Education and Human Capital Effect on Malaysian Economic Growth

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ABSTRACT

In this globalization era, more knowledgeable human capital is needed to gain better economic growth. The ability of a country’s human resources in providing skillful labors in various scopes ensures the success of implementation of the economic policies. Education and human capital has two essential keys that have relation in contributing towards the economic growth. Human capital is a set of resources that combines knowledge, training and skills that is correlated to education. The attention in higher education increases from time to time as people realizing the importance of providing better education for the future of their children and the economy as a whole.

Keywords: Education, Human Capital, Economic Growth, Skill Labor

JEL Classifications: I25, J24, O

1. INTRODUCTION

Human capital plays an important role in achieving economic growth and development. Knack and Keefer (1997) argued that higher learning indicates that an individual is well equipped with information and better interpretation of information in engaging human capital. The higher the level of education, the higher the distribution of income obtains by an individual (Ozturk, 2001). However, these variables may change overtime in accordance with the current situation. Theoretical studies suggest that the co-relation between education and human capital is not clear enough. There is a firm belief that human capital to any organization is one of the sine-qua-non assets and most important asset to achieve competitive advantage (Joarder et al., 2015). The term brain drain has been conceptualized as emigration of highly skilled individuals with a superior academic or professional degree beyond high schools. Others recognized as the human capital flight (Junaimah et al., 2015).

Good health is one of the most important pre-requisite to human productivity which in turn leads to overall development of a society. Health is understood as the indispensable basis for defining a person’s sense of well-being and is regarded as an important resource for a nation to pursue national development goals. Good health raises the productivity of the labor force and enhances economic growth (Aldosari et al., 2014). At the same time, the quality of human capital determines whether a country has achieve higher growth economically or viz. In a broader context, it shows that human capital helps a nation in moving towards its targeted vision. Without a good quality in human capital, it may weaken the impulse on its socio-economic activities.

According to Yunus (2014), innovation in education plays an important role in determining the direction of personal, social and economic growth within the nation. However, the issue arise is whether the nation is prepared in understanding the concept of human capital development and as well as putting in higher investment into education in gaining better attainment.

Good health is one of the most important pre-requisite to human productivity which in turn leads to overall development of a society. Health is understood as the indispensable basis for defining a person’s sense of well-being and is regarded as an important resource for a nation to pursue national development goals. Good health raises the productivity of the labor force and enhances economic growth (Aldosari et al., 2014). At the same time, the quality of human capital determines whether a country has achieve higher growth economically or viz. In a broader context, it shows that human capital helps a nation in moving towards its targeted vision. Without a good quality in human capital, it may weaken the impulse on its socio-economic activities.

According to Yunus (2014), innovation in education plays an important role in determining the direction of personal, social and economic growth within the nation. However, the issue arise is whether the nation is prepared in understanding the concept of human capital development and as well as putting in higher investment into education in gaining better attainment.

What will be the achievement of Malaysian economic growth by year 2020? When Malaysia is in the state of high nation country
as Malaysia is left with 5-year period into strengthening its human capital development? The youth are the future leaders that lead the country in every aspects of the economy and are they competitively prepared to compete globally and aware that it is important to dominate education in facing challenges of the future within this new era and at the same time molding the quality of human capital?

In this globalization era, more knowledgeable human capital is needed to gain better economic growth in the future. The ability of a country’s human resources in providing skillful labors in various scopes ensures the success of implementation of the economic policies. Education and human capital is two essential key that has relation in contributing towards the economic growth. Human capital refers to a set of knowledge and skills that has an economic value. Human capital skill can be improved through education investment. The requirements of high skill development and knowledge are needed by firms to fulfill employment for productivity.

Human capital investment is a part of Malaysia’s strategic development scope. Human Capital Development is a major aspect in Economic Transformation Programme (ETP) across all NKEA’s. Malaysia is ranked on 22nd out of 122 countries and placed 5th is Asian Pacific Region in Human Capital Index 2013 by World Economic Forum. This human capital index examine how countries leveraging their human capital and developing workforce in order to meet the demand in competitive economy. Table 1 shows a review on Malaysia’s progress of the HDI (Human Development Report, 2014).

