

A STUDY OF SOME PSYCHO-SOCIAL
CORRELATES OF UNDERACHIEVEMENT
OF SECONDARY SCHOOL PUPILS
IN ENGLISH

THESIS
SUBMITTED FOR THE DEGREE OF

**DOCTOR OF PHILOSOPHY
IN EDUCATION**

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CERTIFICATE

I, Dr. P.K. Aruna, do hereby certify that this thesis, “A Study of Some Psycho- Social Correlates of Underachievement of Secondary School Pupils in English”, is a record of bonafide study and research carried out by Mr. Jamaluddeen K under my supervision and guidance. The report has not been submitted by him for the award of a Degree, Diploma, Title or Recognition before.

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DECLARATION

I, Jamaluddeen K, do hereby declare that this thesis, “A Study of Some Psycho- Social Correlates of Underachievement of Secondary School Pupils in English”, has not been submitted by me for the award of a Degree, Diploma, Title or Recognition before.

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CHAPTER I

INTRODUCTION

Need and Significance of the Study

Statement of the Problem

Objectives of the Study

Hypotheses

Methodology in Brief

Scope of the Study

Limitations of the Study

Organisation of the Research Report

INTRODUCTION

The present study is an attempt to examine the psychological and social correlates that influence underachievement of secondary school pupils in English. Underachievement implies the academic achievement below one's level of measured intelligence. It is the discrepancy between ability and achievement. A learner who has intellectual potential to deliver good performance in school work but fails to do so is an underachiever. He fails to score in academics commensurately to his intellectual capacity. The problem of underachievement is seen to be persistent across the educational arena around the world. In India too, this problem is acute.

The academic achievement of learners is a matter of supreme importance as far as the educational system of a country is concerned. Buch (1991) remarked, "The whole system of education revolves round the academic achievement of students." So every attempt is to be made to maximise learner achievement, considering the capacity to achieve.

The education system should be capable of tapping the maximum potential of the learners. Academic achievement of learners should be at par or above the level of their intellectual capacity to achieve. Difference in achievement of pupils of equal intelligence levels is usually observed. The pupil who attains above his level of intelligence is known as over-achiever where as one who attains below the level of his intelligence is called

underachiever. The learner whose achievement is at par with his intelligence is called normal achiever.

As a curricular subject, English is a compulsory subject of study. It gets high consideration in schools. At least one period is set apart every day on the time table for teaching it. It is one of the subjects that get highest number of periods a week. Moreover, generally, tender periods are allotted for English.

Underachievement is one of the main obstacles standing in the way of optimum academic achievement in schools. It affects the learners' achievement and performance adversely and results in the wastage of human resource. It lessens the effects of teaching. It marks the poor quality of education of a country. It creates slum in the education arena of the country.

The Education Commission (1964 – 66) said, “The group of under-achievers consists of children who are not intellectually dull, but are at least of average and may even be of superior ability. The failure of such children should be of great concern to a developing country like ours, which cannot remain indifferent to the loss of potential man power within the high ability range.” So the problem of underachievement is to be remedied as much as possible in order to facilitate not only the personal development of the students and institutions concerned but of the whole nation. It is the responsibility of the country to see that the maximum potential of its citizens is tapped.

A large number of pupils fail to produce the academic outcome they are capable of and their school performance is most often lower than their ability peers (Terman and Oden, 1947; Burt, 1862; Pringle, 1970; Whitmore, 1980; Gallagher, 1985).

Fool-proof facilities and arrangements are to be initiated in order to ensure that the students who show signs of higher intellectual potential can make higher achievement in academics too. Underachievers must be channelised and be led in proper directions, otherwise their potential may be utilised in unproductive or undesirable ways.

Exact knowledge of underachievement and its causal factors is of great practical value to the pedagogic process and it helps enhance the academic achievement of learners. The phenomenon of underachievement is complex and multi-faceted. Academic standard of the pupils can be enhanced to a very high extent, if the predicament of underachievement in academics is remedied. Absence of underachievement in a subject can facilitate optimum delivery of the academic output. It means a learner will be able to perform in school work to the maximum extent his intellectual capacity permits him to. The present study deals with underachievement in English and its select correlates.

NEED AND SIGNIFICANCE OF THE STUDY

English language is given high consideration as a compulsory subject in the curriculum in private and government schools. It is a compulsory subject in the school curriculum. English as a second language starts from the

primary level itself. The government has adopted several measures to enrich and improve the teaching of English in schools. The measures include appointing well qualified teachers, setting up quality facilities, providing plenty of academic materials to schools etc. Select teams of English teachers are sent to the Regional Institute of English, Bangalore and English and Foreign Languages University, Hyderabad for special training and practice at global standards. Refresher courses are organised periodically. Teachers are given special incentives for attending in-service courses. Teachers too use state of the art technical devices to make their classes more effective. The fullest realisation of these facilities must ensure the boosting of the achievement of the learners of English.

But in spite of these efforts on the part of teachers and government, the standard of pupils in English remains poor. Continuous study of English for years doesn't equip the learners to use English in speech and writing accurately. They can't even understand English speeches. According to Ramanathan (1999), teaching of English in India- school or college – is no way preparing the students to use English in the real world.

The standard of students in English at secondary level calls for special attention. The prominence given to English in the curriculum does not yield optimum achievement. A satisfactory proficiency in English is still a distant dream to most students who have studied English in schools and colleges for more than a decade.

That the number of students scoring high marks in other school subjects and failing in English alone is extremely large is a matter of high seriousness and gravity. The report that one of the subjects in which most number of pupils fail in the SSLC examination is English testifies to the same. For many students, English seems to be a hard nut to crack.

The poor achievement of students in English is not an issue we alone face. It is global scenario. Adesanoye (1976) and Aboderin (1985) reported that students who left secondary school and then gained admission into the tertiary levels of education in Nigeria continued to perform poorly and below average, especially because of their poor English language background.

Identification of the causal factors of underachievement is the initial step in the process of eliminating it. The Education Commission (1964 – 66) had stressed this point. It said in its report, “The first step is to diagnose the causes of these factors by observation, interrogation and application of psychological tests, if possible. Such a collection of data will make it possible to have a total appraisal of the situation and indicate remedial treatment.” Exact diagnosis helps minimise the occurrence of underachievement.

The underachievement, a factor that adversely affect student learning has attracted the attention of researchers a lot on teaching and learning. Several studies have been carried out on the areas related to underachievement. A study conducted by Mercy Abraham (1974) reveals that 15 % of secondary school pupils are underachievers in English. The study

conducted by LT Behrens and PE Vermon (1978) reports that 20 % of the grade seven students from three categories of public junior High Schools are underachievers.

Nair (1984) has conducted a study of the factors related to underachievement in Biology of secondary school students. Ramachandran carried out a study of the social and familial variables which caused underachievement in secondary schools in 1992.

It may be noted that psycho-social factors play vital and crucial roles in facilitating learning. The influence of the psychological factors on things related to learning is to be considered appropriately in order to ensure the effectiveness of teaching and learning. Achievement motivation, attitude, and study habit of the learners have far reaching effect on learning. Strictly speaking, they determine how much a learner learns a topic in a particular situation at a specific time slot. But a study of the important variables related to the underachievement of pupils in English has not been carried out so far. Consequently, appropriate remedial measures are still alien to the underachievement of students in English. English as a curricular subject needs specially concentrated study. The problem of underachievement in English is becoming more and more acute in schools. Therefore, a study related to the psychological and social variables is essential for facilitating effective remediation. Such a study is not only the need of the hour but highly

significant too. It is in this context that the investigator thought of selecting the underachievement in English as a topic to be studied in depth.

Teaching means facilitating achievement. Teaching is effective when it succeeds in equipping learners to attain knowledge or improve their performance, at least up to the level his intellectual potential permits to. Removing obstacles that lie between teaching and learning or enabling the learner to overcome the same is part of efficient teaching. Remedying the underachievement among pupils is highly important and therefore, the present study of some psycho-social correlates of underachievement in English is a topic of too much relevance.

Better achievement in English improves the overall performance of the learners. Ability to use English language accurately in speech and writing facilitates attainment of more knowledge, better options for higher studies, more attractive career options, personal developments, world wide contacts etc. Higher achievement in English language is considered as an added advantage in any field of learning and profession around the world. Improving the English language proficiency of learners is a must. The attempts for the purpose can be made fruitful only if the intellectual potentials of the learners are tapped sufficiently and utilised properly to the maximum extent possible.

The incidence of underachievement causes blockades and obstacles in pupils' learning. English being seen as the backbone of the school curricular scenario, the problems and complexities caused by underachievement is more

aggravate in it. The factors that cause underachievement seem to emerge from different sources such as social and psychological. How much influence these factors exert on underachievement is to be brought out only through scientific means and systematic studies. Therefore the investigator decided to focus on the area of underachievement in English to study in required depth and width. The present study is a systematic endeavour to find out the extent of the underachievement among the secondary school pupils in English and of the effect of the variables such as attitude towards English, achievement motivation and study habit of the learners.

It may also be noted that though the terms such as achievement motivation, attitude and study habit are among those which have been heard for decades, the version of their tools used in the present study are new and fresh, developed and standardised by the investigator in consultation with his supervising teacher, with new components for collecting the required data from the pupils of the latest era, as essential for a study, aiming at precise findings. This is helpful to ensure precision in the collection of data and accuracy in the interpretation and findings.

The findings of this study will be useful in the attempts aimed at remedying the problem of underachievement in English. Remedying the underachievement will help the learners make maximum achievement by using their potential. The gap between the achievement in English and in other subjects can be minimised. It will certainly result in the improvement of

the academic standard of the pupils. All these situations and aspects testify to the significance of the present study.

STATEMENT OF THE PROBLEM

The present study is entitled “A STUDY OF SOME PSYCHO - SOCIAL CORRELATES OF UNDERACHIEVEMENT OF SECONDARY SCHOOL PUPILS IN ENGLISH”.

DEFINITION OF THE KEY TERMS

The key terms used in the statement of the problem are defined below.

UNDERACHIEVEMENT

The word ‘underachievement’ is defined as “a discrepancy between a person’s intellectual capacity (IQ) and achievement” (Mendol& Marcus, 2016).

Underachievement is a significant discrepancy between high level of giftedness and low level of achievement. (Durr, 1964).

In the present study, underachievement in English means the pupils’ achievement in English that falls below the expected level on the basis of the measured intelligence.

PSYCHO-SOCIAL CORRELATES

The word ‘correlate’ is defined as ‘a variable which is correlated with a specified variable (Wolman, 1975). A variable is any characteristic or value that can be changed or manipulated.

The term “psycho-social correlates” stands for a set of cognitive, affective and social correlates that may influence underachievement in English. The psycho-social correlates selected in the present study are achievement motivation, attitude towards English and study habit.

Achievement Motivation: The term ‘Achievement Motivation’ means “one’s level of motivation to engage in achievement behaviour”. (Harter & Connell, 1984). In the present study, it means an individual’s motive to excel in performance, enhance aspiration and achieve goals.

“Attitude is a relatively enduring organization of beliefs, feelings, and behavioural tendencies towards socially significant objects, groups, events or symbols.” Hogg & Vaughan (2005). Attitude towards English means the extent of favourableness, unfavourableness and neutrality towards English. In the present study, attitude towards English implies the pupils’ degree of favourableness, unfavourableness and neutrality towards English language, culture, achievement and English language teaching.

The term study habit is defined as “the student’s way of study, whether systematic, efficient or inefficient etc.” Good (1973). Study Habit means the behaviours a person uses while studying and preparing for the examination. In the present study, it implies the routine activities a learner follows for improving learning.

SECONDARY SCHOOL PUPILS

The secondary school pupils mean the pupils studying in the 8th, 9th and 10th standards of recognised schools in Kerala.

OBJECTIVES OF THE STUDY

Objectives of the present study are enumerated below.

1. To find out the levels of the variables Achievement Motivation, Attitude towards English, Study Habit and Achievement in English of the secondary school pupils for the total sample.
2. To identify the extent of normal, under and over achievers in English among the secondary school pupils for the total sample and sub samples formed on the basis of the gender of the pupils, locale and type of the management of the school and medium of instruction.
3. To estimate the association between each of the psycho-social variables Achievement Motivation, Attitude towards English and Study Habit with over, normal and underachievement in English for the total sample.
4. To compare the mean scores of independent variables Achievement Motivation, Attitude towards English and Study Habit and dependent variable underachievement in English for the sub samples formed on the basis of the gender, locale and type of management of the school and medium of instruction.
5. To examine the extent of the relationship between each psycho-social variable and underachievement in English for the total and sub samples

formed on the basis of the gender, locale and type of management of the school and medium of instruction.

6. To examine the extent of relationship between the independent variables Achievement Motivation and Attitude towards English of the underachievers in English for the total and sub samples formed on the basis of the gender, locale and type of management of the school and medium of instruction.
7. To examine the extent of relationship between the independent variables Achievement Motivation and Study Habit of the underachievers in English for the total and sub samples formed on the basis of the gender, locale and type of management of the school and medium of instruction.
8. To examine the extent of relationship between the independent variables Attitude towards English and Study Habit of the underachievers in English for the total and sub samples formed on the basis of the gender, locale and type of management of the school and medium of instruction.
9. To find out the combined effect of the psychological correlates Achievement Motivation and Attitude towards English on underachievement in English for the total sample.
10. To find out the effect of the social correlate Study Habit on underachievement in English for the total sample
11. To find out the combined effect of the psycho-social correlates Achievement Motivation, Attitude towards English and Study Habit on underachievement in English for the total sample.

12. To predict the over, normal and underachievement groups in English by using the select set of independent variables (Discriminating variables) Achievement Motivation, Attitude towards English and Study Habit.

HYPOTHESES

1. There will be significant association for each the psycho-social variables, Achievement Motivation, Attitude towards English and Study Habit with underachievement in English.
2. There will be significant difference in the mean scores of the dependent variable underachievement in English and the independent variables Achievement Motivation, Attitude towards English and Study Habit of underachievers in English between the samples of male and female.
3. There will be significant difference in the mean scores of the dependent variable underachievement in English and the independent variables Achievement Motivation, Attitude towards English and Study Habit of underachievers in English between the samples of Government and Aided school pupils.
4. There will be significant difference in the mean scores of the dependent variable underachievement in English and the independent variables Achievement Motivation, Attitude towards English and Study Habit of underachievers in English between the samples of Rural and Urban school pupils.

5. There will be significant difference in the mean scores of the dependent variable underachievement in English and the independent variables Achievement Motivation, Attitude towards English and Study Habit of underachievers in English between the samples of Malayalam and English medium pupils.
6. There will be significant relationship between the independent variable Achievement Motivation and the dependent variable underachievement in English for the total sample and sub samples of male, female, rural, urban, government, aided, un-aided, Malayalam medium and English medium pupils .
7. There will be significant relationship between the independent variable Attitude towards English and the dependent variable underachievement in English for the total sample and sub samples of male, female, rural, urban, government, aided, un-aided, Malayalam medium and English medium pupils .
8. There will be significant relationship between the independent variable Study Habit and the dependent variable underachievement in English for the total sample and sub samples of male, female, rural, urban, government, aided, un-aided, Malayalam medium and English medium pupils .
9. There will be significant relationship between the independent variables Achievement Motivation and Attitude towards English of the underachievers in English for the total sample and sub samples of male,

female, rural, urban, government, aided, un-aided, Malayalam medium and English medium pupils.

10. There will be significant relationship between the independent variables Achievement Motivation and Study Habit of the underachievers in English for the total sample and sub samples of male, female, rural, urban, government, aided, un-aided, Malayalam medium and English medium pupils.
11. There will be significant relationship between the independent variables Attitude towards English and Study Habit of the underachievers in English for the total sample and sub samples of male, female, rural, urban, government, aided, un-aided, Malayalam medium and English medium pupils .
12. The combined effect of the psychological correlates, Achievement Motivation and Attitude towards English on underachievement in English will be significant.
13. The effect of the social correlate Study Habit on underachievement in English will be significant.
14. The combined effect of the psycho-social correlates Achievement Motivation, Attitude towards English and Study Habit on underachievement in English will be significant.
15. The over, normal and underachievement groups in English can be predicted by using the select set of independent variables

(Discriminating variables) Achievement Motivation, Attitude towards English and Study Habit.

METHODOLOGY IN BRIEF

The investigator used survey method to study the extent of the underachievement of secondary school pupils in English and of its psychosocial correlates. It facilitates collection of data from a large number of subjects.

SAMPLE SELECTED

The researcher selected a sample of 625 pupils studying in the Standard IX in the revenue districts of Thrissur, Palakkad, Malappuram, Kozhikode and Wayanad in the state of Kerala using the proportionate stratified random cluster sampling technique. The selection was made giving due weightage to the characteristic features of the population such as sex, locale, medium of instruction and management type of the school. The underachievers in English were identified from the sample by using appropriate statistical techniques.

VARIABLES SELECTED FOR THE STUDY

The variables selected for the present study are presented below in two categories of Dependent and Independent variables.

Dependent Variable

The dependent variable in the present study is underachievement of secondary school pupils in English.

Independent Variable

The following variables are taken as independent variables.

1. PSYCHOLOGICAL VARIABLES
 - a. Achievement Motivation.
 - b. Attitude towards English.
2. SOCIAL VARIABLE
 - a. Study Habit

TOOLS USED

All the dependent and independent variables were measured using standardised tools. Achievement Test in English, Scale of Achievement Motivation, Scale of Attitude towards English and Study Habit Inventory were developed and standardised by the investigator. To measure the intelligence of the pupils, an available standardised tool was used. The tools used in the present study are the following.

1. Achievement Test in English (Muhammed & Jamaluddeen, 2015)
2. Verbal Group Test of Intelligence (Kumar, Hameed & Prasanna, 1997)
3. Scale of Achievement Motivation (Muhammed & Jamaluddeen, 2015).
4. Scale of Attitude towards English (Muhammed & Jamaluddeen, 2015).

5. Study Habit Inventory (Muhammed & Jamaluddeen, 2015).

STATISTICAL TECHNIQUES USED

The following statistical techniques were employed in the present study.

1. Descriptive statistical techniques like Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis.
2. Chi-square Test of Independence followed by estimation of C coefficients.
3. Pearson's Product Moment Coefficient of Correlation
4. Two-tailed Test of Significance of Difference between the Mean Scores of Large Independent Samples.
5. Multiple Regression Analysis
6. Discriminant Function Analysis

SCOPE OF THE STUDY

The prime object of the present study is to study the extent of the underachievement of secondary school pupils in English and the nature and extent of the relationship of psychological variables achievement motivation and attitude towards English and social variable study habit with it. However, the extent of normal and over achievers in English was also identified. All the variables were measured using standardised tools.

The sampling was done using the proportionate stratified random cluster sampling. It is hoped that the extent of the normal, under and over achievers among the sample selected for the study will be a true indicator of the existing ratio of the normal, under and over achievers among the secondary school pupils of Kerala.

As the findings of this study unmask the nature and extent of the impact of the social and psychological variables on underachievement in English, all the stake holders of the education system of the state of Kerala can benefit from them. The findings of the study can facilitate the adoption and application of appropriate measures to remedy the pupils' underachievement in English. Thus the standard of pupils in English can be improved a lot.

LIMITATIONS OF THE STUDY

The investigator is not unmindful of the limitations of the present study. Of the different correlates of underachievement, only the select psycho – social ones have been considered. Only the pupils of secondary schools in the districts under the administrative purview of the University of Calicut were taken as sample for the study.

The study has focused on the achievement of the 9th standard pupils only. The main limitation of the study is that the students' achievement in English was evaluated through written test only. Oral aspects of language were not considered.

ORGANISATION OF THE PRESENT REPORT

The present thesis is organised in five chapters. The first chapter is titled as Introduction. It contains a brief introduction to the topic, need and significance of the study, statement of the problem, definition of the key terms, objectives of the study, design of the study, scope and limitations of the study and organisation of the report.

Second chapter is titled as Review of Related Literature. It consists of two parts, Part A and B. Part A deals with the theoretical overview of underachievement, attitude towards English, achievement motivation and study habits. Part B shows a survey of related studies. It is presented in four sections. They are studies related to underachievement, achievement motivation, attitude towards English and other school subjects and studies related study habit

Third chapter is titled as Methodology. It shows the design of the study. It is an account of the sample selected, tools used, data collection procedure followed, scoring details and statistical techniques used.

Fourth chapter is titled as Analysis and Interpretations. It is presented in seven sections. They are preliminary analysis of the test scores of the whole sample, identification of the extent of under, normal and over achievers in English, preliminary analysis of the test scores of underachievers in English, estimation of the association between psycho-social variables with underachievement in English, investigation of group differences, relation of

the select psycho-social correlates of underachievement in English and finally the effect of the select psycho-social variables on underachievement in English. .

Fifth chapter is the final chapter. It includes the summary of the findings, tenability of the hypotheses, conclusion and educational implications of the study. It also contains suggestions for further research.

CHAPTER II

REVIEW OF RELATED LITERATURE

- A. Theoretical Overview**
- B. Survey of Related Studies**
- C. Conclusion of the Review**

REVIEW OF RELATED LITERATURE

Review of the related literature implies descriptions of the research activities carried out earlier in connection with the area of the problem under consideration of the investigator. It covers theses, dissertations, research papers, treatises of varied nature, research journals, books and other materials related to the area of the problem to be researched.

A minute review of the literature related to the problem under consideration is a core element of any meaningful research study. It helps the researcher know what has been done in the field, how and when. It also helps the researcher pin point the problem. It shows the researcher the ways ahead in the realm of research. It sensitises the investigator to the area of research, eases the process and enriches the study.

Turney and Pobb (1977) reports, "Identification of a research design and determination of the size and scope of a problem, all depends to a great extent, on the care and intensity with which a researcher has examined the literature related to the intended research."

Best (1961) says, "The research for reference materials is a time consuming but fruitful phase of investigation. A familiarity with the literature on any problem area helps the students discover what is already known, what others have attempted to find out, what methods have been found to be promising or disappointing and what problems remain to be solved. In order to

be creative and original, one must read extensively and critically as a stimulus to thinking.”

The review of the literature gives worthwhile insight regarding the strong points and limitations of previous studies. It helps the investigator make the process of his research strain free and improves the quality of his work a lot. The review of literature enables the researcher to define the limits of his field. It helps the researcher to delimit and define his problems (Kaul, Lokesh, 1998).

The review of related literature is dealt with in two sections, i.e., theoretical overview and review of related studies.

A. THEORETICAL OVERVIEW

A theoretical overview of underachievement, psychological correlates achievement motivation and attitude towards English and social correlate study habit is presented below.

UNDERACHIEVEMENT

Underachievement means the academic achievement of a learner below the level of his intellectual potential. According to Durr (1964), it is a significant discrepancy between high level of giftedness and low level of achievement.

Mendol & Marcus (2016) defined the term underachievement as “a discrepancy between a person’s intellectual capacity (IQ) and achievement”. In other words, underachievement means the performance of learners below the level expected of them on the basis of their ability indicated by intelligence. It is revealed through performance of the pupils on tests of intelligence and achievement. An underachiever is a learner who fails to realise his fullest potential.

The term underachievement is viewed differently. One view considers underachievement as discrepancy between potential and performance. A second view is that underachievement is the discrepancy between predicted achievement and actual achievement. In another view, underachievement is a regression equation involving human potential and performance (Frick, 1991). Barbara (2005) contends that despite all the assessment tools available to educators and mountains of existing research data, a clear definition of underachievement is not available.

The underachievement is a perplexing phenomenon. Too often, for no apparent reason, students who show great academic promise fail to perform at a level commensurate with their previously documented abilities, frustrating both parents and teachers (Whitmore, 1986). The gifted underachiever is something of a mystery; it is difficult to explain how gifted students can underachieve academically. Emerick (1992) found that gifted underachievers exhibited above average ability, creative ability, and an intense love for what

they were doing. The gifted underachiever truly is an educational enigma, and this situation has elicited professional concern in the educational field, considering the fact that highly able students perform poorly in academics when they possess the potential for achieving high scores.

Characteristics of Underachievers

Listing the characteristics of underachievers may seem illogical as the traits contradict one another as shown by the research findings which are often inconsistent in this regard. For example several studies (Eg. Ford, 1996., Bruns, 1992., Van Boxtel & Monks, 1992 and Whitmore, 1980) indicate low self-concept as one of the most common characteristics of gifted underachievers. Some other studies (e.g. Holland, 1998) have found that the self-concepts of the underachievers are not lower than that of their achieving counterparts. Emerick (1992) observes that the picture of an underachiever is often contradictory and inconclusive. Other characteristics of underachievers include failure to perform up to the level expected of them on the basis of their measured intelligence. Underachievers do not think their learning and success are under their own control (Robert, 2016). In a study, Reis and Mc Couch (2000) show some aspects of underachievers which include low self-concept, low self-efficacy, pessimism, anxiety, depression and social immaturity. All these factors may not be seen altogether in an underachiever and some of them may be shared by non-underachievers too.

Identification of Underachievers

Underachievers can be identified in several ways. According to Shaw (1964) gifted students can be classified as underachievers when their intellectual abilities (IQ) are in upper 25% of their class and their achievement remain under the class average. Hanses and Rost (1998) view that underachievers are those students whose IQ percentiles are at least 96 and Achievement percentiles 50 at most. The latest trend is identifying the underachievers on the basis of the difference of one standard deviation. (Eg. Stoeger & Ziegler, 2005). It is a view among the researchers in general that underachievers perform at a level below that of their actual performance potential. (Eg. Reis & Mc Coach, 2000; Hoover-Schultz, 2005; Khan, 2005; Rimm, 2008 and Montgomery, 2009.)

Different statistical techniques can be employed for identifying under, normal and over achievers. Traditional statistical techniques include absolute split method, simple difference method and regression method. (Lau and Chan, 2001., Mc Coach and Siegle, 2011).

Absolute Split Method

It identifies the students who score on an ability test (IQ) higher than a certain level (Eg. top 5%) but score lower than a certain maximum (Eg. bottom 5%) on an achievement test. (Lau and Chan, 2011).

Simple Difference Method

It involves estimating the discrepancy between the standardised performance score and the standardised ability score. When this difference is greater than an arbitrary limit (normally 1 standard deviation), the student concerned can be regarded as an underachiever.

Regression Method

It is a common method used to quantify the discrepancy between ability and actual achievement. It is based on the deviation of the students' score from the regression line of the achievement measure based on the ability measure. If this deviation is negative and greater than one standard error of the estimate, the student concerned is an underachiever. If this deviation is positive and greater than one standard error of the estimate, the student concerned is an overachiever. If this deviation is between positive and negative one standard error of the estimate, the student concerned is a normal achiever.

A study carried out by Lau and Chan (2001) on 126 Chinese students found that the same group of underachievers were identified when used each of these statistical techniques.

Causes of Underachievement

The exact causes of underachievement are still unknown. Several possibilities as causes of underachievement have emerged, but none of them has clear substantiation. Considerable divergences of opinions are found on what causes underachievement in students. Sousa (2003) observed that a combination of factors both in the home and at school can cause underachievement. Ryan (1989) points out that on the basis of current research in cognitive development and reading comprehension, two important reasons for students' underachievement in any academic area can be identified: (1) their inadequate understanding of how to select and modify strategies for learning; and (2) their inadequate motivation to apply their understanding in new situations.

Several endeavours for identifying the factors of reason behind underachievement have been made, around the world. Mc Coach (2000) considered determining the causes of underachievement as one of the necessary avenues of research in the field. Some prominent factors that can influence underachievement may be better to be discussed. They are described below.

1. Home environment and parenting style

Rimm & Low (1988) in a study found that parenting style has influence on the achievement and underachievement behaviours of the pupils.

Bestowing adult status on a child may cause underachievement (Fine & Pitts, 1980; Rimm & Lowe, 1988). In a study of gifted urban underachievers, the familial problems of the gifted underachievers contrasted with the pleasant home atmosphere of the gifted achievers (Reis et al., 1995). Anyhow, it is difficult to find out a cause – effect relationship of family conflict and underachievement on the basis of available findings.

2. Peer influence

Peer influence is an important factor so far as adolescents are considered. With regard to the relationship between peer influence and underachievement, several studies have been carried out. Berndt (1999) reports positive correlation between the achievement of a student and that of his closest peer group. Clasen & Clasen (1995) and Weiner (1992) have found the following.

- a). Positive peer interaction can contribute to the reversal of underachievement of students.
- b). Negative peer attitudes can contribute to underachievement.
- c). Underachievers frequently report peer influence as the strongest force impeding their achievement
- d). Sixty-six percent of the students point out the pressure or attitude of the peers and friends as the main reason for their low achievement.

3. Culturally diverse background

The relationship between culturally diverse students and underachievement has not been sufficiently researched. Some studies by Ford (1996), Tomlinson, Callahan, & Leili (1997) report that culturally diverse students are often underrepresented in programs for the gifted and talented. Culturally diverse students continue to face different sorts of bias at school and in society at large (Ford, 1996). Mickelson (1990) reports that African-American students have positive attitudes towards education, yet they show poor academic achievement. This makes reversing their underachievement difficult. The National Achievement Survey of India (2012), indicates that the academic achievement of pupils in different standards varies across the states and union territories in the country.

4. Quality of Schooling

Difference in educational opportunities may also influence underachievement. Students who do not get sufficient opportunity to realise their potentials and to enhance achievement may become 'involuntary underachievers'. What is viewed as normal achievement in a school may be viewed as underachievement in another school. Quality of schooling is a significant predictor of achievement (Anderson & Keith, 1997). A study carried out by Considine and Zappala (2002) shows that school environment

and teachers' expectations of the pupils' standards have strong influence on the academic achievement.

A study of underachievement carried out in urban schools in the United States has found that there may be regional or sub-cultural differences but the factors associated with school are always important in the case of underachievement of students (Smith 2005). It can, therefore, be deduced that lack of competent teachers, improper methods of teaching, poor infrastructural facilities of the school, defective curriculum and defective system of assessment are factors of influence so far as underachievement is concerned.

5. Psycho-Social Factors

Padwick (2010) views that the nature of language learning has some psychological and social aspects and depends primarily on the learners' motivation and attitude in learning the target language. A study conducted by Lavin (1965) has found that the ability factors account only 35 to 45 percent of variations in the academic achievement of the pupils.

The findings of the study carried out by Reis and Mc Coach, (2000) indicate that the major reasons for underachievement in majority cases are (a) emotional problems (Siegle and Mc Coach, 2005); (b) difficulties in adjusting to the home or school environment (Baker, 1998) and (c) personal aspects such as low self-concept.

Classification of Underachievers

Attempts to classify the underachievers have been made in different ways and into different categories. Eliot & Gables (2014) classifies underachievers into eight types. They are rebel, conformist, stressed learner, struggling student, distressed learner, bored students, complacent learner and single sided learner.

PSYCHOLOGICAL VARIABLES

A study, conducted by Sujatha (1994), entitled, “Certain psycho-social correlates of achievement in English of secondary school pupils of Kerala”, on a sample of 550 students in standard IX in 12 schools of Malappuram, Calicut, and Kannur districts using stratified random sampling techniques found that psycho-social correlates had significant influence on the high, average and low achievers. The psychological variables the present study focuses on are achievement motivation and attitude towards English. Theoretical overviews of them are given below in brief.

ACHIEVEMENT MOTIVATION

Motivation is one of the major determinants of second language learning. It has multiple roles in facilitating language learning. Motivation refers to a process that impels an organism to act. Denhardt (2008) defines motivation as “what causes people to behave as they do”.

Achievement motivation implies the motive to achieve. Heckhausen (1967) defines achievement motivation as the striving to increase or to keep as high as possible one's own capabilities in all activities. In the words of Nomusankar and Babu Rao (2012), achievement motivation is a drive some pupils have to pursue and attain goals. Harter & Connell (1984) views achievement motivation as "one's level of motivation to engage in achievement behaviour". Achievement motivation shows an individual's need to meet realistic goals, receive feedback and experience a sense of accomplishment. It is the desire to excel in performance. Achievement motivation varies from person to person and field to field. The same person may be more strongly motivated at one time than another time. The term achievement motivation was first used by Murray (1938).

Achievement motivation is a key factor in learning. Many studies have proved that achievement motivation can facilitate academic achievement. Keefe and Jenkins (1993) view that students with high achievement motivation generally do well academically, but motivation does not guarantee achievement and achievement does not reflect motivation. Atkinson (1999) states that a percentage of students will work hard to achieve a task they do not enjoy, solely to keep their high score or class rank. Pupils with high achievement motivation generally perform well.

Theories of Achievement Motivation

There are several theories pertinent to achievement motivation. Major theories of achievement motivation include Need Achievement Theory, Attribution theory, Achievement Goal Theory and Competence Motivation Theory. They are described below in brief.

1. Need Achievement Theory

The theory of Need Achievement was propounded by Atkinson (1974) and elaborated by Mc Clelland, (1961). It explains the difference between high achievers and others. This theory postulates that people with a high need for achievement target high standards of achievement and seek challenges that are right at the edge of their abilities. It focuses on five factors, ie., personal factors, situational factors, resultant factors, emotional reactions, and achievement related behaviour.

2. Attribution Theory

This theory was propounded by Fritz Heider (1958) elaborated by Bernard Weiner (1985). Attribution theory postulates that individuals try to attribute their success and failure of themselves and of others to either personal or environmental factors. Personal factors are internal and the individuals can control them. Environmental factors are external and the individuals cannot control them. It means that some people attribute their success and failure to themselves, ie., to their ability or to their own effort.

Some other people attribute their success and failure to the factors outside themselves such as luck, destiny and incidental outcomes. Both internal and external attributions play decisive roles in the behaviour of an individual. (Eliot, 2005).

3. Achievement Goal Theory

This theory is based on the belief that an individual's motivation is formed and developed by the interaction of achievement goals, perceived ability, and achievement behaviour. Achievement goals can be goal oriented or task oriented. Perceived ability can be high or low. Achievement behaviour denotes performance.

4. Competence Motivation Theory

This theory postulates that human beings have some innate competence motives which trigger them to explore their unique environment in the most effective ways possible and thereby prove themselves as persons of capacity and ability.

Familiarity with major theories of achievement motivation can sensitise the people to the different aspects, perspectives and approaches relevant with its regard.

ATTITUDE TOWARDS ENGLISH

Attitude is a tendency to respond towards a specific idea, object, person, event, thing or situation. "Attitude is a relatively enduring organization

of beliefs, feelings, and behavioural tendencies towards socially significant objects, groups, events or symbols.” Hogg & Vaughan (2005). Factors such as thoughts, ideas, beliefs, values, personal experiences, and social norms influence the attitude of a person.

Attitude consists of three components. They are affective, behavioural and cognitive components. Affective component involves a person’s emotional aspects with regard to the attitude situation. Behavioural component involves the manner in which the attitude of a person influences his behaviour and actions. Cognitive component involves the ideas and thoughts of the person with regard to his attitude situation. Attitude can be positive, negative and neutral.

Attitude towards English implies the pupils’ favourableness, unfavourableness or neutrality towards the relevant aspects of English language. Attitude of learners is a factor of influence in language learning. Attitude influences achievement and performance. To some extent, it determines with how much enthusiasm and optimism one approaches learning a language and makes further proceedings. Fakeye (2010) observes that learner’s attitude towards language is seen as one of the most important factors that impact on learning a language.

Students’ attitude towards language learning is pertinent for many reasons. Weinburgh (1998) observes that attitude towards learning influences behaviours such as selecting and reading books and speaking in a foreign

language. Achievement in a language depends not only on the intellectual capacity of the learner but also on his attitude towards that language. Padwick (2010) views that besides the intellectual aspects, the nature of language learning has some psychological and social aspects and depends primarily on the learners' motivation and attitude in learning the target language. The ability of students to master a second language is not only influenced by the mental competence but also by the students' attitudes and perceptions towards the target language. (Abidin, 2012).

Positive attitude towards a subject tends to be helpful to the learners in attaining better achievement in it. Kara (2009) states that positive attitude leads to the exhibition of positive behaviour towards studying, absorbing themselves in it, and striving to learn more. "Negative attitude towards English is a psychological factor that results in the student's poor performance in English." (Tella, Indoshi and Othuon, 2010).

Theories of Attitude

There are theories that describe the formation of attitudes. Some prominent theories are described below in brief.

1. Balance Theory

It is a theory based on the perspective that people have a tendency in general to keep consistency in their attitude. When inconsistency occurs in the attitude of an individual, he may change that attitude to suit the new

situations or change his perception of the new situation and thereby eliminating inconsistency. This theory was propounded by Fritz Heider (1959).

2. Cognitive Dissonance Theory

It is a theory that focuses on the lack of harmony between an individual's attitude and his behaviour or between his attitudes themselves. Dissonance means lack of harmony or link. It takes place when conflict occurs between attitude and behaviour. It creates tension and the individual tries to evade it by changing the attitude and forming a new one. It was proposed by Leon Festinger.

3. Self-perception Theory

This theory has been developed from the premise that people shape their attitude by taking their own behaviour into account.

4. Congruity Theory

This theory emerges from the assumption that if a situation arises with two things one of which an individual likes and the other dislikes, he may have a neutral feeling towards both of them.

SOCIAL VARIABLE

The social variable the present study focuses on is study habit. A brief description of it is given below.

STUDY HABIT

The social variable the present study considers is the study habit. It implies various methods and practices adopted by the students in their studies. It refers to the ways of studying a subject.

Study habit is the habitual practice one does to facilitate learning. It is the routine a person follows while studying and preparing for the examination. It includes home learning environment, school environment, time management, planning of the works to be done, participating in academic activities, listening to the class, reading, making and keeping notes, reviewing, concentration, preparation for the examination and working systematically. Good (1973) define study habit as: “The student’s way of study, whether systematic, efficient or inefficient etc.”

Study habit has crucial influence on the student learning. Good study habit is the key to effective learning. Learning can be made more fruitful by developing good study habit. A study conducted by Kaur and Lekhi (1995) found that study habit of the pupils significantly and positively influences their academic achievement. Nadeem, Puja and Bhat (2014) report that efficient learning depends on the development of good study habits.

Study habit has very important role in helping the learners channelise their potential towards academic achievement. Good study habit may cause good academic achievement and bad study habit may lead to poor academic

achievement. Varma & Kumar (1999), Satapathy & Sinhal (2000) and Vyas (2002) have found that in spite of having good intelligence and personality, lack of good study habit may impede academic achievement.

B. SURVEY OF RELATED STUDIES

A survey of the studies done earlier related to the present study is given below in brief. It is given in four sections, as described below.

1. Studies related to underachievement
2. Studies related to Achievement Motivation
3. Studies related to Attitude
4. Studies related to Study Habits

Section I

STUDIES RELATED TO UNDERACHIEVEMENT

Entwistle (1968) carried out a study titled “The study Factors that differentiate underachieving gifted students from high-achieving gifted students”. The finding shows positive relationship between psychological variables and academic achievement.

Kellmer Pringle (1970) in his study, “Able Misfits: The educational and behavioural difficulties of intelligent children”, found that it was teachers themselves who exert the strongest and most lasting influence through their personalities – particularly on able underachievers who lack appropriate role

models at home. Kellmer Pringle argues that effective teachers can improve pupils' self-concept and morale, offer targeted support, and provide pupils with opportunities to work independently and to rediscover their commitment to and excitement about learning.

Menon (1980) in a study titled, "A Comparative Study of the Personality Characteristics of Overachievers and Underachievers of Higher Ability", showed correlation between intelligence and language achievement.

Butler - Por (1987) in his study, "Underachievers in School: Issues and Intervention" shows that some emotional and motivational factors can stem from the influence of family and family background.

- ⇒ Hostility in family relations.
- ⇒ Rejection of the value of that member of the family.
- ⇒ Excessive parental expectations.
- ⇒ Lack of support for emotional and social development and stability.
- ⇒ Lack of interest in the child'.

Gallagher (1991) studied "Personal Patterns of Underachievement" and contented that besides school or family influence, personal and psychological factors could also cause underachievement in students.

Fehrenbach (1993) in his study titled "Underachieving gifted students: Intervention programmes that work" contented that a student's personality

characteristics such as self-esteem, Perfectionism / procrastination, and ability or willingness to take risks also contributes to his or her underachievement.

Mc Clelland (1993) conducted a study entitled “Motivation and strategy factors in gifted underachievement”. The finding shows that underachievers may find it hard to focus attention and concentrate on task.

Sujatha (1994) conducted a study, “Certain psycho-social correlates of achievement in English of secondary school pupils of Kerala”, on a sample of 550 students in standard IX in 12 schools of Malappuram, Calicut and Kannur districts using stratified random sampling techniques and found that psycho-social correlates influence the high, average and low achievers.

Ford (1995) in her study, “A study of Achievement and Underachievement among Gifted, Potentially Gifted and Regular Educational Black Students”, found that 46 % of pupils were underachievers.

Rimm (1995) in a study on underachievement syndrome in gifted students found that researchers attribute gifted underachievement to several factors including family, school and peers.

Sharma (1995) in a study, “Aptitudes of Academic Achievers”, found that out of the 500 standard X pupils studied, 78 (15.6%) were underachievers and 85 (17%) were over achievers.

Grayson (1996) in the study, “Under and overachievement in first year”, found that underachieving freshmen who spent their time outside of class in

academically related extra curricular activities (e.g., attending non-required lectures, speaking with the professor outside of class) were more likely to see an increase in their grade point averages than those students who pursued socially related activities (e.g., clubs, sports, cultural events).

Ford, Albert & Howard (1998) in a study, “Setting ‘Motivation Traps’ for Underachieving Gifted Students”, found that by using students’ interests as a motivator, students could be “trapped” into learning important skills.

Ramesan (2000) carried out a study titled “Achievement Motivation, Attitude towards Malayalam and Some Social – Familial Variables Differing between High and Low Creative Underachievers in Malayalam among Secondary School Pupils of Kerala”. He found that out of the sample he studied 17.2 % were underachievers, 65.9% were normal achievers and 16.9 % were over achievers in Malayalam.

Reis & Mc Coach (2000) in their study found positive relationship between Asynchrony and underachievement. Asynchrony is a peculiar trait of giftedness, having negative connection with school outcomes.

A study was conducted by **Reis & Mc Coach** (2000), “The Underachievement of Gifted Students: What do We Know and where do we go?” The study showed that gifted underachievers share characteristics that fall into the following categories: personality characteristics, internal motivators, differential thinking skills/styles, maladaptive strategies, and positive

attributes. The number of characteristics present, and the magnitude of each, varies from student to student.

Bindu (2001) conducted a study titled “A Study of the association of certain affective variables with discrepant achievement in school subjects of secondary school pupils” and found that out of the 879 standard IX pupils, 125 (14.22) were underachievers and 93 (10.58%) were over achievers in Mathematics.

Lau, K.-L. & Chan, D.W. (2001) carried out a research titled “Motivational characteristics of underachievers in Hong Kong” with underachieving students in China. The finding reveals that underachievement involves a marked discrepancy between expected and actual performance.

Sousa (2002) carried out a study and found that a combination of factors both in the home and at school could cause underachievement.

Mc Coach & Siegle (2003) in a study, “Factors that differentiate underachieving gifted students from high-achieving gifted students”, found that gifted underachievers differed from gifted achievers in their levels of motivation. They were less motivated to be successful in school.

Ajawani & Rungta (2004) in their study, “Intelligence Variance of Under and Overachievers”, found that out of the 90 pupils studied, 14 were underachievers, 70 were normal achievers and 6 were over achievers.

Valentine, Du Bois & Cooper (2004) in their study “The relation between self-beliefs and academic achievement: A meta-analysis review” found self concept as both a cause and an effect of underachievement.

Nicemol Sebastian (2005) in the study, “Study of some psychological variables discriminating between under and over achievers in mathematics of secondary school pupils of Kerala” found extent of under, normal and over achievers in Mathematics among the secondary school pupils as 15%, 70% and 15% respectively.

Franzis (2006) conducted a study on the academic underachievement, its relationship with cognitive motivation, achievement motivation and Conscientious. The findings show that need for cognition and facilitating anxiety have more contribution in causing underachievement.

Preckel, Holling & Vock (2006) carried out a study entitled “Academic Underachievement: Relationship with Cognitive Motivation, Achievement Motivation, and Conscientiousness” and found that underachievers tended to have lower motivation and difficulties dealing with stressful situations and challenges.

Research by **Mroczek & Little** (2006) on personality studies contend negative self concepts can cause underachievement when parents do not acknowledge their children’s abilities or fail to support them.

Gnanaguru & Suresh Kumar (2008) examined the underachievement of the B. Ed students in relation to their home environment and attitude towards teaching and found that no significant relationship existed between underachievers' achievement and their attitude towards teaching.

Yuvan (2008) in a study examined the causes of male underachievers. The findings of the study show the state of mind, learning environment, interest, goal, effort, study habit, emotion and learning strategy as the main causes of underachievement, ranked in the order of importance.

Li (2011) studied the attribution tendencies of EFL learning underachievers. The findings show that underachievers ascribe their failure in English to effort, situation, ability and luck, ranked in the order of importance.

Tarun Deep Kaur (2016) conducted a study with the object of estimating the percentage of underachievers in the sample of standard X students across the city of Chandigarh. The study found that 20% of the pupils are underachievers.

Kapri, U.C. (2017) carried out a study of "underachievement in science in relation to permissive school environment of secondary school students in Haryana". Achievement Test in Science and Intelligence test were administered on a sample of 400 standard IX pupils in order to identify the extent of underachievers among them and to know the relation between underachievement in science and permissive school environment of secondary school pupils. The study found significant positive correlation between the

achievement in science and permissive school environment of secondary school pupils.

Table 1

Summary of the Studies on Underachievement

<i>Sl. No</i>	<i>Author</i>	<i>Finding</i>
1	Entwistle (1968)	Positive relationship between psychological variables and academic achievement.
2	Kellmer Pringle (1970)	High influence of teacher personality on learner self-concept.
3	Menon (1980)	Significant positive correlation between intelligence and language achievement
4	Butler - Por (1987)	Familial aspects influence children's emotional aspects.
5	Gallagher (1991)	Psychological factors can cause underachievement in students.
6	Fehrenbach (1993)	Student's personality characteristics can cause underachievement.
7	Mc Clelland (1993)	Underachievement derails concentration.
8	Sujatha (1994)	Psycho-social correlates influence the high, average and low achievers.
9	Ford (1995)	Percentage of underachievers is 46.
10	Rimm (1995)	Family, school and peers can cause underachievement.
11	Sharma (1995)	Over achievers : 17% Underachievers: 15.6%)

<i>Sl. No</i>	<i>Author</i>	<i>Finding</i>
12	Grayson (1996)	The achievement of underachievers engaged in co curricular activities is higher than those engaged in social activities.
13	Ford, Albert & Howard (1998)	There is positive association between students' interest and learning skills.
14	Reis & Mc Coach (2000)	Positive relationship between asynchrony and underachievement.
15	Ramesan (2000)	Underachievers: 17.2 % Normal achievers: 65.9% Over achievers: 16.9 %
16	Reis & Mc Coach (2000)	Characteristics gifted underachievers include personality characteristics, internal motivators and maladaptive strategies.
17	Bindu (2001)	Underachievers:14.22% Over achievers: 10.58%
18	Lau, K.-L. & Chan, D.W. (2001)	Underachievement involves discrepancy between expected and actual performance.
19	Sousa (2002)	Home and school factors could cause underachievement.
20	Mc Coach & Siegle (2003)	Gifted achievers have higher motivation.
21	Ajawani & Rungta (2004)	Underachievers:15.5%. Normal achievers:77.8%. Over achievers: 6.7 %
22	Valentine, Du Bois & Cooper (2004)	Self-concept is both a cause and an effect of underachievement
23	Sebastian, N. (2005)	Among the secondary school pupils : Underachievers - 15 % Normal achievers- 70% Over achievers - 15 %

<i>Sl. No</i>	<i>Author</i>	<i>Finding</i>
24	Franzis (2006)	Anxiety can cause underachievement.
25	Preckel, Holling & Vock (2006)	Underachievers have lower motivation.
26	Mroczek & Little (2006)	Negative self-concepts can cause underachievement.
27	Gnanaguru & Suresh Kumar (2008)	No significant relationship between underachievers' achievement and their attitude towards teaching.
28	Yuvan (2008)	State of mind, learning environment, interest, goal, effort, study habit, emotion and learning strategy are the main causes of underachievement.
29	Li (2011)	Underachievers ascribe their failure in English to effort, situation, ability and luck.
30	Tarun Deep Kaur (2016)	Extent of underachievers is 20%.
31	Kapri, U.C. (2017).	Significant positive correlation between underachievers' achievement in science and permissive school environment of secondary school pupils.

