Project Report

On

STUDY OF INFLUENCE OF FAMILY BACKGROUND ON ACADEMIC PERFORMANCE OF STUDENTS

Submitted

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by

ADITHYA A G

(Register No. AB20AMAT038)

Under the Supervision of

DR. ELIZABETH RESHMA M T

DEPARTMENT OF MATHEMATICS

ST. TERESA'S COLLEGE (AUTONOMOUS)

ERNAKULAM, KOCHI - 682011

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CERTIFICATE

This is to certify that the dissertation entitled, **STUDY OF INFLUENCE OF FAMILY BACKGROUND ON ACADEMIC PERFORMANCE OF STUDENTS** is a bonafide record of the work done by Ms. **ADITHYA A G** under my guidance as partial fulfillment of the award of the degree of **Bachelor of Science in Mathematics** at St. Teresa's College (Autonomous), Ernakulam affiliated to Mahatma Gandhi University, Kottayam. No part of this work has been submitted for any other degree elsewhere.

Date:16/02/2023
Place: Ernakulam

DR. ELIZABETH RESHMA M T
Assistant Professor,
Department of Mathematics,
St. Teresa's College(Autonomous),
Ernakulam.
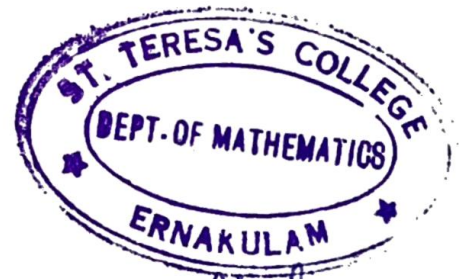
Dr.Ursala Paul
Assistant Professor and Head,
Department of Mathematics,
St. Teresa's College(Autonomous),
Ernakulam.

External Examiners

1: ....

2: ....

DECLARATION

I hereby declare that the work presented in this project is based on the original work done by me under the guidance of DR. ELIZABETH RESHMA M T, Assistant Professor, Department of Mathematics, St. Teresa's College(Autonomous), Ernakulam and has not been included in any other project submitted previously for the award of any degree.

Ernakulam.   **ADITHYA A G**

Date:16/02/2023   **AB20AMAT038**

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Contents

Chapter 1

INTRODUCTION

Education is the basic mechanism for enhancing the population quality of a nation. Academic performance in primary education plays a crucial role in obtaining further educational and professional development. Childhood education not only affects the achievement and happiness at the individual level, but also shapes the labour force quality and capacity of innovation. We've conducted a study on the Influence of family background on academic performance of students. The study aims to investigate the relationship between family background and academic achievement in students of age fifteen to twenty-one.

Data was collected from the students of age group fifteen to twenty-one using Google forms. Effect of factors like annual income, gender, place of residence, educational qualification of parents and no. of siblings, on the academic performance of the student was studied using Chi-square test, correlation, regression and independent t-test. Conclusions were drawn from the same.

B. J. Ojo and Ato Yilma Tsehaw [1] studied on the Influence of the Home Background on Student's Achievement in Mathematics and the study emphasised on the parental involvement in the education of children. Tao Lin and Han Lv [2] shows 'The effects of family income on children's education' and the results show that family income has a significant influence on children's education level, and the increasing family income can improve their education level; the phenomenon of intergenerational transmission of education is not obvious, and the

intergenerational mobility is good. Spyros Konstantopoulos and Geoffrey D. Borman [3] studied on 'Family Background and School Effects onStudent Achievement' and concluded that school characteristics are not strongly related to student achievement in the presence of family background and that family inputs are much more valuable predictors of student achievement than school inputs. Eknath Shankarrao [4] studied on 'A Study of the Influence of Parents Education and Income Level on Academic Performance of the Students' and found that there is significant positive relationship between parent's income level and academic performance of students, this study also shows that there is a positive relationship between parent's education and academic performance of students. Oginni O.I [5] studied on 'Home Background and Students Achievement in Mathematics' and found out the influence of parental occupation, family size and parental motivation on student's academic achievement in Mathematics.

1.1 OBJECTIVES

The study aims to investigate the influence of family background on academic performance of students of age group 15-22. The purpose of this study is to find out how the various factors of family background of students affects the development of their ability to continue with academic success. In the present study the following objectives are considered:

1.To find out if there is any significant relationship between parental annual income and student's academic performance.