In the Tenth Malaysian Plan (2011-2015), has stated their high focused into putting in efforts on non-physical infrastructure that includes human capital development such as, skills development and strong innovation capabilities. Therefore, government is implementing a holistic approach to strengthen education and training system, from early childhood to tertiary level. Technical and vocational training is being provided as an alternative for individuals in strengthening full potential.

The attention in higher education is growing in many nations across the globe. Government efforts in strengthening human capital via education are increasing. In most of the studies on human capital development, the economic growth process as strictly endogenous and there are two factors concerned that the growth theory introduced by these economist is differ from one another. Adam Smith states that the efficiency of labor is important to economic growth. Karl Marx’s view is that a capitalist profit attained from the utilization of labor, a profit oriented organization.

According to Stanley and Randy (2007), Adam Smith viewed that growth process as strictly endogenous and there are two factors contribute to economic growth, which is, division of labor and capital accumulation on labor productivity. These two factors have a positive relationship that could lead to a higher labor productivity. Adam Smith stands that the key of labor productivity growth is where the dependences of division of labor to the extent of market and capital accumulation. A country’s economic growth depends on the number of productive labor and unproductive labor as this shows different level of growth between countries. In an economic that has more productive labor tends to have a highly educated labor is faster than low educated labors (Nahar and Zubaidah, 2015). There are 20 public universities and 450 private higher learning institutions that include 25 universities, 22 college universities and 5 branch campuses (Ministry of Higher Education, 2011). The human capital theory shows that the existence of positive relationship between human capital, education and wages by individuals (Nasir and Tendot, 2014).

The aim of this study is to obtain about education and human capital in contributing the Malaysian economy growth. This research is done to see the relationship between education and human capital on the economic growth of Malaysia. The role of education may be different throughout the Malaysian growth. The central issue of this study is that educational attainment can lead to the increase in economic growth and what the gains of education. Besides that, the positive relationship shows that education and human capital is vital in the process of economic development. Therefore, through this research, we would be able to examine the importance of education that enhances human capital in achieving sustainable economic growth.

2. LITERATURE REVIEW

2.1. Classical Theories

The economic growth school of thoughts begins with classical economist. In the era of classical economics, which are, Adam Smith, David Ricardo and Karl Marx. The main question concerned that the growth theory introduced by these economist is differ from one another. Adam Smith states that the efficiency of labor is important to economic growth. David Ricardo states the theory of distribution and capital accumulation. Karl Marx’s view is that a capitalist profit attained from the utilization of labor, a profit oriented organization.

2.1.1. Adam smith

According to Stanley and Randy (2007), Adam Smith viewed that growth process as strictly endogenous and there are two factors contribute to economic growth, which is, division of labor and capital accumulation on labor productivity. These two factors have a positive relationship that could lead to a higher labor productivity. Adam Smith stands that the key of labor productivity growth is where the dependences of division of labor to the extent of market and capital accumulation. A country’s economic growth depends on the number of productive labor and unproductive labor as this shows different level of growth between countries. In an economic that has more productive labor tends to have a

<table>
<thead>
<tr>
<th>Years</th>
<th>Life expectancy at birth</th>
<th>Expected years of schooling</th>
<th>Mean years of schooling</th>
<th>GNI per capita (2011 PPP$)</th>
<th>HDI value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>63.1</td>
<td>9.0</td>
<td>4.4</td>
<td>7569</td>
<td>0.577</td>
</tr>
<tr>
<td>1985</td>
<td>69.5</td>
<td>9.8</td>
<td>5.6</td>
<td>9069</td>
<td>0.619</td>
</tr>
<tr>
<td>1990</td>
<td>70.7</td>
<td>9.7</td>
<td>6.5</td>
<td>9767</td>
<td>0.641</td>
</tr>
<tr>
<td>1995</td>
<td>71.8</td>
<td>10.2</td>
<td>7.6</td>
<td>13,432</td>
<td>0.681</td>
</tr>
<tr>
<td>2000</td>
<td>72.8</td>
<td>11.9</td>
<td>8.2</td>
<td>14,493</td>
<td>0.717</td>
</tr>
<tr>
<td>2005</td>
<td>73.7</td>
<td>12.7</td>
<td>8.9</td>
<td>17,149</td>
<td>0.747</td>
</tr>
<tr>
<td>2010</td>
<td>74.5</td>
<td>12.7</td>
<td>9.5</td>
<td>19,716</td>
<td>0.766</td>
</tr>
<tr>
<td>2011</td>
<td>74.7</td>
<td>12.7</td>
<td>9.5</td>
<td>20,555</td>
<td>0.768</td>
</tr>
<tr>
<td>2012</td>
<td>74.8</td>
<td>12.7</td>
<td>9.5</td>
<td>21,048</td>
<td>0.770</td>
</tr>
<tr>
<td>2013</td>
<td>75.0</td>
<td>12.7</td>
<td>9.5</td>
<td>21,324</td>
<td>0.773</td>
</tr>
</tbody>
</table>
higher growth and viz. Therefore, productivity never depends on by lacking in technological knowledge whereas adequate capital that drives productivity.

