

## **DOES POVERTY INFLUENCE THE PERFORMANCE OF STUDENTS? A CASE IN UNIVERSITI MALAYSIA SABAH**

*VIVIN VINCENT CHANDRAN & CAROLINE GEETHA*

### *ABSTRACT*

A study was conducted in determining whether family disadvantage can influence the academic attainment of the 200 students in University Malaysia Sabah. According to Du Bois (2001), family disadvantage can be grouped into financial capital, human capital and social capital. Among the factors, household income, household expenditure on food and clothing and parental education are found to be the factors that can contribute to the changes in the educational attainment of the students. Other factors in the financial capital such as the parental occupation and the household structure are found to be insignificant in influencing the changes in the educational attainment. Human capital and social capital are also found to be insignificant in influencing the educational attainment of the students. Therefore it can be concluded poverty does influence the educational attainment of students even at the university level.

*Keywords:* poverty; students performance; human capital

### **1. Introduction**

Social background influences the way children feel about school from an early age. At primary school, children in poverty are more likely to have negative experiences and feel “got at” by teachers. Hirsch (2007) claims that it does not mean that the teachers are prejudice, but the low income children find themselves in schools where the pressures are greater and this reinforces prior disadvantage. Children from all background can see advantages of school, deprived children are likely to feel more anxious and confident about school. Out of school activities can help build self confidence by improving learning relationships and children from advantage backgrounds greatly benefit from the access they have to a more structured and supervised activities beyond school. Poorest children do less well not because their parents read to them less but because of their life experience. If we are serious about improving their educational capabilities, measures should be taken to improve their life chances not curriculum. Hirsch’s (2007) research also found that many children and young people who become disaffected with school develop strong resentment about mistreatment and this issue should be taken into account when you deal with them.

The economic and social adversity within families can contribute to the educational outcome of a nation. The rate of dropouts is found to be high from children who came from low income families. But there are literature reviews such as Werner (1995) who claims that surrounding might develop resilience that could protect them from the negative outcome. Individual factors identified as promoting resilience that could protect them from negative outcome. Individual factors identified as promoting resilience are strong positive self concept or sense of self efficacy, personal values, inspirational orientation and the importance of self domain.

A conceptual framework was designed by DuBois (2001) to interrelate family disadvantage with academic achievements. Family disadvantage was conceptualized using

indicators such as household income, parent education, household structure and parental occupation. The indicators chosen are consistent with the indicators used by Coleman (1987). He claims that there are three type of capital needed at home to obtain optimum youth development. These include financial capital (income spend to buy food and clothes), human capital (non-material resources from parents such as the ability to help youth with school work) and social capital (the people the youth shares his household). Based on this financial capital can be related with household income, parental education, human capital index and household structure (single or not single parents) can be good indicating variables. The choices of proxy chosen as indicators are also supported by researchers such as Brooks-Gunn and Duncan (1997), Mc Loyd (1998) and Shavelson and Bolus (1982).

Investment in education at all levels and across many nations consistently yield double digit returns. In Venezuela investment at the primary level yields a private return on investment in excess of 25 percent, a social return of investment of 16.9 percent. As for the secondary education primary and secondary education respectively provides 10.6 percent and 11.5 percent of return respectively. Finally, university education yields 13.5 percent and 12.0 percent for private and social return on investment. The private and social returns are the highest for investment at the primary level especially in the developing countries.

Beyond primary level, the picture gets complicated. For the individuals, a loss of income due to occupation becomes significant as they become older. As the child is older and stronger, he or she can earn more income while working on the field. Beyond elementary education, the societies return on investment will also depend on the nature and the kind of education provided. A system that emphasizes maths, science and foreign language such as English provides higher returns. Increasing the number of years devoted to this subject is not enough. Quality should be emphasized compared to quantity. Skills in the area of science, maths and foreign language have greater transferability to other areas. A system that does not emphasize in this subject will not provide greater returns like India and other Muslim countries.

Among the ethnic groups in Malaysia, Malays with degree earn less than non-Malays because Malays tend to have higher qualification in other subjects compared to science and maths. The cultural element may have a lot to do with Malays attitude towards education. Moreover some researchers also feel that difference in economic status from various regions in Malaysia is also better correlated with educational achievement among certain ethnic groups. This results in creating disadvantage families. The effect of family disadvantage on academic achievement can also be intervening by self system. Earlier studies on self factors were fueled by Affective Education Movement in the 1960's and 1970's. The movement focused on the overall view about self and their role in potentially shaping education. Kohn (1994) found weak correlation with a magnitude of 0.18 to 0.22 between academic achievement and self factors. Studies conducted by Shavelson and Bolus (1982), Felner (1995) also unexpectedly found positive overall self concept and self esteem in processes may be involved in lowering rather than raising level of academic achievements. According to Cohen and Cohen (1975), self esteem may be associated to accumulation of non-academic experiences that includes sports and other leisure activities. But such activities can distract students away from school and it is also time consuming.