2.To find out if there is a relationship between parental educational qualifications and a student's academic performance.

3.To determine the influence of the total number of children in the family on a student's academic performance.

4.To determine whether the student's academic performance is influenced by gender.

5.To find out if the place of residence effect the student's academic performance.

1.2   DATA SOURCE

Data is collected by circulating a google form containing 10 questions among the students of age group 15-22.

1.3   DATA DESCRIPTION

The data collected was the primary data for studying the influence of family background on the academic performance of students. The study was conducted using an online self administered questionnaire. The questionnaire was circulated using Google form through social media platforms. The target population for the survey was individuals of 15 − 22 age group.

PRIMARY DATA SET

Primary data was collected by circulating a Google form. A Google form containing 10 questions was designed to obtain information from the respondents. 287 responses of students of age group 15 - 22 were listed in this data. This data includes the various factors of family background of students that affects their academic performance.
The variables under consideration were: -

1) ANNUAL INCOME
Annual income is a numerical variable. In this case, the minimum and maximum annual family income was about Rs.18000 and Rs.7000000 respectively.

2)PARENT'S EDUCATIONAL QUALIFICATIONS

Data on educational qualification of both the parents of students were collected. The data obtained was converted to number of years the parent studied after 10th. The value corresponding to educational level class 10th or below was taken to be 0. For example, if the highest educational qualification of the mother is Graduate, then the corresponding numerical value would be 5, indicating that the student's mother studied 5 years after 10th.

3) NUMBER OF SIBLINGS IN THE FAMILY

Number of siblings is a numerical variable. In this case around 202 families have 2 children. While considering the total number of children in the family we added 1 to each value corresponding to the number of the siblings.

4)GENDER

Gender of the person is a qualitative data. In this case, around 238 were females.

5)PLACE OF RESIDENCE

The location of residence of the students were collected. That is, whether they are from urban or rural locality.

6)PERCENTAGE OF MARKS OBTAINED BY THE STUDENT IN 10 TH BOARD EXAM

The minimum and maximum value obtained in this case are 50 and 100 respectively.

1.4 SIGNIFICANCE OF STUDY

Education provides stability in life it is the foundation of a successful life. In fact, not only the quality of education provided by the school may affect students academic performance but also the ways and abilities of the participation of parents in their children's education may

directly and adversely affect students academic performance. Considering one such factor we've conducted a study on the influence of family background on the academic performance of students which helps us to determine the affect of this factor on a child's academic performance.

1.5   LIMITATIONS OF STUDY

Even though the study yielded major findings, there were a few limitations in our survey. The survey has been restricted to students between the age group 15-22. Students from other age groups were not taken into consideration. As the sample size increases the margin of error decreases. But due to time and other restrictions, the survey was limited to only 287 participants. Only qualitative data has been used in the study. Since the responses received were the personal choices of the respondents there is a chance that the data may or may not be biased.

1.6   LITERATURE REVIEW

In 2008 B. J. Ojo and Ato Yilma Tsehaw had conducted a comparative Study of the Influence of the Home Background on Student's Achievement in Mathematics in Bensihangul Gumuz Regional State of Ethiopia,African Research Review. It sought to establish if there was any relationship between the home front and the students' academic achievement. Within these environments, measurable characteristics would be the home background. Socioeconomic differences were conventionally indexed by such demographic variables as household income, parents' education, occupation, and the social status.

The study was carried out X-post facto and the methods the researchers used were statistical correlation and ANOVA. Results showed that the home and its environment could predict academic achievement. The regression analyses showed no significant difference in the attitudes of students from different homes towards the learning of mathematics.

Similarly in 2011 Spyros konstantopoulos and Geoffrey D. Borman had done a study on Family Background and School Effects on Student Achievement: A Multilevel Analysis of the Coleman Data,Teachers Col-

lege Record Volume 113, Number 1.The study sought to determine the predictive efficacy of school characteristics on student achievement net of the effects of family background they used both regression and multilevel models. Conclusions/Recommendations were found considerable and significant between-school variance in achievement.

In 2017 Tao Lin and Han Lv had also done a study on the effects of family income on children's education: An empirical analysis of CHNS data ,Research on Modern Higher Education 4,02002. The results show that family income has a significant influence on children's education level, and the increasing family income can improve their education level.