2.1.2. David Ricardo

In David Ricardo’s model states that economic growth depends on supply of land, capital stock, labor and agricultural technology. David Ricardo modified Adam Smith’s model. He includes diminishing marginal productivity of land. The motive of profit influenced the outcome of the market and allocation of resources. The assumption of this model is that agricultural sector contributes most consumption from land (variable). Land is known as a fixed variable that associate with diminishing rate of return and variable in quantity. David Ricardo begins with a growing population. He states that as with an increase in population and capital indicates that production of food will increase. As a result, an increase in demand for food will happen and raises the wages and saved capital in higher proportion. David Ricardo has contributed on few important models in his book “The Principal of Political Economy and Taxation.” Firstly, an assumption of model that economic growth stagnates as it reaches a certain level. Secondly, income distribution in terms of rent, profit, and wage is inter-related in determining then economic growth (Stanley and Randy, 2007).

2.1.3. Marxian

Marx view is on the end of an economic growth. Marx believes that growth does not move on continuously. Whenever a crisis occurs, the economic growth may become stagnated. Marx view economic development in a view of social and history. Labors productivity, labors skill, knowledge in science and technology and environment are the factors contributes towards economic development (Stanley and Randy, 2007).

2.1.4. John Stuart Mill

John Stuart Mill was heavily influenced by David Ricardo. Mill concentrates on the variables such as, capital accumulation, population growth and technology. He agrees on the existences of diminishing return, division of labor and government’s role in contributing towards economic growth. He views capital as a future production that exists from the previously accumulated stock. He also states that not all capital is needed to be employed at once. The division of labor shows that capital equipment can be fully utilized in order to gain more returns to the extent of invention and capital accumulation (Stanley and Randy, 2007).

2.2. Theories of Economic Growth and Development

There are few important models in this thinking. The Harrod-Domar growth model of development economics states that economic growth rate depends on the level of saving and capital output ratio. Schumpeter growth theory explains on quality improving innovations to replace previous technology and by prospective of monopoly rent. Harrod-Domar model states the importance of forming capital by rising economic growth and output capacity.

2.3. Neo-classical Theories

The neo-classical growth theory states that economy is stable and move towards full employment. The models consider that factor of prices to be flexible in the long run that cause factor substitution to respond in price changes.

2.3.1. Joseph Schumpeter

Modern growth theory begins with Joseph Schumpeter. He states that human resources are much more important factor of production that natural resources. He emphasizes on the role of entrepreneur or businessman. He determined that capital will grow faster or slower or involve innovation and changes (Hill & Pearce, 1990).

2.3.2. Solow growth model

Solow growth model (1956) has emphasize on the significance of capital investment for economic growth where the model assumes that technology is exogenously determined the rate of growth to increase the productivity of labors. There is no longer only depends on rate of population growth but add on the progress of rate of technological (Fonsenca and Chi, 2011). Savings and investment are specified as minor roles in economic growth for long term. This model’s fundamental assumptions are reducing marginal productivity of capital, exogenous technical progress and placement of capital and labor.

2.4. Romer’s Growth Model

Romer determined that education could increase human capital through labor force by rising productivity that will result in greater output growth. Romer’s model also emphasize on the investment of the new knowledge as a form of capital. There are two variable, which is, physical capital and technological capital. Romer differentiates human capital (Grossman and Helpman, 1991). Romer introduced the positive spillover effects where firm generate new combinations that affects production possibilities by gaining benefit from rival’s effort.