Section II

STUDIES RELATED TO ACHIEVEMENT MOTIVATION

Indrani (1985) carried out a study on the relationship between academic achievement and achievement motivation of standard IX pupils of Bangalore city and found high positive relationship.

Sontakey (1986) in the study, “A comparative study of personality factors and achievement motivation of high and low achievers in natural and biological sciences”, found that high achievers and low achievers did not differ significantly in achievement motivation.

Ayishabi (1987) in her study examined the relationship between achievement motivation and performance in Biology of secondary school pupils and found that achievement motivation could act as predictor of achievement in Biology only to a less extent.

The study conducted by **Reddy** (1990) reported that achievement motivation had no significant relationship with academic achievement.

Mishra (1991) conducted a comparative study of achievement motivation, scholastic achievement in relation to self-concept. The finding shows that there is significant positive correlation between achievement motivation and scholastic achievement.

Kaile & Kingra (1994) in their study found negative correlation between achievement motivation and academic achievement.

Kaur & Lekhi (1995) examined achievement motivation and study habit as correlates of academic achievement and found that they were positively and significantly correlated with academic achievement of pupils.

Unnikrishnan (1995) in his study that examined the effect of achievement motivation on achievement in Biology of standard XI pupils found significant positive correlation between achievement motivation and achievement in Biology.

Minnalkodi (1997) in a study examined the relationship between achievement motivation and achievement in Zoology. The findings reveal that significant positive relationship exists between ACHIEVEMENT Motivation and achievement in Zoology.

The study conducted by **Rao & Rao** (1997) entitled “Difference in Achievement Motivation between Professional and non-Professional College Students” showed positive relationship between achievement motivation and academic achievement of the students.

Yeh (1999) examined the relationship between achievement motivation and academic achievement and reported that a weak positive correlation was found between them.

Mumathas (2001) carried out a study focusing on certain psychological variables as predictors of achievement in Mathematics of secondary school pupils of Kerala. One of the findings of the study is that achievement motivation has significant positive relationship with achievement in Mathematics.

Jugal (2003) conducted a study on the association of achievement motivation with home environment and culture of adolescents. The findings show that achievement motivation is higher in urban adolescents than their rural counterparts.

Singh & Kaur (2003) carried out a study on achievement motivation and parental background. The findings show that significant positive correlation exists between achievement motivation and academic achievement. Qualification of parents has significant effect on pupils' achievement motivation.

Kaushik, Nirmala & Rani (2005) carried out a study on achievement motivation. The findings show that there is no significant difference between boys and girls in achievement motivation.

Nagarathanamma, B., & Rao, V. (2007) conducted a study titled "Achievement motivation and academic achievement of adolescent boys and girls". The study did not show any influence of achievement motivation on academic achievement of the pupils.

Acharya & Joshy (2009) carried out a study on achievement motivation and parental education. The findings show that parental education level has significant influence on the children's achievement motivation.

Alam (2009) in his study found that the correlation between achievement motivation and academic achievement is positive and significant.

Mahyuddin, Elias & Noordin (2009) in their study found significant but low correlation between achievement motivation and academic achievement of the students of higher education institutions.

Baker, Tarmizi, Mayhuddin, Elias, Luan & Ayub (2010) carried out a study with the object of examining the factors related to the student achievement such as attitude and achievement motivation. The results indicated negative low correlation between students' achievement motivation and their academic achievement.

Ali (2011) investigated the influence of motivation on academic achievement and found positive correlation.

Manjuvani & Anuradha (2011) in their study found significant difference between children of single parent and two-parent families in achievement motivation.

Sekhar & Devi (2012) in their study found significant difference between male and female students and between the science and arts group students in achievement motivation.

Veena & Shastri (2013) examined achievement motivation and found that no significant difference existed between high and low achievers.

Affum-Osei, Asante, Josphine, & Forkouch (2014) found in their study titled “Achievement motivation, academic self-concept, and academic achievement among high school students” positive but not significant correlation between achievement motivation and academic achievement.

Sandhu & Sukhdev Singh (2014) examined the relationship of achievement motivation and study habit with academic achievement of adolescents. The result shows that relationship of achievement motivation and study habit with academic achievement of adolescents is positive and significant.

Mukhtah Ahmed Wani (2015) in a study of Achievement Motivation found that girls ($M = 127.82$) have greater achievement motivation than boys ($M = 121.89$) and the government school pupils (125.59) than private school pupils (119.70).

Kumari (2015) carried out a study focusing on the relationship between achievement motivation and academic achievement of secondary school pupils of Allahabad city. A sample of 200 pupils was selected from the government and private schools. The result shows that achievement motivation has statistically significant relationship with academic achievement in the case of secondary school pupils.

Chauhan (2016) in his study found out no significant difference between boys and girls and between government and private school pupils in achievement motivation.

Table 2

Summary of the studies on Achievement Motivation

<i>Sl. No.</i>	<i>Author</i>	<i>Finding</i>
1	Indrani (1985)	High positive relationship between academic achievement and achievement motivation.
2	Sontakey (1986)	No significant difference between high achievers and low achievers in achievement motivation.
3	Ayishabi (1987)	Achievement motivation can act as a predictor of achievement in biology only to a less extent.
4	Reddy (1990)	No significant relationship between achievement motivation and academic achievement.
5	Mishra (1991)	Significant positive correlation between achievement motivation and scholastic achievement.
6	Kaile & Kingra (1994)	Negative correlation between achievement motivation and academic achievement.
7	Kaur & Lekhi (1995)	Significant positive correlation between achievement motivation and academic achievement.
8	Unnikrishnan (1995)	Significant positive correlation between achievement motivation and achievement in Biology of standard XI pupils.
9	Minnalkodi (1997)	Significant positive correlation between achievement motivation and achievement in zoology.

<i>Sl. No.</i>	<i>Author</i>	<i>Finding</i>
10	Rao & Rao (1997)	Positive correlation between achievement motivation and academic achievement.
11	Yeh (1999)	Weak positive correlation between achievement motivation and academic achievement.
12	Mumathas (2001)	Significant positive relationship between achievement motivation and achievement in mathematics.
13	Jugal (2003)	Achievement motivation is higher in urban adolescents than their rural counterparts.
14	Singh & Kaur (2003)	Significant positive correlation between achievement motivation and academic achievement.
15	Kaushik, Nirmala & Sunitha Rani (2005)	No significant difference between boys and girls in achievement motivation.
16	Nagarathanamma, B., & Thirumala Rao, V. (2007)	Achievement motivation has no influence on academic achievement.
17	Acharya & Joshy (2009)	Parental education level has significant influence on children's achievement motivation.
18	Alam (2009)	Significant positive correlation between achievement motivation and academic achievement.
19	Mahyuddin, Elias & Noordin (2009)	Significant positive correlation between achievement motivation and academic achievement.
20	Baker, K.A., Tarmizi, R.A., Mayhuddin, R., Elias, H., Luan, W.S. & Ayub, A.F. (2010)	Negative low correlation between achievement motivation and academic achievement.

<i>Sl. No.</i>	<i>Author</i>	<i>Finding</i>
21	Ali (2011)	Significant positive correlation between achievement motivation and academic achievement.
22	Manjuvani & Anuradha (2011)	Significant difference between children of single parent and two-parent families in achievement motivation.
23	Sekhar & Devi (2012)	Significant difference between male and female students and between the science and arts group students in achievement motivation.
24	Veena & Shastri (2013)	Significant difference between high and low achievers in achievement motivation.
25	Affum-Osei, Asante, Josphine, & Forkouch (2014)	Positive but not significant correlation between achievement motivation and academic achievement.
26	Sandhu & Sukhdev Singh (2014)	Significant positive correlation between achievement motivation and academic achievement of adolescents.
27	Mukhtah Ahmed Wani (2015)	Girls and government school pupils have greater achievement motivation than boys and private school pupils respectively.
28	Kumari (2015)	Significant positive correlation between achievement motivation and academic achievement.
29	Chauhan (2016)	No significant difference between boys and girls and between government and private school pupils in achievement motivation.

Section III

STUDIES RELATED TO ATTITUDE

Vora (1976) conducted a study, “A study of reading comprehension, rate of reading, reading achievement in the context of attitude towards reading”, and reported that attitude play a dominant role in reading comprehension.

Bhatt (1978) carried out a study, “A study of reading achievement in relation to sex, attitude and anxiety”, and found that girls showed more significant positive attitude towards reading and hence they could be better readers.

Goradon (1980) in a study titled “Attitude and motivations in second language achievement—a study of primary school students learning English in Belize, Central America” found that attitude and motivation have positive correlation with achievement.

Mickelson (1990) in a study found that whether attitude could be a significant predictor of academic achievement or not was dependent on a number of factors such as social class and ethnic back ground.

The study conducted by **Ramila & Smitha** (1991) on the influence of intelligence, socio-economic status, and attitude towards English on achievement in English found that attitude towards English in interaction with intelligence and socio- economic status separately did not influence the students’ achievement, but the interaction effect of intelligence, socio-economic status and attitude together towards English did influence students’ achievement in English.

Reynolds & Walberg (1992) assessed the relationship between attitude and achievement and found out significant positive correlation.

Zimmerman, Bandura, & Martinez – Pons (1992) in their study found significant positive correlation between students' attitude and academic achievement.

Pajares (1994) in the study entitled "Role of self-efficacy and self-concept beliefs in mathematical problem solving: A path analysis" found that attitude had direct effect on academic performance.

The study conducted by **Devi** (1995) entitled "Interaction effect of attitude towards English and home environment on achievement in English" found that attitude towards English had significant effect on achievement in English.

Ma & Kishor (1997) in a study that assessed the relationship between attitude towards Mathematics and achievement in Mathematics found that attitude was not necessarily a predictor of achievement, as it also depended on several factors like race and nature of the sample selection.

Papanastasiou (2000) in a study found positive correlation between students' attitude towards mathematics and achievement in mathematics.

Salta & Tzougraki (2004) in a study found that positive low correlation existed between attitude towards chemistry and achievement in chemistry.

Kan & Akbas (2006) carried out a study, the findings of which shows that pupils' attitude towards chemistry can cause a variance of 10% in their achievement in chemistry.

Xu (2008) in a study found positive correlation between attitude and achievement in learning a second language.

Lawrenz (2009) in a study of the 9th grade students in North America found that 19% of the variance in Physics achievement is the contribution of attitude towards physics, prior knowledge, and mathematics achievement.

Fakeye (2010) carried out a study on some personal correlates of academic achievement and found significant positive correlation between students' attitude and their achievement in English.

Hemmings & Kay (2010) in their study found that attitude towards Mathematics was significantly related to the amount of effort they made in studying Mathematics.

Kamariah, Rohani, Rahil, Habibah, Luan & Fauzi (2010) carried out a study with the object of examining the factors related to student achievement such as attitude and achievement motivation. The results indicated significant positive correlation between students' attitude towards learning and their academic achievement.

Dilek Cagirgan Gultnet (2012) did a study on the relationship between elementary school students' attitude towards mathematics and studying

mathematics. The findings show that significant difference exist between pupils from families of different income groups.

Li (2012) carried out a study and found out that attitude and self-efficacy could significantly predict effort for academic achievement and that effort failed to predict academic achievement.

Kingir & Aydemir (2012) in their study found attitude towards Physics and Chemistry had significant positive relationship with achievement in those subjects.

Ali & Awan (2013) in their study examined the relationship of attitude of secondary school pupils towards Science with achievement in physics, chemistry, biology and mathematics. The result shows that the relationship is positive and significant.

Gajalakshmi (2013) conducted a study on the high school students' attitude towards learning English. The findings of the study reveal that increase in classroom activities in the study of English enhances pupils' attitude towards English.

Mapunda (2013) in study found Attitude towards a language as an important factor in facilitating language learning.

Narmadha & Chamundeswari (2013) carried out a study of attitude towards science and academic achievement in science among students at secondary school level. The findings show that there is positive correlation between

attitude towards science and academic achievement in science and that, girls are significantly higher in attitude towards science.

Awodum (2014) in a study found out that 81% of the variance in Physics achievement is the contribution of attitude towards Physics, study habit and interest in Physics. The study also found out significant positive correlation between attitude towards Physics and achievement in Physics.

Sammit, Ujjwal & Bapi (2014) in their study found that attitude towards education and academic achievement had a very low negative correlation (-0.10). It was also found that no significant difference existed between boys and girls.

Vahedi & Yari (2014) in their study found that the correlation between attitude towards physics and achievement in physics was low (0.27), though positive.

Nyamubi (2016) investigated the students' attitudes and English language performance in secondary schools in Tanzania and the finding shows that attitude has significant positive correlation with performance in English.

Paulo, Adelinda, Antonio, Maria & Madaleno. (2017) carried out a study examining the relationship between attitude towards physics-chemistry and achievement in those subjects. The study found out significant and positive relationship between the variables of attitude and achievement with regard to physics and chemistry.

Suneetha (2018) carried out a study of attitude towards economics among the students of standard XI in schools under different types of management. The study found that gender of the pupils, type of the management of the pupils and parental occupation have significant influence on attitude towards learning economics.

Table No. 3

Summary of the studies on Attitude

<i>Sl. No.</i>	<i>Author</i>	<i>Finding</i>
1	Vora (1976)	Attitude play a dominant role in reading comprehension
2	Bhatt (1978)	Girls have more attitude towards reading and so are better readers.
3	Goradon (1980)	Attitude and motivation have positive correlation with achievement.
4	Mickelson (1990)	Attitude is a significant predictor of achievement.
5	Ramila,S. & Smitha (1991)	Attitude towards English did not influence the students' achievement, but the interaction effect of intelligence, socio-economic status and attitude towards English together did influence students' achievement in English.
6	Reynolds & Walberg (1992)	Significant positive correlation between attitude and achievement.
7	Zimmerman, Bandura, & Martinez – Pons (1992)	Significant positive correlation between attitude and achievement.

<i>Sl. No.</i>	<i>Author</i>	<i>Finding</i>
8	Pajares (1994)	Attitude had direct effect on academic performance.
9	Leena Devi (1995)	Attitude towards English has significant effect on achievement in English.
10	Ma & Kishor (1997)	Attitude was not necessarily a predictor of achievement in Mathematics.
11	Papanastasiou (2000)	Positive correlation between attitude towards mathematics and achievement in mathematics.
12	Salta & Tzougraki (2004)	Positive low correlation between attitude towards chemistry and achievement in chemistry.
13	Kan & Akbas (2006)	Contribution of pupils' attitude towards chemistry to the variance of 10% in their achievement in chemistry.
14	Xu (2008)	Positive correlation between attitude and achievement in learning a second language.
15	Lawrenz (2009)	Contribution of attitude towards physics, prior knowledge, and mathematics achievement to the variance of 19% in physics achievement.
16	Fakeye (2010)	Significant positive correlation between attitude towards English and achievement in English.
17	Hemmings & Kay (2010)	Significant positive correlation between attitude towards mathematics and the amount of effort spent for studying mathematics.
18	Kamariah A.B., Rohani T., Rahil M., Habibah E., Wong Su Luan & Ahmad Fauzi (2010)	Significant positive correlation between attitude towards learning and academic achievement.

<i>Sl. No.</i>	<i>Author</i>	<i>Finding</i>
19	Dilek Cagirgan Gultnet (2012)	Significant difference exists among pupils from families of different income levels with regard to achievement in mathematics.
20	Li (2012)	Attitude and self-efficacy could significantly predict effort for academic achievement and effort failed to predict academic achievement.
21	Kingir & Aydemir (2012)	Attitude towards Physics and Chemistry had significant positive relationship with achievement in those subjects.
22	Ali & Awan (2013)	Relationship of attitude of secondary school pupils towards Science with achievement in physics, chemistry, biology and mathematics is positive and significant.
23	Gajalakshmi (2013)	Increase in activities in the study of English enhances pupils' attitude towards English.
24	Mapunda (2013)	Attitude towards a language is an important factor in facilitating learning that language.
25	Narmadha & Chamundeswari (2013)	There is positive correlation between attitude towards science and academic achievement in Science and that, girls are significantly higher in attitude towards science.
26	Awodum (2014)	81% of the variance in physics achievement is the contribution of attitude towards physics, study habit and interest in physics.
27	Kumar Das Sammit, Halder Ujjwal & Mishra Bapi (2014)	Attitude towards education and academic achievement had a very low negative correlation (-0.10).
28	Vahedi & Yari (2014)	Correlation between attitude towards physics and achievement in physics was low (0.27), though positive.

<i>Sl. No.</i>	<i>Author</i>	<i>Finding</i>
29	Nyamubi (2016)	Attitude has significant positive correlation with performance in English
30	Paulo, Adelinda, Antonio, Maria & Madaleno. (2017)	Relationship of attitude with achievement in physics and chemistry is positive and significant.
31	Suneetha (2018)	Gender of the pupils, type of the management of the school and parental occupation have significant influence on attitude towards learning Economics.

Section IV

STUDIES RELATED TO STUDY HABIT

Abraham (1975) conducted a study, “Effect of intelligence and study habits on English achievement at secondary level”, and found positive correlation.

Grynkewich (1995) conducted a study entitled “A study of relationship between student learning styles and performance in introductory chemistry” and found that a statistically significant relationship existed between learning style and achievement.

Yadav, Ansari & Savanti (1999) in a study found out that concentration, method of study, planning and preparation for examination have significant positive relationship with academic performance of the pupils.

Anton & Angel (2004) in their study found that students with higher scores on socialised personality traits had better study habits.

Pazhanivel (2004) carried out a study entitled “A study of the impact of modular approach on achievement, study habits and attitudes of students in Tamil grammar at secondary level” indicated a significant relationship between achievement and study habits.

Sirohi (2004) revealed that underachievers showed deficiency in study habits.

Lakshminarayanan (2006) compared the achievers and non-achievers in the use of study skills. The findings show that achievers have higher level study skills.

Kumari (2007) carried out a study titled “A study of achievement in English of male and female high school students in relation to their personality adjustment and study habits” and found that study habits of female students were better than male students.

Chandvir (2009) carried out a study, “Frustration, self-concept, and study habits of adolescents in relation to their scholastics, caste and gender” and found a significant relationship between scholastic achievement and study habits of adolescents.

Moeri, Ahmad & Ghader. (2009) conducted a study, “Study of learning styles and their roles in the scholastic achievement of the students of Payame

Noor University”, and found that among students, those with visual learning style had the greatest scholastic achievement.

Kumar & Dixit (2011) carried out a study, “An investigation into the study habits and personality related to achievement in English and Hindi medium students”. The study revealed that study habit scores had direct and significant relation to scholastic achievement.

Jafri (2011) investigated the impact of family climate, mental health, study habit, and self-confidence on the academic achievement of senior secondary students. The findings show family climate, mental health, study habit, and self-confidence have significant positive relationship with the academic achievement.

Acharya (2012) carried out a study of the effect of study habits on academic achievement of tribal and non-tribal students at high school level. The findings show that study habits have significant effect on academic achievement of the tribal and non-tribal students.

Doss (2012) examined the relationship between the study habits and academic achievement of high school students. The result shows that the study habits of the day scholar are better than those of the hostellers.

Gupta & Kapoor (2012) carried out a study, “Impact of learning styles and study habits of high schools students on their scholastic achievement in English”. A sample of 300 students was selected from various schools located

in urban area, affiliated to Haryana Board of School Education of Haryana state, using multi-stage random sampling technique. The study revealed that scholastic achievement in English of good study habit students was better than that of the poor study habit students.

Ehtesham (2013) conducted a study and found that good study habit results in high academic achievement. The correlation between study habit and academic achievement is significantly positive.

Chand (2013) compared the study habits of students of government and private schools and found that significant difference did not exist between them.

Kumar (2013) in his study, “A study of academic achievement of school students in relation to their study habits, academic anxiety and academic motivation” found significant positive relationship between study habits and academic achievement of school students.

Mehnaz (2013) in a study found out significant positive correlation between time management skills and academic performance of pupils.

Saini (2013) carried out a study titled “A study of academic achievement of scheduled caste students of the secondary schools in relation to their study habits, home environment and school environment”. The findings show that there is no significant relationship between study habits and academic achievement of scheduled caste students of the secondary schools.

Nadeem, Puja & Bhat (2014) carried out a study and found out significant difference between Kashmiri and Ladakhi girls with regard to study habits.

Lawrence (2014) investigated the relationship between study habits and academic achievement of higher secondary school students. Sample consisted of 300 students selected from 13 higher secondary schools. The findings of the study show that there is no significant relationship between study habit and academic achievement of higher secondary school students. (t value 0.113 at 0.05 level). There is significant difference among the Government, Aided and Un-Aided higher secondary school students in the case of study habits. Significant difference is also seen between the day scholars and hostellers.

Siahi & Maiyo (2015) studied “The relationship between study habit and academic achievement of students” and found positive relationship of 0.66.

Khan. (2016) carried out a study entitled “Factors affecting study habits” conducted with the object of identifying the impact of gender difference and socio economic status on study habit. The findings show that gender has statistically significant effect on study habit. Effect of socio-economic status on study habit is not significant.

Chawdhury (2017) conducted a study entitled “Study habits and achievement of students in mathematics of secondary schools in the Tinsukia district of Assam” with the objective of identifying the study habits of students and their achievement in mathematics. The findings showed that both study habits and achievement of the pupils in mathematics are average. The findings also

showed that significant difference existed in the study habits of secondary school pupils with regard to the gender of the pupils, locale of the school and type of the management of the school. Significant correlation was found between students' study habit and their achievement in mathematics.

Uju & Paul. (2017) carried out a study entitled, "Study habit and its impact on senior secondary school students' academic performance in biology in the Federal Capital Territory of Abuja" on a sample of 1050 students. The findings show that there is significant positive correlation between study habit and academic performance of the students.

The review of literature related to the study habit shows the importance the researchers have given to this variable in the field of teaching and learning. Drastic changes have been taking place in the study habit of the pupils with the changes brought about by the passing of time in the educational and social walks of life. It convinces the investigator the need for a new study habit inventory with components representing the latest aspects taking place in the field of teaching and learning.

Table 4

Summary of the studies on Study Habit

<i>Sl. No</i>	<i>Author</i>	<i>Finding</i>
1	Mehdi (1965)	Study habit did not have significant contribution to the prediction of academic achievement.
2	Abraham (1975)	Effect of intelligence and study habits on English achievement at secondary level is positive.
3	Grynkewich (1995)	A statistically significant relationship existed between learning style and achievement.
4	Yadav, Ansari & Savanti (1999)	Concentration, method of study, planning and preparation for examination have significant positive relationship with academic performance of the pupils.
5	Anton & Angel (2004)	Students with higher scores on socialised personality traits had better study habits.
6	Pazhanivel (2004)	Significant relationship between achievement and study habits.
7	Sirohi (2004)	Underachievers showed deficiency in study habits.
8	Lakshminarayanan (2006)	Achievers have higher level study skills than non-achievers.
9	Kumari (2007)	Study habit of female students were better than that of male students at high school level.

<i>Sl. No.</i>	<i>Author</i>	<i>Finding</i>
10	Chandvir (2009)	Significant relationship between scholastic achievement and study habit of adolescents.
11	Moeri, Ahmad & Ghader. (2009)	The pupils with visual learning style had the greatest scholastic achievement.
12	Kumar & Dixit (2011)	Study habit scores had direct and significant relation to scholastic achievement.
13	Sadaf Jafri (2011)	Study habit has significant positive relationship with the academic achievement.
14	Acharya (2012)	Study habits have significant effect on academic achievement of the tribal and non-tribal students.
15	Doss (2012)	Study habits of the day scholar are better than those of the hostellers.
16	Madhu Gupta & Meenu Kapoor (2012)	Scholastic achievement in English of students having good study habit was better than that of those having poor study habit.
17	Anwar Ehtesham (2013)	The correlation between study habit and academic achievement is significantly positive.
18	Chand (2013)	There is no significant difference between students of government and private schools with regard to study habit.
19	Dinesh Kumar (2013)	There is significant positive relationship between study habits and academic achievement of school students

<i>Sl. No.</i>	<i>Author</i>	<i>Finding</i>
20	Kaushar Mehnaz (2013)	There is significant positive correlation between time management skills and academic performance of pupils
21	Monika Saini (2013)	There is no significant relationship between study habits and academic achievement of scheduled caste students of secondary schools.
22	Nadeem, Puja & Bhat (2014)	There is significant difference between Kashmiri and Ladakhi girls with regard to study habits.
23	Lawrence (2014)	There is no significant relationship between study habit and academic achievement of higher secondary school students.
24	Siahi & Maiyo (2015)	Significant positive relationship between study habit and academic achievement of students.
25	Khan, Z.N. (2016)	Gender has statistically significant effect on study habit.
26	Chawdhury (2017)	Significant correlation was found between students' study habit and their achievement in Mathematics.
27	Uju, F & Paul, A. (2017)	There is significant positive correlation between study habit and academic performance of the students.

CONCLUSION OF THE REVIEW

The researcher has gone through the literature related to the study and reviewed important concepts such as underachievement, achievement motivation, attitude towards English and other school subjects, and study habit.

The studies reviewed reveal that underachievement exists among students across regional and national borders. It was also found that adequate studies have not been carried out on underachievement in English. In all these contexts and situations, the review upholds the urgent need of initiating such a study. As an academic issue, underachievement is all pervasive across the academic arena, from the primary to the university level. As it is difficult to focus on all levels of education simultaneously, the investigator intends to proceed with the study focussing on secondary school pupils.

Besides investigating the underachievement in English, the effect of the select psychological variables such as achievement motivation and attitude towards English and social variable such as study habit need also be focused. With regard to the relationship between psycho-social variables and underachievement, the studies show mixed findings. The conflicting and inconclusive findings in this regard too necessitate a new study with core focus on the psycho-social correlates of underachievement in English among secondary school pupils.

As the review led through a treasure house of literature related to the area of underachievement and its psycho-social correlates, the investigator felt inadequacy of the existing tools in connection with dependent and independent variables as the students in the modern era have changed a lot following higher exposure in the more sophisticated world of ours. Development and standardisation of new tools for dependent variable achievement in English, independent variables achievement motivation, attitude towards English and study habit, with new components required for collecting the data from the pupils of the latest era are essential for a study, aiming at precise findings. The review of the literature related to the underachievement and its psycho-social correlates does emphasise the need for proceeding with present investigation.

CHAPTER III

METHODOLOGY

Variables of the Study

Tools

Sample

Identifying the Underachievers

Data Collection, Scoring and Consolidation

Statistical Techniques Used

METHODOLOGY

“Research being the process of arriving at dependable solutions to problems through planned and systematic collection, analysis and interpretation of data, the need for adopting the right procedure for carrying out a study is important. The methodology adopted enables an investigator to look at the amorphous data in a meaningful, statistical and orderly way.” (Mouley, 1963)

The chapter shows the methodology of the present study. It describes the following.

1. Variables of the study
2. Tools used
3. Sample
4. Data collection, Scoring and Consolidation
5. Statistical techniques used

VARIABLES OF THE STUDY

“Variables are the conditions or characteristics that the experimenter manipulates, controls or observes.” (Best, 1996).

The study focuses on the following variables.

Dependent Variable

“The dependent variables are the conditions or characteristics that appear, disappear, or change as the experimenter introduces, removes, or changes independent variables.” (Best, 1996).

In the present study, achievement of secondary school pupils in English is the dependent variable.

Independent Variable

“The independent variables are conditions or characteristics that the experimenter manipulates or controls in his or her attempt to ascertain their relationship to observed phenomena.” (Best, 1996).

The investigator has taken the following psychological and social variables as independent variables.

Psychological Variables

1. Achievement Motivation
2. Attitude towards English

Social Variable

1. Study Habit

TOOLS EMPLOYED

Tool is a means of collecting data from the sample. There are various types of data gathering tools which vary in the nature, design, administration and interpretation. Different investigations require different tools. If the investigator finds the existing tools inadequate for his purpose and investigation, he may modify the existing or develop his own tools. The tools employed in the present study are presented in brief in Table 5.

Table 5

Details of the Tools Used

Sl. No	Name of the tool used	Validity	Reliability
1	Achievement Test in English (Muhammed and Jamaluddeen, 2015)	Criterion related validity (0.76), Content validity and face validity	0.77 (Split Half)
2	Verbal Group Test of Intelligence (Kumar, Hameed & Prasanna, 1997)	Criterion related validity (0.66)	0.83 (Split Half)
3	Scale of Achievement Motivation, Muhammed & Jamaluddeen, 2015)	Criterion related validity (0.65)	0.8 (Test – retest)
4	Scale of Attitude towards English, Muhammed & Jamaluddeen, 2015)	Construct and face validity	0.66 (Test – retest)
5	Study Habit Inventory, Muhammed & Jamaluddeen, 2015)	Construct and face validity	0.78 (Test – retest)

The tools are described below with required details such as dimensions, construction aspects, administration points and standardisation procedures.

1. **Achievement Test in English** (Muhammed and Jamaluddeen, 2015)

To test the achievement of the standard IX pupils in English, an achievement test in English was developed and standardised by the investigator in consultation with the supervising teacher. It was prepared on the basis of the Taxonomy of Educational Objectives (Bloom, 1969). The objectives followed in the construction of the achievement test are knowledge, comprehension, application and synthesis.

The construction of an achievement test follows some steps. According to Stanelly (1962), “the four steps in the construction of an achievement test are planning, preparation, try out and finalisation”. The details of the procedures followed in the construction of the achievement test in English are given below.

Planning of the Test

The investigator analysed the course book of English language prepared by the SCERT, Kerala for the standard IX pupils, source book and many other books related and identified the language elements and areas to be focused while constructing the Achievement Test. The investigator consulted the

supervising teacher and some other experts in the field of teaching English as part of preparing the test.

Preparation of the Test

The test was prepared giving due weightage to the select categories of the cognitive domain of the Bloom's Taxonomy of Educational Objectives. Details are given below.

Weightage to Instructional Objectives

The weightage given to the categories under the instructional objectives is shown below in Table 6.

Table 6

Weightage to Instructional Objectives

Sl. No	Objectives	Score	Percentage
1	Knowledge	10	20
2	Comprehension	10	20
3	Application	25	50
4	Synthesis	5	10
	Total	50	100

Weightage to Content

The areas considered for the test and weightage given to each of them are presented below in Table 7.

Table 7

Weightage to Content

Sl. No	Content	Score	Percentage
1	Vocabulary	10	20
2	Grammar	25	50
3	Reading	10	20
4	Writing	5	10
	Total	50	100

Weightage to form of question

The test involves only objective type items with multiple choices in order to ensure more objectivity, coverage and easy scoring. In this test, each test item was given four responses, one of which being correct.

Blue Print of the Test

The blue print of the Achievement Test in English showing the weightage to instructional objectives and content is presented below in Table 8.

Table 8

Blue Print of Achievement Test in English

Content	Objectives				Total
	Knowledge	Comprehension	Application	Synthesis	
Vocabulary	10				10
Grammar			25		25
Reading		10			10
Writing				5	5
Total	10	10	25	5	50

Note: As all items are objective type, numbers in the cells are the same for score and number of items.

Construction of Items

The investigator analysed the English course book, source book and other materials related and constructed the test items following the blue print. The test focuses on linguistic materials included up to the fourth unit of the Course Book for Standard IX, considering the expected time of the administration of the test. After consulting the supervising teacher and some other experts in the field, it was decided to base the test on the areas related to vocabulary, grammar, reading and writing. The draft version of the test

contains 50 items in all. All are objective type questions. Time allotted is 40 minutes. The test includes four sections. They are detailed below.

Section A Vocabulary.

This section includes the items related to spelling, word formation and the use of appropriate words and phrases in situations.

Section B Grammar

This section contains items related to the use of article, use of a few, concord, tenses, question tag, preposition, not only but also, no sooner ...than, too ...to, degrees of comparison, passive voice and indirect speech.

Sections C Reading

This section includes a passage and ten questions to test the pupils' reading comprehension.

Section D Writing.

This section consists of items related to arranging sentences in proper order and sequence.

Pilot Administration of the Test

The investigator administered the test as pilot on a set of 40 ninth standard pupils in order to identify the administration related aspects of the

test such as time the pupils take to complete the test, and ambiguities the test items may cause. Following the pilot administration of the test, some test items were modified by way of rewording and restructuring. The time required was fixed as 40 minutes.

Try out and Item Analysis

The draft test was administered on a sample of 385 standard IX pupils and the response sheets were scored on the basis of the scoring key prepared. After deleting incomplete ones, 370 response sheets were selected. Item analysis was done using the formula propounded by Ebel (1972) and found out the difficulty index and discriminating power. For this purpose, the scores obtained by the pupils were arranged in descending order and the highest 27% (100) and the lowest 27% (100) pupils were selected to form the upper and lower groups respectively.

Difficulty index and discriminating power were calculated using the following formula.

$$\text{Difficulty Index} \quad : \quad \frac{U+L}{2N}$$

$$\text{Discriminating Power} \quad : \quad \frac{U-L}{N}$$

Where

U : The number of correct response in the Upper Group

L : The number of correct response in the Lower Group

N : The number of pupils in each group.

Difficulty Index and Discriminating Power of each item in the Achievement Test are presented in Table 9.

Table 9

Difficulty Index and Discriminating Power of the Items in the Achievement Test in English

Sl. No	Dif. Index	Dis. Power	Remarks	Sl. No	Dif. Index	Dis. Power	Remarks
1	0.389	0.111		2	0.315	0.482	Selected
3	0.482	0.444	Selected	4	0.537	0.555	Selected
5	0.222	0.222		6	0.259	0.370	
7	0.593	0.519	Selected	8	0.444	0.592	Selected
9	0.463	0.704	Selected	10	0.407	0.518	Selected
11	0.222	-0.148		12	0.333	0.444	Selected
13	0.315	0.407	Selected	14	0.259	-0.148	
15	0.611	0.704	Selected	16	0.537	0.482	Selected
17	0.185	0.148		18	0.259	0.148	
19	0.019	0.037		20	0.278	-0.185	

Sl. No	Dif. Index	Dis. Power	Remarks	Sl. No	Dif. Index	Dis. Power	Remarks
21	0.130	-0.185		22	0.370	0.593	Selected
23	0.482	0.741	Selected	24	0.463	0.407	Selected
25	0.241	0.259		26	0.352	0.407	Selected
27	0.722	0.408	Selected	28	0.574	0.556	Selected
29	0.056	0.111		30	0.5556	0.741	Selected
31	0.222	0.148		32	0.5	0.407	Selected
33	0.593	0.444	Selected	34	0.315	0.333	Selected
35	0.148	0.222		36	0.648	0.556	Selected
37	0.630	0.667	Selected	38	0.482	0.370	Selected
39	0.111	-0.148		40	0.093	-0.111	
41	0.056	-0.037		42	0.074	0	
43	0.037	-0.074		44	0.056	-0.037	
45	0.056	-0.111		46	0.407	0.593	Selected
47	0.574	0.556	Selected	48	0.463	0.778	Selected
49	0.333	0.370	Selected	50	0.241	0.259	

Finalisation of the Test

The items having difficulty index and discriminating power between 0.3 and 0.8 were selected for the final test. The final test consisted of 28 items.

Administration and Scoring Procedure of the Achievement Test in English

Pupils were given required directions before and while administering the test as and where necessary. They were directed to read the instructions well before marking their responses in the response sheet provided.

The final test consists of 28 items. All items are in the objective type with four responses, of which one being correct. Each correct response was given one score and incorrect ones, zero score. The sum of the scores of all the items is treated as the achievement of the pupil in English. Maximum score is 28 and minimum is zero.

Validity

The Achievement Test in English was constructed with sufficient coverage of the content area and required weightage to the instructional objectives. The items were evolved and selected by considering the theoretical aspects of the English language learning, teaching and test construction. Thus the content validity of the test was ensured.

The items were prepared by focusing on the selected topics of the English Course Book prescribed for the standard IX pupils. Items of general

nature were also included. It was confirmed by the experts in the field that the test appeared to measure the achievement in English of the standard IX pupils. So the test has face validity.

Criterion related validity of the test was found out by correlating the scores of 41 pupils in the final test with that of the school achievement of the same pupils in English in the second terminal examination. The validity coefficient obtained is 0.76.

Reliability

The investigator found out the reliability of the test by using the Split-half Method. For this purpose, the achievement test was administered on a representative sample of 40 ninth standard pupils and the scores of one half of the test were correlated with those of the other half. Pearson's Product Moment Correlation formula was used.

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n(\sum x^2) - (\sum x)^2][n(\sum y^2) - (\sum y)^2]}}$$

Reliability coefficient for the total test was found by using the following the formula.

$$\frac{2 \times \text{Reliability for half test}}{1 + \text{Reliability for half test}}$$

The obtained coefficient is 0.77. It implies that the test is highly reliable. Thus it is clear that the Achievement Test in English, developed by the

investigator is a highly valid and reliable tool to measure the achievement in English of standard IX pupils.

Copies of the draft version, scoring key, Question wise Analysis, final version, response sheet and scoring key of the test are attached as Appendices I, II, III, IV, V and VI respectively.

2. Verbal Group Test of Intelligence

This is a standardised test of intelligence (Verbal) developed by Sudheesh Kumar, Hameed and Prasanna (1997) to measure the general intelligence 'g' of secondary school pupils of Kerala. This test consists of five subsets, viz., Verbal Analogy, Verbal Classification, Numerical Reasoning, Verbal Reasoning and Comprehension. The test can be answered within an hour for the pupils of the age group of 10 – 15 years.

Validity

In the construction of the present test, the investigator studied the available group test of intelligence and reviewed the available literature dealing with the measurement of verbal intelligence. For establishing the content validity of the Verbal Group Test of Intelligence, the investigator subjected the test items for experts' evaluation and found that each item in the Verbal Group Test of Intelligence was a sampling of the significant concepts which the test intended to measure. The components of the Verbal Group Test of Intelligence were adopted from well established tests of intelligence

(Verbal) which have high factor loadings. Thus the content validity of the Verbal Group Test of Intelligence was established.

The validity of the Verbal Group Test of Intelligence was again established using criterion related techniques. Achievements in Social Science (School mark) of 50 students studying in standard VII were randomly selected and the Verbal Group Test of Intelligence was administered upon them. The two sets of scores were correlated using Pearson's Product Moment Method (Garret, 1981). High internal validity is ensured through item analysis. The validity coefficient thus obtained (for sub tests and total) are presented in Table 10.

Table 10

Validity Co efficient Obtained for Verbal Group Test of Intelligence

(Sub test and total wise)

Sl. No	Subtests of VGTI	Obtained 'r'
1	Verbal Analogy	0.5498
2	Verbal Classification	0.5436
3	Numerical Reasoning	0.5249
4	Verbal Reasoning	0.4041
5	Comprehension	0.4606
	Intelligence - Total	0.6557

P<0.01

Reliability

Reliability of the Verbal Group Test of Intelligence was established using the split half method. For this purpose, the Verbal Group Test of Intelligence was administered on a representative sample of 50 students.

Items of the Verbal Group Test of Intelligence were split into two equal halves in such a way that the scores of the 10 items in each sub test (Total 50) form the first half and the scores of the remaining 10 items in each sub test form the second half (Total 50). The two sets of scores were used to find out the reliability coefficient using Pearson's Product Moment Method (Garret, 1981).

From the correlation of the two half tests, the reliability coefficient of the whole test was estimated using the Spearman Brown Prophecy Formula (Garret, 1981). The obtained reliability coefficients correlated using Spearman Brown Prophecy Formula for the five sub tests and the total sample are given in Table 11.

Table 11

Reliability Co efficient obtained for Verbal Group Test of Intelligence

(Sub test and Total Test)

Sl. No	Sub tests	Obtained 'r'
1	Verbal Analogy	0.6636
2	Verbal Classification	0.5469
3	Numerical Reasoning	0.7214
4	Verbal Reasoning	0.6328
5	Comprehension	0.4700
	Intelligence - Total	0.8283

P < 0.01

The validity and reliability coefficients of the test indicate that the test is a valid and reliable one. The internal structure of the test was also examined by correlating the component wise score with total score. The internal correlation matrix is presented in Table 12.

Table 12

Inter correlation of the Components of the Verbal Group Test of Intelligence with Total Score

Sl. No	Components	Verbal Analogy	Verbal Classification	Numerical Reasoning	Verbal Reasoning	Comprehension	Intelligence Total
1	Verbal Analogy	(--)	0.6209	0.4177	0.433	0.3451	0.7623
2	Verbal Classification		(--)	0.4203	0.4129	0.3954	0.7692
3	Numerical Reasoning			(--)	0.4653	0.4652	0.7673
4	Verbal Reasoning				(--)	0.4079	0.7171
5	Comprehension					(--)	0.6896

P<0.01

The validity and reliability of the test show that the test has acceptable psychometric qualities to measure the verbal intelligence of the sample.

Scoring

For each correct answer 'one score' is given and no score is given to wrong answers. A composite score attained for all the five sub tests is treated as the subject's score of verbal intelligence.

The English and Malayalam versions of the test, response sheet and scoring key are given as Appendices VII, VIII, IX and X respectively.

3. Scale of Achievement Motivation (Muhammed and Jamaluddeen, 2015)

The scale of Achievement Motivation was developed and standardised by the investigator under the guidance of the supervising teacher.

As part of developing the scale, the investigator studied the literature related to the construction of the scale of Achievement Motivation in detail. Atkinson and Feather (1966) stated, "Achievement motivation is a combination of two variables, i.e., tendency to approach success and tendency to avoid failure." Bigge and Hunt (1980) define achievement motivation as the drive to work with diligence and vitality, to constantly steer towards targets, to obtain dominance in challenging and difficult tasks and to create sense of achievement as a result. This definition shows three components of achievement motivation, i.e., stimulation of personal potentials, constant attempts with drive and causing of sense of achievement. Helmreich and Spence (1978) consolidated these theories of achievement motivation and identified its elements as mastery of needs, work orientation, competition and personal unconcern.

Some scales of Achievement Motivation were specifically analysed. The Kerala Scale of Achievement Motivation (Nair, 1980) focuses as components on the ways adopted for achieving the goal, opportunities for doing things extra ordinary, leadership aspects of the pupils, parental attitude

towards the pupils' achievement, pupils' view of the achievement of others, pupils' valuing of efforts, developing new proposals etc. The Cassidy and Lynn Achievement Motivation Questionnaire (1989) focuses on seven components, namely, work ethics, pursuit of excellence, status aspiration, mastery, competitiveness, acquisitiveness and dominance.

On the basis of these focuses and studies, the investigator decided to develop a new scale of Achievement Motivation based on sixteen components so as to make better measurement of the Achievement Motivation of the Secondary School pupils of Kerala. The components the scale focuses on are given below with descriptions and sample test items.

1. Extra preparation

It is the extra preparation made by the learners to avoid the possibility of failure. Better preparation to compensate for fear of failure at a task.

Example: I will continue my preparation for the examination, even if I am thorough with the curricular subjects.

2. Competitiveness

It is the desire to be better than others in accomplishing a task.

It is the desire to be winner.

Example: I like to be the top scorer in the class.

3. Confidence

It implies the confidence in attaining success by overcoming the challenges, if any. The confidence emerges from the

learners' faith in their knowledge and ability and not in luck or faith.

Example: Whichever be the curriculum, I would be able to score high mark.

4. Dominance

It is the tendency of the pupils to influence others in the group and to lead them.

Example: I influence the members in my group through my opinions and suggestions.

5. Interest to learn

It implies the interest and willingness of the learners to learn new things and enhance their knowledge.

Example: Additional tuition class is a burden for regularly school going students.

6. Engagement

It implies the tendency of the pupils to remain engaged in their studies. It indicates preference for work to idleness.

Example: I feel bored when I am without any work.

7. Flexibility

It shows the willingness of the pupils to accept changes and to be open minded.

Example: I am reluctant to change the view once I expressed.

8. Goal Setting

It indicates the tendency of the pupils to set higher goals and targets and make plan of work to achieve them within a fixed time limit.

Example: I procrastinate doing works, most often.

9. Independence

It is the tendency of the pupils to study independently and to take decision independently.

Example: I become anxious when a decision is to be taken.

10. Initiative

It is the ability of the individuals to take first step in an endeavour in a way that encourages others to work.

Example: I would adopt new strategies in learning which others may follow later.

11. Internality

It indicates the belief of the individuals that performance is the result of one's own attempt.

Example: Hard work is the back bone of success in any field.

12. Persistence

It indicates the tendency of the pupils to continue their studies and efforts with full concentration over long period of time with the aim of attaining their goal.

Example: I feel happy when engaging in my studies for a long period of time.

13. Taking up challenges

It shows the tendency of the individuals to take up challenging tasks.

Example: My enthusiasm increases when I face difficulty.

14. Satisfaction in performance

It indicates one's satisfaction in his performance and progress.

Example: I get satisfaction when I correctly answer a question asked by the teacher in the class.

15. Pursuit of excellence

It indicates the tendency of the pupils to follow the ways of excellent performance.

Example: Even after completing a task, I will continue to work for improving it further.

16. Status aspiration

It indicates the learners' desire to go high in his profession and thus achieve high status in the society.

Example: I do not like to be a person highly respected by others.

The scale consists of 50 test items. Positive and negative items are 25 each. It follows three – point scale. Scoring scheme of the scale was to assign scores 2, 1, 0 for responses for 'True', 'Undecided', and 'False' respectively, in the case of positive statements. The scoring was in the reverse order in the case of negative statements. Here the score was 0, 1, 2 for the responses 'True', 'Undecided' and 'False' respectively.

The draft scale was administered on a sample of 385 pupils of Standard IX selected from the districts of Thrissur, Palakkada, Malappuram, Wayanad and Kozhikode following the Stratified Random Sampling technique. After deleting incomplete ones, 370 response sheets were selected.