Sabah has 1,002 schools in the rural areas where 882 are primary schools and 120 secondary schools. This makes Sabah a state that has the second highest amount of school that has few students after Sarawak with 502 schools with fewer students. Based on the study conducted by JPN in 2007, the literacy rate among the students in the rural areas in Sabah is as low as 50 percent. The UPSR achievement among the schools involved is also as low as 0

to 30 percent passes. The socioeconomic development of the society is also deficient. The average income earned by the rural people is below RM 450. They are also categorized as those in the category of hard core poverty. Majority of the students receive financial assistance from a financial assistance scheme for poor children provided by the government. The rural people in Sabah is a collective society that practice traditional socioeconomic and socioculture. With that the education, health and the eating habits are unfavorable. The infrastructure in these areas is below the subsistence level where there is no electric and water supply. The communities that stay in the outskirts depend on gravity water and their own generator to fulfill their basic necessities.

Overall, Sabah is still backward in the terms of education especially in the rural area. Out of 1,064 primary schools in Sabah, 497 schools are in the rural areas. 465 schools belong to the National Schools, 30 National Type Schools and 2 Special schools. Among the 497 schools, 2 schools belong to Schools with fewer Students. Efforts have been taken by the government to develop the level of education in the rural area of Sabah. The estimated cost is RM 83 billion. But under the 9<sup>th</sup> Malaysian Plan the amount allocated was only RM3.43 billion that enables them to carry out 3,904 projects. Due to poverty, insufficient infrastructure and the attitude of the people in the rural area on the importance of education, an average of 83,000 students are believed to have dropped out of the education system. To reduce the amount of drop outs, an allocation of RM185.47 million under the Trust Fund for Poor Students was approved in the 9 Malaysian Plan for Sabah. Under this Scheme, every student eligible to be given the financial assistance from RM150 to RM350. Thus the number of poor students estimated in Sabah is 600,000.

This clearly indicates that the main problem that contributes to the educational problem in the rural areas is the poor standard of living. The parents are not able to bear the cost of education. This help to increase the number of drop outs in schools. Based on the study conducted by the Higher Education Ministry in 2007, the drop outs are due to the location of the schools and the background of the family. Study conducted by the Center of Rural Education, Universiti Malaysia Sabah, the non-verbal cognitive development involving 106 primary students in the islands showed between 56 to 60 percent below average development.

Most of the studies conducted are related to the primary and secondary school students. Up to date there were no studies conducted on the relation between the background of the family and the performance of students in the university. This is because the percentage of the students who pass with second class upper is low in University Malaysia Sabah. A low Grade Point Average will lead to low employment opportunity. This will lead to underemployment. A low level of income will further contribute to living in below the poverty line. Therefore this study aims to find the relationship between the family disadvantage with the academic performance of the students at the university.

### **1.1 Objective of the Study**

The overall objective of the study is to find the relationship between family disadvantage and the performance of students in the university. The specific objective of the study is to identify whether,

- a. Financial capital can influence the academic performance of the students in the university.
- b. Human capital can influence the academic performance of the students in the university.
- c. Social capital can influence the academic performance of the students in the university.

### 1.2 Scope of the Study

The study is conducted on 200 students from University Malaysia Sabah. Out of the 200 students, 100 comes from the Science stream and 100 students are from the Arts stream. The students are further distinguished into 128 Students from Sabah and 72 students from Semenanjung and Sarawak. Among the 128 Students from Sabah, 100 students come from the rural areas in Sabah while 28 come from the urban area in Sabah. The summary of the quota used for the choosing the respondents are as follows:

Table 1: Summary of Quota Used in Choosing Respondents

Category	Number of Students
Stream	
Science	100
Arts	100
State	
Sabah	128
Semenanjung and Sarawak	72
Sabah	
Urban Sabah	28
Rural Sabah	100
Semenanjung and Sarawak	
Urban	22
Rural	50

A questionnaire is used to collect the information. The questionnaire is divided into three sections. Section A questions the demographic information of the respondents. The demographic information consists of age, gender, the household income, the parents occupation and the parents level of education, the household structure and the number of dependents. Section B questions the household expenditure on foods and clothing and finally section C questions the social network of the respondent with his siblings and the school.