In 2018 Oginni O.I studied about Home Background and Students Achievement in Mathematics,Journal of Sociology and Anthropology, 2(1), 14-20. The study investigated the influence of home background on students' academic achievement in Mathematics. It found out the influence of parental occupation, family size and parental motivation on students' academic achievement in Mathematics. The study adopted descriptive research of the survey type and expost facto design. The population for this study is made up of all Basic School II students in Ado − Ekiti Local Government Area of Ekiti State. The sample of this study consists of 100 students in which 20 students were randomly selected in each of the school. The scores obtained from Mathematics examination and questionnaire were the instruments used for the study. The instruments were trial − tested on 20 students outside the study. The reliability co- efficient of 0.80 and 0.78 were obtained respectively, which was considered high enough to consider the instruments reliable. The data collected were analyzed using mean, standard deviation and t- test statistics, all at 0.05 level of significance.

In 2018 Eknath Shankarrao Mundhe also conducted A Study of the Influence of Parents' Education and Income Level on Academic Performance of the Students, Aayushi International Interdisciplinary Research Journal (AIIRJ). This study was conducted to focus the influence and impact of parents educational and income level on students aca-

demic achievement at third year under graduate level of education. The study considered the students results of the first year, second year and third year class in bachelor degree examination taken by the University of Mumbai. A structured questionnaire was used for this study. This article tries to find out the impact of parental education and income status at students academic performance of degree level. Research population was the students of different third year degree classes of B.A., B.Com. and B.Sc. who was enrolled at the same college. The total 120 were taken as a sample randomly. Null hypothesis was formulated and tested using Correlation, Regression and Test for correlation coefficient. After analysis of the data, it is found that there is significant positive relationship between parents income level and academic performance of students, this study also shows that there is a positive relationship between parents education and academic performance of students.

Chapter 2

METHODOLOGY

2.1 CHI-SQUARE TEST

The Chi-Square Test is an important test among the several tests of significance. It was developed by Karl Pearson in 1990. The Chi-square Test, in general, is used to measure the difference between what is observed and what is expected according to an assumed hypothesis. Simply we can say that Chi-Square Test is a relationship between two variables. It is considered as a nonparametric test. It is mostly used to test statistical independence. For this test, the data must meet the following requirements:

- Two categorical variables.

- Relatively large sample size.

- Categories of variables (two or more).

- Independence of observations.

H_0 is the null hypothesis which represents that there is no relationship between the two variables. H_1 is the alternative hypothesis which indicates that there exists a significant relationship between the two variables. The significant level is the probability of rejecting the null hypothesis, when it is true. In most of the cases, we use significant level as 0.05.First, we create the table of observed frequency from obtained data.

$$Expected\ frequency = \frac{(Row\ total \times Column\ total)}{Grand\ total} \qquad (2.1)$$

Then, we create the table of expected frequency, we can calculate the Chi-square value using the equation: -

$$Degrees\ of\ freedom = (column - 1) \times (row - 1) \qquad (2.2)$$

$$\chi^2 = \frac{(Observed\ value - Expected\ value)^2}{Expected\ value} = \Sigma \frac{(Oi - Ei)^2}{Ei} \qquad (2.3)$$

Tabular Chi-square value can be obtained by using degrees of freedom and significance level.

Degrees of freedom refers to the maximum number of logically independent values, which are values that have the freedom to vary, in the data sample. If calculated Chi-Square is greater than tabular Chi-Square, then we reject null hypothesis and accept alternate hypothesis. A p value is a measure of the probability that an observed difference could have occurred just by random chance. The lower the p value the greater the statistical significance of the observed difference. In MS excel, we calculate the p value. Then we compare the p value with significance level. If p value is greater than the significance level, we accept H_0. Hence, we can say that there is no relation between two variables.

2.2 CORRELATION

To find the correlation between influence of family background on the academic performance of students. The correlation coefficient (γ) can range in value from -1 to +1. The larger the absolute value of the coefficient, the stronger the relationship between the variables i.e; family

background and academic performance of the student.