The scale was standardised by doing item analysis on the basis of the Critical Ratio of the two –tailed ‘t’ test calculated for each statement, with the objective of discriminating pupils having high and low levels of achievement motivation. The discriminating power of each item was found by following the procedure suggested by Edward (1969). The response sheets of 370 pupils were arranged in the ascending order of the scores obtained by the pupils. The pupils of top 27 % scores (100 pupils) and of lowest 27% (100 pupils) were taken and upper and lower groups were formed respectively. Then the two-tailed test of significance of difference between the mean scores of the upper and lower groups was used to find out the discriminating power. The ‘t’ value of the scores of each item was found by using the following formula (Edwards, 1957).

$$t = \frac{\bar{X}_H - \bar{X}_L}{\frac{\sqrt{\sum(X_H - \bar{X}_H)^2 + \sum(X_L - \bar{X}_L)^2}}{n(n-1)}}$$

Where

$$\sum(X_H - \bar{X}_H)^2 = \sum X_H^2 - \frac{(\sum X_H)^2}{n}$$

and $\sum(X_L - \bar{X}_L)^2 = \sum X_L^2 - \frac{(\sum X_L)^2}{n}$

- $\bar{X}H$ = Mean score on a given item for the high group
- $\bar{X}L$ = Mean score on a given item for the low group
- XH = Score on a given item for the high group
- XL = Score on a given item for the low group
- n = Number of subjects in the high and low group

The ‘t’ values of each item in the draft scale of Achievement Motivation are given in Table 13

Table 13

The ‘t’ values of each item in the draft scale of Achievement Motivation

Item No.	‘t’ Value	Remarks	Item No.	‘t’ Value	Remarks
1	1.109		2	2.645	Selected
3	3.661	Selected	4	0.798	
5	6.034	Selected	6	5.069	Selected
7	2.323	Selected	8	1.971	Selected
9	4.065	Selected	10	3.267	Selected
11	0.225		12	1.346	
13	4.320	Selected	14	5.146	Selected
15	1.716		16	1.863	
17	4.270	Selected	18	1.518	

Item No.	't' Value	Remarks	Item No.	't' Value	Remarks
19	3.835	Selected	20	5.302	Selected
21	2.141	Selected	22	0	
23	5.156	Selected	24	2.143	Selected
25	0.889		26.	2.648	Selected
27.	6.021	Selected	28.	6.831	Selected
29.	0.913		30.	1.592	
31.	0.434		32.	2.278	Selected
33.	3.255	Selected	34.	3.983	Selected
35.	2.693	Selected	36.	1.662	
37.	1.762		38.	5.726	Selected
39.	3.519	Selected	40.	0.444	
41.	3.070	Selected	42.	0.962	
43.	0.309		44.	1.388	
45.	4.112	Selected	46.	4.467	Selected
47.	3.232	Selected	48.	3.704	Selected
49.	0.419		50.	2.077	Selected

The items with 't' value greater than 1.96 were selected to be included in the final Scale of Achievement Motivation. Thus the final scale consists of 31 items, with 13 positive and 18 negative statements.

The copies of the draft English and Malayalam versions, Final English and Malayalam versions and response sheet of the Scale of Achievement Motivation are attached as Appendices XI, XII, XIII, XIV and XV respectively.

Validity

In the construction of the scale, selection of dimensions, nature of designing, preparation of item statements were all done minutely following the criteria with strong theoretical support. Thus the scale is rightly assumed to have construct validity. The test was delivered for the perusal of some experts in the field and was confirmed that the test appeared to measure the achievement motivation of the secondary school pupils. So the test has face validity. Criterion related validity for the scale was also found by correlating the scores with scores of Scale of Achievement Motivation (Thulasidharan & Manikandavijayan (2017). The coefficient of correlation obtained is 0.65, which is sufficiently high indicating that the scale is a valid one to measure the Achievement Motivation of the standard IX pupils.

Reliability

The reliability of the scale was estimated by the test - retest method with an interval of two weeks. The correlation coefficient was 0.8 (N: 40). It

shows that the scale is reasonably reliable to measure the Achievement Motivation of secondary school pupils.

4. Scale of Attitude towards English (Muhammed and Jamaluddeen, 2015)

The scale of Attitude towards English was developed and standardised by the investigator in consultation with the supervising teacher. It was designed following the Likert type three – point scale with descriptions ‘Agree’, ‘Undecided’ and ‘Disagree’.

On the basis of the review of the literature related to the construction of attitude scale and analysis of several similar scales, the investigator identified the dimensions to be focused in the construction of the Scale of Attitude towards English, so as to measure the extent of the secondary pupils’ favourableness, unfavourableness and neutrality towards English. Different aspects of attitude towards English were considered. The dimensions are the following.

1. Values of English.
Example: Knowledge of English is essential for international communication.
2. Attitude towards English culture.
Example: English culture is a progressive culture.
3. Exposure to English language.
Example: I like to be among English speaking people.
4. Attitude towards teaching of English.

Example: I do not appreciate teachers teaching me English.

5. Attainment in English

Example : My present standard in English is not satisfactory.

On the basis of the dimensions, the investigator prepared item statements. The draft scale was formed after initiating necessary modification following the suggestions of the supervising teacher and some other experts in the field. The draft scale included 34 items in all. Positive and negative items were equal in number.

Example for the statements:

Positive: Ability to speak English enhances our social status.

Negative: The importance given to English in our country is excessive.

The scores were fixed as 2 for the response 'Agree', 1 for the response 'Undecided' and zero for the response 'Disagree' in the case of positive statements. For negative statements, the scoring scheme is reversed, i.e. zero for the response 'Agree', 1 for the response 'Undecided' and 2 for the response 'Disagree'. The sum of the scores of all the statements forms the measure of the attitude of the respondents towards English.

The draft scale was administered on a sample of 385 pupils of Standard IX selected from the districts of Thrissur, Palakkad, Malappuram, Wayanad

and Kozhikode following the Stratified Random Sampling technique. After deleting incomplete ones, 370 response sheets were selected.

The scale was standardised by doing item analysis on the basis of the Critical Ratio of the two –tailed ‘t’ test calculated for each statement, with the objective of discriminating pupils having high and low levels of attitude towards English. The discriminating power of each item was found by following the procedure suggested by Edward (1969). The response sheets of 370 pupils were arranged in the ascending order of the scores obtained by the pupils. The pupils of top 27 % scores (100 pupils) and of lowest 27% (100 pupils) were taken and upper and lower groups were formed respectively. Then the two-tailed test of significance of difference between the mean scores of the upper and lower groups was used to find out the discriminating power. The ‘t’ value of the scores of each item was found by using the following formula (Edwards, 1957).

$$t = \frac{\bar{X}_H - \bar{X}_L}{\frac{\sqrt{\sum(X_H - \bar{X}_H)^2 + \sum(X_L - \bar{X}_L)^2}}{n(n-1)}}$$

Where

$$\sum(X_H - \bar{X}_H)^2 = \sum X_H^2 - \frac{(\sum X_H)^2}{n}$$

$$\text{and } \sum(X_L - \bar{X}_L)^2 = \sum X_L^2 - \frac{(\sum X_L)^2}{n}$$

\bar{X}_H = Mean score on a given item for the high group

\bar{X}_L	=	Mean score on a given item for the low group
XH	=	Score on a given item for the high group
XL	=	Score on a given item for the low group
n	=	Number of subjects in the high and low group

The 't' values of each item in the draft scale of Attitude towards English are given in Table 14.

Table 14

The 't' values of each item in the draft scale of Attitude towards English

Item No.	't' Value	Remarks	Item No.	't' Value	Remarks
1.	2.563	Selected	2	1.660	
3	1.966	Selected	4	3.156	Selected
5	0.681		6	1.920	
7	1.167		8	2.376	Selected
9	0.184		10	1.939	
11	1.777		12	2.079	Selected
13	0.979		14	2.420	Selected
15	3.342	Selected	16	2.752	Selected
17	9.864	Selected	18.	8.880	Selected

Item No.	't' Value	Remarks	Item No.	't' Value	Remarks
19.	1.898		20.	6.767	Selected
21.	4.127	Selected	22.	2.420	Selected
23.	4.662	Selected	24.	2.226	Selected
25.	6.464	Selected	26.	3.098	Selected
27.	3.242	Selected	28.	2.176	
29.	3.558	Selected	30.	3.236	Selected
31.	5.148	Selected	32.	5.164	Selected
33.	5.041	Selected	34.	2.965	Selected

The items with 't' value of greater than 1.96 were selected for including in the final scale of Attitude towards English. Thus the final test consists of 24 items, with equal number of positive and negative statements.

The copies of the draft English and Malayalam, final English and Malayalam versions, and response sheets of the scale of Attitude towards English are attached as Appendices XVI, XVII, XVIII, XIX and XX respectively.

Validity

The construct validity of the scale was established by the researcher. The mode of selecting the dimensions, variety of the components accommodated, criteria followed in writing the statements, and the method followed in the construction of the scale all show that the scale has construct validity. Besides, the researcher has sought suggestions from subject experts for criticism and feedback. In the light of the suggestions received from the subject experts, the scale was modified and the researcher thus could establish face validity.

Reliability

The reliability of the scale was estimated by the test - retest method with an interval of two weeks. The correlation coefficient was 0.66 (N: 40). It shows that the scale is reasonably reliable to measure the attitude of secondary school pupils towards English.

5. Study Habit Inventory (Muhammed and Jamaluddeen, 2015)

The Study Habit Inventory was developed and standardised by the investigator under the guidance of the supervising teacher.

As part of developing the inventory, the investigator studied the literature related to the construction of the Study Habit Inventory in detail. Some Study Habit Inventories were specifically analysed.

The Study Habit Inventory (Mukhopadhyaya & Sansanwal, 1985) is a five point scale focusing on eight kinds of study behaviours, namely,

comprehension, concentration, task orientation, study sets, interaction, drilling, supports, recording and language. The Study Habit Inventory of Palsane & Sharma (2003) considered eight dimensions. They are time budgeting, physical conditions for study, reading ability, taking notes, factors in learning motivation, memory, taking examinations and health.

The Study Habit Inventory developed by Patel (1975) is based on the factors of home environment and planning, reading and note taking, planning of subject, ethics of concentration, preparation for examination, general habit and attitude, and school environment. The Study Habit Inventory designed by Malleson, Penfold and Sawiris (1968) focuses on study methods and attitudes. The Brown – Holtzman Survey of Study Habits and Attitudes Inventory (1953) is based on two scales each for study habit and attitude. The two scales based for study habits are the following.

1. Work methods: Use of effective study procedures, skill and efficiency in doing academic assignments.
2. Delay avoidance: Promptness in completing assignments and ability to resist distractions.

Study habit includes home environment and school environment which in turn comprises interactions with friends, parents and others, social status of parents, social circles etc. So, its focus on social dimensions is very pertinent and evident.

On the basis of analysing these studies, the investigator decided to develop a new Study Habit Inventory based on twelve components so as to make better measurement of the study habits of the secondary school pupils of Kerala. The components the Inventory focuses on with descriptions and sample test items are given below.

1 Home Environment

Example: My study place is in the central gathering area of my house.

2. School Environment

Example: I feel strain due to the improper height of the bench and desk I use in the classroom.

3. Availability of Resources and Academic Support

Example: I possess the required study materials.

4. Motivation

Example: It is my desire to be the top scorer of the college in the coming examination.

5. Memory

Example: Soon after reading, I forget the meaning of what I read.

6. Concentration

Example: I can continue study for at least half an hour without any break.

7. Recording

Example: I do not mark or note down the important areas while reading.

8. Practice

Example: I do exercises and .home assignments carefully.

9. Preparing for the examination

Example: I would not make use of any strategy to improve my examination performance.

10. Posture

Example: While studying, I sit keeping my feet on the floor or on a foot rest.

11. Planning

Example: I properly order in advance the subjects and lessons to be learned.

12. Time budgeting

Example: I have a time table for study.

On the basis of the dimensions, the investigator prepared item statements. The draft scale was formed after initiating necessary modification following the suggestions of the supervising teacher and some other experts in the field. The draft scale included 52 items in all. Positive and negative items were equal in number.

The scores were fixed as 1 for the response 'A' (True in my case), and zero for the response 'B' (Not true in my case) in the case of positive statements. For a negative statement the scoring scheme was reversed, i.e. zero for the response 'A', and 1 for the response 'B'. The sum of the scores of all the statements forms the measure of the study habit of the pupil.

The draft scale was administered on a sample of 385 pupils of Standard IX selected from the districts of Thrissur, Palakkad, Malappuram, Wayanad and Kozhikode following the Stratified Random Sampling technique. After deleting incomplete ones, 370 response sheets were selected.

The scale was standardised by doing item analysis on the basis of the Critical Ratio of the two –tailed 't' test calculated for each statement, with the objective of discriminating pupils having high and low levels of study habit. The discriminating power of each item was found by following the procedure suggested by Edward (1969). The response sheets of 370 pupils were arranged in the ascending order of the scores obtained by the pupils. The pupils of top 27 % scores (100 pupils) and of lowest 27% (100 pupils) were taken and upper and lower groups were formed respectively. Then the two-tailed test of significance of difference between the mean scores of the upper and lower groups was used to find out the discriminating power. The 't' value of the scores of each item was found by using the following formula (Edwards, 1957).

$$t = \frac{\bar{X}_H - \bar{X}_L}{\frac{\sqrt{\sum(X_H - \bar{X}_H)^2 + \sum(X_L - \bar{X}_L)^2}}{n(n-1)}}$$

Where

$$\sum(X_H - \bar{X}_H)^2 = \sum X_H^2 - \frac{(\sum X_H)^2}{n}$$

$$\text{and } \sum(X_L - \bar{X}_L)^2 = \sum X_L^2 - \frac{(\sum X_L)^2}{n}$$

- \bar{X}_H = Mean score on a given item for the high group
 \bar{X}_L = Mean score on a given item for the low group
 X_H = Score on a given item for the high group
 X_L = Score on a given item for the low group
 n = Number of subjects in the high and low group

The 't' values of each item in the draft version of the Study Habit Inventory are given in Table 15.

Table 15

The 't' values of items in the draft version of the Study Habit Inventory

Item No.	't' Value	Remarks	Item No.	't' Value	Remarks
1	0		2	0.966	
3	4.310	Selected	4	0	
5	1.539		6	0.345	
7	0.962		8	2.046	Selected
9	2.339	Selected	10	2.071	Selected
11	2.046	Selected	12	2.623	Selected
13	0.813		14	2.285	Selected
15	3.106	Selected	16	4.636	Selected
17	2.787	Selected	18	2.208	Selected
19	3.866	Selected	20	2.524	Selected
21	3.452	Selected	22	1.683	
23	0.547		24	0.962	
25	1.780		26	2.937	Selected

Item No.	't' Value	Remarks	Item No.	't' Value	Remarks
27.	2.339	Selected	28.	2.339	Selected
29.	3.469	Selected	30.	1.539	
31.	1.190		32.	6.407	Selected
33.	6.407	Selected	34.	3.469	Selected
35.	1.388		36.	1.990	Selected
37.	3.191	Selected	38.	5.178	Selected
39.	6.407	Selected	40.	3.137	Selected
41.	2.903	Selected	42.	3.763	Selected
43.	5.245	Selected	44.	2.574	Selected
45.	0.621		46.	3.866	Selected
47.	1.539		48.	3.469	Selected
49.	1.683		50.	9.179	Selected
51.	4.423	Selected	52.	5.392	Selected

The items with 't' value of greater than 1.96 were selected for including in the final version of the Study Habit Inventory. Thus the final inventory consists of 35 items, with 18 positive and 17 negative statements.

The copies of the draft English and Malayalam versions, final English and Malayalam versions and response sheets of the Study Habit Inventory are attached as Appendices XXI, XXII, XXIII, XXIV and XXV respectively.

Validity

The construct validity of the scale was established by the researcher. The mode of selecting the dimensions and components, criteria followed in writing the statements and the method followed in the construction of the scale all show that the scale has construct validity. In addition, the researcher has sought suggestions from subject experts for criticism and feedback. In the light of the suggestions received from the subject experts, the scale was modified and the researcher thus could establish face validity.

Reliability

The reliability of the scale was estimated by the test - retest method with an interval of two weeks. The correlation coefficient was 0.78 (N: 40). It shows that the scale is reasonably reliable to measure the study habit of the secondary school pupils.

SAMPLE

“A sample is a small proportion of a population selected for observation and analysis.” (Best, 1996).

“Sample is the process by which a relatively small number of individuals, objects, or events is selected and analysed in order to find out something about the entire population from which it was selected.” (Kaul, 1998).

“The ideal sample is large enough to serve as an adequate representation of the population about which the researcher wishes to generalise and small enough to be selected economically – in terms of subject availability, expense in both time and money, and complexity of data analysis.” (Best, 1996).

The secondary school pupils of Kerala form the population of the present study. The sample was selected from the pupils of standard IX as the best representation of standard VIII, IX and X. Sampling was done using the proportionate stratified random cluster sampling technique. The strata considered are gender of the pupils, medium of instruction, type of the management and locale of the school. The proportion followed while selecting the sample was 1:1 for boys and girls (Gender), 2:1 for rural and urban schools (Locale of the school), 4:5:1 for the government, aided and un-aided schools, 3:1 for Malayalam and English medium schools. Considering the minute stratification and economy of time and money, the investigator selected 17 schools from the districts under Calicut University jurisdiction, ie, Thrissur, Palakkad, Malappuram, Kozhikode and Waynad. The initial sample consisted of 650 pupils. Details of the initial sample are presented below in Table 16.

Table 16
Details of the Initial Sample

Gender		Type of Management of School			Locale of School		Medium of Instruction	
Ratio 1:1		Ratio 4:5:1			Ratio 2:1		Ratio 3 : 1	
Boys	Girls	Government	Aided	Un-Aided	Rural	Urban	Malayalam Medium	English Medium
326	324	263	330	57	448	202	497	153
650		650			650		650	

Procedure followed in Data Collection

The investigator fixed the sample and identified the schools for data collection. Then contacted the heads of the schools and obtained permission to administer the tools and collect data.

Pupils were made familiar with the nature of each tool going to be administered. Required directions were given before and while, as the case may be, administering each tool. It took four periods of 45 minutes as a whole for administering all the five tools. The test materials and response sheets were collected back after the stipulated time.

The collected data were consolidated and tabulated. Incomplete data were rejected. Thus the size of the sample became reduced from 650 to 625. Later, the tabulated data were converted to a mode suitable to computer processing and analysis. Details of the final sample are presented in Table 17.

Table 17

Details of the Final Sample

Gender		Type of Management of School			Locale of School		Medium of Instruction	
Ratio 1:1		Ratio 4:5:1			Ratio 2:1		Ratio 3: 1	
Boys	Girls	Government	Aided	Un-aided	Rural	Urban	Malayalam Medium	English Medium
311	314	260	315	50	430	195	492	133
625		625			625		625	

Aspects of the break up of the final sample are graphically represented below. The percentage of boys and girls in the final sample is graphically represented as Figure 1.

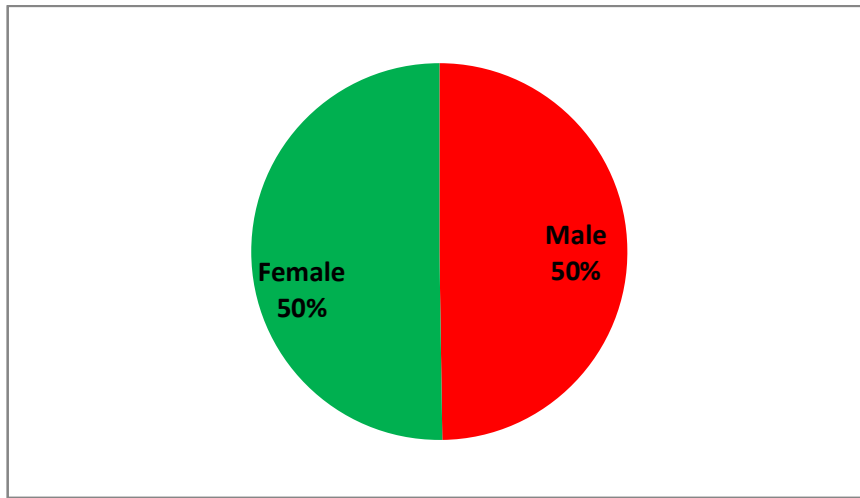


Figure 1. Percentage of male and female pupils in the total sample

The figure 1 indicates that the percentage of boys and girls in the final sample is 50 % each.

The percentage of rural and urban school pupils in the final sample is graphically represented as Figure 2.

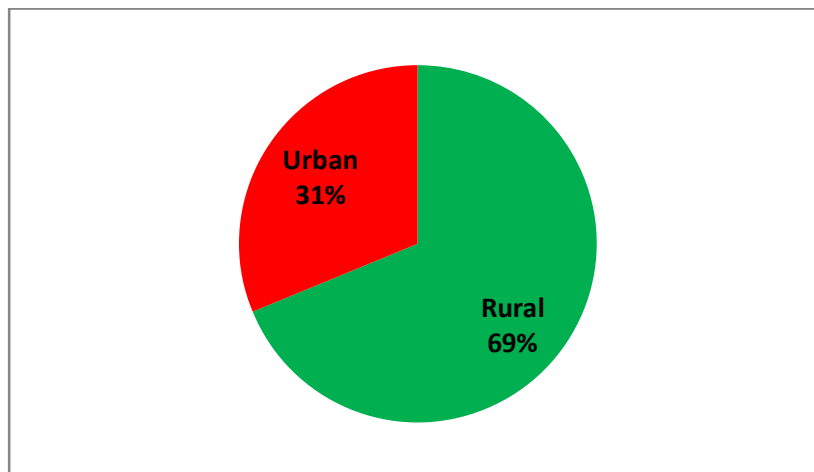


Figure 2. Percentage of Rural and Urban school pupils in the total sample

The figure 2 indicates that the percentage of the pupils studying in the schools located in the urban area is 31 and those studying in the schools located in the rural areas is 69 of the final sample.

The percentage of the Government, Aided and Un-Aided school pupils in the final sample is graphically represented as Figure 3.

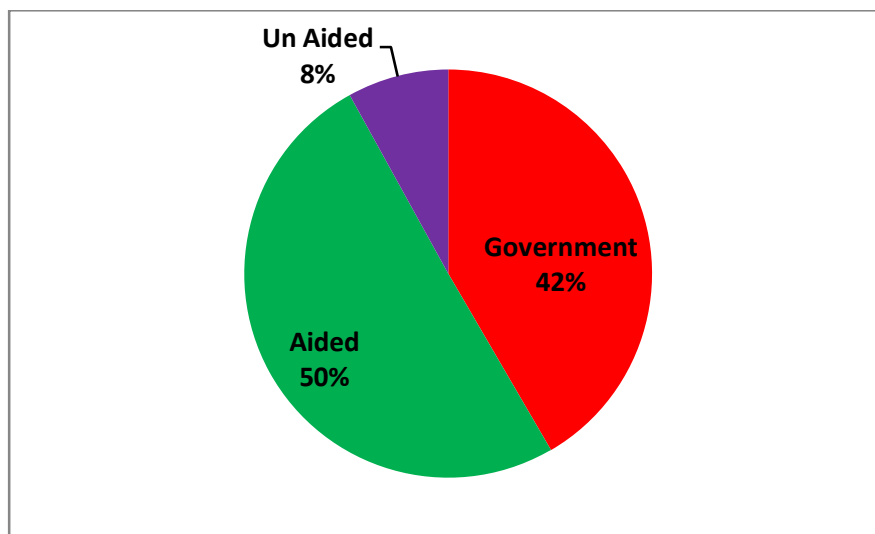


Figure 3. Percentage of the Government, Aided and Un-Aided school pupils in the total sample

The figure 3 indicates that the percentage of the Government school pupils is 42, that of Aided school pupils is 50 and that of Un-Aided school pupils is eight of the final sample.

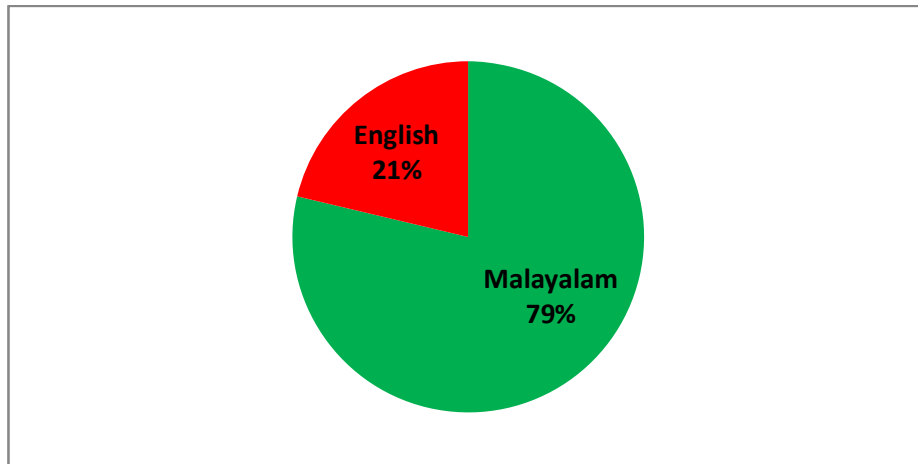


Figure 4. Percentage of the English and Malayalam medium pupils in the total sample

The figure 4 shows that 79 % of the total sample form the Malayalam medium pupils and 21% English medium pupils in the final sample selected for the present study.

IDENTIFYING THE UNDERACHIEVERS

The investigator identified the underachievers from the total sample of 625 pupils, considering the scores obtained in the test of intelligence and of achievement in English, using statistical techniques.

The investigator found the Arithmetic Mean of the scores obtained by the pupils in the test of intelligence. Then plus or minus one Standard Deviation of the mean was calculated. The pupils whose intelligence scores fell on or above the plus one standard deviation were grouped as Above Average Intelligence group. The pupils whose intelligence scores fell on or

below the minus one standard deviation were grouped as Below Average Intelligence Group. The pupils whose scores in intelligence did not belong to either of these groups were grouped as Average Intelligence Group.

Then the Arithmetic Mean of the scores obtained by the pupils in the test of Achievement in English was found. The plus or minus one Standard Deviation of the mean was calculated. The pupils whose achievement scores fell on or above the plus one standard deviation were grouped as Above Average Achievement Group. The pupils whose achievement scores fell on or below the minus one standard deviation were grouped as Below Average Achievement Group. The pupils whose scores in Achievement in English did not belong to either of these groups were grouped as Average Achievement Group. Criteria followed in the categorisation of scores are shown in Table 18.

Table 18

Criteria followed in the categorisation of scores as Above Average, Average and Below Average

Range	Category
Less than or equal to (Mean -1 SD)	Below Average
In between (Mean \pm 1 SD)	Average
Greater than or equal to (Mean + 1 SD)	Above Average

Afterwards, the Average and Below Average Achievement Group pupils belonging to the Above Average Intelligence Group were selected. The pupils of the Below Average Achievement Group belonging to the Average Intelligence Group were also selected. These selected pupils are underachievers in English. They failed to score in English commensurately to their intelligence score. Details of classification are presented in table 19.

Table 19

Classification of achievement as normal, over and underachievement

Intelligence	Achievement	Nature of Resultant Achievement
Above Average	Above Average	Normal Achievement
Average	Average	
Below Average	Below Average	
Average	Above Average	Over Achievement
Below Average	Above Average	
Below Average	Average	
Above Average	Average	Underachievement
Above Average	Below Average	
Average	Below Average	

As the present study is concentrated on underachievement in English, the investigator found out the extent of the effect of the psycho - social correlates, i.e., the pupils' Achievement Motivation, Attitude towards English and Study Habits on underachievement in English.

STATISTICAL TECHNIQUES USED

The statistical analysis of the data was done by using the computer software known as Statistical Package for Social Sciences, SPSS, version 20. The techniques used for the analysis are the following.

1. Two – tailed test of significance of difference between Mean Scores of Large Independent Sample.

This was used to compare the group difference in the scores of achievement in English attained by the sub samples formed on the basis of the gender of the pupils, locale and type of the management of the school and medium of instruction.

If the 't' value obtained exceeds 1.96 or 2.58, the 'r' is considered as significant at 0.05 and 0.01 level respectively.

2. Pearson's Product Moment Coefficient of Correlation

Coefficient of correlation between pairs of select variables was calculated using the Pearson's Product Moment Coefficient of Correlation. Coefficient of correlation is the index of the extent of the relation between two variables.

The correlation between the two select variables is interpreted following the criteria described below. (Garret, 1996)

r from 0.00 to ± 0.20 : Indifferent or negligible relationship.

r from ± 0.20 to ± 0.40 : Low relationship.

r from ± 0.40 to ± 0.70 : Substantial or marked relationship

r from ± 0.70 to ± 1.00 : High or very high relationship.

3. Multiple Regression Analysis: This was done to estimate the effect of the select psycho-social correlates, namely, Attitude towards English, Achievement Motivation, and Study Habit on underachievement in English. It can also indicate the relative contribution of the select psycho-social correlates to the variance in the dependent variable.
4. Chi-Square (X^2) test of independence followed by estimation of $c -$ coefficients: The investigator used Chi-Square test of independence to test whether underachievement in English is associated with any of the psycho-social variables. The formula suited for the Chi-Square test is as follows.

$$x^2 = \frac{\sum(f_o - f_e)^2}{f_e}$$

Where f_o is the observed frequency and f_e is the expected frequency.

The null hypothesis of independence is accepted or rejected depending upon whether the obtained chi-square value is less than or greater than the tabled value of chi-square for a particular level of significance for $(r-1)(c-1)$ degrees of freedom.

When a chi-square is found to be significant, the strength of association was estimated by computing C coefficient. The C coefficient contingency C is the technique to find the extent of relationship between two variables, when each has been classified into two or more variables. The formula suited for this is the following.

$$C = \sqrt{\frac{x^2}{n+x^2}}$$

Where n is the size of the sample.

5. Discriminant Function Analysis (Tabachnick & Fidell, 1983)

Discriminant Function Analysis is a multivariate procedure in statistics used to predict group membership on the basis of a set of predictor variables. In the present study, this technique was used in order to identify the contributions of the select variables, i.e., Achievement Motivation, Attitude towards English and Study Habit to the discrimination between the over, normal and underachievement groups in English. It can indicate the nature of

differences between groups and help the investigator classify a new case into the relevant group.

CHAPTER IV

ANALYSIS AND INTERPRETATION

Preliminary Analysis of the Test Scores of the Whole Sample

Identification of the Extent of the Under, Normal and Over Achievers for the total and sub samples

Preliminary Analysis of the test Scores of the Underachievers

Estimation of Association of Psycho-Social Variables with Under, Normal and Over Achievement in English

Investigation of Group Differences

Relation of the Select Psycho-Social Correlates with Achievement of Underachievers in English

Effect of the Select Psycho – Social Correlates on Underachievement in English

Prediction of the Over, Normal and Underachievement Groups in English on the Basis of the Independent Variables.

ANALYSIS AND INTERPRETATION

The present study aims at identifying the extent of the underachievers among the secondary school pupils of Kerala and the relation of the achievement of the underachievers in English with select psycho-social correlates, i.e., attitude towards English, achievement motivation and study habit. The select psycho-social correlates were treated as independent variables and underachievement in English as dependent variable. The Analysis and discussion of the results are presented below in seven sections.

Section I	:	Preliminary analysis of the test scores of the whole sample
Section II	:	Identification of the extent of under, normal and over achievers
Section III	:	Preliminary analysis of the test scores of underachievers in English
Section IV	:	Estimation of association of psycho-social variables with under, normal and over achievement in English
Section V	:	Investigation of group differences
Section VI	:	Relation of the select psycho-social correlates with underachievement in English.
Section VII	:	Effect of the select psycho-social correlates on underachievement in English.

Section VIII : Prediction of the over, normal and underachievement groups in English on the basis of the independent variables

Section One

A. PRELIMINARY ANALYSIS OF THE TEST SCORES OF THE WHOLE SAMPLE

A statistical analysis of the scores obtained from the whole sample for the variables intelligence, achievement in English, attitude towards English, achievement motivation and study habit was done at preliminary level before moving to further statistical procedures. Descriptive statistics such as Mean, Median, Mode, Standard Deviation, Skewness, and Kurtosis of all the variables for the total and sub samples were found out. Preliminary analysis was carried out to get an appropriate set of summary statistics. It may provide a quick impression of the main features of the data, which, in turn, may provide guidance as to how the analysis and interpretation should proceed. The score distributions of the variables achievement in English, intelligence, achievement motivation, attitude towards English and study habit are presented in Table 20, 21, 22, 23 and 24 respectively.

Table 20

Statistical constants of the variable Achievement in English for the total sample and sub samples.

Sl No	Variable	N	Mean	Median	Mode	SD	Skewness	Kurtosis
1	Total	625	10.827	9.000	7.00	5.549	.930	.405
2	Male	311	10.193	9.000	7.00	5.695	1.198	1.371
3	Female	314	11.455	10.000	9.00	5.336	.699	-.454
4	Government	260	8.965	8.500	9.00	3.926	1.014	1.331
5	Aided	315	11.476	10.000	7.00	5.769	.624	-.659
6	Un-Aided	50	16.420	17.000	22.00	6.664	.286	.247
7	Rural	430	10.561	9.000	7.00	5.469	.852	-.123
8	Urban	195	11.415	10.000	9.00	5.692	1.087	1.315
9	Malayalam Medium	492	8.994	8.500	7.00	3.897	.942	1.031
10	English Medium	133	17.609	19.000	22.00	5.496	-.323	.426

Table 20 reveals that the mean, median and mode of all the groups keep normality. The standard deviation reveals that the scores are somewhat dispersed from the central value of respective samples. All samples were positively skewed except sub samples of English medium. The kurtosis of the samples are higher than normal value so the distribution were leptokurtic except for groups such as female, aided and rural which are platykurtic as the kurtosis values were less than the normal value.

Table 21

Statistical Constants of the Variable Intelligence for the total sample and sub samples.

Sl No	Variable	N	Mean	Median	Mode	Standard deviation	Skewness	Kurtosis
1	Total	625	50.245	50.000	45.00 ^a	16.175	.158	-.553
2	Male	311	46.248	46.000	34.00 ^a	16.293	.368	-.357
3	Female	314	54.204	54.000	67.00	15.070	.064	-.572
4	Government	260	47.269	48.000	57.00	14.229	-.093	-.287
5	Aided	315	52.083	50.000	67.00	17.309	.203	-.790
6	Un Aided	50	54.140	55.500	70.00	16.052	-.210	-1.368
7	Rural	430	49.688	49.000	45.00	16.554	.208	-.489
8	Urban	195	51.472	51.000	57.00	15.278	.060	-.728
9	Malayalam Medium	492	47.360	48.000	45.00 ^a	14.460	.013	-.555
10	English Medium	133	60.917	64.000	66.00 ^a	17.700	-.263	-1.044

Table 21 shows that the mean, median and mode of all the groups belong to same range for the total sample and sub samples. The standard deviation reveals that the scores are somewhat dispersed from the central value of respective samples. The samples of government, un-aided and English medium are negatively skewed and all other samples were positively skewed. The Kurtosis of the samples are lower than normal value so the distribution were platy kurtic for all samples.

Table 22

Statistical constants of the variable Achievement Motivation for the total sample and sub samples.

Sl No	Variable	N	Mean	Median	Mode	Standard deviation	Skewness	Kurtosis
1	Total	625	36.600	37.000	34.00	8.903	-.092	.149
2	Male	311	35.071	35.000	34.00	9.325	-.117	.305
3	Female	314	38.115	38.000	34.00	8.202	.097	-.390
4	Government	260	36.719	36.500	34.00	8.688	.105	-.083
5	Aided	315	35.816	36.000	38.00	8.327	.001	-.177
6	Un Aided	50	40.920	44.000	29.00 ^a	11.959	-1.353	2.211
7	Rural	430	35.700	36.000	34.00 ^a	7.825	.040	-.088
8	Urban	195	38.585	38.000	34.00	10.667	-.473	.190
9	Malayalam Medium	492	36.309	36.000	34.00	8.330	.096	.017
10	English Medium	133	37.6767	38.000	36.00 ^a	10.728	-.542	.208

Table 22 reveals that the mean, median and mode of all the groups are almost similar for the total sample and sub samples. The standard deviation shows that the scores are somewhat dispersed from the central value of respective samples. Almost all samples are negatively skewed except the sub samples with positive skewness values. The kurtosis of the samples are higher than normal value so the distribution are leptokurtic, but the groups of female and rural are platykurtic as the kurtosis values are less than the normal value. The kurtosis values of government and aided samples shows that they are mesokurtic.

Table 23

Statistical constants of the variable Attitude towards English for the total sample and sub samples.

Sl No	Variable	N	Mean	Median	Mode	Standard deviation	Skewness	Kurtosis
1	Total	625	30.658	30.000	32.00	6.921	.022	-.304
2	Male	311	29.698	29.000	26.00	6.609	.079	-.188
3	Female	314	31.608	32.000	32.00 ^a	7.099	-.076	-.346
4	Government	260	29.223	29.000	28.00	6.238	-.125	-.254
5	Aided	315	30.860	31.000	32.00 ^a	6.933	.034	-.182
6	Un - Aided	50	36.840	39.500	41.00 ^a	6.783	-.666	-.737
7	Rural	430	30.305	30.000	26.00 ^a	6.733	.071	-.244
8	Urban	195	31.4359	31.000	28.00 ^a	7.274	-.109	-.362
9	Malayalam Medium	492	29.128	29.000	26.00 ^a	6.250	-.086	-.227
10	English Medium	133	36.316	36.000	31.00	6.336	-.283	-.608

Table 23 reveals that the mean, median and mode of all the groups are almost similar for the total sample and sub samples. The standard deviation reveals that the scores are somewhat dispersed from the central value of respective samples. Some samples are negatively skewed and some are nearer to normal value. The Kurtosis of the samples are lesser than normal value so the distribution are platykurtic.

Table 24

Statistical constants of the variable Study Habit for the total and sub samples.

Sl No	Variable	N	Mean	Median	Mode	SD	Skewness	Kurtosis
1	Total	625	23.971	24.000	24.00	5.150	-.181	-.447
2	Male	311	22.633	23.000	24.00	5.005	.013	-.352
3	Female	314	25.296	26.000	28.00	4.953	-.404	-.198
4	Government	260	23.831	24.000	25.00	4.889	-.207	-.125
5	Aided	315	23.721	24.000	24.00	5.178	-.214	-.595
6	Un-Aided	50	26.280	27.000	34.00	5.800	-.327	-.887
7	Rural	430	23.709	24.000	24.00 ^a	4.844	-.164	-.385
8	Urban	195	24.549	25.000	27.00	5.738	-.293	-.589
9	Malayalam Medium	492	23.846	24.000	24.00	4.983	-.228	-.408
10	English Medium	133	24.436	24.000	24.00 ^a	5.723	-.125	-.649

Table 24 shows that the range of the mean, median and mode of all the groups are almost similar for the total sample and sub samples. The standard deviation reveals that the scores are somewhat dispersed from the central value of respective samples. All samples are negatively skewed. The Kurtosis of the samples are lesser than normal value so the distribution are platy kurtic.

Smoothed Frequency Curves of Intelligence, Achievement in English, Achievement Motivation, Attitude towards English and Study Habit are presented below as Figure 5, 6, 7, 8 & 9.

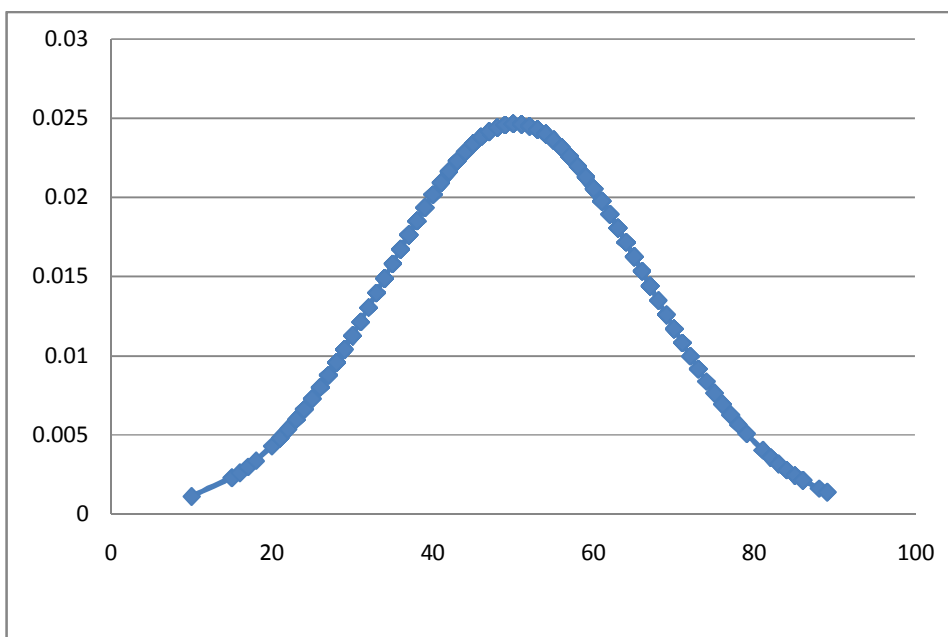


Figure 5. Smoothed Frequency Curve of Intelligence

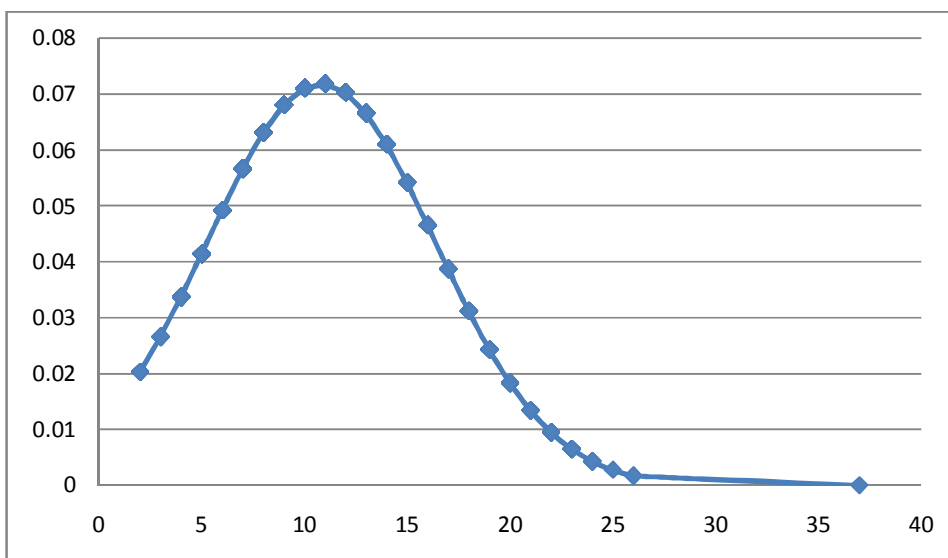


Figure 6. Smoothed Frequency Curve of Achievement in English

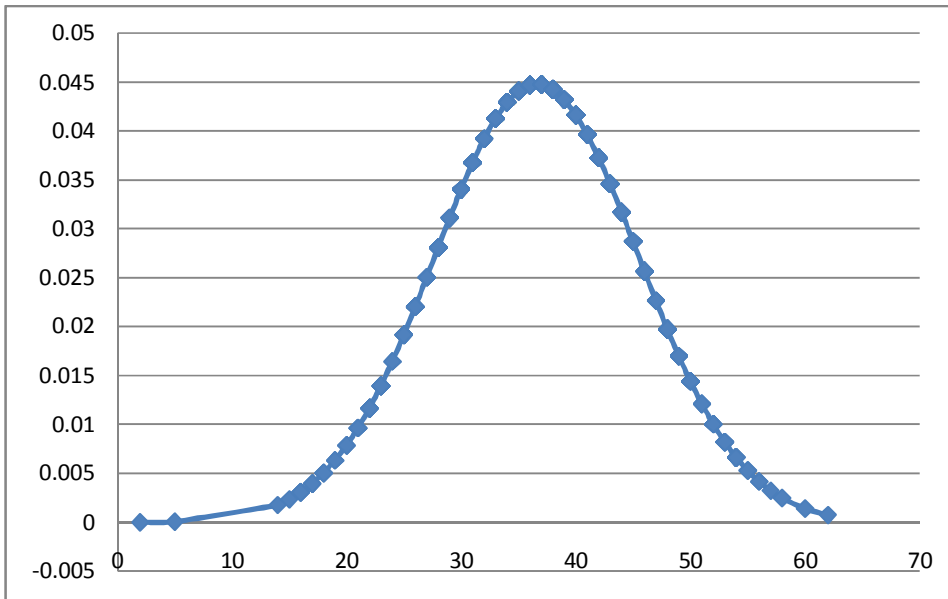


Figure 7. Smoothed Frequency Curve of Achievement Motivation

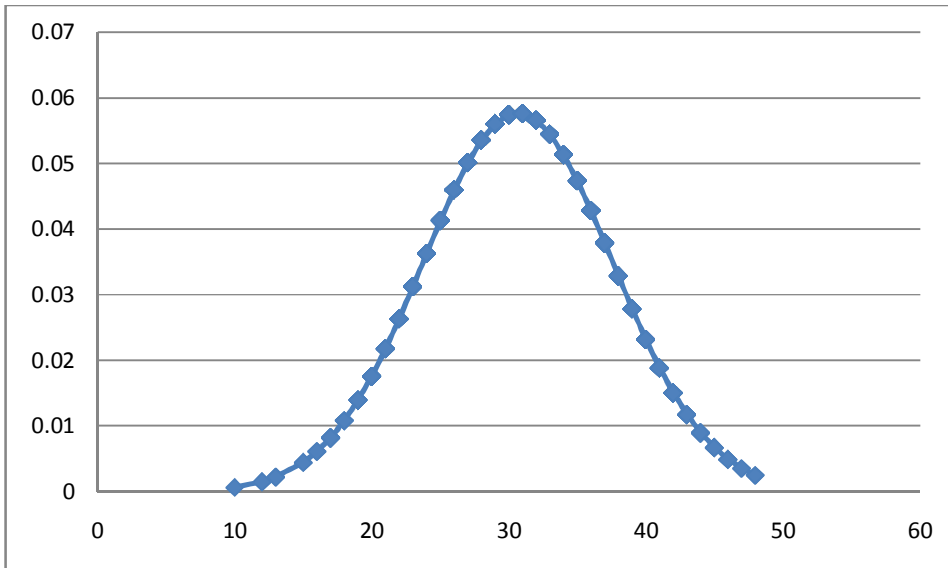


Figure 8. Smoothed Frequency Curve of Attitude towards English

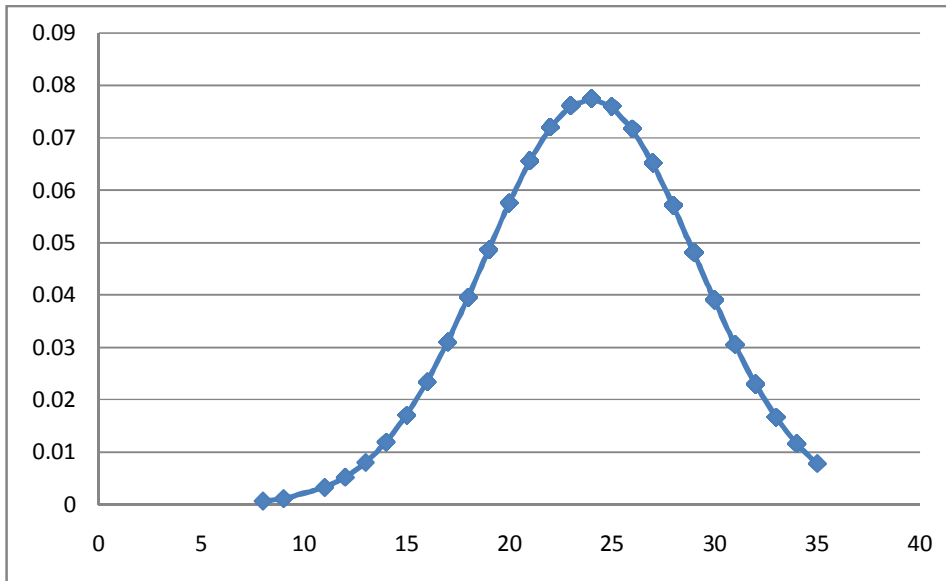


Figure 9. Smoothed Frequency Curve of Study Habit

The descriptive statistical aspects furnished in Figure 5, 6, 7, 8 & 9 are only the graphical representations of aspects presented in Table 20, 21, 22, 23 and 24 respectively. The statistical constants of the variables Intelligence, Achievement in English, Achievement Motivation, Attitude towards English and Study Habit are close approximations to the values expected for normal distribution.

