

A STUDY OF ACADEMIC ACHIEVEMENT IN RELATION TO MENTAL ABILITY AND SOCIO-ECONOMIC STATUS OF SECONDARY SCHOOL STUDENTS

Research Scholar: Suresh Ukkali, Dakshina Bharath Hindi Prachar Sabha, Madras Post Graduate and Research Institute D.C. Compound Dharwad-- 580001

Research Supervisor: Dr. C.V Hiremath; Principal, CTES College of Education, Chikodi, Belagavi District

ABSTRACT

The major task of school is to educate students and to provide them with the fundamental knowledge and skills deemed necessary for survival and healthy development in the modern world. School Achievement is of paramount importance in the present socio-economic and cultural context. The effectiveness of any educational system depends to a very great extent on what students achieve. In general terms, Achievement refers to the scholastic or Academic Achievement of the student at the end of an educational program. To maximize the Achievement within a given set-up is therefore, the goal of every educationist. This research paper focuses on to study the academic achievement in relation to mental ability and socio-economic status of secondary school students. The study is based on survey cum descriptive method, 500 secondary school students were selected by systematic random sampling techniques, for the analysis and interpretation of data mean, sd t test, Pearson product moment correlation and ANOVA statistical techniques used. The findings of the reveals that there is moderate correlation between mental ability & Academic achievement, and Socio-economic status & academic achievement, and there is significant difference between the different levels of mental ability & academic achievement, and SES and academic achievement. Thus, this study clearly shows that mental ability and SES factors favorably influencing on academic achievement among secondary school students.

Key words: Mental Ability, Socio-Economic Status, Academic Achievement, etc

INTRODUCTION

Education is a powerful instrument used by the society to shape the future and mould the next generation. Of all the stages of education, namely: kindergarten, primary and secondary, secondary education plays an important and crucial role in the meaningful development of a child. Secondary education is a period of education planned especially for young people of ages approximately from 15 to 18, in which the emphasis is on the basic tools of learning, expression, and understanding to the use and extension of the tools in exploring areas of thought and thinking, and in exploring and acquiring information, concepts, intellectual skills, and attitudes.

It is one which is all the more important because it lays the foundation of the individual's future education or vocational choices, which determines the future occupational, social or economic positions in the society. Without an efficient and progressive system of secondary education, rich and forward looking university education is impossible.

NEED FOR THE PRESENT STUDY

It is a common knowledge that 'Education' has a significant role to play in the development of an individual. The basic purpose of education is to draw the best out of the student in terms of his physical, mental and spiritual development. Until recently, remarkable importance had been given to the education sector by the government in India. This is attributed to weak inputs of the educational process, such as equipment, teacher, aids, curricula and laboratories etc. (Educational Denoters, 2004). In addition this is attributed to waste of the curricula structural composition, the prescriptive academic material, the absence of scientific application and the Audio-visual aids that lead to the supremacy of the theoretical part over the applied one. Consequently, the student lags behind in this modern age that is described as the age of information revolution, communications and technical progress.

The problem of this research was defined by the lack of an educational study of the Mental Ability of the Secondary School Students in India the use of solid and integrated – dimensional measurement instruments, in a time when the Mental Ability is one of the priorities of the educational work to develop the modern society and push the wheel of advancement. There is a very close relation between Intelligence or mental abilities and the scholastic growth which the teacher is expected to induce. Over and above its bearing on Academic Achievement, Intelligence is most important in its own right.

The purpose of the study is to investigate Students Mental Ability and Socio-Economic Status on Academic Achievement among Secondary School Students of Chikodi Educational District. The study believed that if students Mental Ability and Socio

Economic Status are improved and made consistent, Achievement would definitely improve. The knowledge of student degree of study would of course help the teachers and the school counselors to select appropriate techniques of helping students during teaching learning process.

STATEMENT OF THE PROBLEM

A STUDY OF ACADEMIC ACHIEVEMENT IN RELATION TO MENTAL ABILITY AND SOCIO-ECONOMIC STATUS OF SECONDARY SCHOOL STUDENTS.

OPERATIONAL DEFINITIONS OF THE TERMS USED

- 1) **Mental Ability:** The power to learn or retain knowledge; in law, the ability to understand the facts and significance of your behavior, capacity, ability, power possession of the qualities (especially mental qualities) required to do something or get something done; danger heightened his powers of discrimination. **Encyclopedic Dictionary of Education (1997)** defines Mental Ability as a relatively general type of capability of thought processes evaluated by the kind standardized test that is often called a test of mental abilities: among such abilities are verbal ability, numerical ability and spatial visualization ability.
- 2) **Socio-Economic Status:** An individuals or groups position within a hierarchical social structure. Socio Economic Status depends on a combination of variables, including occupation, education, income wealth, and place of residence. Sociologists often use Socio Economic Status as a means of predicting behavior.
- 3) **Academic Achievement:** Academic Achievement is defined as the level of actual accomplishment or proficiency one has achieved in an academic area, as opposed to one is potential in the educational goals measured by examinations.