- Positive correlation - Variables move in the same direction

- Negative correlation - Variables move in opposite directions

- Zero correlation - No correlation between the variables

After finding the x variables representing the various factors determining the family background of the student, the arithmetic mean of x variables i.e.; $\bar{x}$ is found out. Similarly, after finding the y variables representing the percentage of marks obtained for 10th board exam of the student, the arithmetic mean of y variables i.e.; $\bar{y}$ is also found out. After getting values, the Karl Pearson correlation coefficient is found out using the following formula.

$$\gamma = \frac{\Sigma(x - \bar{x})(y - \bar{y})}{\sqrt{\Sigma(x - \bar{x})^2 \times \Sigma(y - \bar{y})^2}}$$

2.3 REGRESSION

Regression analysis is a statistical technique for investigating and modelling the relationship between variables. It is a method to discover the relationship between one dependent and more than one independent variables. The simplest model is multiple linear regression model. It is a model in which dependent variable Y is influenced by p independent variables $X_1, X_2, \ldots, X_p$.

The model is defined by,

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \ldots + \beta_p X_p + \epsilon,$$

where Y is the response value, $X_1, X_2, \ldots, X_p$ are independent variables $\beta_0, \beta_1, \ldots, \beta_p$ are unknown parameters to be estimated and ϵ is the standard error with mean zero and constant variance σ^2, $i = 1, 2, \ldots, n$. Statistical analysis of regression models is carried out under following assumptions:

- The error term ϵ has zero mean and constant variance σ^2.

- The errors are uncorrelated.

- The errors are normally distributed.

2.4 INDEPENDENT SAMPLE T TEST

The Independent Samples t Test compares the means of two independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. The Independent Samples t Test is a parametric test.

This test is also known as:

- Independent t Test.

- Independent Measures t Test.

- Independent Two-sample t Test.

- Student t Test.

- Two-Sample t Test.

- Uncorrelated Scores t Test.

- Unpaired t Test.

- Unrelated t Test.

The variables used in this test are known as:

- Dependent variable or test variable.

- Independent variable or grouping variable.

The null hypothesis (H_0) and alternative hypothesis (H_1) of the Independent Samples t Test can be expressed in two different but equivalent ways:

- H_0: $\mu_1 = \mu_2$ ("the two population means are equal").

- H_1: $\mu_1 \neq \mu_2$ ("the two population means are not equal").
  OR

- H_0: μ_1 - $\mu_2 = 0$("the difference between the two population means is equal to 0").

- H_1: μ_1 - $\mu_2 \neq 0$ ("the difference between the two population means is not 0").

    where μ_1 and μ_2 are the population means for group 1 and group 2, respectively.

When the two independent samples are assumed to be drawn from populations with unequal variances (i.e., $\sigma_1^2 \neq \sigma_2^2$), the test statistic t is computed as:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2}{n_1} - \frac{s_2^2}{n_2}}}$$

Where,

$\bar{x}_1 =$ Mean of first sample

$\bar{x}_2 =$ Mean of second sample

$n_1 =$ Sample size (i.e., number of observations) of first sample.

$n_2 =$ Sample size (i.e., number of observations) of second sample.

$s_1 =$ Standard deviation of first sample

$s_2 =$ Standard deviation of second sample

In MS excel, we calculate the p value. Then we compare the p value with significance level, If the p-value is less than your significance level , you can reject the null hypothesis. If the difference between the two means is statistically significant, then your sample provides strong enough evidence to conclude that the two population means are not equal. The calculated t value is then compared to the critical t value from the t distribution table with degrees of freedom:

$$df = \frac{(\frac{s_1^2}{n_1} - \frac{s_2^2}{n_2})^2}{\frac{1}{n_1-1}(\frac{s_1^2}{n_1})^2 + \frac{1}{n_2-1}(\frac{s_2^2}{n_2})^2}$$

And chosen confidence level. If the calculated t value is greater than critical t value, then we reject the null hypothesis. The Independent

Samples t Test can only compare the means for two (and only two) groups. It cannot make comparisons among more than two groups. If you wish to compare the means across more than two groups, you will likely want to run an ANOVA.

Chapter 3

DATA ANALYSIS

3.1 EXPLORATORY DATA ANALYSIS

Table 3.1 shows the summary statistics of the data

Table 3.1: Despcriptive Statistics

	Mean	Std. Deviation	Minimum	Maximum	N
Percentage of marks in 10th	89.4564	9.16913	50	100	287
Annual income of the family	356032.7875	626711.5568	18000	7000000	287

Fig 3.1 shows the percentage of students with annual family income lying in the range Rs. 18000 − 60000.