The distributions of the variables do not depart markedly for the total sample and sub samples. For a large sample, slight non-normality of the population doesn't seriously affect the probabilities of acceptance and rejection of hypotheses.

All these descriptive statistical aspects point out that the distributions of the scores of the select variables approximate normalcy. The sample selected for the present study can be seen as almost representative a sample of the population.

B. ANALYSIS OF PERCENTAGE

The levels of the variables Achievement in English, Intelligence, Achievement Motivation, Attitude towards English and Study Habit are presented below.

1. Levels of Achievement in English of secondary school pupils.

The levels of Achievement in English were found out by estimating the percentages of the scores obtained. Details of the levels are given in Table 25.

Table 25

Details of the Levels of Achievement in English

Level	Number of Pupils	Percentage of Pupils
Above Average	127	20.3
Average	416	66.6
Below Average	82	13.1
Total	625	100

Table 25 shows that the achievement in English of 20.3 % secondary school pupils is above average, of 66.6 % is average and that of 13.1% is below average. The levels of Achievement in English of the secondary school pupils are graphically represented as Figure No. 10.

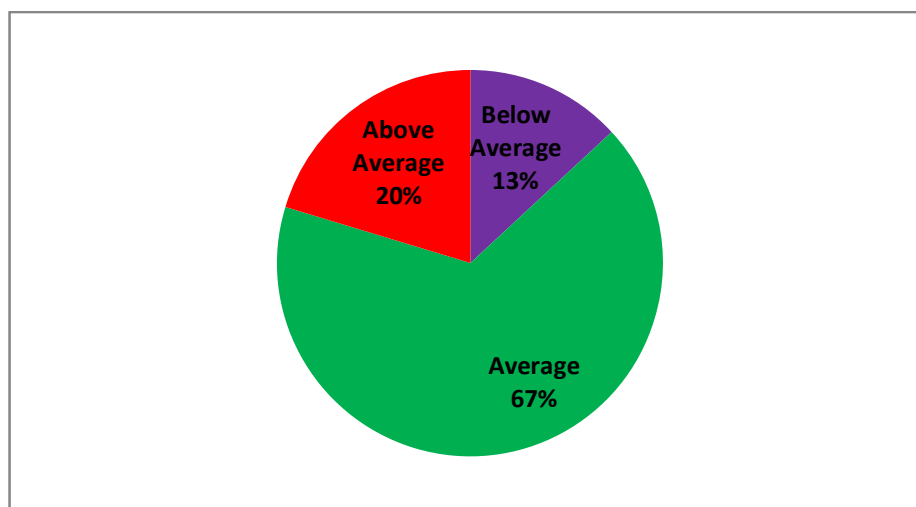


Figure 10. Graphical representation of the levels of Achievement in English of secondary school pupils

2. Levels of Intelligence of Secondary School Pupils.

The levels of the variable Intelligence were found out by estimating the percentages of the scores obtained. Details of the levels are presented in Table 26.

Table 26

Details of the Levels of Intelligence Secondary School Pupils

Level	Number of Pupils	Percentage of Pupils
Above Average	109	17.4
Average	395	63.2
Below Average	121	19.4
Total	625	100

Table 26 shows that the Intelligence of 17.4 % secondary school pupils is above average, of 63.2 % is average and that of 19.4% is below average. The levels

of Intelligence and percentage of the pupils related are graphically represented as Figure 11.

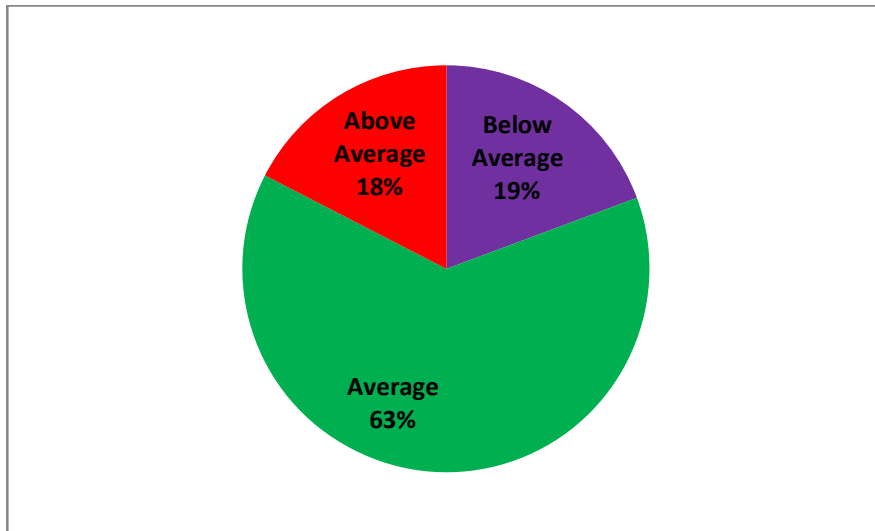


Figure 11. Graphical representation of the levels of Intelligence of secondary school pupils

3. Levels of Achievement Motivation of Secondary School Pupils.

The levels of the independent variable Achievement Motivation were found out by estimating the percentages of the scores obtained. Details of the levels are presented in Table 27.

Table 27

Details of the Levels of Achievement Motivation of Secondary School pupils

Level	Number of Pupils	Percentage of Pupils
Above Average	105	16.8
Average	410	65.6
Below Average	110	17.6
Total	625	100

Table 27 shows that the Achievement Motivation of 16.8 % secondary school pupils is above average, of 65.6 % is average and that of 17.6% is below average. The levels of Intelligence are graphically represented as Figure 12.

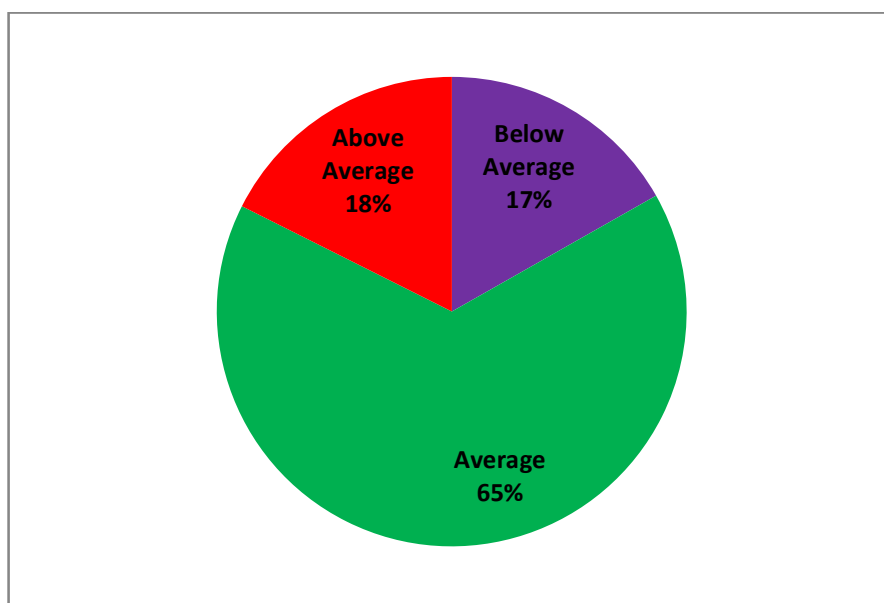


Figure 12. Graphical representation of the levels of Achievement Motivation of secondary school pupils

2. Levels of Attitude towards English of Secondary School Pupils.

The levels of the independent variable Attitude towards English were found out by estimating the percentages of the scores obtained. Details of the levels are presented in Table 28.

Table 28

Details of the Levels of Attitude towards English of Secondary School Pupils

Level	Number of Pupils	Percentage of Pupils
Above Average	104	16.6
Average	406	65.0
Below Average	115	18.4
Total	625	100

Table 28 shows that Attitude towards English of 16.6 % secondary school pupils are above average, of 65 % are average and that of 18.4% are below average. The levels of Attitude towards English are graphically represented below.

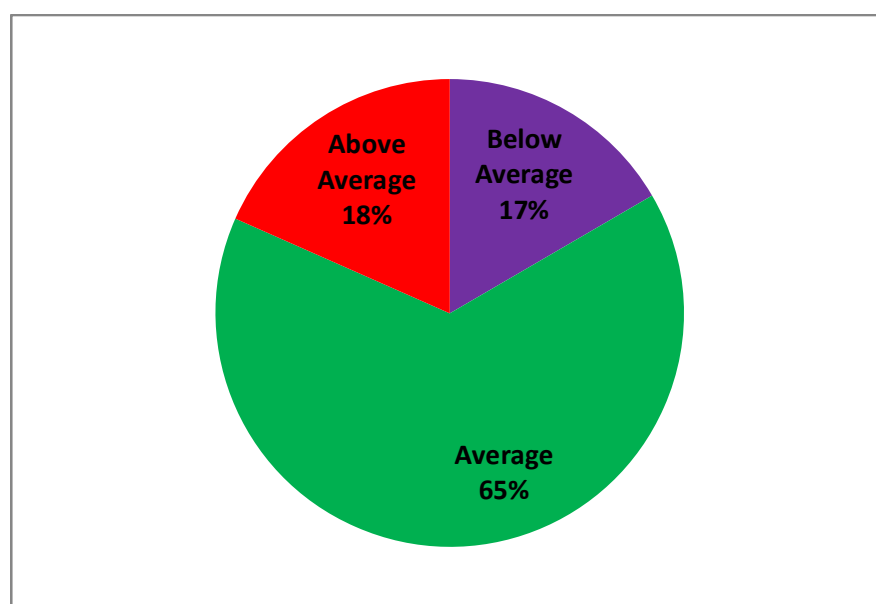


Figure No. 13. Graphical representation of the levels of Attitude towards English of secondary school pupils

2. Levels of Study Habit of Secondary School Pupils.

The levels of the independent variable Study Habit were found out by estimating the percentages of the scores obtained. Details of the levels are presented in Table 29.

Table 29

Details of the Levels of Study Habit of Secondary School Pupils

Level	Number of Pupils	Percentage of Pupils
Above Average	128	20.5
Average	396	63.3
Below Average	101	16.2
Total	625	100

Table 29 shows that the study habit of 20.5 % secondary school pupils are above average, of 63.3 % are average and that of 16.2% are below average. The levels of Study Habit are graphically represented as Figure 14.

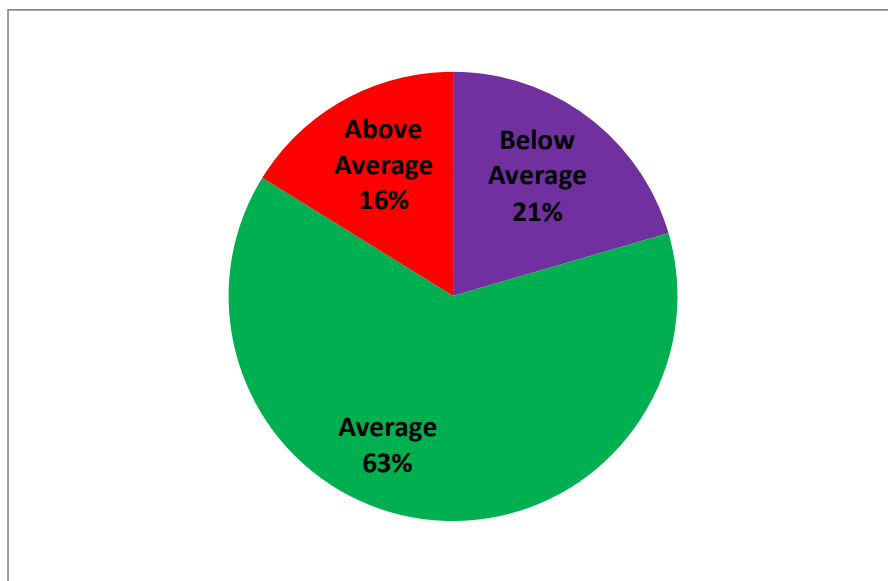


Figure 14. Graphical representation of the levels of Study Habit of secondary school pupils

Section Two

IDENTIFICATION OF UNDERACHIEVERS

The investigator identified the underachievers from the total sample of 625 pupils, considering the scores obtained in the test of Intelligence and Achievement in English, using statistical techniques.

The investigator found out the Arithmetic Mean of the scores obtained by the pupils on the Test of Intelligence. Then plus or minus one Standard Deviation of the

mean was calculated. The pupils whose intelligence scores fell on or above the Mean plus one standard deviation ($\geq 50.245 + 16.175 = 66.420$) were grouped as Above Average Intelligence group. The pupils whose intelligence scores fell below the Mean minus one standard deviation ($< 50.245 - 16.175 = 34.070$) were grouped as Below Average Intelligence Group. The pupils whose scores in intelligence did not belong to either of these groups (In between 66.420 and 34.070) were grouped as Average Intelligence Group.

Then the Arithmetic Mean of the scores obtained by the pupils on the test of Achievement in English was found. The plus or minus one Standard Deviation of the mean was calculated. The pupils whose achievement scores fell on or above the Mean plus one standard deviation ($\geq 10.827 + 5.549 = 16.376$) were grouped as Above Average Achievement Group. The pupils whose achievement scores fell below the Mean minus one standard deviation ($< 10.827 - 5.549 = 5.278$) were grouped as Below Average Achievement Group. The pupils whose achievement scores did not belong to either of these groups (In between 16.376 and 5.278) were grouped as Average Achievement Group.

Afterwards, the extent of Normal Achievers, Underachievers and Over Achievers were found out on the basis the scores obtained by the pupils on the test of intelligence test and achievement test in English. Pupils belonging to the same levels in Intelligence and Achievement in English are Normal Achievers in English. Pupils whose level of achievement in English is higher than that of the Intelligence are Over Achievers in English. Pupils whose level of achievement in English is

lower than that of the Intelligence are Underachievers in English. Underachievers fail to score in English commensurately to their intelligence.

The achievement of the pupils is classified as normal, under and over achievement. Pupils with same levels in intelligence and achievement are normal achievers. Those with above average intelligence and average or below average achievement and those with average intelligence and below average achievement are under achievers. Pupils with average intelligence and above average achievement and those with below average intelligence and average or above average achievement are over achievers. (Tabular presentation in Table 19)

The percentages of normal achievers, over achievers and under achievers for the total sample and sub samples formed on the basis of the gender, locale and type of the management of the school and medium of instruction were estimated. Details of percentages for the total sample are presented below in Table 30.

Table 30

Extent of Over, Normal and Underachievers for the total sample

Achievers	Number	Percentage
Over Achievers	148	23.68
Normal Achievers	386	61.76
Under Achievers	91	14.56
Total	625	100

Table 30 shows that, 23.68% secondary school pupils of the total sample are over achievers in English. Normal achievers form 61.76 %. The percentage of underachievers is 14.56. The data are graphically represented as Figure 15.

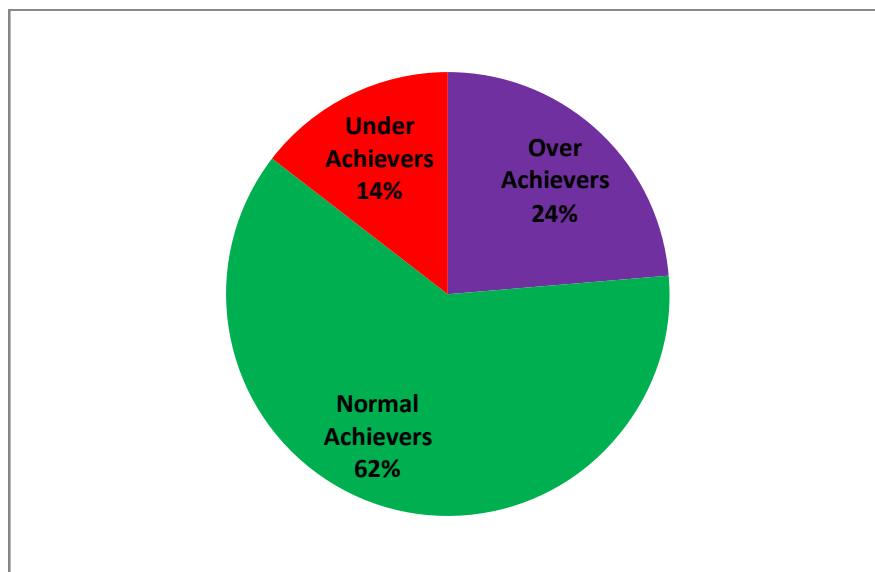


Figure 15. Graphical representation of the percentage of the normal-under and over achievers for the total sample

Gender wise Extent of Under, Normal and Over Achievers

Details of the extent of the under, normal and over achievers of the sub sample based on the gender of the pupils are presented below in Table 31.

Table 31

Extent of Under, Normal and Over Achievers in the sub sample formed on the basis of gender of the pupils.

Variable	Sub Sample	Number	Under Achiever	Normal Achiever	Over Achiever
Gender	Boys	311	13.83	54.66	31.51
	Girls	314	15.29	68.79	15.92

Table 31 shows that, of the boys, the under, normal and over achievers are 13.83%, 54.66% and 31.51% respectively. Among girls, the percentages of under, normal and over achievers are 15.29, 68.79, and 15.92 respectively.

The analysis reveals that the percentage of girls is higher than that of boys in the case of normal achievement and underachievement. But in the case of over achievement, boys are far ahead when compared to girls. In order to show the trend of the difference, Figure 16 is presented below.

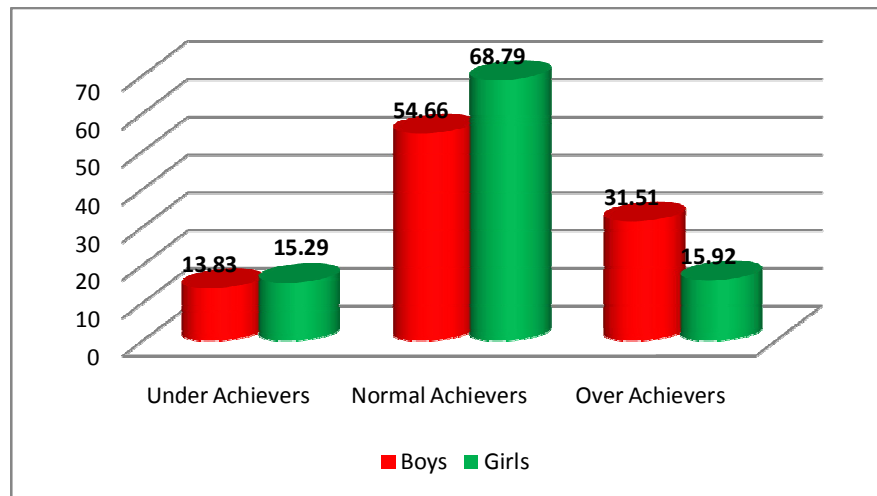


Figure 16. Graphical representation of the percentage of normal, under and overachievers among boys and girls.

Extent of Under, Normal and Over Achievers on the basis of the Type of the Management of the School

Details of the extent of the under, normal and over achievers of the sub sample based on the type of the management of the school are presented below.

Table 32

Extent of the under, normal and over achievers of the sub sample based on the type of the management of the school

Variable	Sub Sample	Number	Under Achiever	Normal Achiever	Over Achiever
Type of the Management of the School	Government	260	16.2	63.8	20
	Aided	315	15.24	60.32	24.44
	Un-Aided	50	2	60	38

Table 32 shows that of the Government School pupils, 16.2% are underachievers. Normal achievers form 63.8% and over achievers 20%. When the pupils of the Aided Schools are considered, the extent of under, normal and over achievers are 15.24%, 60.32% and 24.44 % respectively. Among the Un-Aided School pupils, underachievers are 2%, normal achievers 60% and over achievers 38%.

Government School pupils are ahead in underachievement in English where as Un-Aided School pupils are far ahead in over achievement. That the percentage of underachievers among the Un-Aided School pupils is only two is indeed a matter of extreme educational importance. In order to show the trend of the difference, Figure 17 is presented below.

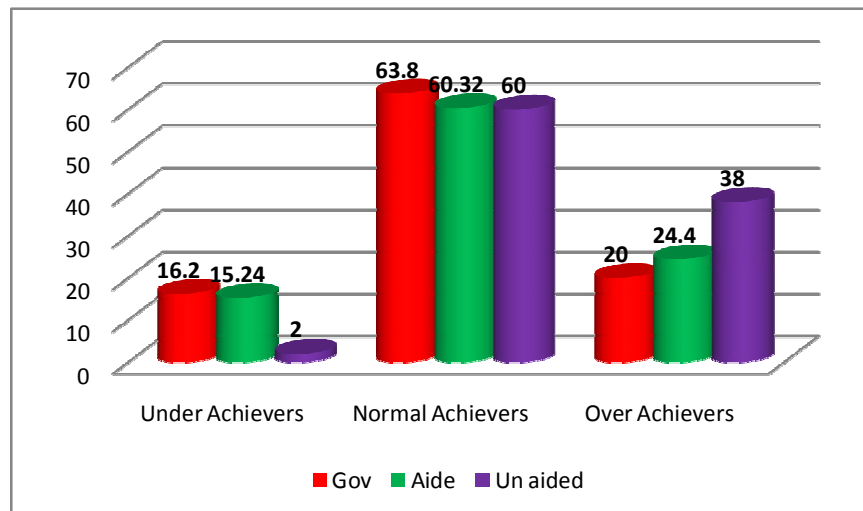


Figure 17. Graphical representation of the percentage of normal, under and over achievers of Government, Aided and Un-Aided school pupils.

Extent of Under, Normal and Over Achievers on the basis of the Locale of the School

Details of the extent of the under, normal and over achievers of the sub sample based on the locale of the school are presented in Table 33.

Table 33

Extent of the under, normal and over achievers of the sub sample based on the locale of the school

Variable	Sub Sample	Number	Under Achiever	Normal Achiever	Over Achiever
Locale of the School	Rural	430	15.58	60.47	23.95
	Urban	195	12.3	64.6	23.1

Table 33 points out that of the Rural School pupils, the extent of the under, normal and over achievers are respectively 15.58%, 60.47%, and 23.95%. Among the Urban School pupils, underachievers form 12.3%, normal achievers 64.6% and over achievers 23.1%. The extent of the Rural School pupils is higher in under and over achievement, where as Urban School pupils become higher only in normal achievement. In order to show the trend of the difference, Figure 14 is presented.

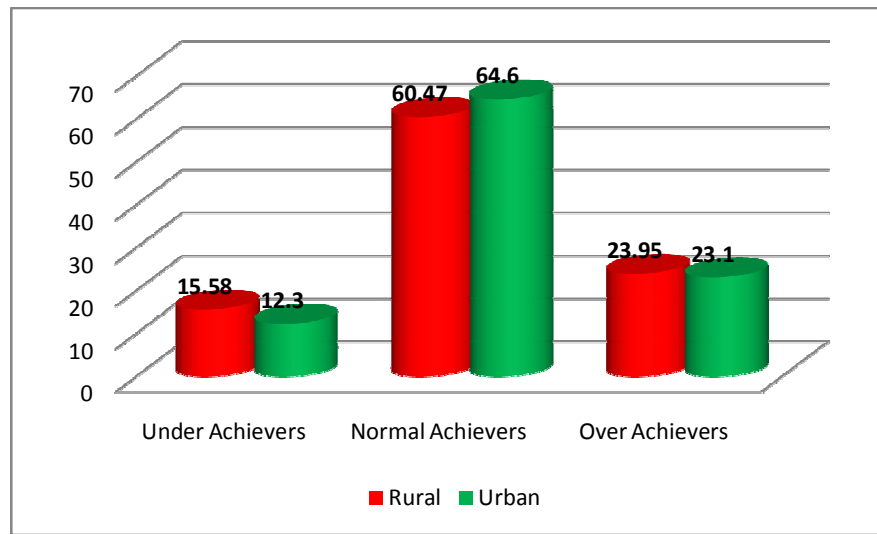


Figure 18. Graphical Representation of the Percentage of Normal, Under and Over Achievers of Rural and Urban School Pupils.

Extent of Under, Normal and Over Achievers on the basis of the Medium of Instruction

Details of the extent of the under, normal and over achievers of the sub sample based on the medium of instruction are presented below in Table 34.

Table 34

Extent of the under, normal and over achievers of the sub sample based on the Medium of Instruction

Variable	Sub Sample	Number	Under achiever	Normal achiever	Over achiever
Medium of Instruction	Malayalam	492	17.68	61.79	20.53
	English	133	3.01	61.65	35.34

Table 34 displays that of the Malayalam medium pupils, 17.68% are underachievers. Normal achievers form 61.79 % and over achievers 20.53%. Among the English medium pupils, the extent of underachievers is 3.01%, of normal achievers is 61.65% and of the over achievers is 35.34%.

The extent of both English and Malayalam medium class pupils in normal achievement is approximately the same, whereas English medium class pupils are far ahead in over achievement and below in underachievement when compared to Malayalam medium class pupils. In order to show the trend of the difference, Figure 19 is presented.

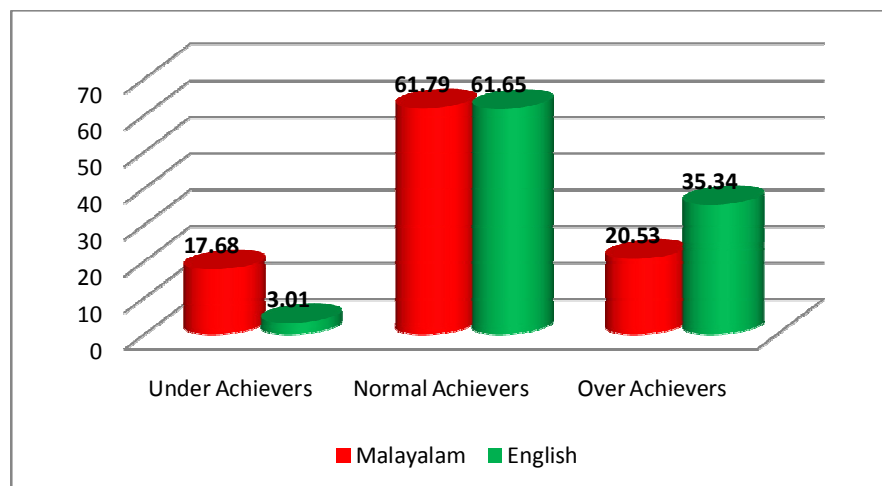


Figure 19. Graphical representation of the percentage of normal, under and over achievers of Malayalam and English medium pupils.

Section Three**PRELIMINARY ANALYSIS OF THE TEST SCORES OF
UNDERACHIEVERS IN ENGLISH**

A statistical analysis of the scores obtained from the sample of the underachievers in English for the variables intelligence, achievement in English, attitude towards English, achievement motivation and study habit was done at preliminary level before moving to further statistical procedures. Descriptive statistics such as Mean, Media, Mode, Standard Deviation, Skewness and Kurtosis of all the variables for the total sample of underachievers in English and sub samples were found out. The score distributions of the Dependent Variables Achievement in English, Independent Variables Achievement Motivation, Attitude towards English and Study Habit are presented in Table 35, 36, 37, and 38 respectively.

Table 35

Statistical constants of the variable Achievement in English for the total sample of underachievers in English and sub samples.

Sl No	Variable	N	Mean	Median	Mode	Standard deviation	Skewness	Kurtosis
1	Total	91	6.582	5.000	5.00	3.839	.994	-.344
2	Male	43	5.302	4.000	4.00 ^a	3.226	1.646	1.590
3	Female	48	7.729	7.000	5.00	4.009	.631	-.965
4	Government	42	5.714	4.500	4.00	3.459	1.642	1.642
5	Aided	48	7.167	5.500	5.00	3.905	.648	-.901
6	Un Aided	1	15.000	15.000	15.00			
7	Rural	67	6.134	5.000	4.00	3.485	1.177	.335
8	Urban	24	7.833	5.000	5.00	4.537	.518	-1.482
9	Malayalam Medium	87	6.345	5.000	5.00	3.631	1.085	-.018
10	English Medium	4	11.750	14.000	14.00	5.188	-1.950	3.847

Table 35 shows that the Mean, Median and Mode of all the groups belong to the same range for the total sample and sub samples. The standard deviation reveals that the scores are somewhat dispersed from the central value of respective samples. The samples are positively skewed since the values are greater than zero. The Kurtosis of the samples such as total, female, aided and urban are lower than normal value so the distribution were platykurtic and for all other samples it is leptokurtic.

Table 36

Statistical constants of the variable Achievement Motivation for the total sample of underachievers in English and sub samples.

Sl No	Variable	N	Mean	Median	Mode	Standard deviation	Skewness	Kurtosis
1	Total	91	37.912	38.000	40.00	6.849	-.224	.627
2	Male	43	38.326	39.000	40.00	7.282	-.069	.605
3	Female	48	37.542	37.500	35.00 ^a	6.490	-.474	.717
4	Government	42	37.024	36.500	33.00 ^a	7.090	.400	1.057
5	Aided	48	38.584	40.000	46.00	6.652	-.809	.989
6	Un Aided	1	43.000	43.000	43.00			
7	Rural	67	37.403	38.000	35.00	6.257	-.255	-.195
8	Urban	24	39.333	39.500	40.00	8.266	-.433	1.605
9	Malayalam Medium	87	37.874	38.000	40.00	6.896	-.196	.656
10	English Medium	4	38.750	41.5000	29.00 ^a	6.551	-1.907	3.694

Table 36 reveals that the mean, median and mode of all the groups belong to the same range for the total sample and sub samples. The standard deviation reveals that the scores are somewhat dispersed from the central value of respective samples. The samples are negatively skewed since the values are lesser than zero. The Kurtosis of the samples are greater than normal value and so the distribution is leptokurtic.

Table 37

Statistical constants of the independent variable Attitude towards English for the total sample of underachievers in English and sub samples.

Sl No	Variable	N	Mean	Median	Mode	Standard deviation	Skewness	Kurtosis
1	Total	91	30.275	31.000	34.00	6.309	-.432	-.303
2	Male	43	29.093	30.000	34.00	6.876	-.539	-.650
3	Female	48	31.333	31.500	27.00	5.617	-.023	-.661
4	Government	42	29.214	29.000	30.00 ^a	6.445	-.338	-.421
5	Aided	48	30.979	32.000	34.00	6.002	-.552	.002
6	Un Aided	1	41.000	41.000	41.00			
7	Rural	67	29.880	31.000	34.00	6.297	-.593	-.153
8	Urban	24	31.375	30.000	27.00 ^a	6.344	-.010	-1.122
9	Malayalam Medium	87	30.149	31.000	34.00	6.122	-.486	-.216
10	English Medium	4	33.000	36.000	41.00	10.456	-1.008	-.499

Table 37 shows that the mean, median and mode of all the groups belong to the same range for the total sample and sub samples. The standard deviation reveals that the scores are somewhat dispersed from the central value of respective samples. The samples are negatively skewed since the values are less than zero. The Kurtosis of the samples are lower than normal value and so, the distribution is platykurtic.

Table 38

Statistical constants of the independent variable Study Habit for the total sample of underachievers in English and sub samples.

Sl No	Variable	N	Mean	Median	Mode	SD	Skewness	Kurtosis
1	Total	91	24.253	25.000	28.00	4.836	-.342	-.592
2	Male	43	23.558	25.000	20.00 ^a	5.338	-.123	-1.010
3	Female	48	24.875	25.000	28.00	4.300	-.497	.118
4	Government	42	23.833	24.000	28.00	4.797	-.191	-.829
5	Aided	48	24.542	25.000	29.00	4.916	-.454	-.296
6	Un Aided	1	28.000	28.000	28.00			
7	Rural	67	23.672	24.000	21.00	4.743	-.239	-.507
8	Urban	24	25.875	27.000	28.00	4.821	-.792	-.087
9	Malayalam Medium	87	24.264	25.000	21.00 ^a	4.871	-.353	-.567
10	English Medium	4	24.000	24.000	20.00 ^a	4.619	.000	-6.000

Table 38 shows that the mean, median and mode of all the groups belong to the same range for the total sample and sub samples. The standard deviation reveals that the scores are somewhat dispersed from the central value of respective samples. The samples are negatively skewed since the values are lesser than zero. The Kurtosis of the samples are lower than normal value and so the distribution is platykurtic.

Smoothed Frequency Curves of Underachievement in English, Achievement Motivation, Attitude towards English and Study Habit are presented as Figure No. 20, 21, 22 and 23.

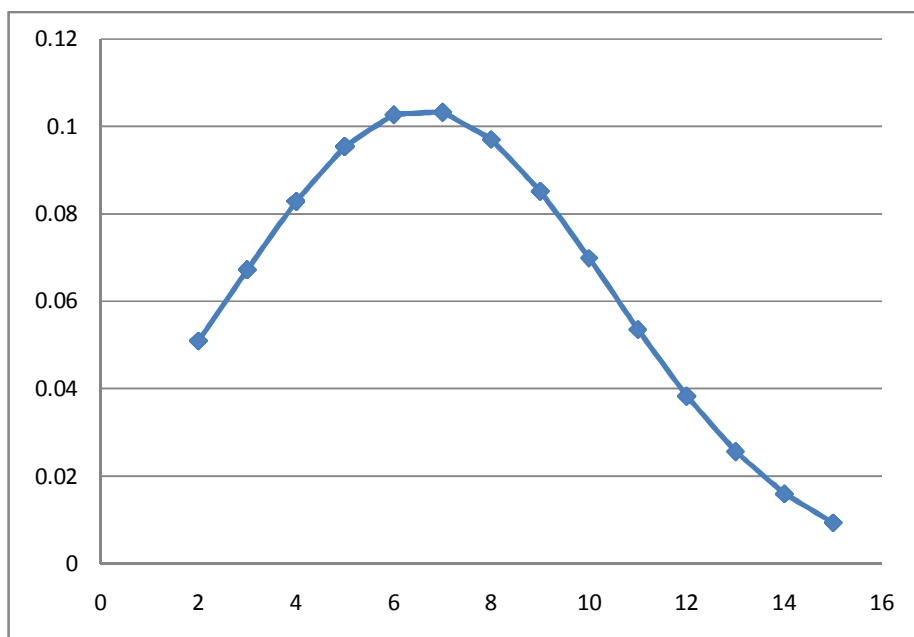


Figure 20. Smoothed Frequency Curve of Underachievement in English

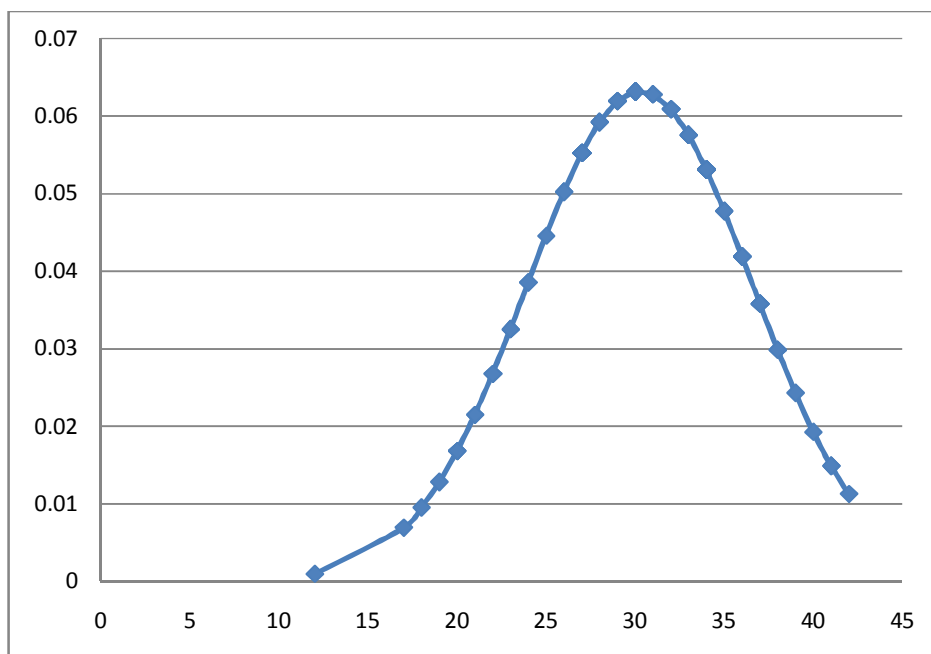


Figure 21. Smoothed Frequency Curve of Achievement Motivation

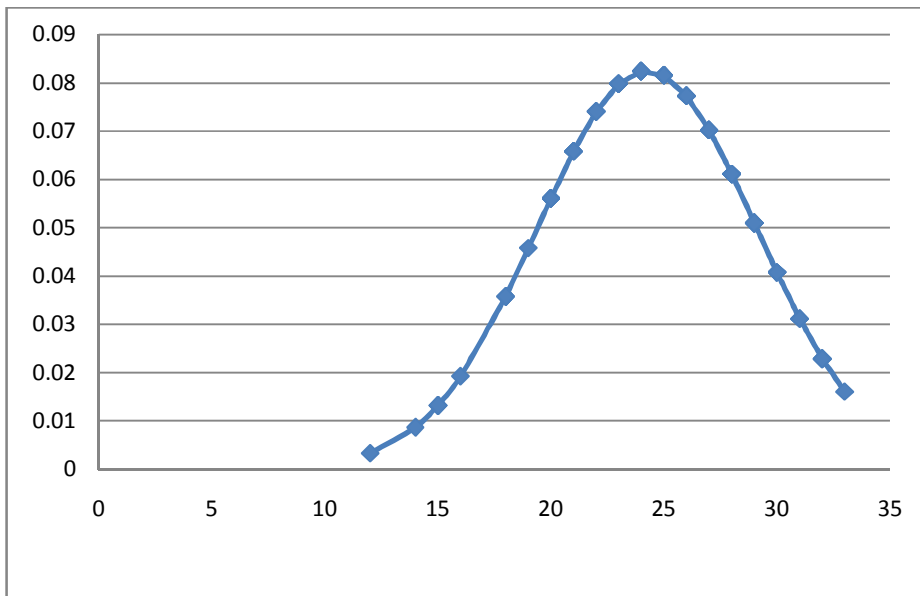


Figure 22. Smoothed Frequency Curve of Attitude towards English

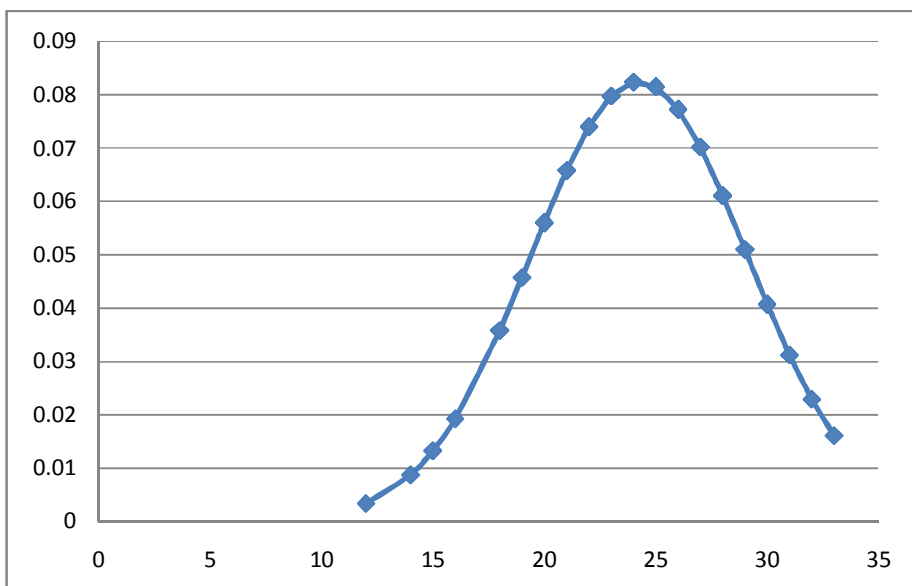


Figure 23. Smoothed Frequency Curve of Study Habit

The descriptive statistical aspects furnished in Figures 20, 21, 22 and 23 are graphical representations of those presented in Tables 35, 36, 37 and 38. They show that the statistical constants of the variables Achievement in English, Achievement Motivation, Attitude towards English and Study Habit of underachievers in English are close approximations to values expected for normal distribution.

The distributions of the variables do not depart markedly for the total sample of underachievers and sub samples. The statistical aspects indicate that the distributions of the select variables of the underachievers in English approximate normalcy. The sample of underachievers in English identified from the total sample in the present study can be seen as almost representative a sample of the population.

Section Four

ESTIMATION OF ASSOCIATION OF PSYCHO- SOCIAL VARIABLES WITH UNDER, NORMAL AND OVER ACHIEVEMENT IN ENGLISH

To test whether underachievement in English is associated with the select psycho-social variables, the non-parametric chi- square (X^2) test of independence was applied with the assumption that underachievement in English and each of the psycho-social variables under study are independent. In order to calculate X^2 values for the association of the psycho-social variables with underachievement in English, data were arranged in the form of 3 x 3 contingency tables. For this, each psycho-social variable was considered in three levels viz., High, Average and Low (' σ '

distance from mean as the criteria for classification) and underachievement as Underachievers, Normal Achievers and Over Achievers.

Contingency Tables for Achievement in English with Psycho-Social Variables Achievement Motivation, Attitude towards English and Study Habit are given in Table 39, 40 and 41.

Table 39.

Details of Chi-square test between Over, Normal and Underachievement in English and High, Average and Low Achievement Motivation Group

	Achievers	Achievement Motivation Group			Total
		High	Average	Low	
Achievement in English	Over achievement	19	103	26	148
	Normal achievement	74	235	77	386
	Underachievement	12	72	7	91
Total		105	410	110	625

Table 40.

Details of Chi-square test between Over, Normal and Underachievement in English and High, Average and Low Attitude towards English Group

Achievers	Attitude towards English Group			Total
	High	Average	Low	
Over achievement	29	85	34	148
Achievement in English Normal achievement	66	258	62	386
Underachievement	9	63	19	91
Total	104	406	115	625

Table 41.

Details of Chi-square test between Over, Normal and Underachievement in English and High, Average and Low Study Habit Group

Achievers	Study Habit Group			Total
	High	Average	Low	
Over achievement	26	92	30	148
Achievement in English Normal achievement	83	244	59	386
Underachievement	19	60	12	91
Total	128	396	101	625

As the X^2 value indicated significant association of the psycho-social variables with underachievement, 'C' coefficient of contingency was estimated to know the extent of relation or association of the variables. The estimated values and the 'C' coefficient are given in Table 42.

Table 42.

Details of Chi-square test between Over, Normal and Underachievement in English and High, Average and Low group of each psycho-social variable and C coefficient.

Sl No	Variables	X^2 Value	C coefficient
1	Achievement Motivation	13.873	0.147
2	Attitude towards English	8.206	
3	Study Habit	3.175	

Degrees of freedom $df = (3-1)(3-1) = 4$

Discussion of Results

From the Table 42 it is revealed that the value of X^2 obtained for the variable Achievement Motivation with Over, Normal and Underachievement in English is 13.87 (table), which exceeds 13.28, the table value of X^2 at 0.01 level of significance at four degrees of freedom. This results in the rejection of the null hypothesis, "Achievement in English and Achievement Motivation are independent", which implies the significant association of two variables. That is, Achievement Motivation and Achievement in English are significantly associated.

When comparing three levels of Achievement in English with three levels of different variables such as Achievement Motivation, Attitude towards English and Study Habit, the following results can be stated. The chi square value obtained when compared with Achievement Motivation is 13.873 which exceeds the table value of chi square 13.28 with four degrees of freedom at 0.01 level of significance. So it can be concluded that the association with Over, Normal and Underachievement in English and Achievement Motivation is significant at 0.01 level of significance

As the relation was found to be significant, to get an idea of the extent of relationship, 'C' coefficient of contingency was estimated in terms of X^2 . The value of 'C' was found to be 0.147 (table). This index suggests that the association is also significant and there exists only a low association with Over, Normal and Underachievement in English and Achievement Motivation

For the variable Attitude towards English, the X^2 value obtained is 8.206 which is less than 9.49, the table value of X^2 at 0.05 level of significance at four degrees of freedom. This suggests that there is no statistically significant association of the variable Attitude towards English with Over, Normal and Underachievement in English.

The X^2 value obtained for the variable Study Habit is 3.175 which is less than the table value of chi square 9.487 with four degrees of freedom. This suggests that the relationship between Study Habit and Underachievement in English is not significant even at 0.05 level.

Section Five

INVESTIGATION OF GROUP DIFFERENCES

This section of Analysis deals with the investigation of group differences in the relation of the select psycho-social correlates with underachievement in English. It shows whether significant difference exists between the sub samples formed on the basis of gender of the pupils, locale and type of the management of the schools, and medium of instruction.

Group difference on the basis of gender

The details of gender –based difference among the underachievers in English with regard to Achievement in English, Achievement Motivation, Attitude towards English and Study Habit are presented in Table 43.

Table 43

Details of the difference between boys and girls of the underachievers in English with regard to Achievement in English, Achievement Motivation, Attitude towards English and Study Habit

Variables	Gender	N	Mean	Std. Deviation	t value	Level of Significance
Achievement in English	Male	43	5.302	3.226	3.157	Significant at 0.01 level
	Female	48	7.729	4.009		
Achievement Motivation	Male	43	38.326	7.282	0.543	Not significant
	Female	48	37.542	6.490		
Attitude towards English	Male	43	29.093	6.876	1.709	Not significant
	Female	48	31.333	5.617		
Study Habit	Male	43	23.558	5.338	1.302	Not significant
	Female	48	24.875	4.300		

Table 43 shows that among the identified underachievers in English, there is significant difference between boys and girls with regard to the dependent variable Achievement in English. The t value is 3.157 and so the difference is significant at 0.01 level. The higher values of the means of girls show that they have more achievement in English than boys have.

In the case of the psychological correlate Achievement Motivation, the t value is 0.543. So there is no significant difference between boys and girls among the identified underachievers in English.

With regard to another psychological correlate Attitude towards English, the t value is 1.709. It points out that there is no significant difference between boys and girls among the identified underachievers in English.

When the social variable study habit is taken into account, the gender difference is not significant among the identified underachievers in English as t value is 1.302.

A graphical representation of the comparison of boys and girls of underachievers in English with regard to the mean scores in the dependent and independent variables is given as Figure 24.