Academic Achievement is defined by **Crow and Crow (1969)** as the extent to which a learner is profiting from instructions in a given area of learning i.e., Achievement is reflected by the extent to which skill and knowledge has been imparted to him.

High School Students

High school students are the students who are studying in classes IX and X standards. Among the studies reviewed, no study has investigated the effect of students Mental Ability and Socio-Economic Status on Academic Achievement. Therefore, the present research is of great significance.

OBJECTIVES OF THE STUDY

The present study is designed with the following objectives:

Major Objective

- I. To Study the significance difference between Mental Ability and Academic Achievement among Secondary School Students.

Minor Objectives

- i. To Study the significance difference between Mental Ability and Academic Achievement among sex-wise Secondary School Students.
- ii. To Study the significance difference between Mental Ability and Academic Achievement among locality-wise Secondary School Students.
- iii. To Study the significance difference between Mental Ability and Academic Achievement among medium of instruction wise Secondary School Students.
- iv. To Study the significance difference between Mental Ability and Academic Achievement among class-wise Secondary School Students.

Major Objective

- II. To Study the significance differences exist between the Socio-Economic Status and Academic Achievement among Secondary School Students.

Minor Objectives

- i. To Study the significance differences exist between the Socio-Economic Status and Academic Achievement among sex-wise Secondary School Students.
- ii. To Study the significance differences exist between the Socio-Economic Status and Academic Achievement among locality-wise Secondary School Students
- iii. To Study the significance differences exist between the Socio-Economic Status and Academic Achievement among medium of instruction-wise Secondary School Students
- iv. To Study the significance differences exist between the Socio-Economic Status and Academic Achievement among class-wise Secondary School Students.

RESEARCH HYPOTHESES

Keeping in view the above objectives, the following research hypotheses are framed:

Major Hypotheses

- I. There is no significance differences exist between the Mental Ability and Academic Achievement among Secondary School Students.

Minor Hypotheses

- i) There is no significance differences exist between the Mental Ability and Academic Achievement among sex-wise Secondary School Students.
- ii) There is no significance differences exist between the Mental Ability and Academic Achievement among locality-wise Secondary School Students.
- iii) There is no significance differences exist between the Mental Ability and Academic Achievement among medium of instruction wise Secondary School Students.
- iv) There is no significance differences exist between the Mental Ability and Academic Achievement among class-wise Secondary School Students.

Major Hypotheses

- II. There is no significance differences exist between the Socio-Economic Status and Academic Achievement among Secondary School Students.

Minor Hypotheses

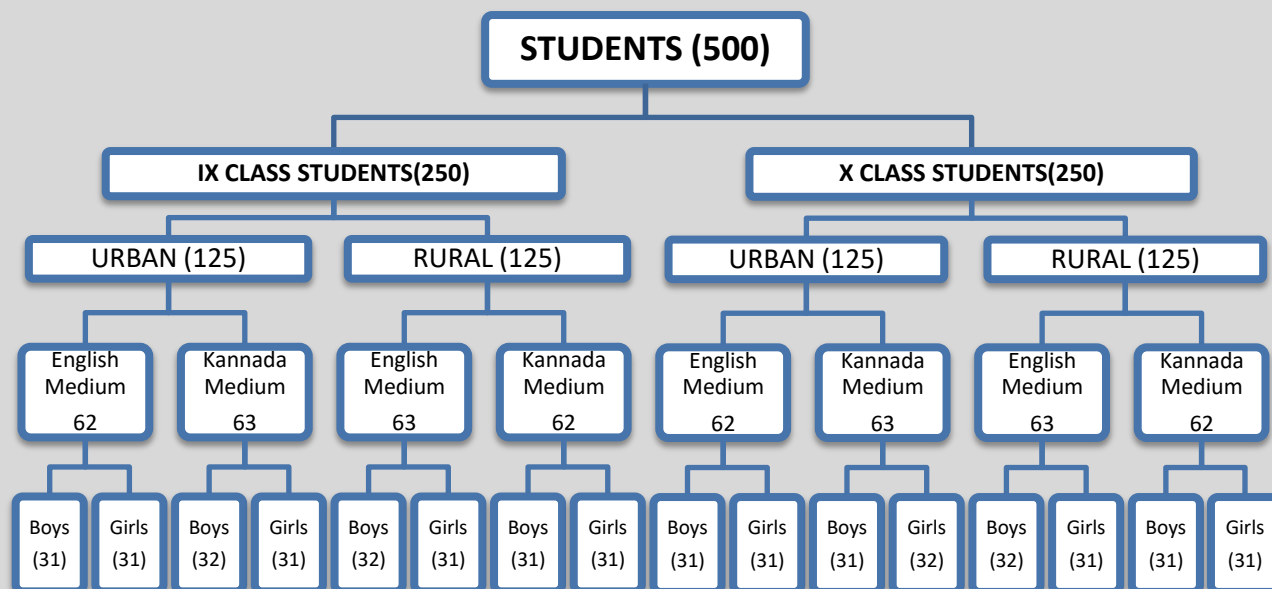
- i) There is no significance differences exist between the Socio-Economic Status and Academic Achievement among sex-wise Secondary School Students.
- ii) There is no significance differences exist between the Socio-Economic Status and Academic Achievement among locality-wise Secondary School Students
- iii) There is no significance differences exist between the Socio-Economic Status and Academic Achievement among medium of instruction-wise Secondary School Students.
- iv) There is no significance differences exist between the Socio-Economic Status and Academic Achievement among class-wise Secondary School Students.