Figure 3.1:

Fig 3.2 shows the percentage of students with annual family income lying in the range Rs. 60000-200000.
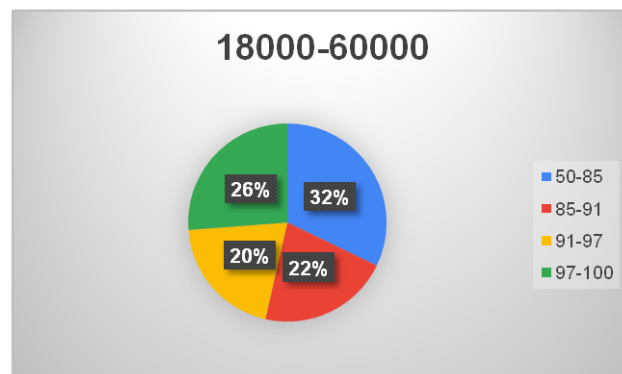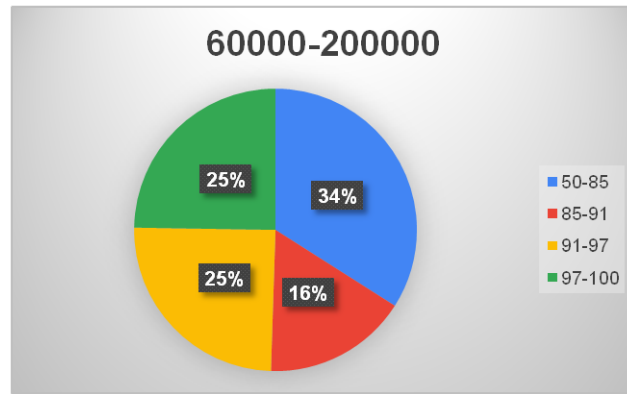
Figure 3.2:

Fig 3.3 shows the percentage of students with annual family income lying in the range Rs. 200000-600000.
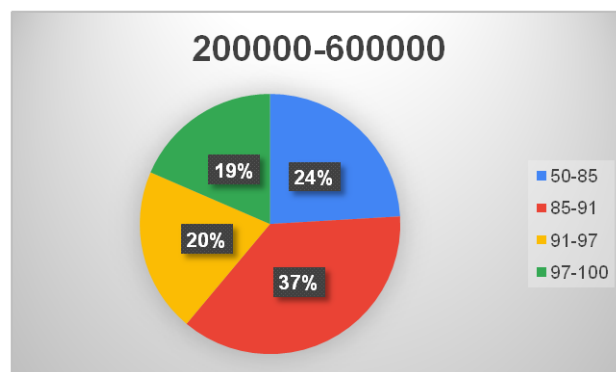

Figure 3.3:

Fig 3.4 shows the percentage of students with annual family income lying in the range Rs. 600000-7000000.

Figure 3.4:

Fig 3.5 shows the distribution of marks of the students in Rural and Urban areas.
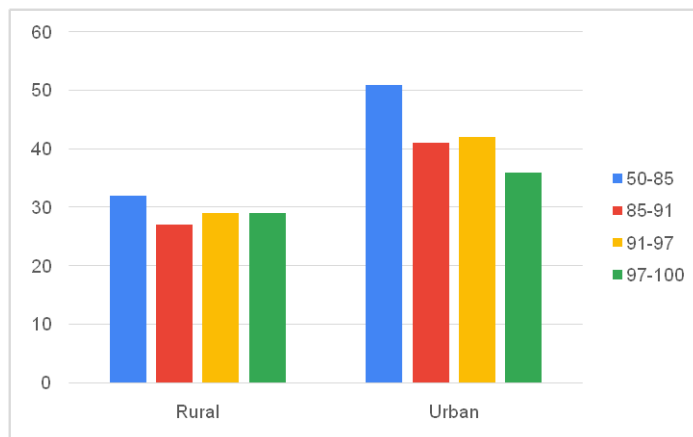
Figure 3.5:

3.2 CHI-SQUARE ANALYSIS

INFLUENCE OF ANNUAL INCOME OF THE FAMILY ON MARKS OF STUDENTS

H_0: **There is no relationship between annual income of the family and marks of the student.**