2.5. Lucas Growth Model

Lucas (1988) states that the level of output is function of stock of human capital. Human capital is knowledge that acquire through education. The first model of Lucas is human capital accumulation and the second model is labor accumulation of human capital with two main variables; human capital and physical capital. Physical capital is goods consumption of same technology and human capital is attained from different technology. Human capital is a vital in producing the next generation of human capital development. Lucas model function shows that higher productivity in education increases the marginal product of labor, higher wage rate and increase in economic growth (Tehrani, 2014). Enrolment in tertiary education is shown in Table 2.

According to Muhammad et al. (2012), says that economic growth needed to be earned by taking into proper strategy in order for Malaysia to achieve high income nation by 2020. Successful implementation of ETP will help Malaysia to gain significant changes to be on par as the other high income nation countries. Improvements in investment of human capital needed to be taken as a crucial point to achieve the desired state. They also viewed that a knowledge based economy would lead Malaysia to a rapid rate of growth and attain international competitiveness and human capital is the main source towards that achievement. They suggest that a lifelong learning system should be introduced to enhance skills and knowledge requirement from time to time and to follow up on the trend of technology change and work processes.
According to Nagaraj et al. (2009) that there is a significance influence of human capital and income that is affected through the education and training. The difference occur within the human capital determined the income gain. Household nowadays usually allocate more investment in education (human capital) for their children to enhance future attainments.

Human capital role has primarily become more important in contributing towards economic growth and development. More educated population has risen up human capital needed to compete globally. In Malaysia, the allocation for education and training is high which more than 20% of the total government expenditure during the period of 2000-2003. The enrolment of students into tertiary education has increase from the period of 2000 to 2010 (Ismail and Yussof, 2010).

### 3. RESEARCH METHODOLOGY

#### 3.1. Type and Design of Study

Research design is an important guideline to make the flow of research process to be in a systematic way. Few aspects that involves in this research design are data collection, processing, and writing of the report. This is carried out from the research problems and research aims to see on education and human capital aspect in Malaysian economic growth.

#### 3.2. Research Instrument

The research instrument used in this research is a quantitative method through the questionnaire forms which are distributed to the 100 selected respondents. This is to gain information from the respondents about the relation between education and human capital in contributing to Malaysian economic growth. The questionnaire form is the instrument used by the researcher to collect data on few sections and elements that suits the purpose of this research. The elements in the questionnaire forms are done by referring to the questionnaire from past researchers and modified according to the suitability of current research objectives.

#### 3.3. Research Model

This research uses multiple linear models. There are one dependent variable and two independent variables in this model.

Dependent variable: Economy growth ($Y$),

Independent variable: Education ($X_1$), human capital ($X_2$),

The multiple linear equation of this model is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \mu$$

Where,

$Y =$ Economy growth,

$X_1 =$ Education,

$X_2 =$ Human capital,

$\mu =$ Error,

$\beta_0 =$ Intercept point,

$\beta_1, \beta_2 =$ Partial coefficients to $X_1$ and $X_2$.

#### 3.4. Method of Data Analysis

Data is analyzed by using statistical analysis based on the respond from questionnaires. The software used for the data analysis is Statistical Package for the Social Sciences (SPSS) version 22. This software helps in the process of interpretation of the collected data in order to test the significance of dependent variable and independent variable accurately. There are two types of test that will be carried out in this research namely Pearson correlation test and regression test.

##### 3.4.1. Pearson correlation test

Correlation measures the degree/strength between two or more variables. The correlation analysis does not take into account which variable that influences it. The strength of correlation is based on the value of $r$. The higher correlation coefficient, $r$ shows a strong positive correlation as the value approaches positive 1.

##### 3.4.2. Regression test

Regression test measures the degree/strength of relationship between one dependent variable and more than one independent variable. The degree/strength between the dependent variable and independent variables depends to the value of $R^2$. $R^2$ or the determining coefficient is the ratio of change (variation) of the dependent variable, economy growth ($Y$) which is explained together by the independent variables, education ($X_1$) and human capital ($X_2$).

