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CORRELATION BETWEEN PARENTS' INCOME AND STUDENTS' ACHIEVEMENT IN UNIVERSITI TEKNOLOGI MARA SEGAMAT CAMPUS.

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ABSTRACT

Many research works have been done in other countries to study the association between parents' income and the students' performance in academic. It was found in the study that in younger age, high-income parents are more likely to exert a positive influence in their children's academic achievement. Tests were conducted in schools to study the association, and it was found that low-income population especially with large minority population has students with low tests scores. However not much research has been done in Malaysia regarding this matter. Thereby the researcher decided to conduct this research and the population is targeted at UiTM Segamat Campus students. Do parents' financial background have anything to do with the students' achievement particularly the CGPA is of interest here. A sample of 350 students were obtained and analyzed. The analysis was done by using Pearson Coefficient of correlation . The results are discussed in detail in this study.

Keyword: *Correlation, Parents' Income, Students' Achievement, and CGPA.*

1.0 INTRODUCTION

There are many factors that influence the performance of students in the University and one of them is socioeconomic factor. Socioeconomic factors such as the rural or urban background, parents working sector and type of house the family live in and low income and poverty have been identified as a major cause for student failure. Poverty and low income can add to stress and these factors may affect the quality of a student learning environment and, consequently his or her chances of academic success.

Family living environment is believed to play an important role in students' achievement. Parental monetary support and involvement is likely to significantly impact the student's performance. Parents education, work background whether government or private sector and income level can also influence students performance because more educated and richer parents may be more prone to value education more within the family environment.

In UiTM the achievement of students are measured by their CGPA (cumulative grade point average) that they obtained in the University. This study was focused on Universiti Teknologi MARA students studying in Segamat Campus where data about their parents' income, working background, types of house they live in and location of house whether urban or rural areas were obtained.

1.1 PAST RESEARCHES

Many research works in other countries were done to see the correlation between family income and performance of students in younger children. One study (3) showed no relationship between financial conditions at home and achievement of children from single parent and two parent families in South Africa. The study was done on 234 students consisting of 103 boys and 131 girls.

In many research works (1), (3), (4), (5), (6) and (7) indicated that family income and student achievement had very high positive correlation. The surveys showed that family income were one of the important predictors of student performance.

Income also had significant effect on mathematics and language achievements in rural areas and science in urban areas, however father's occupation had no effect on learning achievement in those areas (8).

Finally a research work (9) showed that the positive relationship between income and achievement was not supported especially by the senior students but somehow had an effect on the junior students.

1.2 OBJECTIVES OF THE RESEARCH

Based on the previous research findings reported earlier, students' performance as measured by CGPA is hypothesized to be related to the student's: (1) location of family living area (urban or rural), (2) family type of house, (3) father work sector (government or private), and (4) family income. The major objectives of the study are presented as the following research questions.

Research question number:

1. To find whether there is any significant difference of income level between family location of house (urban or rural areas).
2. To find whether the location of family house (urban or rural areas) have any effect on the student's performance.
3. To find whether there is any significant difference of income level between family type of house (bungalow and village house).
4. To find whether the location of family type of house have any effect on the student's performance.
5. To find whether there is any significant difference of income level between father's work sector (government or private).
6. To find whether the fathers' work sector have any effect on the student's performance.
7. To test whether the parent's income are associated with the student's performance.

1.3 DEFINITION OF TERMS.

There are some terms in this research, which needs to be explained in more detail. The terms correlation and CGPA will be discussed

Correlation is used to measure the degree of association between two variables (5). It is measured by using Product Moment or Pearson Correlation Coefficient, which measures the strength of relationship between two variables. The value obtained will also show the direction of the relationship whether positive or negative

The **grade point average** is the weighted sum of the grade points earned, divided by the number of courses attempted. Two types of averages are employed. The session GPA is calculated at the end of each session. The cumulative GPA (CGPA) is calculated at the same time, but is the sum of all courses taken. Refer to Table 1.

