RELATIONSHIP BETWEEN STUDY HABIT AND SOCIO-ECONOMIC STATUS ON ACADEMIC ACHIEVEMENT OF SECONDARY STUDENTS OF THE SUNDARBANS- A STRUCTURE EQUATION MODEL.

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Abstract:

The following study has been conducted by the researcher on 95 secondary students of the Sundarban area. The area is considered to be quite backward in terms of education, but it is very rich in resources. The researcher has tried to find out the relation between the study habit, the socio-economic status and the academic achievement of the students studying in the secondary level. The socio-economic status is again sub-divided into two categories--- educational status and economic status. The researcher found that the study habit has a positive and significant correlation of 0.300 with academic achievement. A positive but not significant correlation of 0.089 was found between educational status and academic achievement, but there was a positive and significant relation of 0.270 between economic status and academic achievement. The researcher was also able to establish a structural equation model between all the variables.

Index terms: **Sundarban area, Study Habit, Socio-economic Status, Academic achievement.**

1. Introduction:

"One child, one teacher, one book, one pen can change the world."- Powerful words from the Nobel laureate Malala Yousufzai manifesting the necessity of education. Education indeed is an all-encompassing tool that has the power to alter the lives of many. It can eradicate poverty, social vices, terrorism and superstitions. Though education is not limited to schools and colleges only, yet a large part of our formal education does originate from our schools. Here we will be discussing about the achievement of a student in schools namely academic achievement and two factors namely study habit and socio-economic status and how they affect academic achievement.

The dictionary of education by Carter (1959) defines academic achievement as the knowledge attained or skills developed in school students, usually determined by test scores or marks assigned by teachers or both. Academic achievement can be defined as fulfilling of short term and long term goals by a student. It can be broken down into interest and participation in educational activities, acquisition of desired knowledge, skills and attainment of educational outcomes.

In the words of Malcom Gladwell, (2008) "Practice isn't the thing you do once you're good. It's the thing you do that makes you good." Education is not received overnight and requires continuous practice. Good study habits pave the path for good education. Quoting the words of the American scientist Maria Mitchell, "the greatest object in educating is to give the right habit of study," Education is often mistaken as the vessel of storage of information, a cluster of files carrying important data to be retrieved when required. In reality, education is the sum of experiences that one learns throughout their lives which alter the person's thinking process making it better every day. Study habits can be defined as the set of strategies or techniques that help a student to organize and retain important lessons and retrieve them on requirement. They are more like the sharp tools in the hand of a sculptor cutting stone to carve a perfect statue. Several studies have established a relation between study habits and academic achievement. E A Siahi, J K Maiyo(2015),found out a significantly high and positive relation between study habit and academic achievement denoted by a r value of 0.66. B.C Shukla (2019) investigated and found that study habit is a significant correlate of study habit with r value of 0.2669.

The term socio-economic status refers to classifying people on the basis of their education. Income and type of employment they are associated with. In the words of the famous politician of the United States of America, Ileana Ros-Lehtinen, "no matter where you are from, no matter what your background is, no matter what your socio-economic status is, every person can achieve his or her dreams." This statement may seem very pleasing to the eye and ears and boast about an idealistic society where everything is hunky-dory and the path to the top is laced with flowers and equal opportunities for all. The truth however is sadly, the very opposite. Multiple studies suggest that socio-economic status is indeed one of the key covariant of academic achievement. A study conducted by Ritu Chandra and Dr. Shaikh Azimuddin.(2013) reveals that there is a high positive correlation between socio-economic status and academic achievement. Swarnalata P. Roy(2021) tested the correlation between high, low and middle socio-economic status and academic achievement and found that they were significant for social-studies, science, mathematics and languages.

1.1 Area of the Study:

The area in which the study has been conducted deserves a special mention. The Sunderban area comprising of 19 blocks encompassing north and south 24 parganas district of West Bengal, is the biggest delta in the world. It is frequented by natural calamities like cyclones and floods. The area is populated by people who are mostly not very educated and the source of their income is usually farming, fishing, apiculture or tourism.