METHOD OF THE STUDY

The investigator employed Survey cum Descriptive method. The purpose of descriptive survey method is to gather detailed information to be used as basis of study. By this method, we can determine the Academic Achievement in relation to Mental Ability and Socio-Economic Status of Secondary School Students.

SAMPLING PROCEDURE

Using Random sampling technique, 500 students are selected form IX and X standard studying in Secondary Schools of Chikodi Educational District. The break of sample are as follows.



VARIABLES

An expression that can be assigned any of the set of the value is known as variable. It is the condition or characteristic that the investigator manipulates controls or observes. Thus, it is likely to change at any time, having a range of possible value. The present study was the survey type of research that involved various variables as following.

INDEPENDENT VARIABLES : Mental Ability and Socio-Economic Status.

DEPENDENT VARIABLE : Academic Achievement.

MODERATE VARIABLES :

In the present study, following are considered as moderate variables in the study: Sex, Locality, Medium of Instruction and Class.

TOOLS USED FOR COLLECTING THE DATA

In the present study, the investigator used the survey method as a main technique to investigate the Mental Ability and Socio-Economic Status on Academic Achievement of High School students. The following tools used for the study.

- i) **Group Test of General Mental Ability:** In order to measure this variable, the Group Test of General Mental Ability constructed by S.Jalota was used.
- ii) **Socio-Economic Status Scale (SESS):** In order to measure this variable, the Socio-Economic Status Scale constructed by Meenakshi (2004) was used.
- iii) **Academic Achievement:** Marks secured by the students in the sample of the class IX and X, In their last annual examination marks are collected from the respective school records. These marks treated as index of their Achievement.

SCORING PROCEDURE

1. Group Test of General Mental Ability (GMAT) by S. Jalota (1972).

It contains 100 questions on 5 pages, 20 on each page. The elements of (1) vocabulary similar (10 questions) (2) vocabulary opposites (10 questions) (3) Number series (20 questions) (4) classification (20 questions), (5) Best answers (10 questions) (6) inferences (10 questions) and Analogies (20 questions) are included in the test. All the items are assigned positions according to their objectively determined order of difficulty. There is only one correct answer to each question and each correct question carries one mark. Thus, the minimum mark is zero and a maximum mark is 100.

For conveniently investigator categorized the General Mental Ability in to three types on Basis of scores obtained as follows

| Sl.no | Categorize | Range of scores |
|-------|-----------------------------|-----------------|
| 1 | High General Mental Ability | 76 and above |

| | | |
|---|--|--------------|
| 2 | Average General Mental Ability | 60-75 |
| 3 | Poor or below Average General Mental Ability | Less than 60 |

2. Socio-Economic Status Scale (SESS)

Scoring of the Test for scoring, the scoring key is used which summarizes the information recorded on the scale and weight age of each item. The obtained scores of respective categories are recorded in the scoring table. Before that, the total weight age of each item is counted and recorded against each of the seven categories. The raw scores are compared with the norms to assign the category to the students accordingly. Based on raw scores, the following status categories were classified.

For conveniently investigator categorized the Emotional Intelligence in to three types on basis of scores obtained as follows

CATEGORY OF SES STATUS

| Sl.No | Categorize | Range of Scores |
|-------|-------------------------------------|-------------------|
| 1 | High Socio-Economic Status | 105 and above |
| 2 | Above Average Socio-Economic Status | Between 90-104 |
| 3 | Average Socio-Economic Status | Between 65 and 89 |
| 4 | Below Average Socio-Economic Status | Between 50 to 64 |
| 5 | Poor Socio-Economic Status | 49 Or Below |

STATISTICAL TECHNIQUES

The scores obtained from different tools used for the present study were analyzed statistically. The statistical techniques used for the data analysis were the Co-Efficient of correlation to see the relationship among independent and dependent variables. In addition to it ANOVA was implied for finding out the mean and interactional effects of independent variable over the dependent variable and 't' test and analysis of variable (ANOVA) were employed for knowing significant difference between different variable.