Table 1: Grading system

Percentage range*	Grades	GPA value Rating
90 - 100	A+	4.00
80 - 89	A	4.00
75 - 79	A-	3.67
70 - 74	B+	3.33
65 - 69	B	3.00
60 - 64	B-	2.67
55 - 59	C+	2.33
50 - 54	C	2.00
47 - 49	C-	1.67
44 - 46	D+	1.33
40 - 43	D	1.00
25 - 39	E	0.67
0 - 24	F	0.00

*These percentage ranges are provided to assist other institutions in interpreting letter grades.

1.4 LIMITATION OF THE STUDY

This study was limited to:

- a) Universiti Teknologi Mara Segamat Johore Campus students only.
- b) Students were selected from Diploma part two onwards and the samples comprised of all programs offered in Segamat Campus such as Diploma in Accountancy, Diploma In Business Studies, Diploma in Banking Studies, Diploma in Investment Analysis, Diploma in Information Management, Bachelor of Accountancy and Bachelor of Finance.
- c) Selected students did not include the part one students because their academic achievement could not be obtained.

2.0 METHODOLOGY

A sample survey was done by using cluster sampling (two layer) technique There are seven colleges in UiTM Segamat Campus, namely Kolej Sempena Riau, Kolej Taming Sari, Kolej Si Manja Kini, Kolej Baiduri, Kolej Intan, Kolej Mutiara and Kolej Nilam Three colleges were selected using simple random sample technique. The selected colleges were Kolej Sempena Riau , Kolej Intan and Kolej Baiduri. The colleges were divided into different wings and rooms and a random sample of 88 rooms were selected. A total of 350 questionnaire forms were distributed to students in the selected rooms in the three colleges. The students consisted of different programs and semester level. The questionnaire forms were collected within the same day and data were coded and entered in the computer. Out of 350 forms, five were unusable and 345 forms were analyzed.

The questionnaire forms consisted of several questions asking about gender, semester, program, CGPA, loan obtained, father's occupation, parents income per month, type of house the family live in , father's work sector and location of family house whether urban or rural area.

The researcher believed that location or place of the family house has some association with the family's income, thus the questions about location and type of house were posed. The same was believed about the father's work sector and family income, the researcher believed there was some association between the two variables thus these variables were also analyzed.

2.1 THE SURVEY INSTRUMENT.

Data for the study was collected from primary data in order to gather information relating to the study. The survey instruments involved in this study were a set of questionnaire forms, which were administered personally, which were completed and returned by respondents. Additional instruments included computer programs (Microsoft Excel, Microsoft Word and SPSS 10.0) for loading and analyzing the data.

3.0 SURVEY RESULTS AND FINDINGS.

The analysis was conducted by using coefficient of correlation analysis and independent samples t test. The initial results consist of respondents and parents' profile. The next results were obtained by using independent samples t test to see the differences of mean income .The last result was obtained by using the Pearson Coefficient of Correlation analysis between the variables. Pearson Coefficient of Correlation was used in this study because the data were strictly quantitative data. All the results are presented below:

3.1 RESPONDENTS PROFILE.

The respondents consisted of 66 male students and 279 female students from UiTM Segamat campus. The mean CGPA of male students was 3.04 and for female students, 3.08. Test of significance (independent sample t test) revealed no difference in the mean CGPA between gender (t value = -0.396, p=0.692)

The overall mean CGPA of all students was 3.11. Most of the students (91 percent) had some financial support from other sources other than their parents such PTPTN loan, YPJ, MARA, JPA and other scholarship. Only nine percent did not get any loan or scholarship to support them in their studies.

3.2. PARENTS PROFILE.

The survey conducted on 345 samples yielded the average overall income of the parents was RM2251 per month. The percentage of family living in urban area was 61 percent and that in rural area was 39 percent. Out of those, 46 percent worked in the government sector and 32 percent in the private sector while the rest were retired or had their own business.

3.3 RESEARCH QUESTION ONE

Income of parent living in urban areas was RM2837 per month whereas those living in rural areas were RM1311 per month. Results from independent samples t test showed there was significant differences between the income of parents living in urban and rural areas (t value =5.310, $p < .01$).

3.4 RESEARCH QUESTION TWO

The mean CGPA of students whose family lived in urban area was 3.15, while those that lived in rural area was 3.02. However there seemed to be no difference in the CGPA among students living in urban or rural areas (t value =1.934, $p=0.054$) Thus it can be concluded that residence place of students do not have any significant effect on the students achievement in UiTM.