### 4. DATA ANALYSIS AND FINDINGS

#### 4.1. Mean and Standard Deviation of Variables

This section will discuss about mean, standard deviation to evaluate the highest level and the lowest level between the variables of education, human capital and economic growth in Malaysia.

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**Table 2: Enrolment in tertiary education 2000-2010**

<table>
<thead>
<tr>
<th>Education level</th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
<td>Private</td>
<td>Total</td>
</tr>
<tr>
<td>Certificate</td>
<td>23,816</td>
<td>81,754</td>
<td>105,570</td>
</tr>
<tr>
<td>Diploma</td>
<td>91,398</td>
<td>117,056</td>
<td>203,454</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>170,794</td>
<td>59,932</td>
<td>230,726</td>
</tr>
<tr>
<td>Master</td>
<td>24,007</td>
<td>2174</td>
<td>26,181</td>
</tr>
<tr>
<td>Ph.D</td>
<td>3359</td>
<td>131</td>
<td>3490</td>
</tr>
<tr>
<td>Total</td>
<td>313,374</td>
<td>261,047</td>
<td>574,421</td>
</tr>
</tbody>
</table>

Source: Malaysia, 2010
4.1.1. Mean and standard deviation of education
Based on the Table 3, statement on does education plays an important role in your future attainments has a mean of 3.0100. Next, receiving higher education indicates higher income shows mean of 3.4000. A mean of 3.2400 is on wether current level of education is sufficient in enhancing your career development. Does government provide enough financial aid and assistance for your education development from time to time has a mean of 2.8500. Lastly, does your current level of education shows the skills and requirements needed by your employer shows a mean of 3.1600.

4.1.2. Mean and standard deviation of income inequality
From the Table 4, gap between the high paid job and low paid job influence by education level with (mean = 3.2400). Urban area and rural area’s education and skill has relation in getting higher income with (mean = 3.4800). The statement of does your monthly income enough for you and your entire family has (mean = 3.0900). Secondary and tertiary sector promises high income shows (mean = 3.4800). Lastly, on the statement does your skills sufficient within the working scope shows (mean = 3.1700).

4.1.3. Mean and standard deviation of economy growth
From Table 5, (mean = 3.1700) is from the statement does Malaysia is growing in the aspect of economy. Does education can bring towards greater economic growth in Malaysia shows (mean = 3.6400). Does strong human capital can bring towards greater economic growth in Malaysia shows (mean = 3.4900). As on the statement wether the role of government is important to achieve economic growth in Malaysia with (mean = 3.6400). On do you think Malaysia is stable in its economic growth shows (mean = 3.400).

4.2. Empirical Data Analysis and Findings
4.2.1. Analysis of Pearson correlation
According to the hypothesis 1 (H₀) that was developed in this research study, H₁: There is a positive relationship between education and human capital in Malaysian economy growth. H₂: There is a negative relationship between education and human capital in Malaysian economy growth.

Analysis of Pearson correlation shows a positive relationship between the variable of education and economy growth in Malaysia. There is a strong relationship between education and economy growth in Malaysia where r = 0.710, P < 0.01 is shown in Table 6. The higher is the education, the higher is the economic growth in Malaysia. Therefore, alternative hypothesis (Hₐ) is accepted showing that there is a positive relationship between education and economy growth in Malaysia. This research corresponds to research done by Rahimah et al. (2014).

According to the hypothesis 2 (H₂) that was developed in this research study, H₃: There is a positive relationship between human capital and economy growth in Malaysia.

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean±Standard deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does education plays an important role in your future attainments?</td>
<td>3.0100±0.7850</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Does receiving higher education indicate a higher income?</td>
<td>3.4000±0.7250</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Does your current level of education is sufficient in enhancing your</td>
<td>3.2400±0.8890</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>career development?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does government provide enough financial aid and assistance for your</td>
<td>2.8500±0.7700</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>education development from time to time?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your current level of education shows the skills and requirements</td>
<td>3.1600±0.8610</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>needed by your employer?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean±Standard deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the gap between the high paid job and low paid job influence by</td>
<td>3.2400±0.7930</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>education level?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does urban area and rural area’s education and skill has relation in</td>
<td>3.4800±0.7310</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>getting higher income?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does your monthly income enough for you and your entire family?</td>
<td>3.0900±0.6050</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Does secondary and tertiary sector promises high income?</td>
<td>3.4800±0.7310</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Does your skills sufficient within the working scope?</td>
<td>3.1700±0.7660</td>
<td>2.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean±Standard deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does Malaysia is growing in the aspect of economy?</td>
<td>3.1700±0.6520</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Does education can bring towards greater economic growth in Malaysia?</td>
<td>3.6400±0.7180</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Does strong human capital can bring towards greater economic growth</td>
<td>3.4900±0.7320</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>in Malaysia?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In your opinion, is the role of government is important to achieve</td>
<td>3.6400±0.7180</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>economic growth in Malaysia?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you think Malaysia is stable in its economic growth?</td>
<td>3.4000±0.7250</td>
<td>2.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>
H₀: There is a negative relationship between human capital and economy growth in Malaysia.