### 1.3 Organization of the study

Section 1 consists of introduction, objective, scope of study and organization of study. Section 2 explains in detail the literature review and section 3 discusses the methodology. Section 4 analyses the data to report the findings while section 5 concludes the findings.

## 2. Literature Review

According to Booth (1993), poverty is define as a person who lives in difficulty in fulfilling his or her basic needs. Poverty can also refer to a person who has few property or small amount of real income to buy basic needs for them to continue living. Basic needs here refer to protection, food and clothing. Poverty can be distinguished into relative poverty and absolute poverty. Relative poverty refers to comparison on poverty between individuals or groups while absolute poverty refers to those who receive real income that are insufficient to buy or fulfill basic needs.

Numerous studies have been carried out that relate poverty with academic attainment of students especially those in the preschool, primary and secondary level. Poverty is believe to create negative impacts to wards academic achievements. Amoto and Zuo (1992) claim that

poverty creates psychological interference that can destroy the quality of poor students. Issues that create stress for these students are family expenditure, work, health, education and security. These issues can harm the cognitive development by destroying once's self acceptance. Students who come from poor family background do not have the motivation to pursue particular task. The findings support the study conducted by Du Bois (2001).

Studies conducted by Kohn (1977) also claim that low motivation especially among the rubber tappers made them not prepared to receive the help forwarded by the government. Continious low motivation can lead to vicious cycle of poverty. The findings supports the study conducted by Gonzalez-Intal and Valera (1990). Hirsch (1997) found that children's who cannot afford good preschools are send by parents to government sponsored schools due to poverty. These government sponsored schools has a high ratio of teacher to students. The teachers are extremely stressed and unable to attend to the children's needs. The stress of the teacher can be transferred to the students. The extra curricular activities are also not designed efficiently to develop the academic attainment of the students unlike the private preschools.

Corington and Beery (1984) showed that cognitive development of students in school depends on their self acceptance. The self acceptance can be influence by the quality of life, income and economic difficulty. All the three variables mentioned above was influence by gender and location. The conceptual framework created by Corington and Beery (1984) is as follows:-

**POVERTY**

Quality of life

Income-----Non-verbal cognitive development

Economic difficulty

Gender and location

Similar study was conducted by Du Bois (2001). Du Bois (2001) groups poverty as family disadvantage. He includes family income, parental occupation, parental education, expenditure on food and clothing and household structure as family capital. Human capital refers to the ability of the parents in helping the students in his school work and finally social capital that refers to the number of people the students is associated with in his household. Du Bois (2001) derived these variables based on the study conducted by Brooks-Gunn and Duncan (1997) and Shavelson and Bolus (1982). The findings reported that family disadvantage due to weak financial capital is the most important factor that influence academic attainment. The findings supported the study conducted by Mc Loyd (1990), Felner (1995), Seidman and Ropkin (1983). A convert factor analysis was used to analyze the data. Family disadvantage is also known as family background by Dika and Singh (2002). Horvart (2003) supported the study by including variables like race and class to represent social capital.

Lin (1999) claimed that among the three capital, financial capital, human capital and the social capital, social capital is the most important factor in influencing the academic attainment of students. Social capital is generally define as the resource that accrue to an individual through social networks and it is not only determine by an individual's choices but by the choices, actions and dynamics in the social network. The study used 1,000 high school respondents. The study used regression analysis. The regression analysis revealed that network qualities and network process both significantly explained the variance in educational outcome.

### 3. Methodology

The study used Du Bois (2001) study as the base to conduct the analysis on 200 students from University Malaysia Sabah students. Primary data are collected using questionnaires. The aim of the study is to find the relationship between the family disadvantage and the academic attainment of the students. The variables used to measure family disadvantage are household income, household expenditure on food and clothing, parental occupation, parental education and household structure. More variables are also added to family disadvantage. The variables are the ability of the students to do their work with the help of their parents when they are at pre-university level. Finally the network between the student and the people around him in his household is included to represent social capital. The academic attainment of the students are measured using the Grade Point Average of the Students. Univariate technique (t-test) was used to identify the variables responsible in influencing academic attainment of the student.

### 4. Results

Table 2 shows the characteristics of the respondents. The number of male is 128 students and the number of female is 72 students. Based on the age group, 1.6 percent of the respondent belongs to the age group of 20 years old and less, 80.3 percent of the respondent belong to the age group between 21 to 30 years old. 28.1 percent of the respondents are more than 30 years old.