3.5 RESEARCH QUESTION THREE

Regarding the type of house the family lived in; the income level of the parents living in bungalow house was RM2918 per month while those in the village was RM1071 per month. Independent samples t test was done to see whether the differences in the mean income was not due to random chances. Result showed that there exists significant difference of income with respect to the type of house the family live in (t value=7.64, $p<0.01$)

3.6 RESEARCH QUESTION FOUR

With regard to the type of house the family lived in and the CGPA of students, the average CGPA of students staying in bungalow house was 3.13 whereas those living in village house, the mean CGPA were 3.00. However there exist no significant difference between the two types of house regarding CGPA of students (t value =1.404, $p =0.162$)

3.7 RESEARCH QUESTION FIVE.

The mean income of father working in the government sector was found to be RM1979 per month, whereas those in the private sector were RM3208 per month. Independent samples t test showed that there exists a significant difference between the father's incomes at different working sectors (t value = -3.508, $p=0.001$)

3.8 RESEARCH QUESTION SIX

With regards to the achievement of students measured by the CGPA, the mean CGPA of students with father working in government sector was 2.99, while those in the private sector were 3.12. Test of significance revealed that there was evidence that the student's performance differed according to father's working sector (t value = -2.034 , $p=0.04$).

3.9 RESEARCH QUESTION SEVEN

Finally the test to determine association of parent's income and students achievement as measured by the CGPA was done.

From the analysis of Pearson Coefficient of Correlation, there exist no correlation between parents' income and students' achievement as measured by the CGPA (r value = 0.018, p =0.745). Therefore there was no sufficient evidence relate both variables together. Thus it can be concluded that students' achievement in UiTM Segamat campus cannot be predicted from their parents' income.

4.0 CONCLUSIONS

From all the findings discussed above, the researcher can conclude that there was not enough evidence to conclude that the parent's income and student's achievement as measured by the CGPA of were related. This was verified by using Pearson Coefficient of correlation analysis. The average CGPA of students surveyed was 3.11 and the average income of their parents was RM2251 per month. From all the analysis, it can be concluded that socioeconomic background especially family income did not have any effect on the achievement of students in UiTM Segamat Campus. Other factors, which were not considered here such as highly competent, experienced and dedicated lecturers may be the key contributing factors to student's success. Besides those factors mentioned above, there are other factors such as students' motivation and parents' moral support, which can also be the other predictors.

Other research works are recommended to find the correlation of family income and students' performance in the lower or younger age students in the secondary or primary school children in Malaysia. Younger students may need tuition, personal teacher, computer, extra exercise and reference books to excel in their study. Richer parents may be empowered financially to provide their children with those extra needs and the best school for their children including private schools, which may increase the student's achievement.

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REFERENCES

1. Anonymous (2001). Parental Involvement, Instructional expenditures, family socioeconomic attributes, and student achievement. *Journal of Education Research*. Vol.95 Issue 2,p110.
2. Anonymous. (2000). A clear Link Between school and teacher characteristics, student demographics, and student achievement. *Journal of Education*, Vol.120.Issue 3,p487.

3. Cherian, V.I.:Malehase, M.C. Relationship between family income and achievement in English of children from single and two-parent families. *Psychological Reports*, v.83 no2 (Oct.1998) p.431-4.
4. Greene, Jay P. (2000) Low income students make academic gains. *The Charlotte Observer*
5. Levin, R.I, Rubin, D.S (1998). *Statistics for Management*, Seventh Edition, Prentice Hall International Inc.
6. Matuszek, Paula: Haskin, Christine (1998) Who are the disadvantaged and what should we do for them? The relationship of family variables to achievement and some implications for educational programming. Pulication No.77.40.Paper presented at the annual meeting of the American Educational Research Association (Toronto, Ontario, 1978)
7. Nelson, James E. (1976) A review of data available regarding family income and financial aid characteristics of students.
8. Panda, B.N.Indicators of quality Learning Achievement Of Primary School Children of Orissa. Regional Institute of Education, Bhubaneshwar.
9. Winkler, Dorman F.: et al. (1993) *Working status and student Performance*. Paper presented at the Annual Meeting of the American Educational Research Association. (Atlanta, GA, April 11-16,1993)