2. Objectives of the Study:
1. To find out the level of study habit of secondary students.
2. To find out the level of economic status of secondary students.
3. To find out the level of educational status of secondary students.
4. To find out the level of academic achievement of secondary students.
5. To find the relation between the study habit and academic achievement of secondary students.
6. To find the relation between the economic status and academic achievement of secondary students.
7. To find the relation between the educational status and academic achievement of secondary students.
8. To establish the structural equation model between the study habit, economic status, educational status and academic achievement of secondary students.

3. Hypotheses of the Study:
3.1 Research Questions:

RQ1. What is the level of study habit of secondary students?

RQ2. What is the level of educational status of secondary students?

RQ3. What is the level of economic status of secondary students?

RQ4. What is the level of academic achievement of secondary students?

3.2 Null hypotheses of the study:
H_{01}. There is no significant relationship between study habit and academic achievement of secondary students.
H_{02}. There is no significant relationship between educational status and academic achievement of secondary students.
H_{03}. There is no significant relationship between economic status and academic achievement of secondary students.
H_{04}. There is no significant structural equation model between the study habit, economic status, educational status and academic achievement of secondary students.

4. Research Methodology:

The research methodology followed for the present study is a **descriptive correlation** study.

4.1 Sample:

A total of 95 students, 52 male and 43 female, studying in standard IX were selected randomly from Rajnagar Biswambhar High School, Namkhana.

4.2 Tools and Techniques:

4.2.1 Study Habit

The study habit tool is prepared by the researcher and the dimensions included are planning, concentration, use of library and taking notes. The question was standardized by experts. The reliability and validity was checked. The final question had 60 items each provided with five options- almost every time, most of the time, some times, rarely and never. The questions were marked on a 5 point scale, the highest being 5 and the lowest being 1. The maximum marks is 300 and the minimum mark is 60.

4.2.2 Socio-Economic Status

The socio-economic status tool encompasses both educational as well as economic status. The tool adapted by the researcher is a standardized tool prepared by Dr. Taraknath Pan in the year 2003 and revised twice in the years 2010 and 2020. The tool was adapted along with some changes made to suit the sample chosen. The altered tool was standardized by experts and their reliability and validity was checked. The marks were allotted to the students on the basis of their caste, the educational qualification of their parents, their family type, furniture and electronic goods owned.

4.2.3Academic Achievement

In order to measure the academic achievement, the researcher designed a tool in which the knowledge of the students in the seven different subjects- English, Bengali, history, geography, mathematics, physical science and life science were tested and marked. The items of this test were standardized by experts and the reliability and validity of the items were tested.

5 Findings of the study:

5.1: Finding the result of research question 1:

RQ1. What is the level of study habit of secondary students?

The distribution of the study habit scores were categorized as low, medium and high and graphically represented in the bar graph titled graph 1.
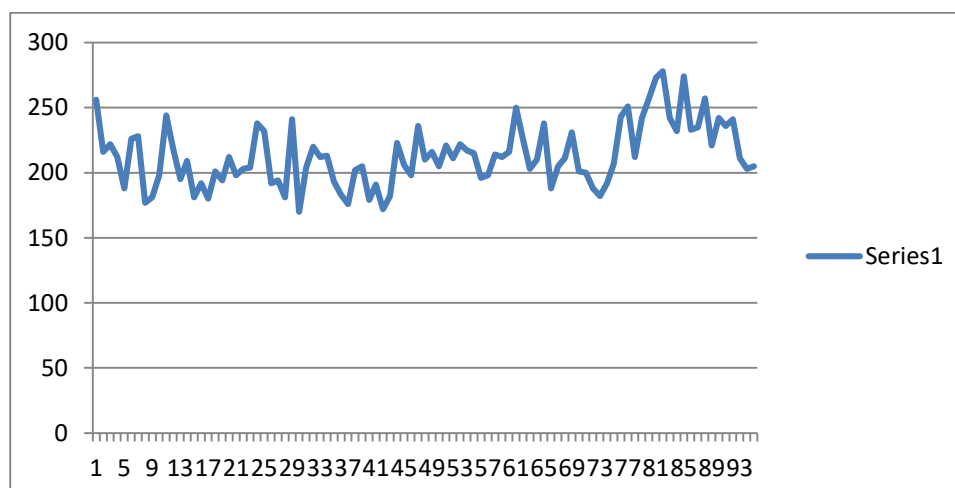

Graph 1: Variation of Study habit of the sample.