ANALYSIS AND INTERPRETATION OF DATA

Table 1 : Correlation between Overall Scores of Mental Ability, Socio-Economic Status and Academic Achievement of Secondary School Students.

| Variables | Mental Ability | Socio-Economic Status | Academic Achievement |
|------------------------------|----------------|-----------------------|----------------------|
| Mental Ability | ----- | 0.76 | 0.86 |
| Socio-Economic Status | 0.76 | ----- | 0.71 |
| Academic Achievement | 0.86 | 0.71 | ----- |

From the above table it could be observed that the Mental Ability and Socio-Economic Status the coefficient of correlation found to be (0.76), Mental Ability and Academic Achievement co-efficient of correlation found (0.86), Socio-Economic Status and Academic Achievement (0.71) having very highly positive correlation.

Thus, there is positive correlation exists between the Mental Ability and Socio-Economic Status on Academic Achievement among Secondary School Students. So, Mental Ability and Socio-Economic Status factors are favorably influence on the Academic Achievement of Secondary School Students.

Table 2 : Mean, SD and 't' ratio Values of Academic Achievement among High, Average and Low Mental Ability Secondary School Students.(based on different variables)

| Sl.No | Variables | N | M | SD | Variables | N | M | SD | T value |
|------------------------------|-----------|-----|--------|-------|-----------|-----|--------|-------|----------------|
| 1 Overall | H.M.A | 115 | 353.79 | 58.08 | A.M.A | 227 | 346.82 | 50.61 | 1.09. NS |
| | H.M.A | 115 | 353.79 | 58.08 | L.M.A | 158 | 334.22 | 47.98 | 2.95. S |
| | A.M.A | 227 | 346.82 | 50.61 | L.M.A | 158 | 334.22 | 47.98 | 2.48.S |
| 2. Male | H.M.A | 60 | 337.51 | 49.15 | A.M.A | 110 | 347.63 | 54.10 | 1.36.NS |
| | H.M.A | 60 | 337.15 | 49.15 | L.M.A | 80 | 331.22 | 46.59 | 0.76.NS |
| | A.M.A | 110 | 347.63 | 54.10 | L.M.A | 80 | 331.22 | 46.59 | 2.52.S |
| 3. Female | H.M.A | 55 | 370.07 | 67.64 | A.M.A | 117 | 346.01 | 52.07 | 2.42.S |
| | H.M.A | 55 | 370.07 | 67.64 | L.M.A | 78 | 337.22 | 49.37 | 3.31.S |
| | A.M.A | 117 | 346.01 | 52.07 | L.M.A | 78 | 337.22 | 49.37 | 1.42.NS |
| 4. Rural | H.M.A | 60 | 332.46 | 50.72 | A.M.A | 122 | 347.16 | 52.96 | 1.18 NS |
| | H.M.A | 60 | 332.46 | 50.72 | L.M.A | 68 | 336.75 | 48.95 | 1.36 NS |
| | A.M.A | 122 | 347.16 | 52.96 | L.M.A | 68 | 336.75 | 48.95 | 1.36 NS |
| 5. Urban | H.M.A | 55 | 377.36 | 73.09 | A.M.A | 127 | 326.86 | 49.62 | 4.67 S |
| | H.M.A | 55 | 377.36 | 73.09 | L.M.A | 68 | 330.15 | 40.18 | 4.29 S |
| | A.M.A | 127 | 326.86 | 49.62 | L.M.A | 68 | 330.15 | 40.18 | 0.50 NS |
| 6. Kannada | H.M.A | 80 | 378.74 | 72.11 | A.M.A | 150 | 339.86 | 55.11 | 4.34.S |
| | H.M.A | 80 | 378.74 | 72.11 | L.M.A | 106 | 330.19 | 51.64 | 5.24.S |
| | A.M.A | 150 | 339.86 | 55.11 | L.M.A | 106 | 330.19 | 51.64 | 1.62.NS |
| 7. English | H.M.A | 35 | 381.48 | 71.21 | A.M.A | 77 | 339.23 | 36.39 | 3.34.S |
| | H.M.A | 35 | 381.48 | 71.21 | L.M.A | 52 | 347.25 | 54.11 | 2.70.S |
| | A.M.A | 77 | 339.23 | 36.39 | L.M.A | 52 | 347.25 | 54.11 | 1.06.NS |
| 8. 9 th class | H.M.A | 45 | 379.25 | 72.65 | A.M.A | 130 | 352.70 | 53.74 | 2.30.S |
| | H.M.A | 45 | 379.25 | 72.65 | L.M.A | 60 | 348.97 | 53.54 | 2.63.S |
| | A.M.A | 130 | 352.70 | 53.74 | L.M.A | 60 | 348.97 | 53.54 | 0.61.NS |
| 9. 10 th class | H.M.A | 70 | 373.74 | 70.10 | A.M.A | 97 | 335.86 | 54.98 | 4.10.S |
| | H.M.A | 70 | .74373 | 70.10 | L.M.A | 98 | 344.82 | 66.10 | 3.31.S |
| | A.M.A | 97 | 335.86 | 54.98 | L.M.A | 98 | 344.82 | 66.10 | 1.31.NS |

H.M.A= High Mental Ability. A.M.A= Average Mental Ability. L.M.A=Low Mental Ability and bolded 't' values of table indicates there is significant differences exists.