H_1: **There is relationship between annual income of the family and marks of the student.**

Table 3.2: Observed frequency

Annual income	50-85	85-91	91-97	97-100	Grand Total
18000-60000	27	18	17	22	84
200000-600000	13	20	11	10	54
600000-7000000	10	14	19	9	52
60000-200000	33	16	24	24	97
Grand Total	83	68	71	65	287

Table 3.3: Expected frequency

Annual income	50-85	85-91	91-97	97-100	Grand Total
18000-60000	24.29268293	19.90243902	20.7804878	19.02439024	84
200000-600000	15.61672474	12.79442509	13.35888502	12.22996516	54
600000-7000000	15.03832753	12.32055749	12.8641115	11.77700348	52
60000-200000	28.05226481	22.9825784	23.99651568	21.96864111	97
Grand Total	83	68	71	65	287

p- value: 0.074865809

Since p value is greater than 0.05, we will accept the null hypothesis.

Hence, we can conclude that there exists no relation between annual income of the family and marks of the students.

3.3 CORRELATION ANALYSIS

Correlation is a statistical technique used to find the relationship between two variables which are quantitative. We have used this technique to interpret the results to find the influence of family background on the academic performance of the students of age group 15-22, that what type of relationship the variables possess. The table 3.4 gives the correlation of factors like parents' education and number of siblings on the students' academic performance.

Table 3.4: Correlation Matrix

Pearson Correlation	Percentage of marks	Number of siblings	Education of father	Education of mother
Percentage of marks	1.000	-0.052	-0.016	0.082
Number of siblings	-0.052	1.000	0.051	-0.035
Education of father	-0.016	0.051	1.000	0.602
Education of mother	0.082	-0.035	0.602	1.000

Here, we observe a positive correlation between the percentage of marks of the student and the educational qualification of mother. While, a negative correlation is observed between: the percentage of marks of the student and the number of siblings and the percentage of marks of the student and the educational qualification of father

3.4 REGRESSION ANALYSIS

A regression model is fitted for the academic performance of students of age group 15-22 according to their percentage of marks obtained in class 10th board exam based on four indicators which can mark the influence of family background as regressors.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

where,

$Y =$ **Mark of the student in 10th board exam**

$X_1 =$ **Number of siblings**

$X_2 =$ **Educational level of the father**

$X_3 =$ **Educational level of the mother**

      The total observations are 287.

The ANOVA for the regression is given in table 3.5.

Table 3.5: Anova

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	392.517	4	98.129	1.170	.324^b
Residual	23652.351	282	83.874		
Total	24044.868	286			

Since the p -value is negligible we reject the null hypothesis that the all coefficients of the regressors are zero. The fitted regression coefficients with significance test results are shown in Table 3.6.

Table 3.6: Model Parameters

	Coefficients	Standard Error	t Stat	P-value
Intercept	89.28343544	1.20997353	73.79	0.000
Number of siblings	-0.458260893	0.71306188	-0.64	0.521
Education of father	-0.319088479	0.26056855	-1.22	0.222
Education of mother	0.513123527	0.26206881	1.958	0.051

The fitted regression model thus obtained is;

$$Y = 89.28343544 - 0.458260893X_1 - 0.319088479X_2 + 0.513123527X_3 + \epsilon$$

3.5   INDEPENDENT T TEST

3.5.1   Independent sample t − test for Female and Male

The table **3.7** and table **3.8** shows the group statistics and independent t − test of two samples assuming unequal variances. Here, we take two groups :- Female and Male to check whether there is any statistical significance in their mean difference.

Table 3.7: Group Statistics

Gender	N	Mean	Std. Deviation	Variance
FEMALE	238	90.3806	8.5354	72.8539
MALE	49	84.9673	10.7895	116.4122

Table 3.8: Independent sample t-test

Gender	t-Test: Two-Sample Assuming Unequal Variances				
	t stat	**p-value (two tailed)**	**t critical**	**Hypothesized mean difference**	**df**
	3.3055	0.001591	1.9996	0	61

Hypothesis under study

Null Hypothesis = H_0 = There is no significant mean difference between male and female in their marks of 10th board exam.

Alternative Hypothesis = H_1 = There is significant mean difference between male and female in their marks of 10th board exam.

Decision Criteria

If p-value is less than 0.05, we reject null hypothesis at a 5 percent level of significance.

