (വാഹനങ്ങളും, ഫ്രിഡ്ജുകളും, ടെലിഫോൺ, ടെലിവിഷൻ) വീടുകളുടെ എണ്ണം.
10 ആ പ്രദേശത്തുള്ള സ്കൂളിൽ പോകുന്ന കുട്ടികളുടെ എണ്ണം.
11 പഠനത്തിനും സാമൂഹ്യ പ്രവർത്തനങ്ങൾക്കും അയൽക്കാരിൽനിന്ന് സഹായം കിട്ടാനുള്ള സാദ്ധ്യത.
12 അയൽക്കാരിൽ നിന്ന് പുസ്തകങ്ങളും / മാസികകളും / വാരികകളും ഇവ കടമായിക്കിട്ടാനുള്ള സാദ്ധ്യത.
13 അയൽവാസികളുമായി വഴക്കുണ്ടാകുന്നതിനുള്ള സാദ്ധ്യത.
14 യാദൃശ്ചികമായി ആപത്തുകളും ഉണ്ടാകുമ്പോളും അയൽവാസികളിൽനിന്നും സഹായം കിട്ടാനുള്ള സാദ്ധ്യത.

APPENDIX XVII

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCHOOL WISE BREAK-UP OF THE SAMPLE

Sl. No	Name of school	Govt. Pvt.	Locality	No. students		Total
				Boys	Girls	
1.	Govt. High School, Kadungapuram	G	R	20	21	41
2.	GBHS Manjeri	G	U	28	-	28
3.	GGHS Wandoor	G	R	-	45	45
4.	GHS Pattikkad	G	R	20	17	37
5.	Tarakan High school Angadippuram	P	R	32	27	59
6.	Govt. Girls H.S. Manjeri	G	U	-	55	55
7.	St. Gemmas Girls H.S. Malappuram	P	U	-	49	49
8.	Govt. Girls High school Malappuram	G	U	-	43	43
9.	Govt. High school Makkaraparamba	G	R	40	17	57
10.	Govt. Vocational Higher secondary School Mankada	G	R	20	16	36
11.	National High school Kolathur	P	R	27	19	46
12.	R.M.H.S. Melattur	P	R	25	20	45
13.	M.S.P. High school Malappuram	P	U	28	17	45
14.	MUHS Urakam	P	R	25	18	43
15.	PMHS Chemmankadavu	P	R	22	23	45
16.	BYKHS Valavannur	P	R	25	15	40
17.	Govt. Boys H.S. Malappuram	G	U	41	-	41
18.	Govt. Boys H.S. Perinthalmanna	G	U	45	-	45
19.	PMHs Elankur	P	R	26	20	46
20.	GVHSS Nellikuth	G	U	22	20	42
21.	G.M.H.S.S. Vellamunda	G	R	23	18	41
22.	IKTHS Cherukulamba	P	R	16	19	35
23.	KMHS Valakkulam	P	R	15	21	36
	Total			500	500	1000