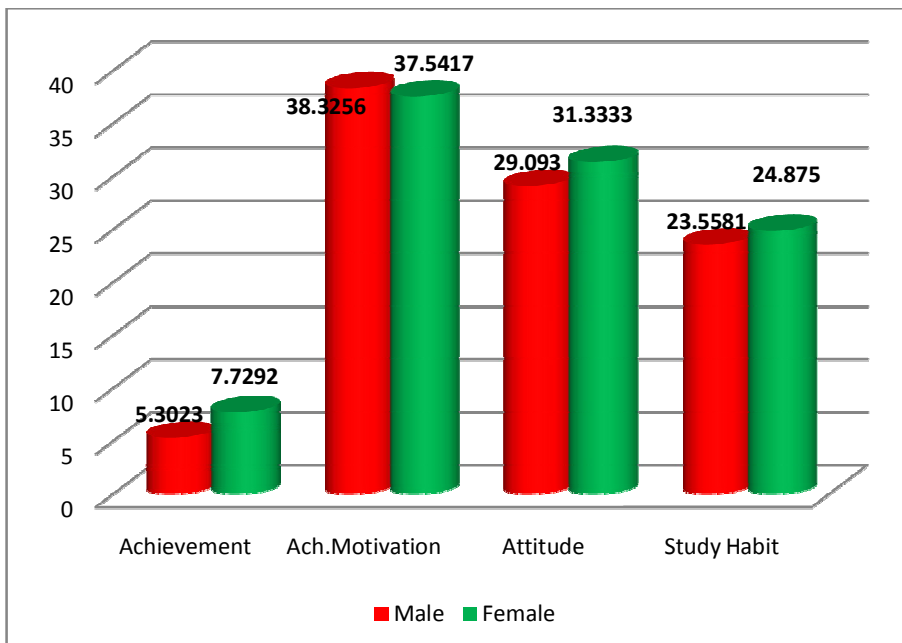


Figure 24. Graphical representation of the comparison of boys and girls of underachievers in English with regard to the mean scores in Achievement in English, Achievement Motivation, Attitude towards English and Study Habit.

Group difference on the basis of the Locale of the School

The details of locale of the school –based relation among the underachievers in English with regard to Achievement in English, Achievement Motivation, Attitude towards English and Study Habit are presented in Table 44.

Table 44

Details of the difference between rural and urban school pupils among the underachievers in English with regard to Achievement in English, Achievement Motivation, Attitude towards English and Study Habit

Variables	Locale	N	Mean	Std. Deviation	t value	Level of Significance
Achievement in English	Rural	67	6.134	3.485	1.887	Not significant
	Urban	24	7.833	4.536		
Achievement Motivation	Rural	67	37.403	6.257	1.188	Not significant
	Urban	24	39.333	8.266		
Attitude towards English	Rural	67	29.880	6.297	0.996	Not significant
	Urban	24	31.375	6.344		
Study Habit	Rural	67	23.671	4.744	1.944	Not significant
	Urban	24	25.875	4.821		

Table 44 shows that among the identified underachievers in English, there is no significant difference between rural and urban school pupils with regard to the dependent variable Achievement in English. The t value is 1.887. So there is no significant difference.

In the case of the psychological correlate Achievement Motivation, the t value is 1.188. So there is no significant difference between rural and urban school pupils among the identified underachievers in English with regard to Achievement Motivation.

With regard to another psychological correlate Attitude towards English, the t value is 0.996. It points out that there is no significant difference between rural and urban school pupils among the identified underachievers in English with regard to Attitude towards English.

When the social variable study habit is taken into account, the difference between rural and urban school pupils is not significant among the identified underachievers in English as t value is 1.944.

A graphical representation of the comparison of rural and urban school pupils of underachievers in English with regard to the mean score in the variables is given as Figure 25.

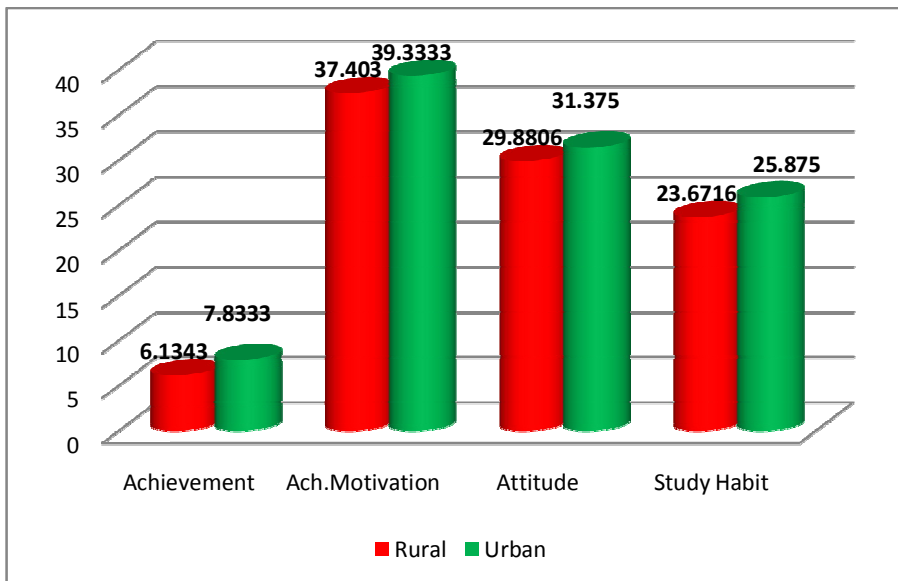


Figure 25. Graphical representation of the comparison of rural and urban school pupils of underachievers in English with regard to the mean score in Achievement in English, Achievement Motivation, Attitude towards English and Study Habit.

Group difference on the basis of the Medium of Instruction

Details of the difference between English and Malayalam medium pupils in the underachievement in English are presented in Table 45.

Table 45

Details of the difference between English and Malayalam Medium pupils of the underachievers in achievement in English

Variables	Medium	N	Mean	Std. Deviation	t value	Level of Significance
Achievement in English	Malayalam	87	6.345	3.631	2.861	Significant at level 0.01
	English	4	11.750	5.188		
Achievement Motivation	Malayalam	87	37.874	6.896	0.249	Not Significant
	English	4	38.750	6.551		
Attitude towards English	Malayalam	87	30.149	6.122	0.883	Not Significant
	English	4	33.000	10.456		
Study Habit	Malayalam	87	24.264	4.872	0.106	Not Significant
	English	4	24.000	4.619		

Table 45 shows that among the identified underachievers in English, there is significant difference between Malayalam medium pupils and English medium pupils with regard to the dependent variable Achievement in English. The t value is 2.861 and so is significant at 0.01 level. The higher values of the means of English medium pupils show that they have more achievement in English than Malayalam medium pupils have.

In the case of the psychological correlate Achievement Motivation, the t value is 0.249. So there is no significant difference between Malayalam medium pupils and English medium pupils among the identified underachievers in English with regard to Achievement Motivation.

With regard to another psychological correlate Attitude towards English, the t value is 0.883. It points out that there is no significant difference between Malayalam medium pupils and English medium pupils among the identified underachievers in English with regard to Attitude towards English. The higher values of the means of English medium pupils show that they have greater attitude towards English than Malayalam medium pupils have, but the difference is not significant even at 0.05 level.

When the social variable study habit is taken into account, the difference between Malayalam medium pupils and English medium pupils is not significant among the identified underachievers in English as the t value is 0.106.

A graphical representation of the comparison of Malayalam and English medium pupils of underachievers in English with regard to the mean scores in the variables is given as Figure 26.

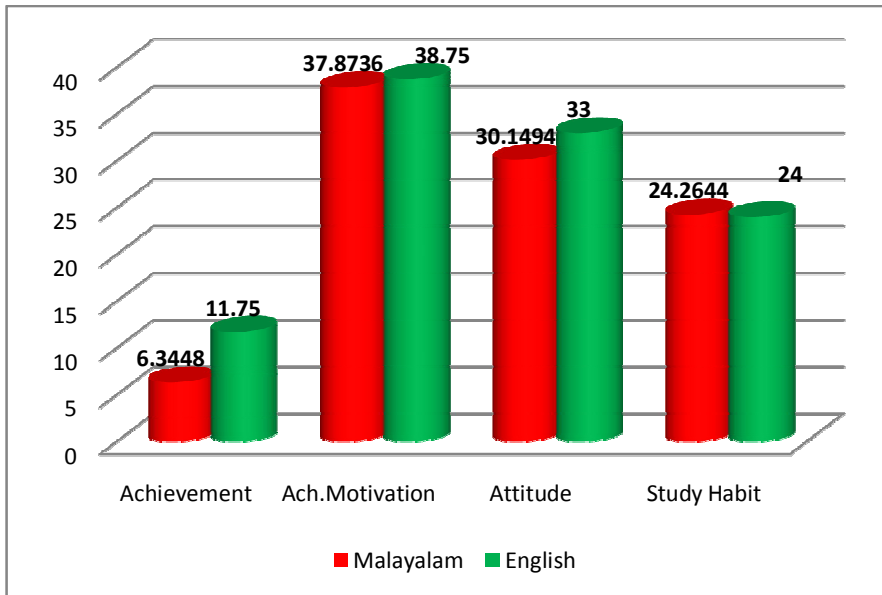


Figure 26. Graphical representation of the comparison of Malayalam and English medium school pupils of underachievers in English with regard to the mean scores in Achievement in English, Achievement Motivation, Attitude towards English and Study Habit.

Group difference on the basis of the Type of the Management of the School

The details of difference among the Government, Aided and Un-Aided school pupils of underachievers in the achievement in English are presented in Table 46.

Table 46

The details of the Analysis of Variance (ANOVA) among the Government and Aided school pupils in the underachievement in English

Variable		Sum of Squares	df	Mean Square	F	Level of Significance
Achievement in English	Between Groups	118.894	2	59.447	4.333	Significant at 0.05 level
	Within Groups	1207.238	88	13.719		
	Total	1326.132	90			
Achievement Motivation	Between Groups	80.654	2	40.327	0.857	NS
	Within Groups	4140.643	88	47.053		
	Total	4221.297	90			
Attitude towards English	Between Groups	186.081	2	93.041	2.411	NS
	Within Groups	3396.051	88	38.591		
	Total	3582.132	90			
Study Habit	Between Groups	25.437	2	12.718	0.538	NS
	Within Groups	2079.750	88	23.634		
	Total	2105.187	90			

In Table 46, the Analysis of Variance (ANOVA) shows the variations between the sub samples of the Government and Aided school pupils alone. Following the inadequate number of pupils in the sample, Un-Aided school pupils could not be focussed. The number of Un-Aided school pupils included among the underachievers in English is only one.

The results presented in the table shows that among the identified underachievers in English, there is significant difference between the Government and Aided school pupils with regard to the dependent variable Achievement in English. The F value is 4.333 at 0.05 level and so is significant.

In the case of the psychological correlate Achievement Motivation, the F value is 0.857. So there is no significant difference between the Government and Aided school pupils among the identified underachievers in English with regard to Achievement Motivation even at 0.05 level.

With regard to another psychological correlate Attitude towards English, the F value is 2.411. It points out that there is no significant difference between the Government and Aided school pupils among the identified underachievers in English with regard to Attitude towards English. The F value is not significant even at 0.05 level.

When the social variable study habit is taken into account, the difference between the Government and Aided school pupils is not significant among the identified underachievers in English as the F value (0.538) is not significant even at 0.05 level.

Two graphical representations of the comparison of the Government, Aided and Un-Aided school pupils of underachievers in English with regard to the mean scores in the variables are given below as Figure No. 27 & 28.

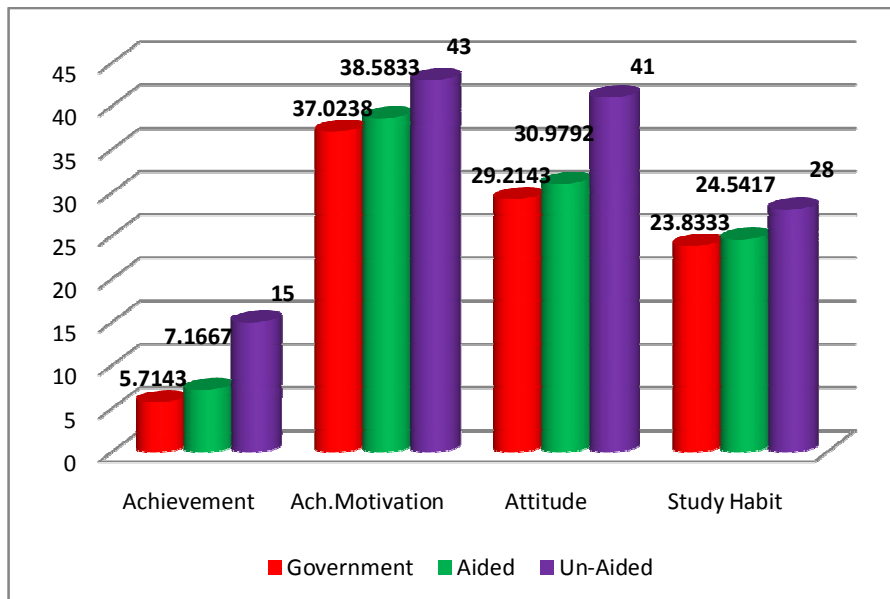


Figure 27. Graphical representation of the comparison of the Government, Aided and Un-Aided school pupils of underachievers in English with regard to the mean score in Achievement in English, Achievement Motivation, Attitude towards English and Study Habit.

In order to know the trend of the difference in the scores of Achievement in English obtained by the Government, Aided and Un-Aided school pupils of underachievers in English, a graph is plotted as Figure 28.



Figure 28. Graphical representation of the mean scores in the Achievement in English obtained by the Government, Aided and Un-Aided school pupils of underachievers in English.

Section Six

RELATION OF THE SELECT PSYCHO – SOCIAL CORRELATES WITH UNDERACHIEVEMENT IN ENGLISH

As the present study is concerned with the psycho-social correlates of underachievement in English, the investigator proceeded to find out the extent of the relation of the psycho-social correlates, i.e., pupils' Achievement Motivation, Attitude towards English and Study Habit on Underachievement in English by means of Pearson's Product Moment Coefficient of Correlation (r). While using this, the following assumptions are to be met.

1. The distribution of the dependent variable should be normal.

2. There should be homogeneity of variance or equal scattering of two variables.

In the preliminary analysis, it is found that the distribution of the criterion variables is not badly skewed. Homogeneity of variance can be expected as large samples are made use of for estimating the 'r's.

Relation between Achievement Motivation and Achievement in English of the Underachievers in English

The details of the relation between the psychological correlate Achievement Motivation and Achievement in English of the underachievers in English for the total and sub samples formed on the basis of gender of the pupils, locale and type of the management of the school, and medium of instruction are given in Table 47.

Table 47

Details of the relationship between the psychological correlate Achievement Motivation and Achievement in English of Underachievers in English for the total and sub samples

Sample	N	Coefficient of Correlation, 'r'	t value	Whether significant or not
Total	91	0.056	0.529	NS
Boys	43	-0.153	0.991	NS
Girls	48	0.267	1.879	NS
Rural	67	0.243	2.030	Significant at 0.05 level
Urban	24	-0.318	1.573	NS
Government	42	0.040	0.253	NS
Aided	48	-0.001	0.006	NS
Malayalam Medium	87	0.066	0.610	NS
English Medium	4	-0.277	0.408	NS

Table 47 shows that among the underachievers in English, the coefficient of correlation between Achievement Motivation and Achievement in English is 0.056. It indicates that the relationship is positive but negligible. That means when Achievement Motivation increases, Achievement in English also increases.

The relationship between Achievement Motivation and Achievement in English of underachievers in English is not significant even at 0.05 level for the total

sample as the t value is 0.529. In the sub sample of rural school pupils, significant relationship is found between the independent variable Achievement Motivation and dependent variable Achievement in English at 0.05 level as the t value is 2.030.

Relation between Attitude towards English and Achievement in English of the underachievers in English

Details of the relationship between the psychological correlate Attitude and Achievement in English of the underachievers in English for the total and sub samples formed on the basis of gender of the pupils, locale and type of the management of the school, and medium of instruction are given in Table 48.

Table 48

Details of the relation between the psychological correlate Attitude towards English and Achievement in English of underachievers in English for the total and sub samples

Sample	N	Coefficient of Correlation, 'r'	t value	Whether significant or not
Total	91	0.150	1.431	NS
Boys	43	-0.072	0.462	NS
Girls	48	0.255	1.789	NS
Rural	67	0.254	2.117	Significant at 0.05 level
Urban	24	-0.131	0.620	NS
Government	42	0.01	0.063	NS
Aided	48	0.153	1.050	NS
Malayalam Medium	87	0.125	1.162	NS
English Medium	4	0.172	0.247	NS

Table 48 shows that among the underachievers in English, the coefficient of correlation between Attitude towards English and Achievement in English is 0.150. It indicates that the relationship is positive but negligible.

The relationship between Attitude towards English and Achievement in English of underachievers in English is not significant even at 0.05 level for the total sample as the t value is 1.431. In the sub sample of rural school pupils, significant relationship is found between the independent variable Attitude towards English and dependent variable Achievement in English at 0.05 level as the t value is 2.117.

Relation between Study Habit and Achievement in English of the Underachievers in English

The details of the relation between social correlate study habit and Achievement in English of the underachievers in English for the total and sub samples formed on the basis of gender of the pupils, locale and type of the management of the school, and medium of instruction are given in Table 49.

Table 49

Details of the relationship between the social correlate Study Habit and Achievement in English of the underachievers in English for the total and sub samples

Sample	N	Coefficient of Correlation, 'r'	t value	Whether significant or not
Total	91	0.246	2.394	Significant at 0.05 level
Boys	43	0.091	0.585	NS
Girls	48	0.337	2.428	Significant at 0.05 level
Rural	67	0.200	1.646	NS
Urban	24	0.253	1.227	NS
Government	42	0.381	2.606	Significant at 0.01 level
Aided	48	0.108	0.737	NS
Malayalam Medium	87	0.298	2.878	Significant at 0.01 level
English Medium	4	-0.501	0.819	NS

Table 49 shows that among the underachievers in English, the coefficient of correlation between Study Habit and Achievement in English for the total sample is 0.246, for the sub sample of girls is 0.337, of urban school pupils is 0.381, and of Malayalam medium pupils is 0.298. The obtained values of coefficient of correlations indicate that the relationship between Study Habit and

Achievement in English of the total sample and the mentioned sub samples of underachievers in English is positive but low.

The relationship between Study Habit and Achievement in English of underachievers in English is significant at 0.05 level for the total sample as the t value is 2.394. In the sub sample of government school pupils and Malayalam medium pupils, significant relationship is found between the independent variable Study Habit and dependent variable Achievement in English beyond 0.01 level and in the sub sample of girls at 0.05 level.

Relation between Achievement Motivation and Attitude towards English of the underachievers in English

The details of the relation between independent variables Achievement Motivation and Attitude towards English of the underachievers in English for the total and sub samples formed on the basis of gender of the pupils, locale and type of the management of the school, and medium of instruction are given in Table 50.

Table 50

Details of relationship between the Independent Variables Achievement Motivation and Attitude towards English of the Underachievers in English for the total and sub samples

Sample	N	Coefficient of Correlation, 'r'	t value	Whether significant or not
Total	91	.546**	6.148	Significant at 0.01 level
Boys	43	.656**	5.565	Significant at 0.01 level
Girls	48	.457**	3.485	Significant at 0.01 level
Rural	67	.570**	5.593	Significant at 0.01 level
Urban	24	.490*	2.637	Significant at 0.01 level
Government	42	.597**	4.707	Significant at 0.01 level
Aided	48	.473**	3.641	Significant at 0.01 level
Malayalam Medium	87	.532**	5.793	Significant at 0.01 level
English Medium	4	.886	2.702	Significant at 0.01 level

Table 50 shows that among the underachievers in English, the coefficient of correlation between Achievement Motivation and Attitude towards English of the underachievers in English for the total sample is 0.546, for the subsamples of boys is 0.656, girls is 0.457, rural school pupils is 0.570, urban school pupils is 0.490, government school pupils is 0.597, Aided school pupils is 0.473, Malayalam

medium pupils is 0.532 and of English medium pupils is 0.886. The obtained values of coefficient of correlations indicate that the relationship between Study Habit and Achievement in English of the total sample and the sub samples of underachievers in English show substantial positive relationship. The sub sample of English medium pupils ($r = 0.886$) has very high correlation between Achievement Motivation and Attitude towards English. The positive relationship implies that increase or decrease in Achievement Motivation tends to cause increase or decrease in Attitude towards English.

The relationship between Achievement Motivation and Attitude towards English of underachievers in English is significant for the total and entire sub samples beyond 0.01 level.

Relation between Achievement Motivation and Study Habit of Underachievers in English

The details of the relation between independent variable Achievement Motivation and Study Habit of underachievers in English for the total and sub samples formed on the basis of gender of the pupils, locale and type of the management of the school, and medium of instruction are given in Table 51.

Table 51

Details of the relationship between the Independent Variables Achievement Motivation and Study Habit of the Underachievers in English for the total and sub samples

Sample	N	Coefficient of Correlation, 'r'	t value	Whether significant or not
Total	91	.516	5.683	Significant at 0.01 level
Boys	43	.597	4.765	Significant at 0.01 level
Girls	48	.446	3.380	Significant at 0.01 level
Rural	67	.645	6.805	Significant at 0.01 level
Urban	24	.216	1.038	NS
Government	42	.468	3.349	Significant at 0.01 level
Aided	48	.546	4.420	Significant at 0.01 level
Malayalam Medium	87	.512	5.495	Significant at 0.01 level
English Medium	4	.661	1.246	NS

Table 51 shows that among the underachievers in English, the coefficient of correlation between Achievement Motivation and Study Habit of the underachievers in English for the total sample is 0.516, for the subsamples of boys is 0.597, girls is 0.446, rural school pupils is 0.645, urban school pupils is 0.216, government school pupils is 0.468, Aided school pupils is 0.546, Malayalam

medium pupils is 0.512 and of English medium pupils is 0.661. The obtained values of coefficient of correlations indicate that the relationship between Study Habit and Achievement in English of the total sample and the entire sub samples of underachievers in English show positive relationship. The positive relationship implies that increase or decrease in Achievement Motivation tends to cause increase or decrease in Study Habit.

The relationship between Achievement Motivation and Study Habit of underachievers in English is significant for the total sample and the sub samples of boys, girls, rural, government, aided, and Malayalam medium pupils beyond 0.01 level.

Relation between Attitude towards English and Study Habit of Underachievers in English

The details of the relation between independent variable Attitude towards English and Study Habit of underachievers in English for the total and sub samples formed on the basis of the gender of the pupils, locale and type of the management of the school, and medium of instruction are given in Table 52.

Table 52

Details of the relationship between the Independent Variables Attitude towards English and Study Habit of the Underachievers in English for the total and sub samples

Sample	N	Coefficient of Correlation, 'r'	t value	Whether significant or not
Total	91	.561	6.393	Significant at 0.01 level
Boys	43	.681	5.955	Significant at 0.01 level
Girls	48	.373	2.727	Significant at 0.01 level
Rural	67	.536	5.119	Significant at 0.01 level
Urban	24	.604	3.555	Significant at 0.01 level
Government	42	.544	4.100	Significant at 0.01 level
Aided	48	.564	4.632	Significant at 0.01 level
Malayalam Medium	87	.583	6.616	Significant at 0.01 level
English Medium	4	.331	0.496	NS

Table 52 shows that among the underachievers in English, the coefficient of correlation between Attitude towards English and Study Habit of underachievers in English for the total sample is 0.561, for the sub samples of boys is 0.681, girls is 0.373, rural school pupils is 0.536, urban school pupils is 0.604, government school

pupils is 0.544, Aided school pupils is 0.564, Malayalam medium pupils is 0.583 and of English medium pupils is 0.331. The obtained values of coefficient of correlations indicate that the relationship between Attitude towards English and Study Habit of the total sample and the entire sub samples except English medium pupils of underachievers in English is substantially positive. English medium pupils have positive and moderate relationship. The positive relationship implies that increase or decrease in Attitude towards English tends to cause increase or decrease in Study Habit.

The relationship between Attitude towards English and Study Habit of the underachievers in English is significant for the total sample and all the sub samples except that of English medium pupils beyond 0.01 level.

Section Seven

EFFECT OF THE SELECT PSYCHO – SOCIAL CORRELATES ON UNDERACHIEVEMENT IN ENGLISH

The effect of the select psycho-social correlates on underachievement was analysed group wise as psychological correlates and social correlates and then collectively, using the Step wise Regression Analysis by ANOVA approach. In the present study, the Multiple Regression Analysis is used to know whether Achievement in English can be predicted on the basis of psychological variables Achievement Motivation and Attitude towards English and social variable Study Habit. In addition, Multiple Regression can help determine the relative contribution of the each predictor variable to the total variance in the criterion variable. The data for the analysis is given in Table 53.

Table 53

Mean and Standard Deviation of the Criterion (Y) and Predictor Variables (X1 to X3) and Correlation Coefficient of Predictor Variables

Variable	N	Mean	Standard Deviation	Coefficient of Correlation
Achievement in English of underachievers in English (Y)	91	6.5824	3.839	---
Achievement Motivation (X1)	91	37.9121	6.849	0.056
Attitude towards English (X2)	91	30.2747	6.309	0.150
Study Habit (X3)	91	24.2527	4.836	0.246

Effect of the Psychological Correlates

The predictor variables are given as input data to estimate the contribution of the predictor variables in making prediction about the criterion variable. In the present study, the psychological correlates, namely, Achievement Motivation and Attitude towards English, are entered as predictor variables in order to identify their contribution in predicting the criterion variable, underachievement in English. The F values and Beta coefficients are calculated. Results are presented in Table 54.

Table 54

Results of Regression Analysis

Model	Sum of Squares	df	Mean Square	F
Regression	30.997	2	15.499	
Residual	1295.135	88	14.717	1.053
Total	1326.132	90		

Dependent Variable: Achievement in English of the Underachievers

Predictors: (Constant), Attitude towards English, Achievement Motivation

Multiple R = 0.153 SE 3.8363 $R^2 = 0.023$ $R^2 * 100 = 2.3$

Table value of F with df 2,90 at 0.05=3.0976 ,at 0.01= 4.8490

Variable	Unstandardised Coefficients	
	Beta coefficient	Std. Error
(Constant)	4.233	2.431
Achievement Motivation	-.021	.070
Attitude towards English	.103	.077

The results of Regression Analysis points out that the obtained F ratio is 1.053 which is lesser than the calculated value of F with df (2, 90) at 0.05 level of significance (3.098). Therefore, it is not significant. It indicates that there is no

significant linear relationship between the dependent variable and the predictor variables. The beta coefficient of the variable Achievement Motivation is -0.021, and of Attitude towards English is 0.103. The values indicate that Achievement Motivation has negative minute correlation and Attitude towards English has a relatively positive correlation, but when taken as combined effect, the psychological variables show relatively positive correlation to the variable Achievement in English. Another thing the analysis reveals is that 2.3% of the variance in Achievement in English of the underachievers in English can be seen as the contribution of the Psychological Variables, Attitude towards English and Achievement Motivation.

The beta coefficient of the variable X1 and X2 are -0.021 and 0.103 respectively. So the regression equation is written as

$$Y = 4.233 - 0.021 X_1 + 0.103 X_2$$

Where, Y refers to Achievement in English, and X1 and X2 refer to Achievement Motivation and Attitude towards English of the underachievers respectively.

This equation helps predict the Achievement in English of the underachievers in English on the basis of the values of Achievement Motivation and Attitude towards English.

Effect of the Social Correlate

The effect of the social correlate Study Habit on the Achievement in English of the underachievers in English was analysed considering it as predictor variable. The results are given below in Table 55.

Table 55

Results of Regression Analysis

Model	Sum of Squares	df	Mean Square	F
Regression	80.477	1	80.477	5.750
Residual	1245.655	89	13.996	
Total	1326.132	90		

Dependent Variable: Achievement in English of Underachievers in English.

Predictors: (Constant), Study Habit

Multiple R = 0.246 SE 3.741 $R^2 = 0.061$ $R^2 * 100 = 6.1$

Table value of F with df 1,90 at 0.05=3.9468 ,at 0.01= 6.9251

Model	Unstandardised Coefficients	
	Beta coefficient	Std. Error
(Constant)	1.841	2.016
Study Habit	.196	.082

The results given in Table 53 points out that the obtained F ratio is 5.750 which is greater than the calculated value of F with df (1, 90) at 0.05 level of significance (3.947) and so it is significant. It indicates that there is significant linear relationship between the dependent variable and the predictor variable. The beta coefficient of the variable Study Habit is 0.196. The value indicates that predictor variable Study Habit has a relatively positive correlation to the variable Achievement in English. Another thing the analysis reveals is that 6.1% of the variance in Achievement in English can be seen as the contribution of the social variable, Study Habit.

The beta coefficient of the variable X₃ is 0.196. So the regression equation is written as the following.

$$Y = 1.841 + 0.196 X_3$$

Where Y refers to Achievement in English, and X₃ refers to Study Habit of the underachievers in English.

This equation helps predict the Achievement in English of the underachievers in English on the basis of the value of Study Habit.

Combined Effect of the Psycho-Social Correlates

The combined effect of all the select psychological (Achievement Motivation and Attitude towards English) and social (Study Habit) variables on underachievement in English is presented below in regression model.

Table 56

Results of Regression Analysis

Model	Sum of Squares	df	Mean Square	F
Regression	92.515	3	30.838	2.175
Residual	1233.617	87	14.180	
Total	1326.132	90		

Dependent Variable: Achievement

Predictors: (Constant), Attitude towards English, Achievement Motivation and Study Habit

Multiple R = 0.264 SE 3.76557 $R^2 = 0.070$ $R^2 * 100 = 7$

Table value of F with df 3,90 at 0.05=2.7058 ,at 0.01= 4.0096

Model	Unstandardised Coefficients	
	Beta coefficient	Std. Error
(Constant)	2.711	2.495
Achievement Motivation	-.066	.073
Attitude	.037	.082
Study Habit	.217	.104

The results given in Table 56 points out that the obtained F ratio is 2.175 which is lesser than the calculated value of F with df (3, 90) at 0.05 level of

significance (2.706) and so it is not significant. It indicates that there is no significant linear relationship between the dependent variable and the predictor variables. The beta coefficients of the three variables presented in the table above show the relationship of the respective variable to the dependent variable Achievement in English. Another thing the analysis reveals is that 7% of the variance in Achievement in English can be seen as the contribution of the Psycho-Social variables.

The beta coefficient of the variable X1, X2 and X3 are -0.066, 0.037 and 0.217 respectively. So the regression equation is written as the following.

$$Y = 2.711 - 0.066 X_1 + 0.037 X_2 + 0.217 X_3$$

Where, Y refers to Achievement in English, and X1, X2 and X3 refer to Achievement Motivation, Attitude towards English and Study Habit respectively.

This equation helps predict the Achievement in English of the underachievers in English on the basis of the values of Achievement Motivation, Attitude towards English and Study Habit.

Section Eight

PREDICTION OF OVER, NORMAL AND UNDERACHIEVEMENT GROUPS IN ENGLISH ON THE BASIS OF INDEPENDENT VARIABLES

In this study, the discriminant function analysis (Direct method) was done in order to predict the over, normal and underachievement groups in English on the basis of the independent variables – attitude towards English, achievement

motivation and study habit. Details of the discriminant function analysis and discussion of results are presented below.

Preliminary Analysis

As an initial step to the discriminant function analysis, group wise number of achievers stipulated by the dependent variable underachievement in English was identified.

Table 57

Group Wise Number of Achievers

Achievers' Group	Unweighted	Weighted
Over Achievers	148	148.000
Normal Achievers	386	386.000
Underachievers	91	91.000
Total	625	625.000

Analysis of Group Difference

A preliminary analysis of the data was done to find out the group means and group standard deviations of the independent variables, viz, achievement motivation, attitude towards English and study habit for the over, normal and underachievement groups in English. Group means, group standard deviations, Wilk's Lambda, and Univariate F ratio indicate the F values for the difference among the over, normal and underachievement groups in English on each independent variable for the total sample. Details are presented in Table 58.

Table 58

Group Means and Standard Deviations

Independent Variables	Achiever's Group								Wilk's Lambda	F
	Over Achievers		Normal Achievers		Underachievers		Total			
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation		
Ach. Motivation	35.372	8.852	36.762	9.304	37.912	6.847	36.600	8.903	0.992	2.472
Attitude	30.101	7.389	30.961	6.873	30.275	6.309	30.658	6.921	0.997	0.989
Study Habit	23.000	5.241	24.277	5.153	24.253	4.836	23.971	5.150	0.989	3.477

Table 58 shows that the values of Wilk's Lambda for the independent variables achievement motivation, attitude towards English and study habit as 0.992, 0.997 and 0.989 respectively, indicating significant difference in the mean values of the groups. The F values denotes that significant difference exists in the mean score of the study habit among the over, normal and underachievement in English as the obtained F value (3.477) exceeds the table F value for (2623) degrees of freedom. In the case of the other independent variables achievement motivation and attitude towards English, the difference is not significant.

Correlation among the Discriminating Variables

As a preliminary measure to the discriminant function analysis, Pooled Groups Correlation Matrices of the independent variables were calculated. Details are given in Table 59.

Table 59

Correlation Matrix of the Discriminating Variables

	Discriminating Variables	Achievement Motivation	Attitude	Study Habit
Correlation	Ach. Motivation	1.000		
	Attitude	0.420	1.000	
	Study Habit	0.601	0.423	1.000

Table 59 shows that the correlation coefficient, 'r' is ranging from 0.420 to 0.601. The correlation between Achievement Motivation and Attitude towards English is 'r' = 0.420. It denotes significant positive moderate correlation. The relationship between Achievement Motivation and Study Habit is 'r' = 0.601. It denotes significant positive strong correlation. The relationship between Attitude towards English and Study Habit is 'r' = 0.423. It denotes significant positive moderate correlation.

Discriminant Functions

Canonical Discriminant Function Analysis

This section shows the calculation of the standardised and unstandardised canonical discriminant function coefficients. The discriminant function coefficient effectively discriminates among the over, normal underachievement in English on the basis of the combination of the discriminating variables. Here, as the number of groups being three, two discriminant functions take place contributing to the overall relationship. The standardised and unstandardised function coefficients are shown in Table 60.

Table 60

Standardised and Unstandardised Canonical Discriminant Function Coefficients

Discriminant Variables	Standardised Canonical Discriminant Function Coefficient		Unstandardised Canonical Discriminant Function Coefficient	
	Function I	Function II	Function I	Function II
Ach. Motivation	0.343	-1.075	0.039	-.121
Attitude	-.132	0.749	-.019	0.108
Study Habit	0.812	0.590	0.158	0.115
(Constant)			-4.622	-1.642

To solve for the standardised discriminant function score for the first function:

$$D_1 = 0.343 \times Z_1 - 0.132 \times Z_2 + 0.812 \times Z_3$$

And second function

$$D_2 = 1.075 \times Z_1 + 0.749 \times Z_2 + 0.590 \times Z_3$$

Where Z_1 , Z_2 and Z_3 are the individual standardised scores obtained for the three discriminating variables namely Achievement Motivation (Z_1), Attitude towards English (Z_2), and Study Habit (Z_3).

To solve for the unstandardised discriminant function score for the first function:

$$D_1 = 0.039 \times X_1 - 0.019 \times X_2 + 0.158 \times X_3 - 4.622$$

And second function

$$D_2 = 0.121 \times X_1 + 0.108 \times X_2 + 0.115 \times X_3 - 1.642$$

Where X_1 , X_2 and X_3 are the individual unstandardised scores obtained for the three discriminating variables namely Achievement Motivation (X_1), Attitude towards English (X_2), and Study Habit (X_3).

Group Centroids

Mean value of D_1 for each group can be computed. Group means on D_1 are termed as Centroids. Group Centroids of the two discriminant functions for the over, normal and underachievement in English are shown in Table 61.

Table 61

Function at Group Centroids

Group	Function	
	1	2
Over Achievers	-.191	-.023
Normal Achievers	0.049	0.048
Underachievers	0.103	0.168

Summary of Canonical Discriminant Functions

The effectiveness of the discriminant functions can be interpreted using the eigen values, percent of variance, canonical correlation, Wilk's Lambda, and chi square values. Canonical correlation shows the relationship between the discriminating variables and function. Chi square values show the reliable relationship between groups and discriminating variables. Summary of the canonical discriminant function is given below in Table 62.

Table 62

Summary of the canonical discriminant function

Function	Eigen values	Percentage of Variance	Cumulative Percentage	Canonical Correlation
1	0.012 ^a	67.1	67.1	0.107
2	0.006 ^a	32.9	100.0	0.075

a. First 2 canonical discriminant functions were used in the analysis

Test of Functions	Wilk's Lambda	Chi-square	df	Canonical Correlation
1 through 2	0.983	10.733	6	0.097
2	0.994	3.535	2	0.171

Table 62 denotes the effectiveness of the discriminant functions. The eigen value is 0.012 and it indicates relative proportion between group variability accounted for the function and 67.1 percent of the between group variability is accounted for the first discriminant function. The value of canonical correlation is 0.107. It denotes that there is low correlation between the discriminant function and discriminating variables. The chi square value 10.733, $P = 0.097 > 0.05$ denotes that there is no significant reliable relationship between groups and discriminating variables. That is, the first discriminant function is not significant to discriminate one group from the other two groups. After the removal of the first function too, no association between groups and prediction is found as the chi square value = 3.535,

$P = 0.171 > 0.05$. The two discriminant functions accounted for the between group variability are 67.1% and 32.9 % respectively.

Table 63

Standardised Canonical Discriminant Function Coefficients

Variables	Function	
	1	2
Achievement	0.343	-1.075
Motivation	0.343	-1.075
Attitude towards English	-.132	0.749
Study Habit	0.812	0.590

Structure Matrix

Variables	Function	
	1	2
Achievement	0.962*	0.261
Motivation	0.962*	0.261
Attitude towards English	0.775*	-.406
Study Habit	0.355	0.547*

Group correlations between discriminating variables and standardised canonical discriminating functions. Variables ordered by absolute size of correlation within function.

* Largest absolute correlation between each variable and any discriminant function.

Table 63 shows the loading matrix of correlation between discriminating variables and two discriminant functions. Achievement Motivation (0.962) is highly correlated with function 1 and Attitude towards English (0.775) is also correlated with function 1. Study Habit (0.355) has low correlation with function 1. The loading matrix also indicates that the best discriminating variables that distinguish among the over, normal and underachievement groups in English for the first function is Achievement Motivation and for the second function is Study Habit.

Classification

Fisher's Linear Discriminant Function Coefficients are used to assign new cases into three groups, i.e., over, normal and underachievement groups in English. Details are given in Table 64.

Table 64

Classification Function Coefficients

	Achievers' Groups		
	Over Achievers	Normal Achievers	Underachievers
Ach. Motivation	0.147	0.148	0.176
Attitude towards English	0.393	0.397	0.372
Study Habit	0.496	0.542	0.526
(Constant)	-15.332	-16.540	-16.450

Fisher's linear discriminant functions

Using the Fisher's Function Coefficients, a case is assigned to the group for which it has the highest classification score. Three classification equations as one for each group, is calculated for each case by applying classification equation. The classification equations of each case for the three groups are as the following.

$$C1 = 0.147 \times X_1 + 0.393 \times X_2 + 0.496 \times X_3 - 15.332$$

$$C2 = 0.148 \times X_1 + 0.397 \times X_2 + 0.542 \times X_3 - 16.540$$

$$C3 = 0.176 \times X_1 + 0.372 \times X_2 + 0.526 \times X_3 - 16.450$$

Where X_1 , X_2 and X_3 are the individual scores obtained for the three discriminating variables namely Achievement Motivation (X_1), Attitude towards English (X_2), and Study Habit (X_3). Each case is assigned to the group for which it has the highest classification score. In the same way, the predicted group membership for the full data is computed and compared to the actual group membership. The number and percentage of cases accurately classified and number and nature of errors of classifications belonging to the groups of over, normal and underachievement in English found out by using discriminant functions are given in Table 65.

Table 65

Classification Results^a

		Achievers' group	Predicted Group Membership			Total
			Over Achievers	Normal Achievers	Underachievers	
Original	Count	Over Achievers	64	41	43	148
		Normal Achievers	135	113	138	386
		Underachievers	29	21	41	91
	%	Over Achievers	43.2	27.7	29.1	100.0
		Normal Achievers	35.0	29.3	35.8	100.0
		Underachievers	31.9	23.1	45.1	100.0

The classifications show that 61.76% cases are correctly classified and that 38.24% cases are misclassified.

CHAPTER V

SUMMARY, FINDINGS, IMPLICATIONS AND SUGGESTIONS

Restatement of the Study

Objectives of the Study

Hypotheses of the Study

Methodology

Major Findings

Tenability of Hypotheses

Conclusion

Educational Implications of the Study

Suggestions for Further Research

SUMMARY, FINDINGS, IMPLICATIONS AND SUGGESTIONS

This chapter provides a summary of important aspects of the present study. It consists of the major findings of the study, conclusions, educational implications and suggestions for further research. The aspects are presented in brief under the following heads.

Study in Retrospect

Major Findings of the Study

Tenability of the Hypotheses

Conclusion

Educational Implications

Suggestions for Further Research

STUDY IN RETROSPECT

This section includes title, variables, objectives, hypotheses, and methodology.

RESTATEMENT OF THE PROBLEM

The present study is entitled “A STUDY OF SOME PSYCHO - SOCIAL CORRELATES OF UNDERACHIEVEMENT OF SECONDARY SCHOOL PUPILS IN ENGLISH”.

VARIABLES SELECTED FOR THE STUDY

The variables selected for the present study are presented below in two categories of Dependent and Independent variables.

Dependent Variable

The dependent variable in the present study is underachievement of secondary school pupils in English.

Independent Variable

The following variables are taken as independent variables.

1. PSYCHOLOGICAL VARIABLES
 - a. Achievement Motivation
 - b. Attitude towards English.
2. SOCIAL VARIABLE
 - a. Study habit

OBJECTIVES OF THE STUDY

Objectives of the present study are the following.

1. To find out the levels of the variables Achievement Motivation, Attitude towards English, Study Habit and Achievement in English of the secondary school pupils for the total sample.
2. To identify the extent of normal, under and over achievers in English among the secondary school pupils for the total sample and sub samples formed on the basis of the gender of the pupils, locale and type of the management of the school and medium of instruction.
3. To estimate the association between each of the psycho-social variables Achievement Motivation, Attitude towards English and Study Habit with over, normal and underachievement in English for the total sample.
4. To compare the mean scores of independent variables Achievement Motivation, Attitude towards English and Study Habit and dependent variable underachievement in English for the sub samples formed on the basis of the gender, locale and type of management of the school and medium of instruction.
5. To examine the extent of the relationship between each psycho-social variable and underachievement in English for the total and sub samples formed on the basis of the gender, locale and type of management of the school and medium of instruction.
6. To examine the extent of relationship between the independent variables Achievement Motivation and Attitude towards English of the

underachievers in English for the total and sub samples formed on the basis of the gender, locale and type of management of the school and medium of instruction.

7. To examine the extent of relationship between the independent variables Achievement Motivation and Study Habit of the underachievers in English for the total and sub samples formed on the basis of the gender, locale and type of management of the school and medium of instruction.
8. To examine the extent of relationship between the independent variables Attitude towards English and Study Habit of the underachievers in English for the total and sub samples formed on the basis of the gender, locale and type of management of the school and medium of instruction.
9. To find out the combined effect of the psychological correlates Achievement Motivation and Attitude towards English on underachievement in English for the total sample.
10. To find out the effect of the social correlate Study Habit on underachievement in English for the total sample
11. To find out the combined effect of the psycho-social correlates Achievement Motivation, Attitude towards English and Study Habit on underachievement in English for the total sample.
12. To predict the over, normal and underachievement groups in English by using the select set of independent variables (Discriminating variables) Achievement Motivation, Attitude towards English and Study Habit.

HYPOTHESES

The hypotheses to test which the present study has been carried out are the following.

1. There will be significant association for each the psycho-social variables, Achievement Motivation, Attitude towards English and Study Habit with underachievement in English.
2. There will be significant difference in the mean scores of the dependent variable underachievement in English and the independent variables Achievement Motivation, Attitude towards English and Study Habit of underachievers in English between the samples of male and female.
3. There will be significant difference in the mean scores of the dependent variable underachievement in English and the independent variables Achievement Motivation, Attitude towards English and Study Habit of underachievers in English between the samples of Government and Aided school pupils.
4. There will be significant difference in the mean scores of the dependent variable underachievement in English and the independent variables Achievement Motivation, Attitude towards English and Study Habit of underachievers in English between the samples of Rural and Urban school pupils.
5. There will be significant difference in the mean scores of the dependent variable underachievement in English and the independent variables Achievement Motivation, Attitude towards English and Study Habit of

underachievers in English between the samples of Malayalam and English medium pupils.

6. There will be significant relationship between the independent variable Achievement Motivation and the dependent variable underachievement in English for the total sample and sub samples of male, female, rural, urban, government, aided, un-aided, Malayalam medium and English medium pupils .
7. There will be significant relationship between the independent variable Attitude towards English and the dependent variable underachievement in English for the total sample and sub samples of male, female, rural, urban, government, aided, un-aided, Malayalam medium and English medium pupils .
8. There will be significant relationship between the independent variable Study Habit and the dependent variable underachievement in English for the total sample and sub samples of male, female, rural, urban, government, aided, un-aided, Malayalam medium and English medium pupils .
9. There will be significant relationship between the independent variables Achievement Motivation and Attitude towards English of the underachievers in English for the total sample and sub samples of male, female, rural, urban, government, aided, un-aided, Malayalam medium and English medium pupils.

10. There will be significant relationship between the independent variables Achievement Motivation and Study Habit of the underachievers in English for the total sample and sub samples of male, female, rural, urban, government, aided, un-aided, Malayalam medium and English medium pupils.
11. There will be significant relationship between the independent variables Attitude towards English and Study Habit of the underachievers in English for the total sample and sub samples of male, female, rural, urban, government, aided, un-aided, Malayalam medium and English medium pupils .
12. The combined effect of the psychological correlates, Achievement Motivation and Attitude towards English on underachievement in English will be significant.
13. The effect of the social correlate Study Habit on underachievement in English will be significant.
14. The combined effect of the psycho-social correlates Achievement Motivation, Attitude towards English and Study Habit on underachievement in English will be significant.
15. The over, normal and underachievement groups in English can be predicted by using the select set of independent variables (discriminating variables) Achievement Motivation, Attitude towards English and Study Habit.

METHODOLOGY

This part includes details of the sample selected, tools used, and the statistical techniques employed.

Sample Selected

The researcher selected a sample of 625 pupils studying in the Standard IX in the revenue districts of Thrissur, Palakkad, Malappuram, Kozhikode and Wayanad in the state of Kerala using the proportionate stratified random sampling technique. The selection was made giving due weightage to the characteristic features of the population such as sex, locale, medium of instruction and management type of the school. Underachievers were identified from the sample by using appropriate statistical techniques.

Tools Used

All the dependent and independent variables were measured using standardised tools. Achievement Test in English, Scale of Achievement Motivation, Scale of Attitude towards English and Study Habit Inventory were developed and standardised by the investigator. To measure the intelligence of the pupils, an available standardised tool was used. The tools used in the present study are the following.