Above table shows the calculated 't' values for Academic achievement of high, average and low mental abilities among Secondary school students (based on selected variables) is greater than tabulated 'F' value for different degree of freedom at 1 percent and 5 percent level of significance respectively. The formulated null hypotheses is rejected at both the levels of significance respectively. In addition, the null hypotheses is rejected and alternative hypotheses is accepted. In case the calculated "t" value is less than table "t" value then the formulated hypotheses is accepted. (*S indicates Significant difference exist and *NS indicates There is no significant difference exists)

Table 3 : Summary of Analysis of Variance of mean scores of High, Average and Low Mental Ability and Academic Achievement among Secondary School Students.

| Group/variables | Source | Sum of squares | Degree of freedom | Mean square | F-value |
|-----------------|----------------|----------------|-------------------|-------------|---------|
| 1.Overall | Between groups | 2 | 27,842.252 | 13,921.126 | 5.22. S |
| | Within groups | 497 | 1,324,851.367 | 2,665.697 | |
| | TOTAL | 499 | 1,352,693.619 | | |
| 2.Genderwise | Between group | 5 | 58,449.029 | 11,689.806 | 4.353.S |
| | Within group | 494 | 1,326,568.768 | 2,685.362 | |
| | TOTAL | 499 | 1,385,017.797 | | |
| 3.locality wise | Between group | 5 | 111,255.587 | 22,251.117 | 7.73.S |
| | Within group | 494 | 1,420,602.265 | 2,875.713 | |
| | TOTAL | 499 | 1,531,857.852 | | |

| | | | | | |
|---|---------------|-----|---------------|------------|----------|
| 4, Medium of instruction | Between group | 5 | 164,267.099 | 32,853.420 | 9.50.S |
| | Within group | 494 | 1,706,719.543 | 3,454.898 | |
| | TOTAL | 499 | 1,870,986.642 | | |
| 5, Class wise (9 th and 10 th Class) | Between group | 5 | 97,942.510 | 19,588.502 | 5.335. S |
| | Within group | 494 | 1,813,770.932 | 3,671.601 | |
| | TOTAL | 499 | 1,911,713.442 | | |

Above table shows the calculated 'F' values for Academic Achievement among high, average and low mental abilities among secondary school students (based on selected variables) is greater than tabulated 'F' value for different degree of freedom at 1 percent and 5 percent level of significance respectively. The formulated null hypotheses is rejected at both the levels of significance respectively. In addition, the null hypotheses is rejected and alternative hypotheses is accepted. In case the calculated "f" value is less than table "f" value then the formulated hypotheses is accepted. Thus, there is significant differences exist among high, average, and low mental abilities of secondary school students with reference to their academic achievement.

Table 4 : Mean, SD and 't' ratio Values of Academic Achievement among High, Average and Low Socio-Economic Status of Secondary School Students.(based on different variables)

| Sl.No | Variables | N | M | SD | Variables | N | M | SD | T value |
|------------------------------|-----------|-----|--------|-------|-----------|-----|--------|-------|----------------|
| 1 Overall | H.SES | 113 | 352.96 | 56.08 | A.SES | 225 | 343.07 | 48.09 | 1.60. NS |
| | H.SES | 113 | 352.96 | 56.08 | L.SES | 162 | 332.98 | 46.76 | 3.10 S |
| | A.SES | 225 | 343.07 | 48.09 | L.SES | 162 | 332.98 | 46.76 | 2.06 S |
| 2. Male | H.SES | 58 | 335.87 | 47.67 | A.SES | 108 | 345.08 | 53.90 | 1.13 NS |
| | H.SES | 58 | 335.87 | 47.67 | L.SES | 82 | 332.65 | 44.90 | 0.40 NS |
| | A.SES | 108 | 345.08 | 53.90 | L.SES | 82 | 332.65 | 44.90 | 1.73 NS |
| 3. Female | H.SES | 55 | 368.08 | 62.64 | A.SES | 117 | 345.01 | 51.07 | 2.38 S |
| | H.SES | 55 | 368.08 | 62.64 | L.SES | 80 | 335.11 | 47.17 | 3.31S |
| | A.SES | 117 | 345.01 | 51.07 | L.SES | 80 | 335.11 | 47.17 | 1.39 NS |
| 4. Rural | H.SES | 38 | 331.45 | 48.88 | A.SES | 101 | 345.16 | 52.96 | 1.44 NS |
| | H.SES | 38 | 331.45 | 48.88 | L.SES | 111 | 335.75 | 47.95 | 1.35 NS |
| | A.SES | 99 | 345.16 | 52.96 | L.SES | 111 | 335.75 | 47.95 | 1.34 NS |
| 5. Urban | H.SES | 75 | 375.36 | 71.19 | A.SES | 124 | 328.86 | 47.62 | 4.98 S |
| | H.SES | 75 | 375.36 | 71.19 | L.SES | 51 | 332.15 | 43.18 | 4.55 S |
| | A.SES | 124 | 328.86 | 47.62 | L.SES | 51 | 332.15 | 43.18 | 0.53 NS |
| 6. Kannada | H.SES | 78 | 376.74 | 70.18 | A.SES | 117 | 337.86 | 53.19 | 4.16 S |
| | H.SES | 78 | 376.74 | 70.18 | L.SES | 55 | 329.49 | 50.64 | 4.50 S |
| | A.SES | 117 | 337.86 | 53.19 | L.SES | 55 | 329.49 | 50.64 | 0.99 NS |
| 7. English | H.SES | 35 | 378.28 | 69.11 | A.SES | 108 | 337.13 | 31.59 | 3.40 S |
| | H.SES | 35 | 378.28 | 69.11 | L.SES | 107 | 343.25 | 53.51 | 2.74 S |
| | A.SES | 108 | 337.13 | 31.59 | L.SES | 107 | 343.25 | 53.51 | 1.01 NS |
| 8. 9 th class | H.SES | 46 | 376.45 | 70.15 | A.SES | 127 | 350.50 | 50.34 | 2.30 S |
| | H.SES | 46 | 376.45 | 70.15 | L.SES | 77 | 346.77 | 51.14 | 2.49 S |
| | A.SES | 127 | 350.50 | 50.34 | L.SES | 77 | 346.77 | 51.14 | 0.50 NS |
| 9. 10 th class | H.SES | 68 | 371.74 | 68.40 | A.SES | 98 | 333.46 | 53.18 | 3.87 S |
| | H.SES | 68 | 371.74 | 68.40 | L.SES | 84 | 343.12 | 65.70 | 2.69 S |
| | A.SES | 98 | 333.46 | 53.18 | L.SES | 84 | 343.12 | 65.70 | 1.13 NS |