If p-value is greater than 0.05, we accept null hypothesis at a 5 percent level of significance.

As can be seen in Table 3.8, p value is 0.001591 which is less than 0.05 (p < 0.05), so we reject H_0 and accept H_1. So it is clear that there is statistically significant mean difference between male and female in their marks of 10th board exam.

3.5.2 Independent sample t − test for Urban and Rural Areas

The table 3.9 and 3.10 shows the group statistics and independent t − test of two samples assuming unequal variances. Here, we take two groups :- Urban area and Rural area to check whether there is any statistical significance in their mean difference.

Table 3.9: Group Statistics

Place of Residence	N	Mean	Std. Deviation	Variance
RURAL	117	88.1118	9.6112	92.3744
URBAN	170	90.3818	8.7612	76.7594

Table 3.10: Independent sample t-test

	t-Test: Two-Sample Assuming Unequal Variances				
Place of Residence	t stat	p-value (two tailed)	t critical	Hypothesized mean difference	df
	-2.0376	0.04271	1.9702	0	234

Hypothesis under study

Null Hypothesis = H_0 = There is no significant mean difference between Mark of students at Rural and Urban areas .

Alternative Hypothesis = H_1 = There is significant mean difference between Mark of students at Rural and Urban areas .

Decision Criteria

If p-value is less than 0.05, we reject null hypothesis at a 5 percent level of significance.

If p-value is greater than 0.05, we accept null hypothesis at a 5 percent level of significance.

As can be seen in Table 3.10, p-value is 0.04271 which is less than 0.05 ($p < 0.05$), so we reject H_0 and accept H_1. So it is clear that there is statistically significant mean difference between mark of students at Rural and Urban areas.

Chapter 4

RESULTS AND CONCLUSION

4.1 FINDINGS

According to this study, it was found that among those students whose annual family income is between Rs.18000-60000; 32%, 22%, 20% and 26% of the students scored between 50-85, 85-91, 91-97, 97-100 respectively. Similarly, 34%, 16%, 25% and 25% of students scored between 50-85, 85-91, 91-97, 97-100 whose annual family income ranged between Rs.60000-200000 . It was also observed that among those students whose annual family income is between Rs. 200000-600000; 24%, 37%, 20% and 19% of the students scored between 50-85, 85-91, 91-97, 97-100. Further it was seen that 19%, 27%, 37% and 17% of the students scored between 50-85, 85-91, 91-97, 97-100 whose family annual income was between Rs. 600000-7000000. With the help of the correlation analysis we could conclude that there is a positive correlation between the percentage of marks of the student and the educational qualification of mother. While, a negative correlation is observed between: the percentage of marks of the student and the number of siblings And the percentage of marks of the student and the educational qualification of father. By regression analysis we concluded that there is an inverse relationship between the percentage of marks obtained by the student and the number of siblings And also between the percentage of marks obtained by the student and the educational qualification of the father. While, a direct relationship is observed between the percentage

of marks obtained by the student and the educational qualification of mother. The fitted regression model obtained was;

$Y = 89.28343544 - 0.458260893\beta_1 - 0.319088479\beta_2 + 0.513123527\beta_3 + \epsilon$

By Independent sample t-test, we found that there is a statistically significant mean difference between male and female in their marks of 10th board exam. And also, there is statistically significant mean difference between Mark of students at Rural and Urban areas.

4.2   CONCLUSION

The study investigated the influence of family background on the academic performance of students according to their 10th board exam marks. From the findings of the study, it was concluded that family background factor influence academic performance of students. Prominent among the family factors include parent's education level, families income and number of siblings. Educational level of the mother and students' academic performance have a positive relation. Mothers involvement in the education of children have been emphasized on this study. Parents should give enough attention to their children learning and effective performance.

Based on the findings of this study, it was recommended that students should give serious attention to their studies at home, since the amount of effort they put in their studies influence academic achievement. Parents should create a conducive learning atmosphere for their wards, such as providing like study space, adequate lighting and time for children to engage in academic activities. The entire home should be stimulating such that children would naturally develop an undying interest for studies. Also, education materials like text books and guides should be provided in order to improve students' performances.

4.3   SUGGESTIONS

- Joining peer groups /support groups is a great way to increase academic performance among students. They provide an opportunity and support for development of an Individual's soft skills.