The minimum score obtained by the student is 170 and the maximum score is 278. The scores in the range of 60 to 140 are considered to be low, those in the range of 141 to 220 and those in the range of 221 to 300 are considered to be high range of study habit. Thus we can see that none of the students have poor study habit. The scores show that all the selected students have medium to high or good study habit. The collected data shows that 67.37% of the students possess medium study habits and the remaining 32.63% of the students possess high study habits.

5.2 Finding the result of research question 2.

RQ2. What is the level of educational status of secondary students?

The distribution of the Socio-Economic status is divided into two parts. Graph 2 shows the educational status of the sample and graph 3 shows the economic status of the sample.
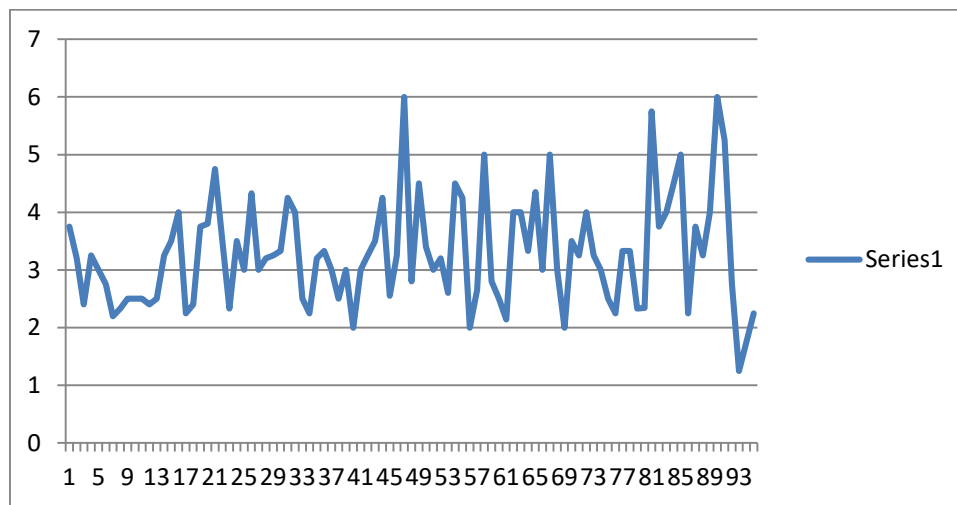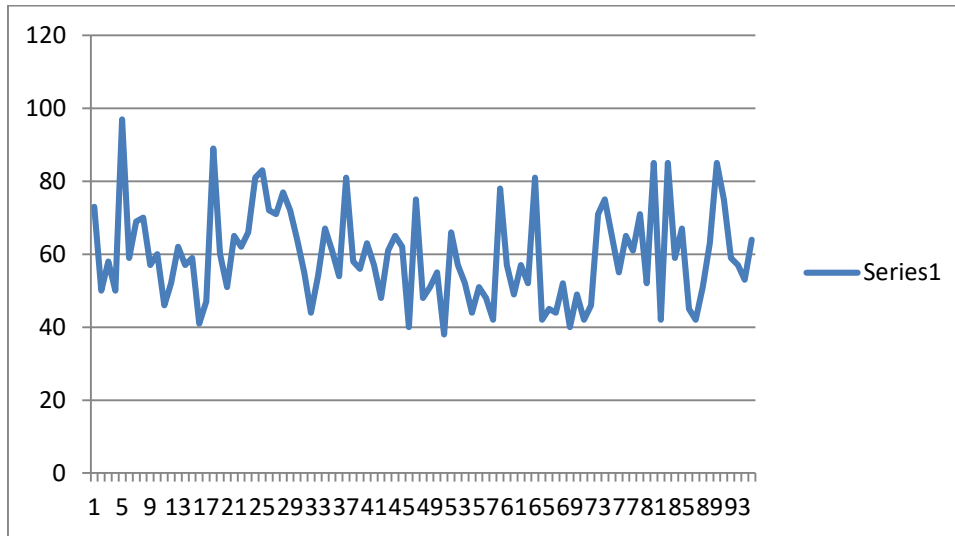

Graph 2: Variation of educational status across the sample.