Table 2: The Characteristics of Respondents

Category	Percentage
Gender	
Male	50
Female	50
Age group	
Less than 20 years old	1.6
21 to 30 years old	80.3
More than 30 years old	28.1
Level of education	
No formal education	12.5
Primary education	54.7
Secondary education	18.7
University/college	14.1
Professional	0
Parental Income	
Less than RM1,500	33.6
Between RM1,500 to RM3,000	22.7
More than RM3,000	43.7
Parental Occupation	
Unskilled manual workers	32
Skilled Manual Workers	25
Clerical	18.8
Professional	24.2

The parental education of the respondent can be divided into no formal education, primary education, secondary education, university or college and finally professional training. Out of 200 respondents 12.5 percent of the respondents parents did not have any formal education, 54.7 percent has primary school education, 18.7 percent of the respondents parents have at least secondary level education, 14.1 percent of the respondents have university level education and finally no parents had formal professional training.

The household income obtained by the parents of the respondents were distinguished into three categories. The first category of income earned by the household is less than RM1,500. In this category, there were 33.6 percent of the respondent. The next category has household income between RM 1,500 to RM 3,000. In this category, there are 22.7 percent of the respondent. Finally the category where parents household income exceeds RM3,000 is around 43.7 percent. The occupation of the parents of the respondents are categorized as unskilled manual workers, skilled manual workers, clerical workers and professionals. The percentage of respondents parental occupation for each category are as follows. Unskilled manual workers are 32 percent, skilled manual workers are 25 percent, clerical has 18.8 percent while professionals are 24.2 percent. Based on the household structure 62 percent of the respondents has a household structure of both parents while 38 percent of the respondents only have single parents.

The univariate techniques (t-test) was used to identify the family disadvantage factors that contribute to the academic attainment of the students in University Malaysia Sabah students. The results obtained are as follows:-

Table 3: Univariate (t-test) for Ranking Important Factors.

Factors	Mean	Rank	T-test
Household income	1.254	1	2.647**
Household expenditure on food and clothing	1.295	2	2.489*
Parental occupation	1.437	3	0.928
Parental education	1.618	4	3.676**
Household structure	1.637	5	1.484
Human capital(the ability of the parents in assisting the child during pre-university in finishing the homework)	1.909	6	1.481
Social capital (the ability to develop good networking with siblings and school)	2.463	7	0.198

\*p<0.05; \*\*p<0.01

Table 3 reveals that the most important factor that influence the academic attainment of the students is the household income. The estimated t value of (2.647) is significant at 1 percent significant level in explaining the changes in the academic attainment of the students. If the household income is low the academic attainment of the students are also low, indicating a significantly positive relationship. Similarly, household expenditure on food and clothing is ranked as the second most important factor that can influence the academic attainment of the students. The factor is found to be significant at 5 percent significance level. The estimated t value is 2.489, indicating a positively significant relationship between

the variables. Based on the mean value, parental occupation and household structure are ranked as the third and the fifth most important factors that influence academic attainment of the students in University Malaysia Sabah but the variable is insignificant in influencing the academic attainment of the students respectively. Unlike parental occupation, parental education is found to be significant at 1 percent significance level in influencing academic attainment of students because the estimated  $t$  value of 3.676 is greater than the critical value of  $t$ . Parental education has been ranked as the fourth most important factor. Both human capital and social capital are found to be insignificant in explaining the changes in the academic attainment of the students though they were ranked as the sixth and the seventh most important factors.

## 5. Conclusion

The findings support the study conducted by most of the researchers such as Du Bois (2001), Hirsch (2007), Coleman (1987), Brooks-Gunn and Duncan (1997), Mc Loyd (1998), Shavelson and Bolus (1982), Felner (1995), Seidman and Ropkin (1983). Financial capital such as the household income, household expenditure on food and clothing and parental education can influence the educational attainment of the students in University Malaysia Sabah. The only factors that did not contribute to the changes in the educational attainment of the students that belong to the financial capital is the parental occupation and the household structure. Human capital was referred to the ability of the parents in assisting the child with school work and social capital are found to be insignificant in explaining the changes in the educational attainment of the students. The findings did not support the study conducted by Dika and Singh (2002) and Hovart (2003) and Lin (1999).

Therefore it can be concluded that financial capital measured by income, education and expenditure that are also used as an indicator for poverty does influence the academic attainment of students in the university level especially at University Malaysia Sabah.

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