H.SES= High Socio-Economic Status, A.SES= Average Socio-Economic Status, L.SES=Low Socio-Economic Status and bolded 't' values of table indicates there is significant differences exists, and not bolded 't' values of tables indicates that there is no significant differences exist.

Above table shows the calculated values for Academic achievement of high, average and low socio-economic status among secondary school students (based on selected variables) is greater than tabulated 'F' value for different degree of freedom at 1 percent and 5 percent level of significance respectively. The formulated null hypotheses is rejected at both the levels of significance respectively. In addition, the null hypotheses is rejected and alternative hypotheses is accepted. In case the calculated "t" value is less than table "t" value then the formulated hypotheses is accepted.(*S indicates Significant difference exist and * NS indicates There is no significant difference exists)

Table 5: Summary of Analysis of Variance of mean scores of High, Average and Low SES and Academic Achievement among Secondary School Students.

| Group/variables | Source | Sum of squares | Degree of freedom | Mean square | F-value |
|---|----------------|----------------|-------------------|-------------|----------|
| 1.Overall | Between groups | 2 | 26,976.538 | 13,488.269 | 5.207. S |
| | Within groups | 497 | 1,287,479.458 | 2,590.502 | |
| | Total | 499 | 1,314,455.996 | | |
| 2.Genderwise | Between group | 5 | 50,904.178 | 10,180.836 | 3.894 S |
| | Within group | 494 | 1,281,206.104 | 2,614.706 | |
| | TOTAL | 499 | 1,332,110.282 | | |
| 3.Locality wise | Between group | 5 | 119,267.486 | 23,853.497 | 8.758 |
| | Within group | 494 | 1,348,220.199 | 2,723.677 | |
| | TOTAL | 499 | 1,467,487.686 | | |
| 4, Medium of Instruction | Between group | 5 | 141,882.177 | 28,376.435 | 9.882 S |
| | Within group | 494 | 1,418,586.210 | 2,871.632 | |
| | TOTAL | 499 | 1,560,468.387 | | |
| 5, Class wise (9 th and 10 th Class) | Between group | 5 | 95,860.287 | 19,172.057 | 5.613 |
| | Within group | 494 | 1,694,199.421 | 3,415.725 | |
| | TOTAL | 499 | 1,790,059.707 | | |

Above table shows the calculated 'F' values for Academic achievement among high, average and low SES among secondary school students (based on selected variables) is greater than tabulated 'F' value for different degree of freedom at 1 percent and 5 percent level of significance respectively. The formulated null hypotheses is rejected at both the levels of significance respectively. In addition, the null hypotheses is rejected and alternative hypotheses is accepted. In case the calculated 'F' value is less than table "F" value then the formulated hypotheses is accepted. Thus, there is significant differences exist among high, average, and low SES of secondary school students with reference to their academic achievement.

MAJOR FINDINGS OF THE STUDY

The following are major findings of the study,

There is positive correlation exists between the Mental Ability and Socio-Economic Status on Academic Achievement among Secondary School Students. So, Mental Ability and Socio-Economic Status factors favorably influence on the Academic Achievement of Secondary School Students.