The educational status scale has a maximum attainable score of 1 and a maximum attainable score of 8. The minimum score obtained by the students is 1.25 and a maximum score of 6 is obtained by the students. If the attainable scores are divided into three categories of low, medium and high then the low category will be categorized by a number range of 1-3.5, the medium category by a range of 3.6-5.5 and the high category by a range of 5.6-8. The data collected shows that 71.58% of the students fall under low educational status, 26.31% fall under medium educational status and the remaining 2.11% fall under the high educational status category.

5.3 Finding the result of research question 3.

RQ3. What is the level of economic status of secondary students?

Graph 3 shows the economic status of the sample.

Graph 3: Variation of economic status across the sample.

The economic status scale has a minimum attainable score of 1 and a maximum attainable score of 100. According to the attainable scores, students scoring in the number range of 1-33, fall under the low economic status, those scoring in the number range of 34-65 fall under the medium economic status and those scoring in the range of 66-100 belong to the high economic status. The collected data shows that, the minimum obtained score is 38 and the maximum score obtained is 97. No students fall in the low economic status category. A total of 73.68% of the total students belong to the medium economic status category and the remaining 26.32% of the students belong to the high economic status category.

5.4 Finding the result of research question 3.

RQ4: What is the level of academic achievement of secondary students?

Graph 4 shows the academic achievement of the sample.
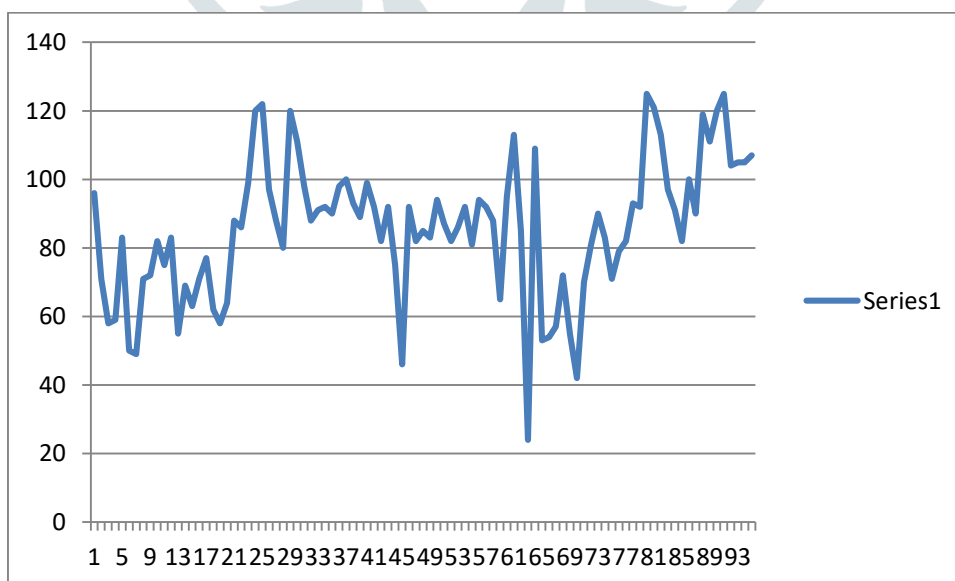
Graph 4: Variation of academic achievement across the sample.

The minimum attainable score of the academic achievement test is 0 and the maximum score is 140. Dividing the attainable scores into low, medium and high academic achievement category results in the following number ranges. For low academic achievement, the range is 0-46, for medium academic achievement, the range is 47-93 and for high academic achievement the range is 94-140. The lowest score as collected by the researcher is 24 and

the highest score collected is 125. Records further show that 3.15% of the students belong to the low academic achievement category, 66.31% belong to the medium academic achievement category and the remaining 30.54% belong to the high academic achievement category.

5.5 Null hypothesis 01:

H_{01}. **There is no significant relationship between study habit and academic achievement of secondary students.**

Groups	N	df	r	p-value	Significance
Study Habit	95	93	0.300	0.003	Significant at 0.01 level
Academic Achievement					

Table 1: Relationship between study habit and academic achievement of secondary students.