1. Achievement Test in English (Muhammed & Jamaluddeen, 2015)
2. Verbal Group Test of Intelligence (Kumar, Hameed & Prasanna, 1997)
3. Scale of Achievement Motivation (Muhammed & Jamaluddeen, 2015).
4. Scale of Attitude towards English (Muhammed & Jamaluddeen, 2015).

5. Study Habit Inventory (Muhammed & Jamaluddeen, 2015).

Statistical Techniques Employed

The following statistical techniques were employed in the present study.

1. Descriptive statistical techniques like Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis.
2. Pearson's Product Moment Coefficient of Correlation
3. Two-tailed Test of Significance of Difference between the Mean Scores of Large Independent Samples.
4. Multiple Regression Analysis
5. Chi-square Test of Independence followed by Estimation of C coefficients.
6. Discriminant Function Analysis

MAJOR FINDINGS OF THE STUDY

This section includes findings based on percentage analysis, association analysis, comparison analysis, correlation analysis, regression analysis and discriminant analysis.

FINDINGS BASED ON PERCENTAGE ANALYSIS

The findings of the percentage analysis are presented below.

1. The levels of the variables Achievement in English, Intelligence, Achievement Motivation, Attitude towards English and Study Habit

Variable	Above Average	Average	Below Average
Achievement in English	20.3	66.6	13.01
Intelligence	17.4	63.2	19.4
Achievement Motivation	16.8	65.6	17.6
Attitude towards English	16.6	65	18.4
Study Habit	20.5	63.3	16.2

In the variable Achievement in English, 20.3% pupils of the total sample are above average. Average level pupils are 66.6 % and below average pupils, 13.1%. In the case of Intelligence, 17.4% pupils of the total sample are above average. Average level pupils are 63.2 % and below average pupils, 19.4%.

In the Achievement Motivation, 16.8% pupils of the total sample are above average. Average level pupils are 65.6 % and below average pupils, 17.6%. In the Attitude towards English, 16.6% pupils of the total sample are above average. Average level pupils are 65 % and below average pupils,

18.4%. In the Study Habit, 20.5% pupils of the total sample are above average.

Average level pupils are 63.3 % and below average pupils, 16.2%.

2. Extent of Under, Normal and Over Achievers in the total and sub samples (in Percentage).

Sample	Under Achievers	Normal Achievers	Over Achievers
Total	14.56	61.76	23.68
Boys	13.83	54.66	31.51
Girls	15.29	68.79	15.92
Government	16.2	63.8	20
Aided	15.24	60.32	24.44
Un -Aided	2	60	38
Rural	15.58	60.47	23.95
Urban	12.3	64.6	23.1
Malayalam Medium	17.68	61.79	20.53
English Medium	3.01	61.65	35.34

Categorisation of the total sample into under, normal and over achievers in English brought out that the secondary school pupils consist of 14.56 % under achievers, 61.76% normal achievers and 23.68% over achievers in English.

The percentages of the under, normal, and over achievers in the sub sample of boys are 13.83, 54.66 and 31.51 respectively. Among girls, underachievers are 15.29%, normal achievers 68.79% and over achievers, 15.92%.

Among the Government school pupils, the percentages of the under, normal, and over achievers are 16.2, 63.8 and 20 respectively. In the sub sample of the Aided school pupils, the percentages of the under, normal, and over achievers are respectively 15.24, 60.32, and 24.44. Among the Un-Aided school pupils, the percentages are 2, 60 and 38 for the under, normal, and over achievers respectively.

In the locale –based sub sample, rural school pupils involves 15.58% underachievers, 60.47 normal achievers, and 23.95 over achievers. The urban school pupils consist of 12.3 % underachievers, 64.6 normal achievers and 23.1 over achievers.

In the medium of instruction based sub samples, the percentage of under achievers among Malayalam medium pupils is 17.68 and that among English medium pupils is 3.01. Percentage of over achievers among Malayalam medium pupils is 20.53 and that among English medium pupils is 35.34. Normal achievers form 61.79% and 61.65 % respectively among Malayalam and English medium pupils.

FINDINGS BASED ON THE ESTIMATION OF ASSOCIATION OF THE
SELECT PSYCHO – SOCIAL CORRELATES WITH OVER, NORMAL
AND UNDERACHIEVEMENT IN ENGLISH

Chi-square test of independence was used to test the association of Under, Normal and Over Achievement with the select psycho-social variables. The chi-square value shows that Achievement in English (which is classified as Under, Normal and Over Achievement in English) has significant association with Achievement Motivation. In the case of the variables, Attitude towards English and Study Habit, Chi-square value shows that there is no statistically significant association for the variables with Over, Normal and Underachievement in English.

The variables (in the order of the extent of association estimated by 'C' coefficient of contingency) are presented below.

Achievement Motivation $(X^2= 13.873, C= 0.147)$

Attitude towards English $(X^2=8.206)$

Study Habit $(X^2=3.175)$

FINDINGS BASED ON COMPARISON ANALYSIS

Two-tailed test of significance of difference was used to examine whether there exists significant difference between male and female, government and aided school pupils, rural and urban school pupils, and

Malayalam and English medium pupils of underachievers in English, with regard to the variables under study.. The findings are summarised below.

1. Gender difference

Significance of the group difference between boys and girls in the variables Achievement in English, Achievement Motivation, Attitude towards English and Study Habit.

Variable	t value	Level of Significance
Achievement in English	3.157	Significant at 0.01 level
Achievement Motivation	0.543	NS
Attitude towards English	1.709	NS
Study Habit	1.302	NS

The t value obtained for Achievement in English is 3.157. So it may be concluded that there is significant gender difference at 0.01 level among underachievers in English with regard to Achievement in English. In the case of Achievement Motivation, Attitude towards English and Study Habit, significant difference is not found between boys and girls even at 0.05 level.

2. Locale Difference

Significance of the group difference between rural and urban school pupils in the variables Achievement in English, Achievement Motivation, Attitude towards English and Study Habit

Variable	t value	Level of Significance
Achievement in English	1.887	NS
Achievement Motivation	1.188	NS
Attitude towards English	0.996	NS
Study Habit	1.944	NS

The t value obtained for each variable indicates that there is no significant difference even at 0.05 level between the rural and urban school pupils of underachievers in English with regard to the mean scores in the dependent and independent variables.

3. Medium of Instruction based difference

Significance of the group difference between Malayalam and English medium pupils in the variables Achievement in English, Achievement Motivation, Attitude towards English and Study Habit.

Variable	t value	Level of Significance
Achievement in English	2.861	Significant at 0.01 level
Achievement Motivation	0.249	NS
Attitude towards English	0.883	NS
Study Habit	0.106	NS

There is significant difference beyond 0.01 level between Malayalam and English medium pupils of underachievers in English in the dependent variable Achievement in English. The obtained t value of 2.861 indicates it. The medium of instruction based difference is not seen as significant in the case of the independent variables even at 0.05 level.

4. Difference based on Type of the Management of School

The mean difference analysis was done using the One – way Analysis of Variance (ANOVA) to examine whether there is any significant difference between the Government and Aided school pupils of underachievers in

English. As the number of underachievers in English from the Un-Aided schools of the sample is only one, only the pupils of Government and Aided schools were considered in the ANOVA procedures. So any difference found in the analysis is the difference between the Government and Aided school pupils. The findings are summarised below.

Variable	F value
Achievement in English	4.333
Achievement Motivation	0.857
Attitude towards English	2.411
Study Habit	0.538

The F value obtained for the dependent variable Achievement in English indicates that there is significant difference between the Government and Aided school pupils of underachievers in English. In the case of independent variables, difference on the basis of the type of the management of the school is not seen as significant even at 0.05 level.

FINDINGS BASED ON CORRELATION ANALYSIS

Computation of the Pearson's coefficient of correlation between each of the select psycho-social correlates and Achievement in English of the underachievers in English reveals the following.

1. The Coefficient of Correlation between the Dependent Variable Achievement in English and psychological correlate Achievement Motivation of the underachievers in English is 0.056 for the total sample. The t value is 0.529. There is positive correlation between Achievement in English and Achievement Motivation of the underachievers in English but not significant. Increase or decrease in the values of Achievement Motivation will slightly influence achievement in English in the case of underachievers in English. In the sub samples, rural school pupils have significant relationship between Achievement Motivation and Achievement in English at 0.05 level, as the t value is 2.020.
2. The Coefficient of Correlation between the Dependent Variable Achievement in English and psychological correlate Attitude towards English of the underachievers in English is 0.150 for the total sample. The t value is 1.431. There is positive correlation between Achievement in English and Attitude towards English of the underachievers in English, but not significant. Increase or decrease in the values of Attitude towards English will slightly influence achievement in English in the case of underachievers in English. Among the sub samples, rural school pupils have significant relationship between Attitude towards English and Achievement in English at 0.05 level, as the t value is 2.117.

3. In the case of the social correlate Study Habit, there exists moderate correlation with Achievement in English of the underachievers in English for the total sample. The obtained value of coefficient of correlation is 0.246. The t value is 2.394. It indicates that the relationship is significant at 0.05 level. Among the sub sample of girls significant correlation between Study Habit and Achievement in English is seen at 0.05 level. Among the sub samples of the government school pupils and Malayalam medium pupils have significant correlation is found between Study Habit and Achievement in English of the underachievers in English beyond 0.01 level as the respective t values are 2.606 and 2.878.

Coefficient of correlation between each of the select psychosocial correlates of the underachievers in English reveals the following.

4. The Coefficient of Correlation between the Independent Variables Achievement Motivation and Attitude towards English of the underachievers in English is 0.546 for the total sample. The t value is 6.148 which tells that the correlation between Achievement Motivation and Attitude towards English of the underachievers in English is significant beyond 0.01 level. In the case of sub samples too, the relationship between Achievement Motivation and Attitude towards English is significant beyond 0.01 level. Boys (t = 5.565), girls (t = 3.485) , rural (t = 5.593), urban (t = 2.637), government (t = 4.707),

aided ($t = 3.641$), Malayalam medium ($t = 5.793$) and English medium pupils ($t = 2.702$).

5. The Coefficient of Correlation between the Independent Variables Achievement Motivation and Study Habit of the underachievers in English is 0.516 for the total sample. The t value is 5.683, which tells that the correlation between Achievement Motivation and Study Habit of the underachievers in English is significant beyond 0.01 level. In all the sub samples, except the English medium and urban school pupils, significant relationship beyond 0.01 level is found between Achievement Motivation and Study Habit. Boys ($t = 4.765$), girls ($t = 3.380$), rural ($t = 6.805$), government ($t = 3.349$), aided ($t = 4.420$) and Malayalam medium ($t = 5.495$).

6. The Coefficient of Correlation between the Independent Variables Attitude towards English and Study Habit of the underachievers in English is 0.561 for the total sample. The t value is 6.393, which indicates that the correlation between Achievement Motivation and Study Habit of the underachievers in English is significant beyond 0.01 level. In all the sub samples, except the English medium pupils, significant relationship between Achievement Motivation and Study Habit is found beyond 0.01 level. Boys ($t = 5.955$), girls ($t = 2.727$),

rural ($t = 5.119$), urban ($t = 3.555$), government ($t = 4.100$), aided ($t = 4.632$) and Malayalam medium ($t = 6.616$).

The table given below shows the details of the coefficients of correlation between the dependent and independent variables and between independent variables themselves.

Variables of correlation		Correlation coefficient	t value	Significant or not
Achievement in English	Achievement Motivation	0.056	0.5291	NS
Achievement in English	Attitude towards English	0.150	1.462	NS
Achievement in English	Study Habit	0.246	2.394	Significant at 0.05 level
Achievement Motivation	Attitude towards English	0.546	6.148	Significant at 0.01 level
Achievement Motivation	Study Habit	0.516	5.683	Significant at 0.01 level
Attitude towards English	Study Habit	0.561	6.393	Significant at 0.01 level

FINDINGS BASED ON THE ANALYSIS OF THE EFFECT OF THE
SELECT PSYCHO – SOCIAL CORRELATES OF UNDERACHIEVEMENT
IN ENGLISH

1. The analysis of effect was done in three ways, i.e., the effect of psychological correlates, that of the social correlate and that of the psycho-social correlates on the dependent variable.

Variable	Effect	F Value	Sig.	Significant or not
Psychological Correlates Achievement Motivation & Attitude towards English	Combined	1.053	0.353	NS
Social Correlate Study Habit	Individual	5.750	0.019	Significant
Psycho-social correlates	Combined	2.175	0.197	NS

The effect of the psychological correlates Achievement Motivation & Attitude towards English on underachievement in English is positive but not significant, where as that of social correlate Study Habit is significant. The combined effect of the all the select Psycho-social correlates is positive but not significant.

2. Contribution of the Independent Variables Achievement Motivation, Attitude towards English and Study Habit to the variance in the Dependent Variable Achievement in English of the underachievers in English .

Correlates	Contribution to the variance in the Dependent Variable
Psychological Correlates Achievement Motivation & Attitude towards English	2.3%
Social Correlate Study Habit	6.1%
Psycho-social correlates Achievement Motivation, Attitude towards English & Study Habit	7%

FINDINGS BASED ON THE DISCRIMINANT FUNTION ANALYSIS

The Discriminant Function Analysis showed two classification functions in order to predict the over, normal and underachievement groups in English. The formulae used to perform the standardised discriminant function of the two functions are the following.

$$D_1 = 0.343 \times Z_1 - 0.132 \times Z_2 + 0.812 \times Z_3 - 4.622$$

$$D_2 = 1.075 \times Z_1 + 0.749 \times Z_2 + 0.590 \times Z_3 - 1.642$$

Where Z_1 , Z_2 and Z_3 are the individual standardised scores obtained for the three discriminating variables namely Achievement Motivation (Z_1), Attitude towards English (Z_2), and Study Habit (Z_3).

The unstandardised discriminant function of the two functions was performed for the two functions using the following formula.

$$D_1 = 0.039 \times X_1 - 0.019 \times X_2 + 0.158 \times X_3$$

$$D_2 = 0.121 \times X_1 + 0.108 \times X_2 + 0.115 \times X_3$$

Where X_1 , X_2 and X_3 are the individual unstandardised scores obtained for the three discriminating variables namely Achievement Motivation (X_1), Attitude towards English (X_2), and Study Habit (X_3).

The findings of the classifications show that 61.76% cases are correctly classified and that 38.24% cases are misclassified.

TENABILITY OF THE HYPOTHESES

1. The first hypothesis is that there will be significant association for each of the psycho-social variables, Achievement Motivation, Attitude towards English and Study Habit with Underachievement in English.

The findings of the study reveal that Underachievement in English has significant association with Achievement Motivation. But it has no statistically significant association with the variables,

Attitude towards English and Study Habit. Thus the first hypothesis is partially substantiated.

2. The second hypothesis is that there will be significant difference in the mean scores of the dependent variable Underachievement in English and the independent variables Achievement Motivation, Attitude towards English and Study Habit of underachievers in English between the samples of male and female pupils.

The findings of the study reveal that significant difference exists in the mean scores of the dependent variable Underachievement in English. No significant difference is seen in the independent variables Achievement Motivation, Attitude towards English and Study Habit of underachievers in English between the samples of male and female pupils. Thus the second hypothesis is partially substantiated.

3. The third hypothesis is that there will be significant difference in the mean scores of the dependent variable Underachievement in English and the independent variables Achievement Motivation, Attitude towards English and Study Habit of underachievers in English between the samples of the Government and Aided school pupils.

The findings of the study reveal that significant difference exists in the mean scores of the dependent variable Underachievement

in English. No significant difference is seen in the independent variables Achievement Motivation, Attitude towards English and Study Habit of underachievers in English between the samples of the Government and Aided school pupils. Thus the third hypothesis is partially substantiated.

4. The fourth hypothesis is that there will be significant difference in the mean scores of the dependent variable Underachievement in English and the independent variables Achievement Motivation, Attitude towards English and Study Habit of underachievers in English between the samples of the Rural and Urban school pupils.

The findings of the study reveal that significant difference is not seen in the dependent and independent variables of underachievers in English between the samples of the rural and urban school pupils. Thus the fourth hypothesis is not substantiated.

5. The fifth hypothesis is that there will be significant difference in the mean scores of the dependent variable Achievement in English and the independent variables Achievement Motivation, Attitude towards English and Study Habit of underachievers in English between the samples of the Malayalam and English medium pupils.

The findings of the study reveal that significant difference exists in the mean scores of the dependent variable Achievement in

English. No significant difference is seen in the independent variables Achievement Motivation, Attitude towards English and Study Habit of underachievers in English between the sub samples of the Malayalam and English medium school pupils. Thus the fifth hypothesis is partially substantiated.

6. The sixth hypothesis is that there will be significant relationship between the independent variable Achievement Motivation and the dependent variable Achievement in English of the underachievers for the total sample and sub samples formed on the basis of the gender of the pupils, locale and management type of school, and medium of instruction.

The findings of the study reveal that significant relationship is seen between the independent variable Achievement Motivation and the dependent variable Achievement in English of the underachievers in English in the sub sample of rural school pupils. Significant relationship is not seen in the total sample and other sub samples. Thus the sixth hypothesis is partially substantiated.

7. The seventh hypothesis is that there will be significant relationship between the independent variable Attitude towards English and the dependent variable Achievement in English of the underachievers in English for the total sample and sub samples formed on the basis of the

gender of the pupils, locale and management type of school, and medium of instruction.

The findings of the study reveal that significant relationship is seen between the independent variable Attitude towards English and the dependent variable Achievement in English of the underachievers in English in the sub sample of rural school pupils. Significant relationship is not seen in the total sample and other sub samples. Thus the seventh hypothesis is partially substantiated.

8. The eighth hypothesis is that there will be significant relationship between the independent variable Study Habit and the dependent variable Achievement in English of the underachievers for the total sample and sub samples formed on the basis of the gender of the pupils, locale and management type of school, and medium of instruction.

The findings of the study reveal that significant relationship is seen between the independent variable Study Habit and the dependent variable Achievement in English of the underachievers in English in the total sample and in the sub samples of girls, government school pupils, and Malayalam medium pupils. Thus the eighth hypothesis is substantiated to a great extent.

9. The ninth hypothesis is that there will be significant relationship between the independent variables Achievement Motivation and Attitude towards English of the underachievers for the total sample and sub samples formed on the basis of the gender of the pupils, locale and management type of school, and medium of instruction.

The findings of the study reveal that there is significant relationship between the independent variables Achievement Motivation and Attitude towards English of the underachievers in English in the total sample and in all the sub samples. Thus the ninth hypothesis is fully substantiated.

10. The tenth hypothesis is that there will be significant relationship between the independent variables Achievement Motivation and Study Habit of the underachievers for the total sample and sub samples formed on the basis of the gender of the pupils, locale and management type of school, and medium of instruction.

The findings of the study reveal that there is significant relationship between the independent variables Achievement Motivation and Study Habit of the underachievers in English in the total sample and in all the sub samples except the English medium and urban school pupils. Thus the tenth hypothesis is substantiated to a great extent.

11. The eleventh hypothesis is that there will be significant relationship between the independent variables Attitude towards English and Study Habit of the underachievers in English for the total sample and sub samples formed on the basis of the gender of the pupils, locale and management type of school, and medium of instruction.

The findings of the study reveal that there is significant relationship between the independent variables Attitude towards English and Study Habit of the underachievers in English in the total sample and in all the sub samples except English medium school pupils. Thus the eleventh hypothesis is substantiated to a very great extent.

12. The twelfth hypothesis is that there will be significant combined effect for the psychological correlates on underachievement in English.

The findings of the study reveal that there is no significant linear relationship between the dependent variable and the predictor variables, i.e., psychological variables Achievement Motivation and Attitude towards English. Thus the twelfth hypothesis is not substantiated.

13. The thirteenth hypothesis is that there will be significant effect for the social correlate Study Habit on underachievement in English.

The findings of the study reveal that there is significant linear relationship between the dependent variable and the predictor variable, Study Habit. Thus the thirteenth hypothesis is substantiated.

14. The fourteenth hypothesis is that there will be significant combined effect for the psycho-social correlates on underachievement in English.

The findings of the study reveal that there is no significant linear relationship between the dependent variable and the predictor variables. Thus the fourteenth hypothesis is not substantiated.

15. The fifteenth hypothesis is that the over, normal and underachievement groups in English can be predicted by using the select set of independent variables (discriminating variables) Achievement Motivation, Attitude towards English and Study Habit.

The Discriminant Function Analysis considered two discriminant formulae that can be used to predict the group membership on over, normal and underachievement groups in English on the basis of the select discriminant variables. The formulae show 61.76% of the cases as correctly classified and 38.24% as misclassified. Thus the fifteenth hypothesis is substantiated.

CONCLUSION

The present study has been carried out with the prime objective of identifying the extent of underachievers in English among the secondary school pupils of Kerala and of examining its select psycho-social correlates Achievement Motivation, Attitude towards English and Study Habit. The study testifies itself to be a break through in the focused area of research, showing findings that can be applied to boost the academic standard and proficiency of pupils in English, across the length and breadth of the state.

The study has found that among the secondary school pupils, underachievers form 14.56%, normal achievers 61.76% and over achievers 23.68%. The findings point out that the academic achievement of pupils in English can be enhanced, even beyond the level expected of them on the basis of their measured intellectual potentials, if sufficient attempts are made in proper direction. Studies done earlier in the field of underachievement bear identical findings with slight variation in the extent of under and over achievers. A study conducted by Bindu (2001), found among the secondary school pupils 14.22% underachievers and 10.58 % overachievers in mathematics. Sharma (1995) found in her study 15% underachievers and 17% overachievers among the standard X pupils. Rameshan (2000) reported 17.2 % underachievers and 16.9% overachievers in Malayalam.

The extent of under, normal and over achievers in English among the different sub samples of the secondary school pupils strongly point fingers at

some present day aspects of the English classrooms. The percentage of underachievers in English among the Government School pupils is 16.6 and among the Aided School pupils is 15.24., but among the Un-Aided School pupils, it is only two. Less number of pupils in the class, higher parental involvement, and better socio-economic status of the parents of the pupils in Un-Aided schools may be reasons. But one thing, if Un-Aided schools can diminish the percentage of underachievers in English to two, government schools can diminish the existing percentage of 16.6 to a level lower than two, if proper measures are successfully applied. The present hierarchical order of the Government (16.6%), Aided (15.24%) and Un-Aided schools (2%) in the case of underachievement in English turns upside down when the case becomes that of overachievement in English, i.e., government (20%) , Aided (24.44 %) and Un-Aided (38%).

The huge difference in the percentage of underachievers in English between Malayalam medium (17.68) and English medium (3.10) pupils also is a matter of academic importance. The difference is clear with regard to over achievers in English also. The percentage of over achievers among Malayalam medium pupils is 20.53 and that among English medium pupils is 35.34. These findings categorically uphold the fact that the more exposure the pupils receive to English language, the more achievement they make in English. As such, helping the pupils receive maximum exposure to English is better to be taken as a responsibility shouldered by all teachers and authorities of the schools.

The present study also examined the select psycho-social correlates of underachievement. The study has found that there is no significant relationship between Achievement Motivation and Achievement in English of the underachievers in English. It means that in the case of the pupils who cannot achieve in English up to the level of their measured intelligence, Achievement Motivation and Achievement in English are, though positive, not significantly correlated.

Studies carried out with regard to Achievement Motivation have similar and dissimilar findings. The study carried out by Sontakey (1986) found that high achievers and low achievers in natural sciences did not differ significantly in achievement motivation. The study done by Reddy (1990) also shows absence of significant relationship between achievement motivation and academic achievement. The study carried out by Nagarathanamma and Thirumala Rao (2007) on achievement motivation and academic achievement of adolescent boys and girls also did not show any influence of achievement motivation on the academic achievement of the pupils. Ayishabi (1987) in her study examined the relationship between achievement motivation and performance in Biology of secondary school pupils and found that achievement motivation could act as predictor of achievement in Biology only to a less extent. Yeh (1999) examined the relationship between achievement motivation and academic achievement and reported that a weak positive correlation was found between them.

There are studies that have found significant positive correlation between achievement motivation and academic achievement as well. For instance, Unnikrishnan (1995) in his study found significant positive correlation between achievement motivation and achievement in Biology of standard XI pupils. The findings of the study conducted by Minnalkodi (1997) reveal that significant positive relationship exists between achievement motivation and achievement in Zoology.

In the case of Attitude towards English, the finding of the present study is that there is no significant relationship with Achievement in English of the underachievers in English. It means that in the case of the pupils who cannot achieve in English up to the level of their measured intelligence, attitude towards English and achievement in English are, though positive, not significantly correlated.

With regard to correlation between Attitude and Achievement, the findings of the present study can be associated with those of the studies done earlier. The findings of the study conducted by Ramila and Smitha (1991) points out that attitude towards English has no influence on the students' achievement. Mickelson (1990) in a study reported that whether attitude could be a significant predictor of academic achievement or not was dependent on a number of factors such as social class and ethnic back ground. Ma and Kishor (1997) in a study that assessed the relationship between attitude towards Mathematics and achievement in Mathematics found that attitude was not

necessarily a predictor of achievement, as it also depended on several factors like race and nature of the sample selection. Whereas, Xu (2008) examined the relationship of attitude with achievement in learning a second language, and found significant positive correlation between them. The study conducted by Leena Devi (1995) reports that attitude towards English has significant effect on achievement in English. The study done by Li (2012) appears to have some more implications. This study found out that attitude and self-efficacy could significantly predict effort for academic achievement and that effort could not predict academic achievement.

In the case of Study Habit, the present study finds significant positive relationship with Achievement in English of the underachievers in English. It means that study habits of learners have decisive roles on their academic achievement. Increase or decrease in study habit can cause the same in the achievement in English of the underachievers in English.

The relationship between study habit and academic achievement has been studied and explored through several studies, but with different findings. Chawdhury (2017) conducted a study entitled “Study Habits and Achievement of Students in Mathematics of Secondary Schools” in the Tinsukia district of Assam and significant correlation was found between students’ study habit and their achievement in Mathematics. Siahi and Maiyo (2015) in their study found positive relationship between study habit and academic achievement of students. The study conducted by Dinesh Kumar (2013) found significant

positive relationship between study habits and academic achievement of school students. But, the finding of the present study is in contrast to the findings of some other studies. The finding of the study carried out by Lawrence (2014) shows that there is no significant relationship between Study Habit and Academic Achievement of Higher Secondary School students. The study conducted by Monika Saini (2013) shows that no significant relationship is found between study habits and academic achievement of scheduled caste secondary school students.

EDUCATIONAL IMPLICATIONS

The present study has been carried out in order to identify the extent of underachievers in English among the secondary school pupils and its select psycho-social correlates, namely, Achievement Motivation, Attitude towards English and Study Habit. The study shows that 14.56% of the secondary school pupils in Kerala are underachievers in English. It shows underachievement in English as a major impediment in the attempts of all stake holders of school education to enhance the academic outcome of the learners. This study can be seen as an eye-opener to the urgent need for evolving and implementing effective measures to tackle the problem of underachievement in English at the earliest.

The contributions of the present study to the realm of education as identified by the investigator are presented below, under the following four heads.

Educational Implications on the basis of Underachievement in English

One of the main thrust areas of the study was to find out the extent of underachievers in English. Along with this, the extents of normal and over achievers were also found out. The study shows the present ratio of under, normal and over achievers in English among the secondary school pupils of Kerala. It helps chalk out proper measures to ensure improvement in the basic standard of the pupils in English.

An important implication from this area is that the percentage of underachievers and over achievers among the English medium pupils is lower and higher respectively when compared to those of Malayalam medium pupils. It indicates that underachievement can be minimised if more exposure to English language is given to the pupils. Teachers may give the pupils maximum exposure to English language.

The present study categorically indicates that pupils' achievement in English needs improvement. The problem of underachievement in English is to be washed out from the classrooms. Strong measures are needed for the purpose. Some suggestions:

1. A minimum attainment in English may be fixed for each learner on the basis of the measured intelligence and measures may be taken to facilitate that attainment.
2. Teachers may be given special rewards for minimising or eliminating underachievement in English in each standard.

3. Parents may also be made aware of the learner potential and his actual attainment in English.
4. Sensitise the pupils, teachers and parents to the loss of the learner and the nation caused by underachievement in English.
5. Maximise exposure to English language
6. Teachers may use English as much as possible.
7. Pupils may be given maximum opportunity to engage in language activities.
8. Subject teachers may also focus on the development of English language proficiency of the pupils as the same is useful for their improvement in other subjects also.
9. Club activities, field trips, English magazine works etc. may be arranged in English.
10. Unlike any other subjects, in the case of English, so many persons having not even a Degree or B. Ed or both in English are seen as engaged as teachers of English and sometimes even as resource persons for giving in-service education to the actual teachers of English. This makes the system of English education in schools a fiasco.

Educational Implications on the basis of the Psychological Correlates

The present study shows that Achievement Motivation has positive relationship with Achievement in English, though not significant. It implies

that improvement in the Achievement Motivation of pupils facilitates improvement in their Achievement in English. The present study also shows that Attitude towards English has positive relationship with Achievement in English, though not significant. It implies that improvement in the Attitude of pupils towards English facilitates improvement in their Achievement in English.

However, the findings of the study in this regard show that the prominent issue is not with regard to the inadequacy of the pupils' Achievement Motivation and Attitude towards English, but the failure of the system to transact the advantages of the same psychological correlates to the realm of their Achievement in English. Urgent measures are required to improve the standard of English achievement of pupils who deserve higher level of achievement in English on the basis of their measured potentials in the areas of Achievement Motivation and Attitude towards English. Some measures, suggestive in nature, are put forward for the purpose.

1. Make curriculum flexible so as to suit the pupils of different nature, talents, and potentials.
2. Follow worthwhile and more effective methods of teaching.
3. Ensure that the persons engaged in teaching English in schools are fit to the profession in terms of academic qualification and professional competence.

4. Improve the quality of infrastructural facilities of the schools with special reference to library, language lab, smart classrooms etc.
5. Maximum individual attention may be provided to the pupils.
6. Ensure teacher – pupil rapport and teacher – parent contact.

Educational Implications on the basis of Social Correlate

The study finds that the social correlate Study Habit has significant relationship with Achievement in English of the underachievers in English. It implies that improvement in Study Habit of pupils enhances their Achievement in English. On the basis of this finding of the study, the measures to develop better study habit in pupils can be evolved and initiated. Some suggestions may be put forward in this regard.

1. Develop the infrastructural facilities of the school
2. Ensure of the fitness of the study environment and related facilities.
3. Improve teacher – pupil rapport
4. Ensure constant teacher – parent contact
5. Teachers may visit pupils' home and consider the study facilities available.
6. Arrange financial support to needy pupils to have better study facilities
7. Make the parents aware of the desired home learning facilities for the pupils of different standards.
8. Make the pupils aware of the importance of good study habits and of ways and means to achieve them.

9. Help the pupils avoid wrong study habits and to develop good study habits.
10. Develop effective study skills in pupils
11. Help pupils develop reference skills

SUGGESTIONS FOR FURTHER RESEARCH

On the basis of the experience the investigator derived from carrying out the present study, some suggestions may be put forward for further researches.

1. Similar studies can be carried out for the sample of Primary, Higher Secondary, Graduate and Post Graduate level learners.
2. Studies on underachievement in other subjects can be carried out.
3. A study can be conducted focusing on other psycho-social correlates of underachievement in English.
4. A study may be carried out on the causal factors of underachievement in English.
5. A study of the characteristics of over, normal and underachievers in different subjects can be carried out.
6. A study of remedial measures for the problem of underachievement in English may be initiated.
7. A study on the relation between teaching strategies and underachievement in English can be carried out.

8. A study on the need for separate curriculum for the under, normal and over achievers in English.
9. A study on the association between the different intelligence styles and underachievement in English.
10. A study of the underachievers in multiple subjects.

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APPENDICES

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ACHIEVEMENT TEST IN ENGLISH
(Draft)

Dr.TK. Mohammed

Jamaluddeen.K

Time: 45. Minutes

Maximum Mark: 50

Section A -- Vocabulary

Two sets of words are given below. Pick out the correctly spelt word from each set.

1. a. pharmaceutical. b. farmacutical c. pharmaceutical d. pharmecuetical.
2. a. superintendent. b. superidentent. c. superintendent d. superintend .

Two sets of words are given below. Pick out the word which has the same spelling for present tense and past tense.

3. a. will. b. try. c. put. d. get
4. a. read. b. write. c. sleep. d. dream

The following words include prefixes and suffixes. Pick out the stem

5. Impossibility
a. Impossible b. Possible c. Possibility. d. Impossibility
6. Incorrectly
a. Incorrect b. Correctly c. Correct. d. Incorection

Fill in the blanks choosing the most appropriate word from those given below.

7. _____ the pencil, Babu bought a pen also.
a. besides b. write c. buy d. beside
8. The storm caused _____ damage to the village.
a. extend b. extent. c. extensive. d. extension

Choose the phrase closest in meaning to the word underlined.

9. They gave up the habit of smoking, following the advice of the doctor.
a. developed. b. encouraged c. propagated. d. abandoned
10. The Head Master put off the terminal examination of the school.
a. fixed b. postponed c. confirmed d. cancelled

Section B -- Grammar

Fill in the blanks by choosing the most appropriate word

11. I saw _____ one-eyed man in the city.
A. an. b. a c. several. d. one of the
12. I got only _____ prizes in the competition.
a. few b. a few c. little d. a little
13. Mr. Joseph as well as his daughters _____ living abroad.
a. likes. b. like c. are liking. d. were liking
14. Neither Mr. Abdu nor Mr. Shaji _____ interested in non-vegetarian food.
a. are. b. were. c. is. d. have

Fill in the blanks by using the most appropriate of the verb forms given below.

15. Mr. Muneer _____ in his room now.
a. is sleep. b. sleeping. c. is sleeping. d. are sleeping
16. Mr. Balan _____ a dictionary yesterday.
a. bought. b. buy c. will buy d. is buying
17. The patient _____ before the doctor arrived.
a. died. b. was dying . c. had died d. is dying
18. Each of the players _____ for months.

- a. have been practising. b. has been practising. c. were practising
d. been practising

19. By the next December, she _____ the project work.
a. will have completed b. will complete c. will be completed
d. will have been completing

Some statements are given below. Add suitable question tag.

20. I am speaking seriously, _____
a. am I? b. am I not? c. aren't I? d. are I?
21. She has little interest in cricket, _____
a. hasn't she? b. has she? c. has her? d. hasn't her?

Fill in the blanks by choosing the appropriate preposition.

22. The programme will begin _____ ten minutes.
a. in. b. on. c. with. d. about
23. They have studied here _____ five years.
a. than. b. for . c. to. d. at
24. He prefers coffee _____ tea.
a. than. b. for . c. to. d. at
25. Arjun died _____ heart attack.
a. of . b. on. c. at. d. in
26. Shylaja gives _____ smoking following the doctor's advice.
a. in. b. up. c. out. d. away
27. This is the chair I used _____ sit on.
a. to. b. of. c. with. d. by

Four sentences are given below to mean the same thing. Identify the correct ones.

28. a. Darkness prevented us to seeing the destruction.
b. Darkness prevented us from see the destruction.
c. Darkness prevented us from seeing the destruction.
d. Darkness prevented us to see the destruction.
29. a. No sooner did I see snake than I shouted loudly.
b. No sooner had I seen snake than I shout loudly.
c. No sooner I saw snake, than I shouted loudly.
d. No sooner I see snake, than I shouted loudly.
30. a. She is not only a singer but also dances.
b. She not only sings but also a dancer.
c. She is a singer and dancer not only but also.
d. She is not only a singer but also a dancer.
31. a. The ceremony will be between 10.am to 11 am.
b. The ceremony will be between 10.am and 11 am.
c. The ceremony will be from 10.am and 11 am.
d. The ceremony will be between from 10.am to 11 am.

The following sentences are rewritten as specified in the bracket. Pick out the correct one.

32. The box is so heavy that I cannot lift it. (Restructure using *too to*)
- a. The box is too heavy that I cannot lift it.
b. The box is too heavy for me to lift it.
c. The box is so heavy that I too cannot lift it.
d. I cannot lift the box because it is too heavy.
33. India is the biggest democracy in the world. (Turn into Comparative Degree)
- a. No other country is the biggest democracy in the world.
b. All other democracies in the world are bigger than India.
c. India is bigger than no other democracies in the world.

- d. India is bigger than any other democracies in the world.
34. He is writing short stories. (Begin with “Short stories
- a. Short stories are written by him.
 - b. Short stories he is writing.
 - c. Short stories are being writing by him.
 - d. Short stories are being written by him
35. The teacher said, “I will not come tomorrow.” (Begin : The teacher said
- a. The teacher said that he will not come tomorrow.
 - b. The teacher said that he would not come tomorrow.
 - c. The teacher said that he will not come the next day
 - d. The teacher said that he would not come the next day.

Section C -- Reading

A passage is given below. Read it carefully and answer the questions that follow.

Environment is the sum total of everything that surrounds a living organism. It includes living and non-living things. Air, water, soil, rock, trees and living beings are all parts of the environment. The act of contaminating or causing damage to the natural environment is called environmental pollution.

Environmental pollution affects human life a lot. It makes life uneasy. It causes shortage of pure water, unbearable heat, various types of diseases etc. Environmental pollution is of various types. More important pollutions are air pollution, water pollution, soil pollution and noise pollution.

Water pollution is mainly due to industrial wastes, pesticides and electronic wastes. People throw wastes and dead bodies of men and animals into the rivers. All these make water unfit for drinking. Air pollution is mainly caused by the gases given out by burning petroleum products. Such polluted atmosphere causes acid rain. Sound pollution is caused by sounds of vehicles, heavy machines, loud speakers etc. Too much noise affects the nervous system and causes diseases.

It is the duty of every individual to keep the environment uncontaminated. We must engage in environment protection activities. Planting saplings, keeping wells, ponds and other water bodies clean, adopting scientific waste management systems etc. are important environment protection activities. Schools should try to develop environment protection awareness among students through activities such as campaign against the use of plastics, formation of nature clubs etc.

36. Environment includes _____
- a. living and non-living things.
 - b. living things only
 - c. non-living things only
 - d. neither living nor non-living things.
37. Environmental pollution means the act of _____
- a. protecting the environment
 - b. contaminating the natural resources
 - c. appreciating the beauty of nature
 - d. developing nature-friendly attitude
38. Which of the following is the main factor of causing air pollution?
- a. Use of loud speaker
 - b. rivers
 - c. rocks
 - d. gases emitted by vehicles
39. Acid rain is mainly caused by?
- a. noise pollution.
 - b. unbearable heat
 - c. air pollution
 - d. deserts
40. Identify an environment protection activity from the following.

- a. Keeping wells clean
 - b. Smoking
 - c. Throwing waste materials into a river
 - d. Increasing the use of carbon emitting vehicles
41. Name a factor that causes water pollution.
- a. Use of loud speakers
 - b. Smoking
 - c. Lack of drinking water
 - d. Industrial waste
42. The responsibility of protecting the environment is on _____
- a. Police
 - b. All people.
 - c. Students
 - d. Politicians
43. As an issue, environmental pollution is _____.
- a. Highly interesting
 - b. Very serious
 - c. Not global
 - d. Trivial
44. Throwing dead bodies of men and animals into rivers is an act of ?
- a. Safe guarding the environment.
 - b. Loving the animals.
 - c. Protecting the rivers
 - d. Polluting the environmental
45. What should schools do to develop environment protection awareness in students? _____
- a. Discourage the use of plastics
 - b. Encourage cutting of woods.
 - c. Excessive use of loud speakers
 - d. See water bodies as places for dumping wastes

49. a. Pupils prepared the write up as group work.
b. Feedback was given to the pupils.
c. The pupils were asked to prepare a write up on social forestry.
d. The speeches were presented.

Ans. a. ADCB b. CDAB c. BCDA d. CADB

50. a. Then it was sent to the printing section.
b. Mohan wrote a story.
c. The editor read the story and made some modifications.
d. It was sent to the editor of a magazine.

Ans. a. BDCA b. BADC c. CADB d. DCAB

Appendix II

Achievement Test in English
(Draft)

Scoring Key

Question Number	Answer	Question Number	Answer	Question Number	Answer
1	A	18	B	35	D
2	A	19	A	36	A
3	C	20	C	37	B
4	A	21	B	38	D
5	B	22	A	39	C
6	C	23	B	40	A
7	A	24	C	41	D
8	C	25	A	42	B
9	D	26	B	43	B
10	B	27	A	44	D
11	B	28	C	45	A
12	B	29	A	46	C
13	A	30	D	47	B
14	C	31	B	48	D
15	C	32	B	49	D
16	A	33	D	50	A
17	C	34	D		

Achievement Test in English

(Draft)

Question wise Analysis

<i>Q. No</i>	<i>Objective</i>	<i>Content</i>		<i>Q. No</i>	<i>Objective</i>	<i>Content</i>
1	Knowledge	Vocabulary		26	Application	Grammar
2	Knowledge	Vocabulary		27	Application	Grammar
3	Knowledge	Vocabulary		28	Application	Grammar
4	Knowledge	Vocabulary		29	Application	Grammar
5	Knowledge	Vocabulary		30	Application	Grammar
6	Knowledge	Vocabulary		31	Application	Grammar
7	Knowledge	Vocabulary		32	Application	Grammar
8	Knowledge	Vocabulary		33	Application	Grammar
9	Knowledge	Vocabulary		34	Application	Grammar
10	Knowledge	Vocabulary		35	Application	Grammar
11	Application	Grammar		36	Comprehension	Reading
12	Application	Grammar		37	Comprehension	Reading
13	Application	Grammar		38	Comprehension	Reading
14	Application	Grammar		39	Comprehension	Reading
15	Application	Grammar		40	Comprehension	Reading
16	Application	Grammar		41	Comprehension	Reading
17	Application	Grammar		42	Comprehension	Reading
18	Application	Grammar		43	Comprehension	Reading
19	Application	Grammar		44	Comprehension	Reading
20	Application	Grammar		45	Comprehension	Reading
21	Application	Grammar		46	Synthesis	Writing
22	Application	Grammar		47	Synthesis	Writing
23	Application	Grammar		48	Synthesis	Writing
24	Application	Grammar		49	Synthesis	Writing
25	Application	Grammar		50	Synthesis	Writing

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

ACHIEVEMENT TEST IN ENGLISH
(Final)

Dr.TK. Mohammed

Jamaluddeen.K

Time: 30. Minutes

Maximum Mark: 28

Section A -- Vocabulary

A set of words are given below. Pick out the correctly spelt word.

1. a. superintendent. b. superidentent. d. superentendent. d. superintend .

Two sets of words are given below. Pick out the word which has the same spelling for present tense and past tense.

2. a. will. b. try. c. put. d. get
3. a. read. b. write. c. sleep. d. dream

Fill in the blanks choosing the most appropriate word from among the words given below.

4. _____ the pencil, Babu bought a pen also.
 a. besides b. write c. buy d. beside
5. The storm caused _____ damage to the village.
 a. extend b. extent. c. extensive. d. extension

Choose the phrase closest in meaning to the word underlined.

6. They gave up the habit of smoking, following the advice of the doctor.
 a. developed. b. encouraged c. propagated. d. abandoned
7. The Head Master put off the terminal examination of the school.
 a. fixed b. postponed c. confirmed d. cancelled

Section B -- Grammar

Fill in the blanks by choosing the most appropriate word

8. I got only _____ prizes in the competition.
a. few b. a few c. little d. a little
9. Mr. Joseph as well as his daughters _____ living abroad.
a. likes. b. like c. are liking. d. were liking

Fill in the blanks by using the most appropriate of the verb forms given below.

10. Mr. Muneer _____ in his room now.
a. is sleep. b. sleeping. c. is sleeping. d. are sleeping
11. Mr. Balan _____ a dictionary yesterday.
a. bought. b. buy c. will buy d. is buying

Fill in the blanks by choosing the appropriate preposition.

12. The programme will begin _____ ten minutes.
a. in. b. on. c. with. d. about
13. They have studied here _____ five years.
a. than. b. for . c. to. d. at
14. He prefers coffee _____ tea.
a. than. b. for . c. to. d. at
15. Shylaja gives _____ smoking following the doctor's advice.
a. in. b. up. c. out. d. away
16. This is the chair I used _____ sit on.
a. to. b. of. c. with. d. by

Four sentences are given below to mean the same thing. Identify the correct ones.

17. a. Darkness prevented us to seeing the destruction.
b. Darkness prevented us from see the destruction.
c. Darkness prevented us from seeing the destruction.
d. Darkness prevented us to see the destruction.
18. a. She is not only a singer but also dances.
b. She not only sings but also a dancer.
c. She is a singer and dancer not only but also.
d. She is not only a singer but also a dancer.

The following sentences are rewritten as specified in the bracket. Pick out the correct one.

19. The box is so heavy that I cannot lift it. (Restructure using *too to*)
- a. The box is too heavy that I cannot lift it.
b. The box is too heavy for me to lift it.
c. The box is so heavy that I too cannot lift it.
d. I cannot lift the box because it is too heavy.
20. India is the biggest democracy in the world. (Turn into Comparative Degree)
- a. No other country is the biggest democracy in the world.
b. All other democracies in the world are bigger than India.
c. India is bigger than no other democracies in the world.
d. India is bigger than any other democracies in the world.
21. He is writing short stories. (Begin with "Short stories")
- a. Short stories are written by him.
b. Short stories he is writing.
c. Short stories are being writing by him.
d. Short stories are being written by him

Section C -- Reading

A passage is given below. Read it carefully and answer the questions that follow.

Environment is the sum total of everything that surrounds a living organism. It includes living and non-living things. Air, water, soil, rock, trees and living beings are all parts of the environment. The act of contaminating or causing damage to the natural environment is called environmental pollution.

Environmental pollution affects human life a lot. It makes life uneasy. It causes shortage of pure water, unbearable heat, various types of diseases etc. Environmental pollution is of various types. More important pollutions are air pollution, water pollution, soil pollution and noise pollution.

Water pollution is mainly due to industrial wastes, pesticides and electronic wastes. People throw wastes and dead bodies of men and animals into the rivers. All these make water unfit for drinking. Air pollution is mainly caused by the gases given out by burning petroleum products. Such polluted atmosphere causes acid rain. Sound pollution is caused by sounds of vehicles, heavy machines, loud speakers etc. Too much noise affects the nervous system and causes diseases.

It is the duty of every individual to keep the environment uncontaminated. We must engage in environment protection activities. Planting saplings, keeping wells, ponds and other water bodies clean, adopting scientific waste management systems etc. are important environment protection activities. Schools should try to develop environment protection awareness among students through activities such as campaign against the use of plastics, formation of nature clubs etc.

22. Environment includes _____
- a. living and non-living things.
 - b. living things only
 - c. non-living things only
 - d. neither living nor non-living things.
23. Environmental pollution means the act of _____

- a. protecting the environment
 - b. contaminating the natural resources
 - c. appreciating the beauty of nature
 - d. developing nature-friendly attitude
24. Which of the following is the main factor of causing air pollution?
- a. Use of loud speaker
 - b. rivers
 - c. rocks
 - d. gases emitted by vehicles

Section D -- Writing

The following sentences are not in proper order. They can be put together to form a well connected passage. Select the option that gives the best order of the sentences.