RESULT BASED ON LEVELS OF MENTAL ABILITY AND ACADEMIC ACHIEEMENT

- There are significant differences exist among High & Low and Average & Low Mental Ability Secondary School Students with regard to their Academic Achievement. Hence, the null hypotheses Nos. I is rejected and alternate hypotheses is accepted. But there is no significant differences exist among High & Average Mental Ability Secondary School Students with regard to their Academic Achievement. Hence, the null hypotheses Nos. I is accepted.
- There are significant differences exist among Average & Low Mental Ability Secondary School Students with regard to their Academic Achievement. Hence, the null hypotheses Nos. I(i) is accepted. But there is no significant differences exist among High & Average and High and Low Mental Ability Secondary School Students with regard to their Academic Achievement. Hence, the null hypotheses Nos. I(i) is rejected and alternative is accepted.
- There is significant differences exist among High & Average and High & Low Mental Ability secondary school Female students with regard to their Academic Achievement. Hence, the null hypotheses Nos. I(i) is rejected and alternative is accepted. But there is significant difference between average and low mental abilities of female with regard their academic achievement.

- There is significant difference among the High, Average and Low Mental Ability secondary school Male & Female students respect to Academic Achievement.
- There is no significant differences exist among High, Average and Low Mental Ability secondary school rural students with regard to their Academic Achievement. Hence, the null hypotheses Nos. I(ii) is accepted.
- There is significant differences exist among High & Average and High & Low Mental Ability secondary school rural students with regard to their Academic Achievement. Hence, the null hypotheses Nos. I(ii) is rejected and alternative hypotheses is accepted.
- There is significant differences exist among High & Average and High & Low Mental Ability secondary school rural students with regard to their Academic Achievement. Hence, the null hypotheses Nos. I (ii) is rejected and alternative hypotheses is accepted.
- There is no significant difference among the High, Average and Low Mental Ability among rural and urban Secondary School Students respect to Academic Achievement.
- There is significant differences exist among High & Average and High & Low Mental Ability secondary school rural students with regard to their Academic Achievement. Hence, the null hypotheses Nos. I (iii) is rejected and alternative hypotheses is accepted. But there is no significant difference between Average and Low Mental Ability secondary school rural students with regard to their Academic Achievement.
- There is significant differences exist among High & Average and High & Low Mental Ability secondary school rural students with regard to their Academic Achievement. Hence, the null hypotheses Nos. I (iii) is rejected and alternative hypotheses is accepted. But there is no significant difference between Average and Low Mental Ability among English Medium Secondary School Students with regard to their Academic Achievement.
- There is significant difference among the High, Average and Low Mental Ability among Kannada & English Medium Secondary School Students respect to Academic Achievement.
- There is significant differences exist among High & Average and High & Low Mental Ability secondary school 9th standard students with regard to their Academic Achievement. Hence, the null hypotheses Nos. I (iv) is rejected and alternative hypotheses is accepted. But there is no significant difference exists between Average and Low Mental Ability among 9th standard Secondary School Students with regard to their Academic Achievement.
- There is significant differences exist among High & Average and High & Low Mental Ability secondary school 10th standard students with regard to their Academic Achievement. Hence, the null hypotheses Nos. I (iv) is rejected and alternative hypotheses is accepted. But there is no significant difference exists between Average and Low Mental Ability among 10th Standard Secondary School Students with regard to their Academic Achievement.
- There is significant difference among the High, Average and Low Mental Ability among 9th and 10th standard Secondary School Students respect to Academic Achievement.

RESULT BASED ON LEVELS OF SOCIO ECONOMICS STATUS AND ACADEMIC ACHIEEMENT

- There are significant differences exist among High & Low and Average & Low Socio-Economic Status Secondary School Students with regard to their Academic Achievement. Hence, the null hypotheses Nos. II is rejected and alternate hypotheses is accepted. But there is no significant differences exist among High & Average Socio-Economic Status Secondary School Students with regard to their Academic Achievement. Hence, the null hypotheses Nos. II is accepted.
- There are significant differences exist among Average & Low Socio-Economic Status Secondary School Students with regard to their Academic Achievement. Hence, the null hypotheses Nos. II (i) is accepted. But there is no significant differences exist among High & Average and High and Low Socio-Economic Status Secondary School Students with regard to their Academic Achievement. Hence, the null hypotheses Nos. II(i) is rejected and alternative is accepted.
- There is no significant differences exist among Average and Low Socio-Economic Status secondary school Female students with regard to their Academic Achievement. Hence, the null hypotheses Nos. II is accepted. But there is significant difference exists between High & Average and High & Low Socio-Economic Status secondary school Female students with regard to their Academic Achievement.
- There is significant difference among the High, Average and Low Socio-Economic Status secondary school Male & Female students respect to Academic Achievement.
- There is no significant differences exist among High, Average and Low Socio-Economic Status secondary school rural students with regard to their Academic Achievement. Hence, the null hypotheses Nos. II(ii) is accepted.
- There is significant differences exist among High & Average and High & Low Socio-Economic Status secondary school rural students with regard to their Academic Achievement. Hence, the null hypotheses Nos. II (ii) is rejected and alternative hypotheses is accepted.
- There is no significant difference among the High, Average and Low Socio-Economic Status among rural and urban Secondary School Students respect to Academic Achievement.
- There is significant differences exist among High & Average and High & Low Socio-Economic Status Secondary School Kannada Medium students with regard to their Academic Achievement. Hence, the null hypotheses Nos. II (iii) is rejected and alternative hypotheses is accepted. But there is no significant difference between Average and Low Socio-Economic Status Secondary School Kannada Medium students with regard to their Academic Achievement.
- There is significant differences exist among High & Average and High & Low Socio-Economic Status secondary school rural students with regard to their Academic Achievement. Hence, the null hypotheses Nos. II(iii) is rejected and alternative hypotheses is accepted. But there is no significant difference between Average and Low Socio-Economic Status among English medium Secondary School Students with regard to their Academic Achievement.