The value of correlation between study habit and academic achievement of secondary students using Pearson's method of coefficient of correlation is 0.300. The value is medium and positive indicating that an increase in study habit leads to an increase in academic achievement. The p value is 0.003 which is less than the criterion value of 0.01 for df =93 which indicates a significant correlation at 1% level of significance. Hence **the null hypothesis H_{01} is rejected.**

5.6 Null hypothesis 02:

H_{02}. **There is no significant relationship between educational status and academic achievement of secondary students.**

Groups	N	df	r	p-value	Significance
Educational Status	95	93	0.089	0.392	Not significant at 0.01 level
Academic Achievement					

Table 2: Relationship between educational status and academic achievement of secondary students.

The value of correlation between educational status and academic achievement of secondary students using Pearson's method of coefficient of correlation is 0.089. The value is low and positive indicating that an increase in educational status leads to an increase in academic achievement. The p value is 0.392 which is greater than the criterion value of 0.01 for df =93 which indicates there is no significant correlation at 1% level of significance. Hence **the null hypothesis H_{02} is accepted.**

5.5 Null hypothesis 03:

H_{03}. There is no significant relationship between economic status and academic achievement of secondary students

Groups	N	df	r	p-value	Significance
Economic Status	95	93	0.270	0.008	Significant at 0.01 level
Academic Achievement					

Table 3: Relationship between educational status and academic achievement of secondary students

The value of correlation between economic status and academic achievement of secondary students using Pearson's method of coefficient of correlation is 0.270. The value is low and positive indicating that an increase in economic status leads to an increase in academic achievement. The p value is 0.008 which is less than the criterion value of 0.01 for df =93 which indicates a significant correlation at 1% level of significance. Hence **the null hypothesis H_{03} is rejected.**

5.7 Null hypothesis 04:

H_{04}. There is no significant structural equation model between the study habit, economic status, educational status and academic achievement of secondary students.
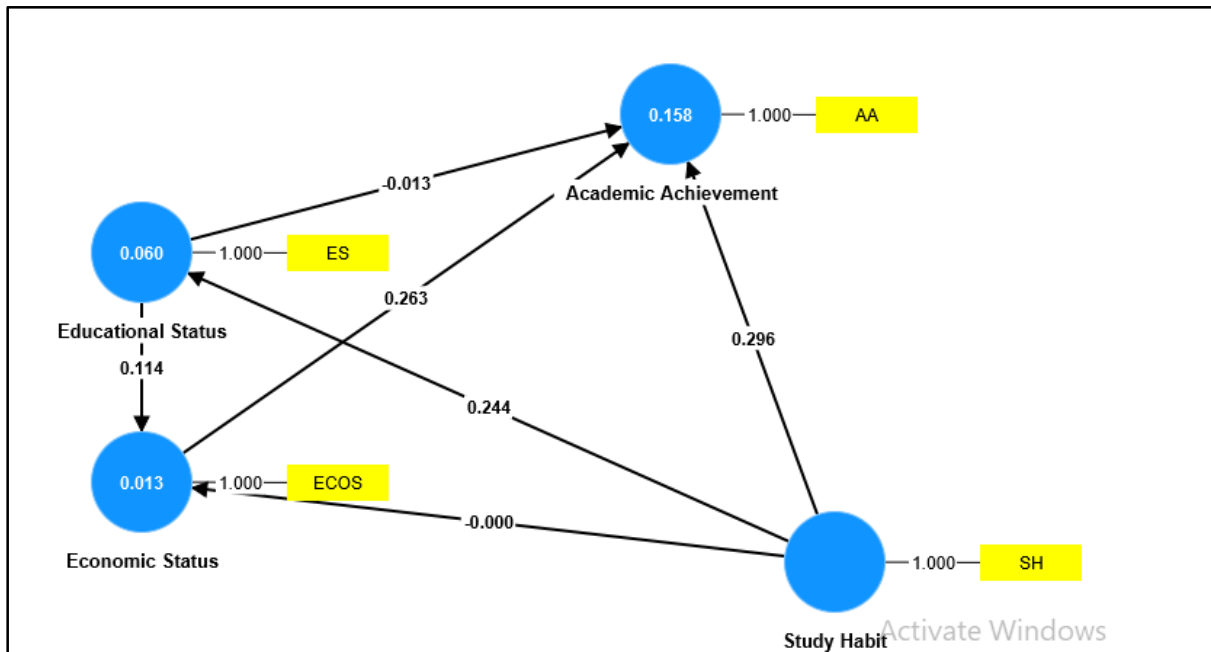
Figure 1: Structural equation model between study habit, educational status, economic status and academic achievement.