- 25.
- a. He submitted the application for admission to the Higher Secondary Course.
 - b. He joined the Higher Secondary School.
 - c. He received admission memo.
 - d. Gopan passed the SSLC examination.
- a. ACBD. b. CABD. c. DACB. d. BCBA
- 26.
- a. He was admitted to a nearby hospital.
 - b. The people took him out of the well.
 - c. Later he was discharged from the hospital.
 - d. The doctor examined him and prescribed medicines.
 - e. Rafeeq fell into a well.
- a. ACBED. b. EBADC. c. DAECB. d. EBCBA

27.

- a. Candidates submitted nomination papers.
- b. The Election commission issued Election Notification.
- c. The votes were counted and the results declared.
- d. Some candidates withdrew their nominations after the scrutiny.
- e. The election took place with neck to neck fight.

a. ACBED. b. CEABD. c. EDACB. d. BADEC

- 28.
- a. Pupils prepared the write up as group work.
 - b. Feedback was given to the pupils.
 - c. The pupils were asked to prepare a write up on social forestry.
 - d. The speeches were presented.

Ans. a. ADCB b. CDAB c. BCDA d. CADB

Achievement Test in English
(Final Version)

Response Sheet

Name of the studentRoll No.....

Class.....DivSchool

Sl No	Answer				Sl No	Answer			
	A	B	C	D		A	B	C	D
1					15				
2					16				
3					17				
4					18				
5					19				
6					20				
7					21				
8					22				
9					23				
10					24				
11					25				
12					26				
13					27				
14					28				

Appendix VI

Achievement Test in English
(Final Version)

Scoring Key

Question Number	Answer Code	Question Number	Answer Code
1	A	15	B
2	C	16	A
3	A	17	C
4	A	18	D
5	C	19	B
6	D	20	D
7	B	21	D
8	B	22	A
9	A	23	B
10	C	24	D
11	A	25	C
12	A	26	B
13	B	27	D
14	C	28	D

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

VERBAL GROUP TEST OF INTELLIGENCE

Dr. P.K. Sudheesh Kumar

Hameed. A. & Prasanna. A.

This test is prepared to test the mental abilities of students. This test includes 5 sub tests. Before writing the answer, carefully read the instructions given in the beginning of each test. The mode of answering is explained with examples. Try to answer the questions within the time limit. Do not write or mark anything in the question paper. Mark your responses in the given response sheet only.

TEST I – VERBAL ANALOGY

In this section, for each question, three words are given. You have to write the fourth word. By understanding the relationship between the first word and the second word from the given three words, select the fourth word from the alternatives A, B, C, and D and mark it in the response sheet provided.

Example: Thirsty: Water :: Hungry : _____

A. Meat B. Leisure C. Food D. Weariness

We drink water when we are thirsty. Likewise, we take food when we are hungry. So the answer is 'C'.

A	B	C ✓	D
---	---	-----	---

1. Clever : Fox : : Foolishness : _____

A. Monkey B. Bear C. Deer D. Ass

2. Mercy: Cruelty : : Silence : _____

A. Serene B. Noise C. Calmness D. Meditation

3. Drama : Director : : Newspaper : _____

- A. Manager B. Editor C. Owner D. Press
4. Ship : Captain :: Aeroplane : _____
A. Sea B. Airport C. Driver D. Pilot
5. Cry : Laugh :: Sadness : _____
A. Happiness B. Energetic C. Harmony D. Peace
6. Shirt : Cloth :: Chappell : _____
A. Chisel B. Leather C. Cobbler D. Tailor
7. Crow : Black :: Swan : _____
A. Bird B. Water C. White D. Grey
8. Magazine : Reader :: Radio : _____
A. Advertisers B. Announcers C. Spectators D. Listener
9. Log : Axe : Cloth : _____
A. Machine B. Needle C. Scissors D. Thread
10. Student : Classroom :: Player : _____
A. Stadium B. Competition C. Coach D. Game
11. House: Roof :: Earth : _____
A. Air B. Sky C. Atmosphere D. Poles
12. Child : Parents :: Book : _____
A. Teacher B. Publisher C. Press D. Author
13. Year : Month :: Week : _____
A. Hour B. Minute C. Fortnight D. Day
14. Night : Day :: Hatred : _____
A. Help B. Mercy C. Love D. Failure
15. Poet : Poem :: Music : _____

A. Composer B. Writer C. Producer D. Conductor

16. Snow : White :: Coal : _____

A. Smoke B. Red C. Black D. Yellow

17. Cow : Animal :: Hen : _____

A. House B. Bird C. Egg D. Nest

18. Swimming :: Water : Skating : _____

A. Ice B. Sky C. Mountain D. Space

19. Man : Autobiography : : Nation : _____

A. People B. Population C. Geography D. History

20. Medicine : Disease :: Book : _____

A. Knowledge B. Teacher C. Author D. Publisher

TEST II – VERBAL CLASSIFICATION

In this section, for each question, four words are given, of which three can be grouped together. Find out fourth word and mark it in your response sheet.

Example: A. Sweetness B. Chilly C. Hotness D. Bitterness

Among these words, A, C, and D are different tastes. B (Chilly) is not included in this category. So the right answer is 'B'.

A	B ✓	C	D
---	-----	---	---

1. A. Teacher B. Principal C. Student D. Professor

2. A. Bus B. Aeroplane C. Bicycle D. Lorry

3. A. Walking B. Thinking C. Swimming D. Jumping

4. A. Circle B. Square C. Triangle D. Hexagon
5. A. Beauty B. Senility C. Chap D. Youth
6. A. Gram B. Kilogram C. Metre D. Quintal
7. A. Peace B. Sound C. Meditation D. Stillness
8. A. Director B. Actor C. Singer D. Orator
9. A. Day B. Calendar C. Mouth D. Week
10. A. Quintal B. Inch C. Mile D. Feet
11. A. Tongue B. Eye C. Tooth D. Nose
12. A. Wheat B. Ragi C. Paddy D. Pie
13. A. Snake B. Whale C. Chameleon D. Tortoise
14. A. Pencil B. Umbrella C. Paint D. Canvas
15. A. Mango Tree B. Jack Fruit Tree C. Coconut Tree D. Teak
16. A. Mango B. Apple C. Tomato D. Potato
17. A. Ear B. Finger C. Hand D. Leg
18. A. Hen B. Goat C. Cow D. Crow
19. A. Office B. House C. Bungalow D. Hut
20. A. Announcers B. Spectators C. Lyricist D. Listeners

TEST III – NUMERICAL REASONING

For the six items given below, certain numbers are given in particular orders.

For each item, four alternatives are given as A, B, C and D. Find out the right answer and mark it in the response sheet.

Example: 2, 4, 6, ____, 10

- A. 5 B. 8 C. 7 D. 11

A	B ✓	C	D
---	-----	---	---

1. 4, 9, 16, 25, 36 ____
A. 39 B. 47 C. 49 D. 59
2. 25, 24, 22, 19, ____, 10
A. 15 B. 16 C. 17 D. 14
3. 6, 8, ____, 20, 36.
A. 15 B. 14 C. 16 D. 12
4. 2, 6, 12, 20, 30, ____
A. 42 B. 46 C. 40 D. 36
5. 3, 3, 6, 18, ____
A. 68 B. 33 C. 72 D. 29
6. 0, 2, 4, 6, ____, 10.
A. 7 B. 5 C. 8 D. 9

For the question 7 to 10, four numbers are given. Find out the numeral that is not related to other three and mark it in the response sheet provided.

Example: A. 1 B. 3 C. 6 D. 7

In this A, B and D are odd numbers, where as C is an even number. Therefore, the answer is C.

A	B	C ✓	D
---	---	-----	---

7. A. 1 B. 5 C. 25 D. 75
8. A. 3 B. 4 C. 7 D. 9
9. A. 12 B. 24 C. 35 D. 48

10. A. 150 B. 36 C. 12 D. 4

For the questions 11 to 20, three numbers are given. You have to find out the fourth number from the given three numerals. There is relationship between the first two numerals. Select the most appropriate numeral to the third one from the numerals A, B, C, and D.

Example: $1 : 2 :: 2 : \underline{\hspace{2cm}}$

- A. 6 B. 4 C. 1 D. 5

One is the multiple of two. Similarly two is the multiple of four. So the answer is B.

A	B ✓	C	D
---	-----	---	---

11. $3 : 5 :: 11 \underline{\hspace{2cm}}$

- A. 12 B. 13 C. 14 D. 15

12. $5 : 25 :: 3 \underline{\hspace{2cm}}$

- A. 6 B. 12 C. 15 D. 9

13. $1 : 6 :: 7 \underline{\hspace{2cm}}$

- A. 12 B. 13 C. 11 D. 14

14. $10 : 20 :: 18 \underline{\hspace{2cm}}$

- A. 26 B. 36 C. 46 D. 32

15. $4 : 5 :: 8 \underline{\hspace{2cm}}$

- A. 6 B. 7 C. 5 D. 9

16. $12 : 72 :: 6 \underline{\hspace{2cm}}$

- A. 58 B. 36 C. 46 D. 52

17. $12 : 4 :: 24 \underline{\hspace{2cm}}$

- A. 6 B. 10 C. 8 D. 12
18. 28: 22:: 46 _____
 A. 40 B. 38 C. 42 D. 29
19. 49: 7:: 4 _____
 A. 16 B. 8 C. 2 D. 12
20. 48: 8:: 18: _____
 A. 8 B. 4 C. 2 D. 3

TEST IV – VERBAL REASONING

For each question of this section, four alternatives A,B,C, and D are given. Read them carefully and mark the answers in the response sheet provided.

Example:

Bindu is fatter than Sindu. Manju is not so fatter than Bindu. Manju and Sandhya are equally fat. Then who among them is the fattest?

- A. Manju B. Bindu C. Sindu D. Sandhya

As Bindu is the fattest, the answer is 'B'.

A	B ✓	C	D
---	-----	---	---

1. Appu sings better than Chippu. Devan cannot sing as good as Kannan. Kannan can sing better than Appu. Who is the best singer among them?
 A. Appu B. Kannan C. Chippu D. Devan
2. Raman is walking behind Rema. Ramani is walking behind Rema but in front of Raman. Raju is walking in front of Ramani. Then who is walking behind every body?

A. Raman B. Ramani C. Rema D. Raju

3. Ajay works more than Vijay. Asok and Ajith have the same capacity to work.

Vijay works more than Asok. Who is the hard worker?

A. Asok B. Ajith C. Vijay D. Ajay

4. Remya cannot dance as Bhavya. Divya can dance better than Bhavia. Vidhya's performance in dance is better than that of Divya. Then who is the best dancer?

A. Divya B. Bhavia C. Remya D. Vidhya

5. If the son of Mohan is the father of Deepak, what is the relationship between Deepak and Mohan?

A. Son B. Brother C. Nephew D. Grandson

6. Rafeeq has better sight than Muneer. Shameer has less sight than that of Sudheer. Sudheer doesn't have the sight as that of Rafeeq. Who among them have more power of sight?

A. Sudheer B. Shameer C. Rafeeq D. Muneer

7. If two persons have completed a job within ten days, what amount of job one can do in a day?

A. $\frac{1}{2}$ B. $\frac{1}{5}$ C. $\frac{1}{10}$ D. $\frac{1}{20}$

8. If the sound of a gunfire takes two minutes to reach from the place A to B, how much time the sound of five gunfires will take to reach from place A to B?

A. 10 Minutes B. 2 Minutes C. 4 Minutes D. 5 Minutes

9. Sharmila is younger than Mala. Kunjan and Nanda are of the same age. Sudheesh is younger than Nanda and elder than Sharmila. Mala is not as old as Sudheesh. Then who is the eldest one?

A. Sudheesh B. Mala C. Sharmila D. Kunjan

10. There are 70 students in a queue for remitting the fees. If the position of Mohan is 54 from the window, how many students will be behind him?

A. 15 B. 16 C. 17 D. 18

11. If South – West is North, what will be the North- East?

A. West B. South - West C. East- West D. South

12. A is the son of B. B and C are sisters. D is the mother of C and E is the son of D. Then which is right in the following.

- A. E is the uncle of A.
- B. C and E are brother and sister.
- C. C is the grand mother of A
- D. A and E are brothers.

13. There are 80 employees in a company. $\frac{1}{4}$ of them have a car, $\frac{1}{2}$ of them have scooter and $\frac{1}{10}$ have both car and scooter. Then, how many of them are there without car or scooter?

A. 12 B. 32 C. 30 D. 28

14. In a class having strength of 51 students, the rank of Akhil is 21st. Then what is the position of Akhil from the last one?

A. 12 B. 30 C. 31 D. 35

15. A person walked 4 miles towards the east. Then turned left and walked 5 miles and again turned left and walked 2 miles. Then what is the direction he is walking now?

A. North B. West C. East D. South

16. F is the brother of A and C is the daughter of A. K is the sister of F and G is the brother of C. Among them, who is the uncle of G?
- A. F B. C C. K D. A
17. Jinu is two years elder than Vinu and have three times the age of Minu. If the sum of the ages of the three is 27, what will be the age of Jinu?
- A. 5 B. 3 C. 9 D. 10
18. If the place of X who is standing in a queue in front of Maveli Store is 22 from the front and 28 from back, how many persons are there in the queue?
- A. 49 B. 52 C. 50 D. 54
19. A is longer than B and B is shorter than X. X and Y are of the same length. If Z is longer than A, which will be the shortest one?
- A. X B. Y C. A D. B
20. If the father of Syam is the son of Sanjay, then what is the relationship between Syam and Sanjay?
- A. Son B. Grandson C. Brother D. Nephew

TEST V – COMPREHENSION

In this section, for each question, some statements are given. Four alternatives are given for every question as A,B,C and D. Read the statements carefully and find out the answers and mark them in the response sheet provided.

Example: Satish has two sons, A and B and two daughters, C and D. Shyama has two children, X and Y. Manoj has two children namely E and F and they are employed in a company. A and D are married. X married C and F married A. Manoj is the brother of Shyama.

Question:

1. What is the relationship between X and E?

- A. Father and son B. Brother and sister C. Cousins
D. Daughter and father

A	B	C ✓	D
---	---	-----	---

I. W, X, Y and Z are the four members of a home. Among them W, X and Y are educated and W, Y and Z are honest. Y and Z are employed and W, X and Z have humility.

1. Who have education and honesty but is not employed?

- A. W B. X C. Y D. Z

2. Who is honest, educated and employed?

- A. W B. X C. Y D. Z

3. Who is honest and employed but not have education?

- A. W B. X C. Y D. Z

4. Who has education and humility but yet not with honesty and employment?

- A. W B. X C. Y D. Z

5. Who doesn't have education, even if he is humble, honest, and employed?

- A. W B. X C. Y D. Z

II. Dinesh has a daughter A, and two sons B and C. Shyam has two sons P and Q and a daughter R. P and C are married and they have two sons M and N. Rahit is the father of both S and T. T and B are married and they have daughters D and E and a son G.

6. What is the relationship of Q to N?
 A. Father B. Grand Father C. Uncle D. Son
7. What is the relationship of Dinesh to E?
 A. Grand Father B. Uncle C. Father D. Son
8. What is the relationship of M to R?
 B. Mother B. Daughter C. Niece D. Uncle
9. What is the relationship of B to G?
 C. Son B. Mother C. Aunt D. Niece
10. What is the relationship of E to S?
 D. Grand Child B. Uncle C. Cousin D. Father

III. If $5 \text{ PQ } 8 = 5^2 + 8 = 25 + 8 = 33$

11. $4 \text{ PQ } 4 = ?$
 A. 16 B. 20 C. 24 D. 12
12. $4 \text{ PQ } 1 = ?$
 A. 17 B. 12 C. 8 D. 9
13. $5 \text{ PQ } 5 = ?$
 A. 20 B. 30 C. 24 D. 12
14. $6 \text{ PQ } ? = 108$
 A. 72 B. 30 C. 15 D. 25
15. $? \text{ PQ } 9 = 109$
 A. 50 B. 25 C. 20 D. 10

IV. U,V,W,X,Y and Z are the six members of a home. One among them is a foot ball player, and another one is a chess player. The third person is a cricket player. U and X are unmarried women and they do not participate in any game.

No woman is engaged in playing foot ball or cricket. Among the one couple, Z is the husband. V, the brother of W is not a chess player nor a cricket player. Y is the friend of V and also a cricket player.

16. Who is the foot ball player?

- A. X B. U C. Y D. Z

17. Who is the chess player?

- B. U B. V C. W D. X

18. Who is the wife of Z?

- C. W B. V C. U D. Y

19. Who are the ladies?

- D. UXV B. VYX C. XZY D. UXW

20. Who are the gents?

- E. XUY B. UXV C. VYZ D. WXZ

UNIVERSITY OF CALICUT

Department of Education

Verbal Group Test of Intelligence

Dr. P.K. Sudheesh Kumar

Hameed. A, & Prasanna. A

hriZymÄ° n fpsS am\k nI amb l gnhrpl Ä] crnti m[nj p¶ Xn\lv
 വേണ്ടി തയ്യാറാക്കിയ പരീക്ഷാ ചോദ്യങ്ങൾ Cu sSi v hnhn[Xc- nepÄ 5 sSi p-
 l Ä CXnÄ DÄs; mÄ n' ncrj p¶ p. Hmtcm sSi nsâ bpw B cw- nÄ
 sl mSp- nkrÄ \nÄt±i S Ä F gpXn- pSS p¶ Xn\lv ap¼v (i ² n' p hmbn-
 j pl . D- cw F gpതേങ്ങ രീതി ഉദാഹരണ cW k l nXw hyà amj nbnkrns.
 \nÄ±nj S k ab- n\pÄ nÄ D- cw F gpXn XoÄ; m³ {i ² nj pl bpw } d-
 a Xn\lv ti j w am{Xw F gpXn XpSS pl bpw Gähpw thK- nÄ F gpXn
 XoÄ; m³ {i anj pl bpw sNt, nbnkrns Xn\lv X¶ ncrj p¶ Cu tNmZyl Sem-
 k nÄ F s' -; nepw F gpXpl tbm ASbmfS, Sp- pl tbm sNt cpXv
 {} tXyl w X¶ nkrÄ D- c; Semk nÄ am{Xta D- cw F gpXmhq.

Test 1 Verbal Analogy

Cu hri`mK- nÄ sl mSp- nkrÄ tNmZyS fna aq¶ v hmj pl Ä
 hoXw X¶ nkrns. \memas- hmj v \nS Ä F gptXnbnkrns X¶ ncr-
 j p¶ aq¶ v hmj pl ഉള്ള ആദ്യത്തെ രണ്ട് വാക്കുകൾ Ä X½nepÄ _ Öw a\
 Ênemj n aq¶ mas- hmj nt\mSv tbmPn; p¶ hmj \A B C D F ¶ o {l a-
 - nÄ sl mSp- ncrj p¶ \nep hmj pl fna \n¶ pw sXcs^a Sp- vD- c-
 j Semk nÄ ASbmfS, Sp- pl .

DZml cWw:

Zml w : shÄ w :: hni , v:.....

- a. amwk w b. hri aw c. B l mcw d. E oWw

Zml w hcpt¼mÄ shÄ w l pSnj p¶ p. AXpt] mse hni , v hcp-
 t¼mÄ B l mcw l gnj p¶. അതുകൊണ്ട് C' bnWvi cnbmb D- cw.

A	B	C✓	D
---	---	----	---

- 1 I ui ew : I pdpj³ :: hnVn⁻ w :
- a. I pcS³ b. I cSn c. am³ d. I gpX
- 2 Zb: {I qcX :: \ni _vX :.....}
- a. \nY^é ew b. i _vW c. i m[´] X d. [ym\w
- 3 \mSI w : k whn[mbl³ :: \yqk vt] _ A :.....
- a. amt\PA b.] {Xm[n] A c. DSaØ³ d. {] k v
- 4 I _ A : I ym] ä³ :: hnam\w:.....
- a. I SÂ b. F bÂt] mÂ«v c. ss{UhÂ d. ss] eäv
- 5 I c[·] nÂ: Nncn : : hnj aw :.....
- a. k t[´] mj w b. Dt· j w c. i m[´] n d. k am[m\w
- 6 j Â«v XpWn :: sNcp_v :.....
- a. Dfn b. Xpl Â c. sNcp_v v p⁻ n d. X_ç ÂI mc³
- 7 I mj : I dp_v v :: I wk w :.....
- a.] E n b. shÂ w c. shfp_v v d. Xhn«v
- 8 amk nl : hmb-\j mc³ :: tdUntbm:.....
- a.] ck yj mc³ b. A dnbn_v pl mc³ c. I mgNj mc³ d. tl Ähnj mc³
- 9 hndl v : tl mSmen :: XpWn:.....
- a. saj o³ b. k qNn c. I {Xnl d. \oev
- 10 hnZymÂ° n : Çmk v dqw: I fnj mc³ :.....
- a. tì Unbw b. aÂk cw c. tl m[·] v d. I fn
- 11 hoSv: taÂj qc :: `qan:.....
- a. hmbp b. B I mi w c. A[´] coE w d. [qhS Ä
- 12 I p«n: amXm-] nXmj Ä :: _ qj v :.....
- a. A [ym-] t³ b. {] k m-[t³ c. {] Ê v d. {KÛ t Ä⁻ mhv

13. hÄj w : amk w :: B gN :
- a. aWn; qÄ b. an\päv c. രണ്ടാഴ്ച d. Znhk w
14. cm{Xn:] I Ä : : shdp, v :
- a. k l mbw b. Zb c. Cj Öw d. k t´ mj w
15. I hn: I hnX:: k wKoXw :
- a. cNbnXmhv b. F gp- p l mc³ c. \nÄ½mXmhv d. കണ്ടി ÖÄ
16. a^a v shfp, v: I Äj cn:
- a.] pl b. Nph, v c. l dp, v d. a^a
17.] i p: arKw: tl mgn:
- a. hoSv b.] E n c. ap« d. l qSv
18. \o´ Ä : shÄ w : k vt l ämMv:
- a. a^a v b. B l mi w c.] ÄEXw d. i q\ym l mi w
19. a\pj y³: B B l Y: cmj {Sw:
- a. P\Ö Ä b. P\k wJy c. `qam mk {Xw d. Ncn{Xw
20. acp¶] v tcmKw:] pk v l w:
- a. A dnhv b. A [ym-] l ³ c. {KÜ l mc³ d. cNbnXmhv

Test-II

Verbal Classification

Cu hn`mKÖ fnepÄ tNmZyÖ fnÄ Hmtcm¶] n\pw A B C D F ¶] n-
 Ö s\ \nep hm; p l Ä hoXw X¶] n«pneÖ. അതിൽ ഒരേണ്ണം മറ്റു മൂന്ന്
 hm; p l tfmSpw tbnPn; msX \nÄj p¶] p: അത് ഏതെന്ന് കണ്ടു:] nSn´ v
 D- c; Semk nÄ A Sbmfs, Sp- p l .

DZm l cWw:

- a. a [pcw b. ap l v c. F cihv d. l b] v

CXnÄ A, C, D F ¶] nh hnhn[cpNnl sf l mWn; p¶] p. B (ap l)
 cpNnl fnÄ DÄs, Sp¶] XÄ. A Xpകൊണ്ട് ശരിയുത്തരം B' B Wv

A	B✓	C	D
---	----	---	---

- 1 a. A [ym] l ³ b. {] n³ k n] Ä c. hnZymÄ° n d. {] ^ k Ä
- 2 a. _ k v b. hnam\w c. ssk j nÄ d. temdn
- 3 a. \Sj pl b. Nn´ nj pl c. \o´ pl d. NmSpl
- 4 a. hr¯ w b. NXpcw c. {Xntl mVWw d. j Uv pPw
- 5 a. ʌʌʌʌʌʌʌ b. hmÄ² l yw c. anSpj ³ d. buÆ\w
- 6 a. {Kmw b. l ntem{Kmw c. aöÄ d. l znâÄ
- 7 a. k am[m\w b. i _ vzw c. [ym\w d. \nÝ ew
- 8 a. k whn[mb l ³ b. \S³ c.] m«pl mc³ d. {] mk wKn l ³
- 9 a. Znhk w b. l eʌʌʌʌ b. amk w d. B gN
- 10 a. l znâÄ b. C© v c. ssaÄ d. hmc
- 11 a. \mhv b. l ®v c.] Äv d. aqj v
- 12 a. tKmX¼v b. cmKn c. s\Äv d.] bdv
- 13 a. / n¼v b. XæmKew c. A cW d. B a
- 14 a. s] ³ k nÄ b. l S c. s] bnâv d. l ym³ hmk v
- 15 a. amh v b. ¹ mhv c. sX§ v d. tXj v
- 16 a. am§ b. B , nÄ c. Xj mfn d. Dcpfj ng§ v
- 17 a. sNhn b. hncÄ c. ssl d. l mÄ
- 18 a. tl mgn b. B Sv c.] i p d. l mj
- 19 a. Hm^ ok v b. hoSv c. _ w¥mhv d. l pSnÄ
- 20 a. A dnbn, pl mÄ b. l mgN l mc³ c. cNbnXmhv d. tl Ähn l mc³

Test-III

Numerical Reasoning

Xmsg sl mSp⁻ ncn; p¶ B dv tNmZyS finÄ I psd k wJ yÄ Ä Hmtcm {l a⁻ nÄ sl mSp⁻ ncn; p¶ p. H¶ v F gpXmsXbpw hn«ncn; p¶ p. Xmsg A B C D F ¶ {l a⁻ nÄ \mevD⁻ cS Ä sl mSp⁻ ncn; p¶ p. Ch- bnÄ \n¶ pw i cnbp⁻ cw കണ്ടെത്തി അടമ്ബട്, Sp⁻ pl .

DZmH cWw:

2 4 6 10

- A. 5 B. 8 C. 7 D. 11

A	B✓	C	D
---	----	---	---

1 4 9 16 25 36.....

- A. 39 B. 47 C. 49 D. 59

2 25 24 22 19..... 10

- A. 15 B. 16 C. 17 D. 14

3 6 8 20 36

- A. 15 B. 14 C. 16 D. 12

4 2 6 12 20 30.....

- A. 42 B. 46 C. 40 D. 36

5 3 3 6 18.....

- A. 68 B. 33 C. 72 D. 29

6 0 2 4 6..... 10

- A. 7 B. 5 C. 8 D. 9

Ggv apXÄ]⁻ v hscbpÄ tNmZyS finÄ Hmtcm¶ nepw A B C D F ¶ nS s\ \mev k wJ yÄ Ä X¶ n«¶. അതിൽ ഒരു സംഖ്യ മറ്റ് മൂന്ന്

k wJ yI t f m S p w t b m P n j m s X \ n A j p m . അത് ഏതെന്ന് കണ്ടു] n S n ' v D - .
 c j S e m k n A A S b m f s , S p - p l .

DZ m l c W w :

- A. 1 B. 3 C. 6 D. 7

C X n A A B D F q | n h H ä k w J y l s f k q N n , n j p q | p . F q | m A C ' H ä k w J y b A . A X p k a n s u t t a r o C ' B l p q | p .

A	B	C✓	D
---	---	----	---

7. A. 1 B. 5 C. 25 D. 75
 8. A. 3 B. 4 C. 7 D. 9
 9. A. 12 B. 24 C. 35 D. 48
 10. A. 50 B. 36 C. 12 D. 4

] X n s \ m q | v a p X A z h s c b p A t N m Z y S f n A a q q | v k w J y l A h o X w X q | n k p n s . \ m e m a s - k w J y \ n S A F g p t X n s X m W v X q | n c n j p q | a q q | v k w J y l q u i l o a r d y a t e r a n s s a m b l y l A X 1 2 n e p A _ O w a \ E n e m j n a q q | m a s - k w J y t b m S v t b m P n j p q | k w J y A B C D F q | o { l a - n A s l m S p - n c n j p q | k w J y l f n A \ n q | p w s X c s a S p - v D - c j S e m k n A A S b m f s , S p - p l .

DZ m l c W w :

1. 12 :: 2 ::

- A. 6 B. 4 C. 1 D. 5

H q | n s a C c k i y a n s r a n s . അതുപോലെ രണ്ടിന്റെ ഇരകണമിടി \ m e v A X p k a n s u t t a r o c w B B W l

A	B✓	C	D
---	----	---	---

11. 35 :: 11 ::

- A. 12 B. 13 C. 14 D. 15

12. 5:25 :: 3 ::

- A. 6 B. 12 C. 15 D. 9
13. 16 :: 7 ::
A. 12 B. 13 C. 11 D. 14
14. 10:20 :: 18 ::
A. 26 B. 36 C. 46 D. 32
15. 45 :: 8 ::
A. 6 B. 7 C. 5 D. 9
16. 12:12 :: 6 ::
A. 58 B. 36 C. 46 D. 52
17. 12:4 :: 24 ::
A. 6 B. 10 C. 8 D. 12
18. 28:22 :: 46 ::
A. 40 B. 38 C. 42 D. 29
19. 49:7 :: 4 ::
A. 16 B. 8 C. 2 D. 12
20. 48:8 :: 18 ::
A. 8 B. 4 C. 2 D. 3

Test-IV

Verbal Reasoning

Cu hñ`mK- nepÅ F Åm tNmZyS Äj pw A B C D F ¶ {l a-
- nÃ \mev hoXw D- cS Ä sl mSp- ñkþens. æwæyo æbmbn hmbn`v
a\Ê nemj n i cnbmb D- cw D- c; Semk nÃ A Sbmfs, Sp- pl .
DZmñ cWw:

1 æwæyhn\ ñwæyhn\j mÄ h®w l qSpXemWv a© phn\ æwæyhn-
t\j mÄ h®w l pdhmWv a© phn\pw k Ôyi pw XpÃy h®amWpÅ Xv
F ¶ mÃ ChcnemÄj mWv h®w Gähpw l qSpXÃ?

7 രണ്ട് വേർ ചേർന്ന് പത്ത് ദിവസം കൊണ്ട് എത്ര ജോലി ചെയ്യാൻ കഴിയും?

- A. 12 B. 15 C. 10 D. 20

8 Hcp shSnsbmⁱⁱ A F η \emptyset e⁻ p\ n η B F η \emptyset es⁻ :⁻ m³ F Sp_i p η kabw 2an\p \ll v F η m \hat{A} 5shSnsbmⁱⁱ I \hat{A} A F η \emptyset e⁻ p\ n η B \emptyset es⁻ :⁻ m³ F {X k absaSp_i pw?

- A. 2an\päv B. 2an\päv C. 4an\päv D. 5an\päv

9 j \hat{A} anf_i v ame_tb_i m \hat{A} {} mbw I pdhmWv I p \odot \pw \ന്ദയ്ക്കും തുല്യ {} mbamWp \hat{A} Xv k p[oj n\ v \ന്ദ_tb_i m \hat{A} {} mbw I pdhmWv k p[oj n\ v j \hat{A} anf_tb_i m \hat{A} {} mbw I qSpXemWv ameb_y v k p[oj nt\mfw {} mbw C \hat{A} . Chcn \hat{A} Gäh] w I qSpX \hat{A} {} mbw B \hat{A} _i mW \hat{A}

- A. k p[oj v B. ame C. j \hat{A} anf D. I p \odot ³

10 Hcp tl mtfPnse \hat{A} ok Sby m³ \n \hat{A} _i p η I yqhnse I p \ll nl fpsS F \odot w 70 B I p η p. A Xn \hat{A} taml s \hat{a} \emptyset m\w P\ens \hat{a} A Sp⁻ p\ n η v 54pms⁻ XmsW⁻ n \hat{A} A hs \hat{a}]nd_t n \hat{A} F {X t] \hat{A} I mWpw?

- A. 5 B. 6 C. 7 D. 8

11 sX_i p] Sn^a mdv hS_i msW⁻ n \hat{A} hS_i p I ng_i v F \hat{A} m_tnc_i pw?

- A.] Sn^a mdv B. sX_i p] Sn^a mdv C. I ng_i p-] Sn^a mdv D. sX_i v

12 A, B bpsS al \mWv B. bpw C bpw k tl mZcn_t fmWv D, C bpsS A 1/2bpw E, D bpsS al \pamWv F η m \hat{A} Xmsg]dbp η hbn \hat{A} GXmWv i cn?

- A. A bpsS A 1/2mh\mWvE.
 B. C bpw E bpw k tl mZcn_t k tl mZc_t mcmWv.
 C. C, A bpsS A 1/2qabmWv
 D. A bpw E bpw k tl mZc_t mcmWv

൪ Hcp I ¼-\\nbise sXmgnemfinl fpsS F ®w 80 B I p¶ p. A XnÃ ¼ t] Àj v I mdpw ¼2t] Àj v k \\ q«dpw ¼0t] Àj v I mdpw k \\ q«dparansl F ¶ mÃ F {X t] Àj mWv I mtdm k \\ q«tdm CÃm- X?

- A. ൪ B. ൩ C. ൩ D. ൪

൫ 57t] cpÃ Hcp ¶mÊ nÃ A J nen\\ ¼21pmas- dm; mWv Gãhpw HSpñ-es- dm; pÃ I p«nbñ \\n¶ v I Wj mj pt¼mÃ A J nen\\ F {Xmas- dm; mbñരിക്കും ഉണ്ടാകൂ .

- A. ൪ B. ൩ C. ൩ D. ൪

൫ HcmÃ X F ¶ Ø e- p-\\n¶ ¼4ssaÃ I ngtj m«p \\S¶ v CSt- m«v തിരിഞ്ഞു വീണ്ടും 5 മൈൽ \\sന് വീണ്ടും ഇst- m«v Xñcñ ¼2 ssaÃ \\S¶ p. F ; nÃ A t±l w Ct, mÃ \\Sj p¶ Zni tbX?

- A. hSj ✓ B.] Snª mdv C. I ngj v D. sXj v

൫ F, A bpsS k tl mZc-\\mWv C, A bpsS al fmW \\K, F sã k tl mZcñ-bmWv G, C bpsS k tl mZc-\\mWv CXnÃ B cmW \\G bpsS A ½m-h³?

- A. F B. C C. K D. A

൫ hñ\\phñt\\ക്കാൾ രണ്ടു വയ്É v I qSpXepÃ Pñ\\phñ\\ an\\phñt \\j mÃ aq¶ p aSS v {] mbapans. aq¶ p t] mcpsSbpw hbÉ v I q«nbmÃ ൪ I n«pw. F ; nÃ Po\\phñsã hbÉ v F {X?

- A. 5 B. 3 C. 9 D. 0

൫ Hcp amthen tì mdnsã ap¼nepÃ I yqhnÃ \\nÃj p¶ X F ¶ bm-fñsã Ø m\\w ap¶ nÃ \\n¶ ¼22pmas- Xpw] n¶ nÃ \\n¶ ¼28pmat- Xp-amsW-; nÃ B sl I yqhnepÃ B fpñ fpsS F ®sa{X?

- A. 49 B. 52 C. 50 D. 54

൫ A by \\B tbj mÃ \\ofw I qSpXemWv B by \\X t \\j mÃ \\ofw I pd-hmWv X \\pw Y by pw XpÃy \\ofamWpÃ Xv Z \\A j mÃ \\ofw I qSp-Xepans. എങ്കിൽ ഏറ്റവും \\ofw I pdhmÃj ?

- a. X b. Y c. A d. B

20 i ymansâ A $\cdot \cdot^3$ k Ö bnsâ al \msW-| nÂ i ymapw k Ö bpw X $\frac{1}{2}$ n-
epÂ _ Ô sa´ ¢

- A. al 3 B. sl m \cdot pal 3 C. k tl mZc 3 D. A \-´ ch 3

Test-V

Comprehension

Cu hñ`mK- nepÂ tNmZyS frnÂ Hmtcm¶ nepw GXm\pw Nne
{] k Xmh-\| Ä sl mSp- ñkpsñ. ഇവ ശ്രദ്ധാ] qÄEw hmbn \cdot v A Xn\p Xmsg
sl mSp- ñcñ; p¶ tNmZyS Ä; v D- cw കണ്ട- pl . A B C D F ¶ o
{l a- nÂ \mev D- cS Ä sl mSp- ñcñ; p¶ p. i cñbpxതരം കണ്ടത്തി
D- c; Semk nÂ A Sbmfs, Sp- pl .

k Xoj nsâ] p{X- mcmWv A bpw B bpw.] p{XnamcmWv C bpw D bpw.
i ymabpsS a; fmWv X Dw Y Dw. at\mPnsâ a; fmb E bpw F Dw Hcp
l $\frac{1}{4}$ \nbñÂ tPmenbpÂ hcmWv A bpw D bpw hñhml ñXcmWv X
hñhml w sNbvXñcñ; p¶ Xv C sbbpw F hñhml w sNbvXñcñ; p¶ Xv A
sbbpw B Wv at\mP v i ymabpsS k tl mZc-\mWv
tNmZyS Ä:

(X Dw E bpw X $\frac{1}{2}$ nepÂ _ Ô sa´ ¢

- a. al \pw A \cdot \pw b. k tl mZco k tl mZc- mÂ
c. k tl mZcn k tl mZc- mcpsS a; Ä d. al fpw A \cdot \pw

A	B	C✓	D
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I. Hcp hoñise \mev AwKs fmWv W,X,Y,Z. ChcnÂ W,X,Y hñZym- ym-
k apÂ hcmWv W,Y,Z k Xyk Ô cpvY,Z F ¶ nhÂ tPmenbpÂ hcpam l p-
¶ p. Y,X,Z F ¶ nhÄ; v hñ\bhparpsñ

1 B \dot{A}_j mWv hnZym⁻ ymk w, k Xyk $\hat{O} X$ F η o KpWS fp \dot{A} Xpw F η m \hat{A} tPmenbn $\hat{A}m^-$ Xpw?

- a. W b. X c. Y d. Z

2 tPmenbpw hnZym⁻ ymk hpw k Xyk $\hat{O} X$ bpw D \dot{A} X $\dot{m}\dot{A}_j$ mW \dot{E}

- a. W b. X c. Y d. Z

3 B \dot{A}_j mWv tPmenbpw k Xyk $\hat{O} X$ bp \dot{A} Xpw F η m \hat{A} hnZym⁻ ymk an $\hat{A}m^-$ Xpw?

- a. W b. X c. Y d. Z

4 hnZym⁻ ymk hpw hn\wawo \dot{u} nes \dot{e} nepw k Xyk $\hat{O} X$ bpw tPmenbpw C $\hat{A}m^-$ X $\dot{m}\dot{A}_j$ \dot{E}

- a. W b. X c. Y d. Z

5. k Xyk $\hat{O} X$ bpw tPmenbpw hn\bhparanesob \dot{u} epw hnZym⁻ ymk an $\hat{A}m^-$ X \dot{v} B \dot{A}_j mW \dot{E}

- a. W b. X c. Y d. Z

II. Znt\j n\ v A F η] p{Xnbpw B, C F η] p{X⁻ mcp \dot{u} nes. \dot{u} y \dot{u} zi\ v P, Q F η] p{X⁻ mcpw R F η] p{Xnbparanes v P bpw C bpw hnhml nXcmWv M Dw N Dw A hcpsS] p{X⁻ mcpamWv tcml nXv S, T F η nhcpsS] nXmhmWv T hnhml w l gr⁻ ncrj p η Xv B sbbmWv D, E F η nh \dot{A} A hcpsS] p{Xnamcpw G.] p{X\pamWv

6 Q hn\ \dot{N} ambp \dot{A} \dot{u} \hat{O} sa⁻ \dot{E}

- A. A⁻ \dot{u} \dot{u} \dot{u} B. ap⁻ \dot{u} \dot{u} \dot{u} C. A $\frac{1}{2}mh^3$ D.] p{X³

7 Znt\i n\ \dot{E} bpambp \dot{A} \dot{u} \hat{O} sa⁻ \dot{E}

- A. ap⁻ \dot{u} \dot{u} \dot{u} B. A $\frac{1}{2}mh^3$ C. A⁻ \dot{u} \dot{u} \dot{u} D.] p{X³

8 M \ \dot{R} t\mSp \dot{A} \dot{u} \hat{O} sa⁻ \dot{E}

- A. A $\frac{1}{2}$ B. al \dot{A} C. A \ \dot{u} nch \dot{A} D. A $\frac{1}{2}mh^3$

9 B b \dot{u} \dot{G} tbmSp \dot{A} \dot{u} \hat{O} sa⁻ \dot{E}

- A. al \dot{u} \dot{u} \dot{u} B. A $\frac{1}{2}$ C. A $\frac{1}{2}mbn$ D. A \ \dot{u} nch \dot{A}

10 E b_{ij} v S t \ m Sp Å _ Ô sa ´ ʘ

A. t] c_j n S m h v

B. A ½ m h³

C. k t l m Z c n] p { X n

D. A ´ ´ ³

III. 5 PQ 8 = 5² + 8 = 25+8=33 B b m Å

11 4 PQ 4 = ?

A. 16

B. 20

C. 24

D. 28

12 4 PQ 1 = ?

A. 17

B. 22

C. 8

D. 9

13 5 PQ 5 = ?

A. 20

B. 30

C. 24

D. 28

14 6 PQ ? = 108

A. 22

B. 30

C. 16

D. 25

15 ? PQ 9 = 109

A. 50

B. 25

C. 20

D. 10

IV. Hcp ho«nise B dv A wKS fmWv U,V,W,X,Y,Z ChcnÅ HcmÅ
^ pSit__ mÄ I fr_j mc\pw asämcmÄ sNÊ v I fr_j mc\pw C\nbpsamcmÄ
{I n_j äv I fr_j mc\pamWv A hnhml nXl fmb U hpw X Dw Hcp I fr_n-
bnepw] s; Sp_j p¶ nÄ. Hä k {Xobpw ^ pSit__ mÄ I fr_ntem, {I n_j äv
I fr_ntem GAs, Sp¶ nÄ. ChcnÅ Hcp hnhml tPmUnbise `Ä` m-
hmW vZ. W sâ k t l mZc\mb V Hcp sNÊ v I fr_j mct\m {I n_j äv
I fr_j mct\m AÄ. Y,V bpsS I q«pI mc\pw {I n_j äv I fr_j mc\pamWv

16 B cmWv ^ pSit__ mÄ I fr_j mc³?

a. X

b. U

c. Y

d. Z

17 B cmWv sNÊ v I fr_j mci?

a. U

b. V

c. W

d. X

18 B cmWZ sâ `mcy?

a. W

b. V

c. U

d. Y

19 B scÃmamWv k {Xol Ä?

a. UXV

b. VYX

c. XZY

d. UXW

20 B scÃmamWv] pcpj · mÄ?

a. XUY

b. UXV

c. VYZ

d. WXZ

VERBAL GROUP TEST OF INTELLIGENCE

RESPONSE SHEET

Name of the student Class.....

Age Sex..... Name of the School.....

School Management: Gov/ Aided / Un-Aided. School location: Rural / Urban.

Sl No	SET I Answers				SET II Answers				SET III Answers				SET IV Answers				SET V Answers			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
1	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
2	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
3	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
4	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
5	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
6	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
7	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
8	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
9	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
10	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
11	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
12	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
13	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
14	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
15	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
16	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
17	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
18	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
19	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
20	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D

VERBAL GROUP TEST OF INTELLIGENCE**SCORING KEY**

SI No	SET I Answers	SET II Answers	SET III Answers	SET IV Answers	SET V Answers
1	D	C	C	B	A
2	B	B	A	A	C
3	B	B	D	D	D
4	D	A	A	B	B
5	A	C	C	D	D
6	B	C	C	C	C
7	C	B	A	D	A
8	D	A	B	B	C
9	C	B	C	D	A
10	A	A	A	B	B
11	B	C	B	D	B
12	D	D	D	A	A
13	D	B	A	A	B
14	C	B	B	C	A
15	A	D	D	B	D
16	C	D	B	A	D
17	B	A	C	C	C
18	A	D	A	A	A
19	D	A	C	D	D
20	A	C	D	B	C

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF ACHIEVEMENT MOTIVATION
(Draft Version - English)

Dr. TK. Mohammed

Jamaluddeen.K

Some statements are given below. If you find a statement as TRUE in your case mark X as your response in the column marked 'T' against the number of that statement. If you find a statement as FALSE, mark X as your response in the column marked 'F' against the number of that statement. And if you do not either find a statement as either True or False, then mark X as your response in the column marked 'U' against the number of that statement. T indicates 'True', F indicates 'False' and U indicates 'Undecided'.

Example : My decisions are taken by myself.

T	F	U
X		

Here the mark X is given in the column below T. It shows that the candidate sees the statement as TRUE.

Read the statements given below carefully and express your response by marking X in the appropriate column as shown in the Response Sheet provided.

1. I will continue my preparation for the examination, even if I am thorough with the curricular subjects.
2. I will consult with the teacher to ensure the sufficiency and stability of my preparation.
3. I fear failure in the examination due to lack of preparation.
4. I appreciate working hard.
5. While learning, I wouldn't give extra care to difficult portions
6. I am not bothered about my rank position in the class.
7. I like to be the top scorer in the class.
8. I like not to be a winner always as it may cause envy in other pupils towards me.
9. Examinations should be banned in schools.
10. I have confidence in my abilities to do the task assigned to me.
11. The present school curriculum is over loaded.
12. If the test is very tough, I alone will be the winner in my school.
13. I would avoid taking difficult tasks, fearing failure.
14. Whichever be the curriculum, I would be able to score high mark.
15. I influence the members in my group through my opinions and suggestions.
16. I do not like to be the leader of the group.
17. I would give direction to my class mates while accomplishing a task.
18. I would not attend the special classes arranged in our school on holidays.
19. Additional tuition class is a burden for regularly school going students.
20. I often forget to do the home assignments in time

21. I feel bored when I am without any work.
22. I believe in the saying that work is worship.
23. I abstain from studies, when my friends engage in leisure talks.
24. Others' disapproval of my actions causes me to reconsider my plans.
25. I am reluctant to change the view once I expressed.
26. I plan each day the works to be done that day.
27. Most evenings, I relax rather than prepare for the next day's tasks.
28. I procrastinate doing works, most often.
29. I become anxious when a decision is to be taken.
30. I like to do the assignments on my own, without discussing with others.
31. My decisions are taken by myself.
32. I waste a lot of time before beginning my studies and preparation.
33. I would adopt new strategies in learning which others may follow later.
34. I believe that success is the result of luck and not of hard work.
35. Hard work and success are not related each other.
36. Hard work is the back bone of success in any field.
37. I feel happy when engaging in my studies for a long period of time.
38. I feel I am lazy.
39. I seek tasks that challenge my ability.
40. My enthusiasm decreases when I face difficulty.
41. I avoid the chances of taking risks.
42. I feel happy when completing a task assigned to me.

43. I do not like people praising me in front of others for my better performance.
44. I get satisfaction when I answer a question well asked by the teacher in the class.
45. Even after completing a task, I will continue to work for improving it further.
46. Once a work is complete, then I will not spend a single minute on it.
47. I would continue my preparation even after each examination to improve my performance further in the upcoming examinations.
48. I will study continuously and reach the highest position.
49. I like to be in top positions in the society.
50. I do not like to be a person highly respected by others.