- Conversation with family and loved ones can be of great help in dealing with stress ,anxiety and depression. Students can try and talk to his/her friends, parents ,teachers etc about what's worrying them.

- Good study habits like consistent timing, maintaining a proper schedule etc. can be very helpful for a student to adjust to his/her new ways of learning.

REFERENCES

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ANNEXURE

Study of influence of family background on Academic performance of students.

We are 3rd year Bsc. Mathematics Students of St.Teresa's college, Ernakulam, conducting a statistical study on the influence of family background on the academic performance of students of age group 15 – 22. Kindly spare a few minutes to fill this form. All the data you provide is highly confidential and is used for study purpose only.
Thank you.

AGE *

- ◯ **15**
- ◯ **16**
- ◯ **17**
- ◯ **18**
- ◯ **19**
- ◯ **20**
- ◯ **21**
- ◯ **22**

Gender *

- ◯ **Male**
- ◯ **Female**
- ◯ **Other**

Place Of Residence *

○ **Rural**

○ **Urban**

Annual Income of the family (in Rupees) *

Your answer

Type of family *

○ **Nuclear**

○ **Joint**

Number of siblings you have *

Your answer

Educational qualification of father *

○ **Below 10th**

○ **10th Pass**

○ **12th Pass**

○ **Graduate**

○ **Post Graduate**

○ Other: _____

Educational qualification of mother *

○ **Below 10th**

○ **10th Pass**

○ **12th Pass**

○ **Graduate**

○ **Post Graduate**

○ Other: _____

How do you evaluate yourself? *

○ **Below Average**

○ **Average**

○ **Above Average**

Percentage of marks obtained in
your 10th board exam. *

Your answer

Submit   Clear form

Google Forms

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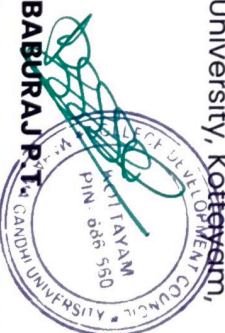
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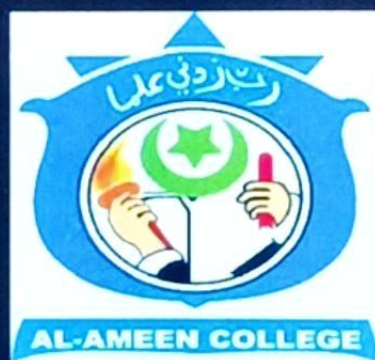# PROCEEDINGS OF
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Study of Influence of Family Background on Academic Performance of Students

Able Antonia George * , Varsha V Babu, Adithya A G, Aleen Juliet Santosh

Aleena Rose A P, Rosmin Raju

St. Teresa's College, Ernakulam

Abstract

In this paper, we conducted a statistical study which investigated the influence of family background on academic performance of students of age group 15-22. The purpose of this study is to find out how the various factors of family background of students affects the development of their ability to continue with academic success. It sought to establish if there is any significant relationship between families' annual income or influence of parents educational qualifications or influence of number of children in the families on the academic performance of students of age group 15-22 in 10th board exam. A Google form containing 10 questions was designed to obtain information from the respondents. The sample of this study consists of 287 responses.The percentage obtained from the 10th board exam and questionnaire are the instruments used for the study. Statistical analysis methods used for this study are Regression and Chi Square Test. Regression and Chi Square Test are used to determine if there is any significant relationship between parents educational qualifications and students academic performance and Number of children in the families and students academic performance and Annual income and students academic performance.

Key words: Annual income, Parent's educational qualification, No. of children in the family, Academic performance of students, Chi square test, Regression, Correlation.

*corresponding author email: ableantonia@gmail.com

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B.Sc. Mathematics, St. Teresa's College (Autonomous), Ernakulam

has participated/ presented a paper/ chaired the session in the National Seminar on "RECENT
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College Development Council,
Mahatma Gandhi University,
Kottayam

Mr.Abraham K. Samuel
Department of Student Services,
Mahatma Gandhi University,
Kottayam

Dr.Sr.Regeenamma Joseph
Principal,
Alphonsa College,
Pala

Dr.Sr.Sonia K. Thomas
Head of the Department,
Department of Mathematics,
Alphonsa College, Pala