Figure 2: Bar graph of path coefficients of the different variables in the structural equation model.

	Path coefficients
Economic Status -> Academic Achievement	0.263
Educational Status -> Academic Achievement	-0.013
Educational Status -> Economic Status	0.114
Study Habit -> Academic Achievement	0.296
Study Habit -> Economic Status	-0.000
Study Habit -> Educational Status	0.244

Table 4: Path coefficients of the different variables in structural equation model.

The path coefficient between the different variables is given in Table 4 and the bar graph of the same is shown in Figure 2. The complete path coefficients are shown in Figure 1. The path coefficient between economic status and academic achievement is 0.263 which indicates a low positive relation between these variables. Similarly arguing, study habit and academic achievement and study habit and educational status have a path coefficient of 0.296 and 0.244 indicating low positive relationship. Educational status and economic status have a low positive correlation of 0.114. Educational status and academic achievement have a low negative path coefficient of -0.013 indicating

weak negative correlation. Study habit is not found to be correlated to economic status with a path coefficient is -0.000. Hence **the null hypothesis H$_{04}$ is rejected.**

6. Conclusion:

The researcher has chosen the Sunderban area for his study. This is a backward region but it is brimming with resources and potential. The people of this area are mainly hot very highly educated neither are do they have a very strong economic foothold. In this area the people earn mainly by primary means which results in them investing a lot of time for labor which is not very highly paying. Hence, it is found that parents are unable to invest a good amount of time in the education of their children or developing good study habit. The present curriculum also does not pay any heed to developing the study habit of children; this culminates into children permanently remaining devoid of fruitful study habit causing them to have poor academic achievement as found out by the researcher. The researcher has found that there is no significant relationship between educational status and academic achievement. This result may be due to the fact that the size of the sample was quite small. If the same study can be carried on a larger sample, the result may vary. There is a positive and significant relation between economic status and academic achievement. This result may not be true always. Results may vary for a larger sample.

References:

1. Ileana Ros-Lehtinen Quotes. (n.d.) BrainyQuote.com.Retrieved May 5, 2023, from BrainyQuote.com Web site:
2. Malala Youssafzai Quotes.(n.d.) BrainyQuote.com.Retrieved May3, 2023, from BrainyQuotes.comWebsite:
3. Malcom X. (n.d.) AZQuotes.com.Retrieved May 03,2023,from AZQuotes.comWeb site: https://www.azquotes.com/quote/184510
4. Gladwell, M.(2008), *Outliers: The story of success(*p.42).Little, Brown ad Company. https://www.brainyquote.com/qotes/ileana_roslehtinen_622220

5. Carter, C.V.(1959).*Dictionary of Education*. McGraw-Hill series in education.
6. Shukla, B.C.(2019) .*Study habit, adjustment, locus of self -control and achievement motivation as correlates of scholastic achievement in socially backward students.*[Doctoral dissertation, Chhatrapati Sahuji Maharaj University] Shodhganga. https://hdl.handle.net/10603/254939
7. Siahi,E.A, Maiyo, J. K .(10th August, 2015), Study of relationship between study habit and academic achievement of students: A case of Spicer H.S. school in India. *Educational Administration and Policy Studies 7*(7) , 134-141. https://files.eric.ed.gov/fulltext/EJ1077791.pdf
8. Chandra,R.,Azimuddin,S. (2013) Influence of socioeconomic status on academic achievement of lucknow city .*International Journal of Scientific & Engineering Research,4*(11) https://www.researchgate.net/publication/259322012-
9. Roy, P.S. (2021*). A study of academic achievement and creativity of students of secondary school in relation to socio-economic status* [Doctoral dissertation, Mahatma Gandhi Kashi Vidyapith.University] Shodhganga. http:/hdl.handle.net/10603/32919
10. Maria Mitchell Quotes. (n.d). BrainyQuote.com. Retrieved October 15, 2023, fromBrainyQuote.com Web site: https://www.brainyquote.com/quotes/maria_mitchell_317071