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF ACHIEVEMENT MOTIVATION
(Draft Version - Malayalam)

Dr. TK. Muhammed

Jamaluddeen. K

Xmsg l pd'iv {} kXmh\Ä \ÄI nbkçpçñ. çççç [çççç] çÄÆw hmbn'iv Hmtcm¶n-
t\mSpapff \nS fpsS {} Xnl cWw CtXmsSm, w \ÄI nb {} Xnl cW]{Xnl bnÄ tcJ-
s, Sp- pl . {} Xnl cW]{Xnl bnÄ Hmtcm {} kXmh\bpsSbpw \¼dn\ t\sc "T", "F"
"U" F ¶l o aq¶vtl mfS Ä \ÄI nbkçççñ "T" F ¶l AÆ cw hrh-Æ n; p¶Xv True (i çn)
F ¶mVv "F" F ¶Xn\False (sXä) F ¶pw "U" F ¶Xn\Undecided (A`r[] mbanÄ) F ¶p-
amVv hrh-Æ .

Hcp {} kXmh\ \nS fpsS l mcj- nÄ i çnbmsW-; nÄ "T" F ¶l tl mf- n\N
Xmsg "x" F ¶l amÄ; nSpI . sXämsW-; nÄ "F" F ¶l tl mf- n\N Xmsgbpw i çnsbt¶m ,
sXsätp¶m A`r[] mbansÄ-; nÄ "U" F ¶l tl mf- n\N Xmsgbpw "x" F ¶l amÄ; nSpI .

DZml cWw

1 F sä Xocpam\ S Ä Rm³ kzbw F Sp; p¶hbmVv

T	F	U
X		

ChrsS "x" F ¶l amÄ; nççç; p¶Xv "T" F ¶l tl mf- n\N XmsgbmVv AXv kqNn-
ç; p¶Xv Cu {} kXmh\ i çnbmbmVv] çç-Æ mÄ° n l mVp¶sX¶mVv

1.]mTy hjj bS Ä \¶mbn]Tn'p l çr^a mepw] çççççç çççççççççç XçmsdSp-
çpl Ä Rm³ XpScpw.

2.] co-E æð œvæns|bpf ff F sâ X_zmsdSp₃pl fpsS] cym] ŰXbpbw ` {Zxbpw Dd₃ v hcp⁻ m³ Rm³ A [ym]-l \pambn _ Ôs₃ Smdpæns.
3. X_zmsdSp₃rsâ A`mhw l mcWw Rm³] co-E bnÂ tXmÂhn` bs₃ Smdpæns.
4. l Tr\m² zm\w sN_zp¶Xv F \n_i vCj 6samWv
5.] Tr_i pt¼mÄ, {] bmkapf`mK§ Ä_i v Rm³ l qSpXÄ {i² \Ä l mchÄ.
6. 6mÊnÄ F sâ dm| v\ne F \n_i v hnj baÄ.
7. 6mÊnÄ Gähpw DbÄ¶ amÄ_i n\pSabm l m³ Rm³ Cj 6s₃ Sp¶lp.
8. aäp hnzÿmÄ° n Ä_i v Ft¶mSv Akqb tXm¶m³ CS hcp⁻ psa¶Xn\mÄ Ft₃mgpw hnPbnbm l p¶Xv Rm³ Cj 6s₃ Sp¶lnÄ.
9. kvl qfp l fnÄ] co-E l Ä \ntcm[n_i Ww.
10. \Ä l s₃ Sp¶ {] hÄ⁻ n Ä \nÄÆ l n_i m\pff F sâ l gnhnÄ F \n_i v Bß hni zmkapæns.
11. hÄ⁻ am\ l me kvl qÄ] mTy] ² Xn AanXamWv
12.] co-E {] bmkätadnbXmbmÄ kvl qfnÄ Rm³ am(Xambrcn_i pw hnPbnbm l p¶Xv
13.] cmPbw `b¶v{] bmkapff DZya§ Ä Rm³ Hgnhm_i mdpæns.
14.] mTy] ² Xn GXmbmepw DbÄ¶ amÄ_i vt\Sm³ F \n_i v l gnbpw.
15. F sâ kwL⁻ ise AwK§ sf A`n{] mb§ freqsSbpw \nÄt±i § freqsSbpw Rm³ km[o\ n_i mdpæns.
16. kwL⁻ rsâ t\Xmhml m³ Rm³ Cj 6s₃ Sp¶lnÄ.
17. {] hÄ⁻ n sN_zp¶ kab⁻ vkl] mTrn Ä_i v Rm³ amÄ^α \nÄt±i § Ä \Ä l mdpæns.

18. RŞ fpsS kvl qfnÂ Ah[n Zn\Ş fnÂ GÀs, Sp- p¶] j yÂ ÇmÊpI fnÂ Rm³]s; Spj mdrnÂ.
19.]Xnhmbn kvl qfnÂ t]ml p¶] hnZymÀ° nl Äj v A[nl ambn GÀs, Sp- p¶] Sj j ³ ÇmÊpI Ä`mcamVv
20. വീട്ടിൽ വെച്ച് ചെയ്യേണ്ട പഠ\ [] hÀ- \Ş Ä I rXjambn \nÄÆI nj m³ Rm³]e- t, mgpw ad¶]vt]ml mdpens.
21. sNçm³ Fs`-; nepw [] hÀ- n CÃm- kab- v F\nj; v hrckX A\p-h- s, Smdpens.
22. [] hÀ- nbmVv Bcm[\ F¶] samgrbnÂ Rm³ hni zk; p¶]p.
23. kpl r- pj Ä Hgrhp kab kwkmcŞ fnÂ GÀs, Sp-t¼mÂ Rm³]T\- nÂ \n¶]vHgn² p \nÂ; mdpens.
24. Fsâ \S] Snl tfmSpff aäpffhçpsS hrtbmPn, v Fsâ Bkq(XWS Ä]p\cm- temN\; v hrt[ban; m³ \ran- aml mdpens.
25. Hcn; Â [] I Sn, n' A`n[] mlw amäpçm³ Rm³ k¶]² aml mdrnÂ.
26. Hmtcm Znhസവു൦ ചെയ്യേണ്ട പ്രവർത്തി Ä Rm³ AXmXv Znhkw Bkq(XWw sNçmdpens.
27.]nsä Znhks- [] hÀ- nl Ä sNçm³ XçmsdSp; p¶]Xrt\; mÄ hrt(i an; m- \mVvan; km bmÓŞ fpw Rm³ hrtbmkn; mdpffXv
28. [] hÀ- nl Ä sNçp¶]Xv Rm³]et, mgpw amän sh; mdpens.
29. Xocpam\w F Spççens സമ b- v Rm³ DÄI \Vvml pe-\ml mdpens.
30. GÄ]nj s, Sp¶] [] hÀ- nl Ä aäpffhçcmSv NÄ' sNçmsX Häj vsNçm\mVv F\nj; vCj šw.
31. Fsâ Xocpam\Ş Ä Rm³ kzbw F Sp; p¶]hbmVv

32.]T\hwp A\p_Ô Hcpj S fpw Bcw`nj p¶Xn\ ap¼v Rm³ I psd kabw]mcjnj mdp`ns.
33. aäpffhÄ]n¶oSv D]tbmKs, Sp` ntbj mhp¶ X{`SÄ]T\ I mcy` nÄ Rm³ kzol cnj mo¿ns.
34. hnPbw `mkf` nsâ ^eamsW¶pw I Tn\m² zn\hpambn AXn\ _ÔansÄ¶pw Rm³ hni zk`nj p¶p .
35. hnPbhpw I Tn\m² zn\hpw]ckv]c _ÔnXaÄ.
36. GXvtaJebnepw hnPb` nsâ \s«ÄmWv I Tn\m² zn\w.
37. I qSpXÄ t\cw]T\` nÄ GAs, Spt¼mÄ F\nj vkt`mj w tXm¶mdp`ns.
38. Rm³ Aek\msW¶v F\nj vtXm¶p¶p.
39. Fsâ I gnhn\shÄphnfibml p¶ []hÄ` nl fmWv Rm³ tXSmdv
40. []bmkw A`napJol cnj pt¼mÄ F\nj vDÖml w I pdbp¶p.
41. kmI kapff []hÄ` nl Ä GsäSp`ææns nããNcyS Ä Rm³ Hgnhmj mclmWv
42. Fs¶ GÄ]n` []hÄ` n sNbWv XoÄj pt¼mÄ F\nj vkt`mj w tXm¶mdp`ns.
43. Fsâ anl hmÄ¶ []I S\`s` aäpffhcpsS ap¶nÄ sh`v []I oÄ` nj p¶hsc F\nj vCj SaÄ.
44. CmÊnÄ A [ym.]I sâ tNmZf` n\ \¶mbn D` cw \Ä I pt¼mÄ kwXr]Wn tXm¶mdp`ns.
45. Hcp []hÄ` n sNbWv XoÄ` Xn\vi j hpw AXv I qSpXÄ sa`'s, Sp` m³ XpSÄ (i aS Ä \S` mdp`ns.
46. Hcp []hÄ` n sNbWv I gn³ mÄ]ns¶ AXn\` òõõõ õõõ an\päv] mepw Rm³ Niehgnj mclÄ.

47. Hmtcm]coE j vtij hpw ASp⁻]coE brse {] I S\w I qSpXÃ sa'is₃«Xm
j m³ Rm³ X₂msdSp₃pl Ä XpScmdp-oms.

48. Rm³ XpSÃ'`bmbn]Tnj pl bpw D¶X]Zhnl fnÃ F⁻ pl bpw sN₂pw

49. kaql - isâ DbÃ¶]Zhnl frise⁻ m³ Rm³ Cj 6s₃Sp¶p.

50. aäpfhcmÃ Gsd _I pam\mj s₃Sp¶ Hcp hyà nbml m³ Rm³ Cj 6s₃Sp¶n
Ã.

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF ACHIEVEMENT MOTIVATION
(Final Version - English)

Dr. TK. Muhammed

Jamaluddeen.K

Some statements are given below. If you find a statement as TRUE in your case mark X as your response in the column marked 'T' against the number of that statement. If you find a statement as FALSE, mark X as your response in the column marked 'F' against the number of that statement. And if you do not either find a statement as either True or False, then mark X as your response in the column marked 'U' against the number of that statement. T indicates 'True', F indicates 'False' and U indicates 'Undecided'.

Example : My decisions are taken by myself.

T	F	U
X		

Here the mark X is given in the column below T. It shows that the candidate sees the statement as TRUE.

Read the statements given below carefully and express your response by marking X in the appropriate column in the Response Sheet provided.

1. I will consult with the teacher to ensure the sufficiency and stability of my preparation.
2. I fear failure in the examination due to lack of preparation.
3. While learning, I wouldn't give extra care to difficult portions.
4. I am not bothered about my rank position in the class.
5. I like to be the top scorer in the class.

6. I do not like to be a winner always as it may cause envy in other pupils towards me.
7. Examinations should be banned in schools.
8. I have confidence in my abilities to do the task assigned to me.
9. I would avoid taking difficult tasks, fearing failure.
10. Whichever be the curriculum, I would be able to score high mark.
11. I would give direction to my class mates while accomplishing a task.
12. Additional tuition class is a burden for regularly school going students.
13. I often forget to do the home assignments in time.
14. I feel bored when I am without any work.
15. I abstain from studies, when my friends engage in leisure talks.
16. Others' disapproval of my actions cause me to rethink my plans.
17. I plan each day the works to be done that day.
18. Most evenings, I relax rather than prepare for the next day's tasks.
19. I procrastinate doing works, most often.
20. I waste a lot of time before beginning my studies and preparation.
21. I would adopt new strategies in learning which others may follow later.
22. I believe that success is the result of luck and not of hard work.
23. Hard work and success are not related each other.
24. I feel I am lazy.
25. I seek tasks that challenge my ability.
26. I avoid the chances of taking risks.
27. Even after completing a task, I will continue to work for improving it further.
28. Once a work is complete, then I will not spend a single minute on it.
29. I would continue my preparation even after each examination to improve my performance further in the upcoming examinations.

30. I will study continuously and reach the highest position.
31. I do not like to be a person highly respected by others.

SCALE OF ACHIEVEMENT MOTIVATION
 (Final Version)
 Response Sheet

Name of the studentNo.

Class.....School.....

Question Number	Response			Question Number	Response		
	T	F	U		T	F	U
1				17			
2				18			
3				19			
4				20			
5				21			
6				22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31			
16							

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF ATTITUDE TOWARDS ENGLISH
(Draft Version - English)

Dr. Mohammed T.K

Jamaluddeen.K

This test is to know your attitude towards English. Some statements are given below. Read them carefully. If you agree with the statement, mark X as your response in the column marked 'A' against the number of that statement. If you disagree with a statement, mark X as your response in the column marked 'D' against the number of that statement. And if you do not either agree or disagree with a statement, then mark X as your response in the column marked 'U' against the number of that statement. A indicates 'Agree', D indicates 'Disagree' and U indicates 'Undecided'.

Example : English enriches Indian literature .

A	D	U
X		

Here the mark X is given in the column below A. It shows that the response of the candidate to the statement is 'Agree'.

Read the statements given below carefully and express your response by marking X in the appropriate column in the Response Sheet provided.

1. Knowledge of English is essential for international communication.

2. English facilitates national integration in India.
3. Knowledge of English enhances our exposure to the world.
4. The status of English is not higher than that of Hindi in the world.
5. English enriches Indian literature.
6. English is the most widely used language in the world.
7. Knowledge of English does not enhance the career possibility abroad.
8. The importance given to English in our country is excessive.
9. Knowledge of English is highly essential for familiarising us with the latest developments in the field of science and technology.
10. Ability to speak English enhances our social status.
11. I don't appreciate English culture.
12. Learning of English facilitates modification of our native culture.
13. The English text books in schools should include the literary works by Indian authors only.
14. Teaching of English in schools doesn't help us preserve our culture.
15. English culture is a progressive culture.
16. I like viewing English films.
17. I regularly listen to English news.
18. I do not like to read English books.
19. I use every opportunity I get to speak English.
20. I prefer Malayalam medium schools to English medium schools.
21. I like to be among English speaking people.
22. I do not like my friends speaking English.
23. Of all the subjects, I like English the most.

24. I do not appreciate teachers teaching me English.
25. I feel often bored in English classes.
26. I would like to avoid English classes.
27. Our English teachers do not bother much about making our language learning interesting.
28. I feel that the time allotted for teaching English in schools is excess.
29. My present standard in English is not satisfactory.
30. The subject I get the lowest mark in is English.
31. I am anxious about passing the examination due to the presence of English in the core curriculum.
32. The mark I get in English causes to enhance the percentage of my total mark.
33. I understand English when it is spoken by my teachers.
34. I speak English rather fluently.

5. C´ y³ k ml nXys⁻ Cw¥oj v [\yamj p¶] p.
6. teml⁻ v Gähpw hym] † ambn D] †bmKñj s, Sp¶] `mj Cw¥oj m-
Wv
7. Cw¥oj v `mj m] cñÚ m\w s] mXpsh B cpsSbpw hntZi sXmgneh-
k c k m [yX hÄ² n, nj p¶] nÄ.
8. \½psS cmPy⁻ v Cw¥oj n\ \ÄI s, Sp¶] {} m [m\yw A anXamWv
9. i mk {X k mt | Xnl taJ e† fñse Gähpw] pXñb k w` h hñl mk -
S Ä \apj v] cñNñXaml m³ Cw¥oj v `mj m] cñÚ m\w \nÄ_ Ô am-
Wv
10. Cw¥oj nÄ B i b hñ\ñabw \S⁻ m\pÅ I gnhv \½psS k maql y
] Zhñ DbÄ⁻ p¶] p.
11. Cw¥oj v k wk † mct⁻ mSv F \ñj vaXñ, nÄ.
12. Cw¥oj v] T\w \½psS Xt±i ob k wk † mcw sa` s, Sp⁻ m³ k l m-
bnj p¶] p.
13. k † qf† fñse Cw¥oj v] mT.] p k † † S Ä C´ yj mÄ F gpXñb
k ml nXy k rj ßñ Ä am{Xsa DÄsI mÄ mhq.
14. k † qf† fñÄ Cw¥oj v `mj] Tñ, nj p¶] Xv \½psS k wk † mcw k wc-
E nj m³ k l m† caÄ.
15. Cw¥oj v k wk † mcw Hcp] ptcñKa\ k wk † mcamWv
16. Cw¥oj v ^ nenap† Ä I mWm³ F \ñj v Cj ßamWv
17. R m³] Xñhmbñ Cw¥oj v hmÄ⁻ tI Äj mdpñš.
18. Cw¥oj v] p k † † S Ä hmbñj m³ R m³ Cj ßs, Sp¶] nÄ.
19. Cw¥oj v k wk mcnj m³ e` nj p¶] F Äm A h k chpw R m³ D] †bmK-
s, Sp⁻ mdpñš.
20. Cw¥oj v aoUnbw k † qf† † fñj mÄ R m³ Cj ßs, Sp¶] Xv aebmfw
aoUnbw k † qf† sfbmWv
21. Cw¥oj v k wk mcnj p¶] hÄj nSbnÄ DÄs, Sm³ R m³ Cj ßs, Sp¶] p.
22. F sâ k pl r⁻ pj Ä Cw¥oj v k wk mcnj p¶] Xv R m³ Cj ßs, Sp¶] n-
Ä.

23.]T\ hnj bS fñÃ R m³ Gähpw I qSpXÃ Cj ts, Sp¶ Xv Cw¥o-
j mWv
24. F s¶ Cw¥oj v]Tñ, ñj p¶ A [ym] † sc R m³ Cj ts, Sp¶ ñÃ.
25. Cw¥oj v Çmk pt fñÃ F \ñj v]et, mgpw hñck X A \p- ñs, Smdp-
ñš.
26. Cw¥oj v ÇmÊ pt Ä Hgnhmj m³ R m³ Cj ts, Sp¶ p.
27. R S fpsS Cw¥oj v `mj m] T\w ck † camj p¶ XñÃ henb XmÃ] -
cyapÃ hcÃ R S fpsS Cw¥oj v `mj m A [ym] † Ä.
28. k v qfp fñÃ Cw¥oj v `mj m]T\` ñ\ A \phZñj s, « kabw
A [ñ amSW¶ v R m³ I çpXp¶ p.
29. Cw¥oj ñÃ F sâ Ct, mgs` \nehmcw Xr] Xñ caÃ.
30. F \ñj v]coE j v Gähpw I pdª amÃj ve`ñj p¶ hnj bw Cw¥o-
j mWv
31.]mTy]² XñbnÃ Cw¥oj v DÄs, Sp¶ Xñ\mÃ]coE sam` ñÃ
]mÊ m¶ p¶ Xñs\ I pdñ v F \ñj v DÄI WvTbpñš.
32. Cw¥oj ñÃ F \ñj ve`ñj p¶ amÃj v F sâ sam` w amÃj nsâ i X-
am\w Dbcm³ \ñar` am¶ mdpñš.
33. F sâ A [ym] † Ä Cw¥oj v k wk mcnj pt ¼mÄ F \ñj v a\Ê nem¶ m-
dpñš.
34. R m³ Cw¥oj v k mam\yw Hgptj msS k wk mcnj mdpñš.

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF ATTITUDE TOWARDS ENGLISH
(Final Version - English)

Dr.TK. Muhammed

Jamaluddeen.K

This test is to know your attitude towards English. Some statements are given below. Read them carefully. If you agree with the statement, mark X as your response in the column marked 'A' against the number of that statement. If you disagree with a statement, mark X as your response in the column marked 'D' against the number of that statement. And if you do not either agree or disagree with a statement, then mark X as your response in the column marked 'U' against the number of that statement. A indicates 'Agree', D indicates 'Disagree' and U indicates 'Undecided'.

Example : English enriches Indian literature .

A	D	U
X		

Here the mark X is given in the column below A. It shows that the response of the candidate to the statement is 'Agree'.

Read the statements given below carefully and express your response by marking X in the appropriate column in the Response Sheet provided.

1. Knowledge of English is essential for international communication.
2. Knowledge of English enhances our exposure to the world.
3. The status of English is not higher than that of Hindi in the world.

4. The importance given to English in our country is excessive.
5. Learning of English facilitates modification of our native culture.
6. Teaching of English in schools doesn't help us preserve our culture.
7. English culture is a progressive culture.
8. I like viewing English films.
9. I regularly listen to English news.
10. I do not like to read English books.
11. I prefer Malayalam medium schools to English medium schools.
12. I like to be among English speaking people.
13. I do not like my friends speaking English.
14. Of all the subjects, I like English the most.
15. I do not appreciate teachers teaching me English.
16. I feel often bored in English classes.
17. I would like to avoid English classes.
18. Our English teachers do not bother much about making our language learning interesting.
19. My present standard in English is not satisfactory.
20. The subject I get the lowest mark in is English.
21. I am anxious about passing the examination due to the presence of English in the core curriculum.
22. The mark I get in English causes to enhance the percentage of my total mark.
23. I understand English when it is spoken by my teachers.
24. I speak English rather fluently.

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

SCALE OF ATTITUDE TOWARDS ENGLISH
(Final Version - Malayalam)

Dr.TK. Muhammed

Jamaluddeen.K

Cw#oj v`mj t bmspÅ \nS fpsS at\mf`mhw A dnbp¶¶ Xn\` eamst-
bpÅ sSÎ mWnXv Xmsg l pd`v {} k \Xmh-\l Ä l mWmw. A hbñÃ Hmtcm-
¶¶ nt\mSpapÅ \nS fpsS {} Xn cWw \nS Ä; v \Ãl s, « {} Xn cW
j oänÃ tcJ s, Sp-` pl . Hcp {} k \Xmh-\t bmsv \nS Ä t b mPrj p¶¶ psh-
; ñÃ B {} k \Xmh-\bpsS \¼dn\ v t\scbpÅ "A' F ¶¶ tl mf-` n\ v
Xmsg "x' F ¶¶ amÄ; nSpl . hnt b mPr, msW; ñÃ "D' F ¶¶ tl mf-` n\ v
Xmsgbpw t b mPr, m hnt b mPr, m CsÃ; ñÃ 'F ¶¶ tl mf-` n\ v
Xmsgbpw x' F ¶¶ Nro` asd .

DZml cWw:

1C` y³ k ml nXys` Cw#oj v [\yam; p¶¶ p.

A	D	U
X		

ChnsS x' F ¶¶ NnÓanncrj p¶¶ Xv "A' F ¶¶ tl mf-` n\ v XmsgbmWv
Cu {} k \Xmh-\t bmspÅ] co-E mÄ° nbpsS {} Xn cWw "t b mPrj p¶¶ p'
F ¶¶ XmsW¶¶ v CXv k qNr, rj p¶¶ p.

- 1 Cw#oj v`mj m] crÚ m\w A` ÄtZi ob B i b hn\ nab-` n\ v
 \ñÃ_ Ö amWv
- 2 Cw#oj v`mj m] crÚ m\w \apj vteml Xe-` nepÅ A \p`hS Ä
 hÄ² r, rj p¶¶ p.

3. ലോകത്ത് ഹിന്ദി പÅ Ø m\ t⁻ j mÄ DbÄ¶ XÄ Cw¥oj nsâ Ø m\w.
4. \½psS cmPy⁻ v Cw¥oj n\ v \ÄI s₃ Sp¶ [] m[m\yw A anXamWv
5. Cw¥oj v] T\w \½psS Xt±i ob k wk\ mcw sa^{..} s₃ Sp⁻ m³ k l m-
bnj p¶ p.
- 6 k\ qfpl fnÄ Cw¥oj v`mj] Tr₃ nj p¶ Xv \½psS k wk\ mcw k wc-
E nj m³ k l mbl caÄ.
7. Cw¥oj v k wk\ mcw Hcp] ptcnKa\ k wk\ mcamWv
8. Cw¥oj v ^ nenapl Ä l mWm³ F \ nj v Cj SamWv
9. R m³] Xnhmbn Cw¥oj v hmÄ⁻ tl Äj mdpns.
- Ø Cw¥oj v] pk \Xl S Ä hmbnj m³ R m³ Cj Ss₃ Sp¶ nÄ.
11. Cw¥oj v aoUnbw k\ qfpl tfj mÄ R m³ Cj Ss₃ Sp¶ Xv aebmfw
aoUnbw k\ qfpl sfbmWv
12. Cw¥oj v k wk mcnj p¶ hÄj nSbnÄ DÄs₃ Sm³ R m³ Cj Ss₃ Sp¶ p.
13. F sâ k pl r⁻ pj Ä Cw¥oj v k wk mcnj p¶ Xv R m³ Cj Ss₃ Sp¶ n-
Ä.
14.] T\ hnj bS fnÄ R m³ Gähpw l qSpXÄ Cj Ss₃ Sp¶ Xv Cw¥o-
j mWv
15. F s¶ Cw¥oj v] Tr₃ nj p¶ A [ym] l sc R m³ Cj Ss₃ Sp¶ nÄ.
16. Cw¥oj v Cm k pl fnÄ F \ nj v] et₃ mgpw hnck X A \ p⁻ hs₃ Smdp-
ns.
17. Cw¥oj v Cm Ê pl Ä Hgnhmj m³ R m³ Cj Ss₃ Sp¶ p.
- Ø R S fpsS Cw¥oj v`mj m:] T\w ck l camj p¶ XnÄ henb XmÄ] -
cyapÄ hcÄ R S fpsS Cw¥oj v`mj m A [ym] l Ä.
19. Cw¥oj nÄ F sâ Ct₃ mgs⁻ \nehmcw Xr] \Xn caÄ.
20. F \ nj v] coE j v Gähpw l pd^a amÄj ve`nj p¶ hnj bw Cw¥o-
j mWv
- Ø] mTy] ² XnbnÄ Cw¥oj v DÄs₃ Sp¶ Xn\mÄ] coE sam⁻ nÄ
] mÊ ml p¶ Xns\ l pdn^{..} v F \ nj v DÄI WVT bpsns.
22. Cw¥oj nÄ F \ nj ve`nj p¶ amÄj v F sâ sam⁻ w amÄj nsâ i X-
am\w Dbcm³ \nar⁻ am l mdpns.

23. $F \hat{=} A [ym] \cdot \hat{=} Cw\text{oj} \vee k \text{ wk } mcn_j \text{ pt } \frac{1}{4}m\hat{=} F \setminus n_j \vee a \setminus \hat{=} nem \cdot m$
dp₆n₃.

24. $R m^3 Cw\text{oj} \vee k \text{ mam} \setminus yw \text{ Hgpt}_j \text{ mS } k \text{ wk } mcn_j \text{ mdp}_{6n_3}$ ✓

SCALE OF ATTITUDE TOWARDS ENGLISH

(Final Version)

Response Sheet

Name of the studentNo.

Class.....School.....

Question Number	Response			Question Number	Response		
	A	D	U		A	D	U
1				13			
2				14			
3				15			
4				16			
5				17			
6				18			
7				19			
8				20			
9				21			
10				22			
11				23			
12				24			

**UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION**

STUDY HABIT INVENTORY
(Draft Version- English)

Dr. TK. Mohammed

Jamaluddeen. K

This is to know your study habits. Please answer all the questions. A list of statements of habits which are likely to influence your study and results is given below. After carefully reading each statement, your response may be marked in the response sheet given. In the response sheet you can see two columns for marking your responses against each statement. Column A and B. If your response to a statement is ‘True in my case’, mark X in the column A. If your response is “False in my case”, then mark X in the column B.

1. While studying, I sit keeping my feet on the floor or on a foot rest.
2. The seat I use has back support
3. While sitting, I cross my legs.
4. While sitting, my knees are above the level of hip.
5. I sit in the same position for long period of time.
6. I follow systematic approaches in study-related matters.
7. My study place is equipped with adequate lighting, ventilation and furniture.
8. I get good concentration in my study area.
9. My study place is in the central gathering area of my house.
10. I feel strain due to the improper height of the table and chair I use in the classroom.

11. My school atmosphere is free from disturbances.
12. I usually note down the main points while listening to the class.
13. Good study may not bring good careers.
14. It is my desire to be the top scorer of the school in the coming examination.
15. I have a time table for study.
16. I set apart the fresh time for entertainment.
17. I am a failure in learning by heart, even the most important points of the lesson.
18. I properly order in advance the subjects and lessons to be learned.
19. I do exercises and home assignments carefully.
20. I cannot do home assignments independently.
21. Usually I do assignments by copying from my peers.
22. I do not mark the important areas while reading the study materials.
23. I would not make use of any special strategy to improve my examination performance.
24. I can't hear the class even though the teacher talks in optimum volume.
25. I can see the writings on the black board clearly.
26. When I sit to study, parents / brothers / sisters will assign some jobs to me.
27. I would not try to note down the questions asked by the teacher in the class.
28. My friends and relatives would inspire me to involve more in learning.
29. I would not examine the previous question papers in order to identify the important areas and questions likely to be asked in the examination.
30. I would study more intensively during the days just before the examination.
31. I go through the lesson at least once before it is being taught in class room.
32. I review class notes regularly.

33. After the class, I contact the teacher to clarify my doubts, if any.
34. I properly organize the materials to be learned.
35. While learning, I select the most important points.
36. I do not try to repeatedly memorise the materials I learned.
37. I do not make use of mnemonic strategies.
38. Soon after reading, I forget the meaning of what I read.
39. I would engage myself in studying every day.
40. I follow regular study time.
41. I do not enjoy the school atmosphere.
42. I possess the required study materials.
43. Referring to dictionaries is not one of my habits.
44. I would give more attention to difficult areas while learning.
45. My parents watch television during my study time.
46. My parents talk over telephone in my study place.
47. The elder members in my family would help me during the study time.
48. The members of my family would try to arrange the study aids for me.
49. My time management needs to be rescheduled.
50. I get distracted when I study for a long time.
51. I can continue study for at least half an hour without any break.
52. I go on studying even after the scheduled time.

Appendix XXII

**UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION**

STUDY HABIT INVENTORY
(Draft Version- Malayalam)

Dr. TK. Mohammed

Jamaluddeen. K

CXv \nS fpsS] T\ i oeS Ä A dnbm\pÅ XmWv \nS fpsS] T\ s⁻ bpw dnk Ä«ns\bpw k zm[o\ñj m\ñSbpÅ i oeS Ä DÄsl mÅ p¶ I pd'v {} k ðmh\Ä Xmsg sl mSp⁻ ncnj p¶ p. A htbmtcm¶ pw {i ≥ m- } qÄEw hmbn'v \nS fpsS {} Xñ cWw CtXmsSm_w \ÄI nb {} Xñ cW] {Xñ bnÄ tcJ s_w Sp⁻ p¶ .

{} Xñ cW] {Xñ bnÄ \nS fpsS {} Xñ cWw tcJ s_w Sp⁻ p¶ - Xñ\ Hmtcm tNmZy \¼dn\ t\ooyoo oonö eeoöS Ä \ÄI nbkponö. tl mfw "A' hñh-£ ñj p¶ Xv "F sâ I mcy⁻ nÄ i cn' F ¶ mWv tl mfw "B' hñh-£ ñj p¶ Xv "F sâ I mcy⁻ nÄ i cnbÄ' F ¶ mWv Hcp {} k ðmh\ tbmSpÅ \nS fpsS {} Xñ cWw "F sâ I mcy⁻ nÄ i cn' F ¶ msW_w; nÄ {} Xñ cW] {Xñ bnÄ B {} k ðmh\bpsS \¼dn\ t\scbpÅ 'A' F ¶ tl mf⁻ nÄ "x' F ¶ amÄ; nSpl . "F sâ I mcy⁻ nÄ i cnbÄ' F ¶ mWv \nS fpsS {} Xñ cWsa_w; nÄ "x' F ¶ amÄ; 'B' F ¶ tl mf⁻ nSpl .

DZml cWw:

ZF \ñj v l rXyamb] T\ k abanÄ.

Cu {} k ðmh\ \nS fpsS I mcy⁻ nÄ i cnbsÄ_w; nÄ {} Xñ cW] {Xñ bnÄ "B' F ¶ tl mf⁻ n\ Xmsg x' F ¶ amÄ; nSpl .

A	B
	X

1. \net⁻ m AsÃ·; nÃ· Foot Rest tem I mev sh[·] mWv]T\ kab⁻ v R m³ Ccñ; mdpÃ· Xv
2. R m³ D] tñmKñ; p¶ Ccñ; nS⁻ n\ v]ndñ phi⁻ v Nmcm-\pÃ· ñññññ.
3. Ccñ; pñ¼mÃ· R m³ I mepñ Ä]ñW[·] vsh; mdpññ.
4. Ccñ; pñ¼mÃ· F sã I mÃ·ap«v CSp_· nsã A tX Dbc⁻ nemWv
5. Htc A hØ bñÃ· R m³ Gsd t\cw Ccñ; mdpññ.
6.]T\ kw_ Ô amb I mcyS fñÃ· R m³ hyhØ m] nX ka-] \S Ä]ñ[·] pSçmçdpññ.
7. F sã]T\ Ø e⁻ v B hi y⁻ n\ v {] I mi hpw hmbp k © mchpw tai , I tk c XpSS nb kul cyS fñpññ.
8.]T\ hij bw A [ym-] ð³ ÇmsÊ Sp; p¶ Xñ\ v ap¼v NpcpS nbXv Hcp XhWsb-; nepw R m³ hmbñ; mdpññ.
9. ho«ñÃ· s] mXpsh F Ã·mñcpw I qSpXembñ Hcpñ[·] p I qSp¶ ñmK⁻ mWv F sã]T\ Ø ew.
10.]T\ Ø es⁻ tai bpsSbpw I tk cbpsSbpw Dbc⁻ nepÃ· tNÃ·[·] bñÃ·mba F \ñ; vñij aw krj ññ; mdpññ.
11. F sã]T\ Ø e⁻ v F \ñ; v bmsXmcp _ p² nap«pñÃ·.
12. Çmk nÃ· {i² ñ; p¶ kab⁻ v s] mXpsh {] [m\ s_· « t] mbiãpñ Ä R m³ I pdñ[·] psh; mñññ.
13. anl[·]]T\ w anl[·] sXmgnÃ· \Ã·I ñtb; nÃ·.
14. A Sp⁻]co-£ bñÃ· kñ qñise Gãhpw DbÃ·¶ amÃ·; n\pSabmñ pl F ¶ Xv F sã B {Kñ amWv
15.]T\⁻ n\ v F \ñ; mcp kab_· «ññ bñññ.
16. \Ã· kabw R m³ DÃ·mK⁻ n\mbñ amñ sh; mdmWv
17. Gãhpw {] [m\ s_· « ñmK S Ä t] mepw I rZñØ am; m³ F \ñ; v I gn bmdñÃ·.
18.]Tñ; m\pÃ·]mT S fpw hij bS fpw R m³ ap³ I qdmbñ A \pñbmPy amb hñ[- ñÃ· {l as_· Sp⁻ ñ sh; mdpññ.
19. kñ qññÃ· sh[·] pw ho«ñÃ· sh[·] pw sNt_· çñXmb]T\ {] hÃ· \S Ä R m³ {i² m] qÃ·Ew sN_· mdpññ.

20. A [ym-] t ³] Tn, n' `mKŞ Ä R m³ ho«nÄsh'' v l psd XhW hmbn-
i mdpens.
21.] co-E i v sXm«v ap¼pff Znhk Ş fñÄ R m³ l qSpXÄ Xo{hambn
] Tn; mdpens.
22.] T\ hnj bŞ Ä hmbn; pt¼mÄ {} [m\ s, « `mKŞ Ä R m³ AS-
bmfs, Sp- mdnÄ.
23.] co-E t fise F sâ {} l S\w sa'' s, Spത്താൻ വേണ്ടി ഞാൻ
{ } tXyl X{ ' Ş sfm¶ pw D] tbnKs, Sp- mdnÄ.
24. A [ym-] t ³ B hi yamb i _Z- nemWv ÇmsÊ Sp; p¶ sX-; nÄ
t] mepw F \n; Xv t l Ä; m³ l gnbmdnÄ.
25. » m; v t_mÄUise F gp- pt Ä F \n; v hrà ambn l mWm³ l gn-
bmdpens.
26. R m³] Tn; m\ncn; p¶ kab- v amXmthm,] nXmthm, k t l mZ-
ctcm B sc-; nepw h¶ v F s¶ Nne ho«p tPmenl Ä GÄ] n; mdpens.
27. A [ym-] t ³ Çmk nÄ tNmZn; p¶ tNmZyŞ Ä l pdns'' Sp; m³ R m³
{ i an; mdnÄ.
28.] T\- nÄ l qSpXÄ GÄs, Sm³ k pl r- p; fpw _ Ö p; fpw
F s¶ {} tNmZn, n; mdpens.
29.] co-E i v hcm³ k m[yXbpff tNmZyങ്ങൾ കണ്ടെത്താൻ വേണ്ടി
R m³] gb tNmZyt] -, dpt Ä] cñti m[n; mdnÄ.
30. k l] m-Tn fptSXnÄ \n¶ v] l Ä- nbmWv R m³] mTy{ } hÄ- \-
Ş Ä s] mXpsh sNç mdpÄ Xv
31. F sâ] T\ Ø e- v F \n; v \Ä GI m{KX e` n; mdpens.
32. Çmk v kab- v F gpXp¶ l pdn, pl Ä R m³ l rXyambn] p\chtem-
l \w sNç mdpens.
33. ÇmÊ n\vti j w _ Ö s, « hnj b- nÄ hÄ k wi bhpw tXm¶ nbmÄ
R m³ B ÇmsÊ Sp- A [ym-] t \pambn _ Ö s, Smdpens.
34.] Tn; m\pÄ `mKŞ Ä R m³ A \ptbmPyamb hn[- nÄ k wL Sn, n-
i pt bpw { l aol cn; pt bpw sNç mdpens.
35.] Tn; pt¼mÄ {} [m\ s, « t] mbnâpt Ä R m³ {} tXyl ambn ASbm-
fs, Sp- mdpens.
36.] Tn' `mKŞ Ä B hÄ- n'' v HmÄs- Sp; m³ R m³ { i an; mdnÄ.

37. HmÄ½i à n sa''s, Sp- m\pÅ X{´ § Ä R m³ D] t b m K s, Sp- m-
dnÄ.
38. hmbn'' `mK- nsâ AÄ° w R m³ DS³ Xs¶ ad¶ p t] ml mo,gně.
39. R m³ F Äm Znhk hpw] T\· nÄ GÄs, Smdpgně.
40.] T\ kabw R m³ I rXyambn] menj mdpgně.
41. k v qÄ A´ coE w R m³ B k zZnj mdnÄ.
42. B hi y- n\] T\ hn`h§ Ä F sâ ssl hi apgně.
43. \nL gněÄ] cñti m[nj pl F ¶ Xv F sâ i oe§ finÄ s] «XÄ.
44.] Tnj pt¼mÄ {] bmk apff `mK§ Äj v R m³ I qSpXÄ {i ² \ÄI m-
dnÄ.
45. F sâ] T\ kab- v amXm] nXmj Ä ho«nÄ sSenhij ³ I mVmdp-
gně.
46. F sâ] T\ Ø e- v sh''v amXm] nXmj Ä sSent ^ m- D] t b m K n-
j mdpgně.
47.] T\ kab- v ho«nise apXnÄ¶ AwK§ Ä F s¶ k I mbnj mdpgně.
48. F \æó œvgně œo\ k I mbnÄ Ä Hcpj m³ I pSpw_ mwK§ Ä {i an-
j mdpgně.
49. F sâ kab ssl I mcy coXn] p\Ä \nÝ bñtj gnëXmVv
50. I ptd t\cw XpSÄ'' bmbn] Tnj pt¼mÄ F \nj v GI m{KX \j 6s, -
Smdpgně.
51. Npcp§ nbXv Ac aWnj qÄ t\ct- sj ·; nepw Csthfl finÄmsX
] T\w XpScm³ F \nj v I gn b m d p g n ě .
52. \nÝ bn'' kab-] cñ[n I gnª mepw R m³] T\w XpScm d p g n ě . }

Appendix XXIII

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

STUDY HABIT INVENTORY (Final Version- English)

Dr. TK. Mohammed

Jamaluddeen. K

This is to know your study habits. Please answer all the questions. A list of statements of habits which are likely to influence your study and results is given below. After carefully reading each statement, your response may be marked in the response sheet given. In the response sheet you can see two columns for marking your responses against each statement. Column A and B. If your response to a statement is "True in my case", mark X in the column A. If your response is "False in my case", then mark X in the column B.

1. While sitting, I cross my legs.
2. I go through the lesson at least once before it is being taught in class room.
3. My study place is in the central gathering area of my house.
4. I feel strain due to the improper height of the table and chair I use in the classroom.
5. My school atmosphere is free from disturbances.
6. I usually note down the main points while listening to the class.
7. It is my desire to be the top scorer of the school in the coming examination.
8. I have a time table for study.
9. I set apart the fresh time for entertainment.
10. I am a failure in learning by heart, even the most important points of the lesson.
11. I properly order in advance the subjects and lessons to be learned.
12. I do exercises and home assignments carefully.
13. I would read several times at my home the portion taken by the teacher.
14. I would study more intensively during the days just before the examination.
15. When I sit to study, parents / brothers / sisters will assign some jobs to me.

16. I would not try to note down the questions asked by the teacher in the class.
17. My friends and relatives would inspire me to involve more in learning.
18. I would not examine the previous question papers in order to identify the important areas and questions likely to be asked in the examination.
19. I review class notes regularly.
20. After the class, I contact the teacher to clarify my doubts, if any.
21. I properly organize the materials to be learned.
22. I do not try to repeatedly memorize the materials I learned.
23. I do not make use of mnemonic strategies.
24. Soon after reading, I forget the meaning of what I read.
25. I would engage myself in studying every day.
26. I follow regular study time.
27. I do not enjoy the school atmosphere.
28. I possess the required study materials.
29. Referring to dictionaries is not one of my habits.
30. I would give more attention to difficult areas while learning.
31. My parents talk over telephone in my study place.
32. The members of my family would try to arrange the study aids for me.
33. I get distracted when I study for a long time.
34. I can continue study for at least half an hour without any break.
35. I go on studying even after the scheduled time.

UNIVERSITY OF CALICUT
DEPARTMENT OF EDUCATION

STUDY HABIT INVENTORY
(Final Version- Malayalam)

Dr. TK. Mohammed

Jamaluddeen. K

CXv \nS fpsS] T\ i oeS Ä A dnbm\pÅ XmWv \nS fpsS] T\ s⁻ bpw dnk Ä«ns\bpw k zm[o\ñj m\ñSbpÅ i oeS Ä DÄsl mÅ p¶ I pd'v { } k ðmh\Ä Xmsg sl mSp⁻ ncnj p¶ p. A htbmtcm¶ pw {i ≥ m- } qÄEw hmbn'v \nS fpsS { } Xñ cWw CtXmsSm_w \ÄI nb { } Xñ cW] {Xñ bnÄ tcJ s_w Sp⁻ p¶ .

{ } Xñ cW] {Xñ bnÄ \nS fpsS { } Xñ cWw tcJ s_w Sp⁻ p¶ . Xñ\ Hmtcm tNmZy \¼dn\ t\oeyo onñ kooS Ä \ÄI nbk¶ns\ tI mfw "A' hñh-£ ñj p¶ Xv "F sâ I mcy⁻ nÄ i cn' F ¶ mWv tI mfw "B' hñh-£ ñj p¶ Xv "F sâ I mcy⁻ nÄ i cnbÄ' F ¶ mWv Hcp { } k ðmh\ tbmSpÅ \nS fpsS { } Xñ cWw "F sâ I mcy⁻ nÄ i cn' F ¶ msW_w nÄ { } Xñ cW] {Xñ bnÄ B { } k ðmh\ bpsS \¼dn\ t\scbpÅ 'A' F ¶ tI mf⁻ nÄ "X' F ¶ amÄj nSpl . "F sâ I mcy⁻ nÄ i cnbÄ' F ¶ mWv \nS fpsS { } Xñ cWsa_w nÄ "X' F ¶ amÄj 'B' F ¶ tI mf⁻ nSpl .

DZmI cWw:

1. F \ñj vI rXyamb] T\ k abanÄ.

Cu { } k ðmh\ \nS fpsS I mcy⁻ nÄ i cnbsÄ_w nÄ { } Xñ cW] {Xñ bnÄ "B' F ¶ tI mf⁻ n\Xmsg X' F ¶ amÄj nSpl .

A	B
	X

1. Ccnj pt¼mÄ R m³ I mepl Ä] nW'vshj mdpññ.

2.]T\ hij bw A [ym:] t³ CmsÊ Spj p¶ Xn\ v ap¼v NpcpS nbXv Hcp XhWsb-; nepw R m³ hmbn; mdpens.
3. ho«nÂ s] mXpsh F Ãmhcpw I qSpXembn Hcpn' p I qSp¶ `mK-
- mWvF sâ]T\ Ø ew.
4.]T\ Ø es⁻ tai bpsSbpw I tk cbpsSbpw Dbc⁻ nepÂ tNÂ' .
bnÃmba F \n; v hij aw krj Gnj mdpens.
5. F sâ]T\ Ø e⁻ v F \n; v bmsXmcp _ p² nap«panÃ.
6. Cmk nÂ {i² nj p¶ kab⁻ v s] mXpsh {} [m\ s₃ « t] mbiâpl Ä
R m³ I pdn' psh; moens
7. A Sp⁻] co-E bnÂ k v qfnise Gähpw DbÄ¶ amÄ; n\pSabm pl
F ¶ XvF sâ B {Kl amWv
8.]T\⁻ n\ v F \ns; mcp kab₃ «n bpsens.
9. \Ã kabw R m³ DÃmk⁻ n\mbn amän sh; mdmWv
10. Gähpw {} [m\ s₃ « `mK§ Ä t] mepw I rZnØ am; m³ F \n; v I gn
bmdnÃ.
11.]Tn; m\pÂ] mT§ fpw hij b§ fpw R m³ ap³ I qdmbn A \ptbmPy-
amb hn[- nÂ {l as₃ Sp⁻ n sh; mdpens.
12. k v qfnÂ sh'' pw ho«nÂ sh'' pw sNt₂ ensXmb]T\ {} hÄ⁻ \§ Ä
R m³ {i² m-] qÄEw sN₂ mdpens.
13. A [ym:] t³]Tn; n' `mK§ Ä R m³ ho«nÂsh'' v I psd XhW hmbn-
; mdpens.
14.] co-E ; v sXm«v ap¼pff Znhk § fnÂ R m³ I qSpXÂ Xo{hambn
]Tn; mdpens.
15. R m³]Tn; m\ncn; p¶ kab⁻ v amXmthm,]nXmthm, k tl mZ-
ctcm B sc-; nepw h¶ v F s¶ Nne ho«p tPmenÄ Ä GÂ] nj mdpens.
16. A [ym:] t³ Cmk nÂ tNmZn; p¶ tNmZy§ Ä I pdns'' Spj m³ R m³
{i an; mdnÃ.
17.]T\⁻ nÂ I qSpXÂ GÄs₃ Sm³ k pl r⁻ pi fpw _ Ö pi fpw
F s¶ {} tNmZn₃ nj mdpens.
18.] co-E ; v hcm³ km[yXbpff tNmZyensub kubensathann vevensl
R m³] gb tNmZyt]-, dpl Ä] crti m[- nj mdnÃ.

STUDY HABIT INVENTORY
 (Final Version)
Response Sheet

Name of the studentNo.

Class.....School.....

Question Number	Response			Question Number	Response	
	A	B			A	B
1				19		
2				20		
3				21		
4				22		
5				23		
6				24		
7				25		
8				26		
9				27		
10				28		
11				29		
12				30		
13				31		
14				32		
15				33		
16				34		
17				35		
18						