- There is significant difference among the High, Average and Low Socio-Economic Status among Kannada & English Medium Secondary School Students respect to Academic Achievement.
- There is significant differences exist among High & Average and High & Low Socio-Economic Status secondary school 9th standard students with regard to their Academic Achievement. Hence, the null hypotheses Nos. II(iv) is rejected and alternative hypotheses is accepted. But there is no significant difference exists between Average and Low Socio-Economic Status among 9th standard Secondary School Students with regard to their Academic Achievement.
- There is significant differences exist among High & Average and High & Low Socio-Economic Status secondary school 10th standard students with regard to their Academic Achievement. Hence, the null hypotheses Nos. II(iv) is rejected and alternative hypotheses is accepted. But there is no significant difference exists between Average and Low Socio-Economic Status among 10th Standard Secondary School Students with regard to their Academic Achievement.
- There is significant difference among the High, Average and Low Socio-Economic Status among 9th and 10th standard Secondary School Students respect to Academic Achievement.

CONCLUSION

Mental Ability and Socio-Economic Status of the students important which turn their futures of life i.e. In their Academic Performance, so it is necessary of them because of the present study. This study is useful to give guidance of the college student. Parent and teachers focus always on Academic Performance through nurturing Mental Ability and Socio-Economic Status. They give tiniest importance to their Academic Performance. Academic Achievement of a student can affect him in many ways. Intelligence may help students in acquiring subject knowledge but only Mental Ability can enrich their learning proficiency and make them efficient as well as achievers. Thus, the overall results of this study, shows that there is significant relationship exists between High, Average and Low levels of Mental Ability and Socio-Economic Status with relations to Academic Achievement of Secondary School Students of Chikodi Educational District. Thus, Mental Ability and Socio-Economic Status are the two important factors, which influence on the students' Academic Achievement.

BIBLIOGRAPHY

1. Buch, M.B. (Ed.) (1991). Fourth Survey of Research of in Education I & K New Delhi : NCERT.
2. Lokes koul (1997): Methodology of Educational Research. Third Revised Edition Vikash Publishing house Pvt Limited, New Delhi.-110014.
3. Best J.W. (2000) research in education. Prentice – Hall of India Pvt., Ltd., New Delhi.
4. NCERT, (2000) Fifth Survey of Research of in Education I & U. New Delhi: National Council of Educational Research and Training.
5. Agraval J.C. (2001) Essential of Educational Psychology Second Edition Vikas Publishing House Pvt Limited Noida-201301 (U.P.).
6. Best John W and Khan, James V (2005) research in education (9th ed.) New Delhi Prentice – Hall of India Pvt., Ltd.
7. Selcuk R. Sirin (2005):- Socioeconomic Status and Academic Achievement: A Meta Analytic Review of Research Review of Educational Research .Fall 2005, Vol. 75, No. 3, pp. 417–453.
8. NCERT, (2006) Sixth Survey of Research of in Education, Vol. I. New Delhi: National Council of Educational Research and Training.
9. Bhatia and Bhatia (2007) Theory and Principles of Education Dobha House Book seller and Publisher 1688 Nasi saraka, New Delhi.
10. S.K.Mangal (2007) Advanced Educational Psychology, Second Edition Prentice Hall of Publication India Pvt Ltd New-Delhi- 110001.
11. Mariam Adawiah Dzulkifli (2012) Students of Low Academic Achievement – Their Personality, Mental Abilities, and Academic Performance: How Counselor Can Help? Department of Psychology International Islamic University Malaysia Jalan Gombak, 53100 Selangor Malaysia. International Journal of Humanities and Social Science Vol. 2 No. 23; December 2012.
12. A.C. Lal Kumar (2016) A Study of Mental Ability of Higher Secondary Students. International journal of Computational Research and Development (IJCRD) Impact Factor: 4.775, ISSN (Online): 2456-3137(www.dypulication.com) Volume I, Issue I, 2016.
13. A.Subramanian (2017) Time Management, Academic Stress and Academic Achievement of School Students. Edutracks, A Monthly Scanner of Trends in Education, Neelkamal Publications Pvt. Ltd. Hyderabad, October.