Analysis of Pearson correlation shows a positive relationship between the variable of human capital and economy growth in Malaysia. There is a very strong relationship between human capital and economy growth in Malaysia where \( r = 0.896, P < 0.01 \) is shown in Table 7. The higher is the human capital, the higher is the economic growth in Malaysia. Therefore, alternative hypothesis (H₁) is accepted showing that there is a positive relationship between human capital and economy growth in Malaysia. This research corresponds to research done by Ismail and Yussof (2010).

4.2.2. Analysis of regression

\[
Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \mu
\]

\[
Y = 0.374 - 0.434X_1 + 1.352X_2 + \mu
\]

(0.134) (0.077) (0.090)

Table 8 is a multiple linear regression model. Based on the model above, \( Y \) is the dependent variable (economy growth). There are two independent variables namely \( X_1 \) (education) and \( X_2 \) (human capital). \( \beta_1 \) correlations is the intercept point with the value of 0.374. Next, \( \beta_1 \) is the partial coefficient to \( X_1 \) with the value of −0.434 and \( \beta_2 \) is the partial coefficient to \( X_2 \) with the value of 1.352. Finally, \( \mu \) is error? The figures that are stated in the brackets; (0.134), (0.077) and (0.090) are the values of standard error. This model shows a negative relationship between the economy growth and education. In contrast, economy growth and human capital shows a positive relationship. 0.374 indicates economy growth is 0.374 when education and human capital are zero or constant. In addition, −0.434 indicates that if there is a decrease of 1% in education, it will affect the economy growth to decrease as much as 56.6% assuming that other independent variable (human capital) is constant. 1.352 indicates that if there is an increase of 1% in human capital, it will affect the economy growth to decrease as much as 135.2% assuming that other independent variable (education) is constant.

Table 9 shows the value of \( R^2 \), 0.851 where 85.1% changes in the dependent variable \( Y \), economy growth, can be explained together with the independent variables \( X_1 \), education and \( X_2 \), human capital, while the remaining 14.9% can be explained by the other variables apart from \( X_1 \), education and \( X_2 \), human capital.

5. CONCLUSION

This research’s general objective is to study about education and human capital in contributing the Malaysian economy growth. The specific objective is to identify the importance education in adding and creating value to economic growth, determine the relationship of education and human capital and identify whether education can lead to economic growth through the investment of human capital.

A total of 100 respondents involve in this research within the area of Bahau, Negeri Sembilan. These respondents consist of working group people. The respondent’s features used to explain through demographic factors such as age, gender, ethnic, marital status, number of family members, level of education, highest educational level, occupation and gross household income (RM). The variables used in this research are education and human capital which has been adapted according to the current research suitability. According to this research, the total respondents consist of 100 people with equal participation from both 50 males and 50 females. There are four ethnics involved in this research namely Malay, Chinese, Indian, and other ethnics such as Portuguese, Iban, Dusun and Bidayuh where majority involvement is Chinese ethnicity.

Based on the correlation test, the analysis shows that there is a positive relationship between the independent variable education and economy growth in Malaysia. The correlation between the independent variable is value \( r = 0.710, P < 0.01 \). Therefore, alternative hypothesis (H₁) is accepted corresponds to research done by Nasir and Norlinda (2014). Based on the correlation test,
the analysis shows that there is a positive relationship between the independent variable human capital and economy growth in Malaysia. The correlation between the independent variable is value \( r = 0.896, P < 0.01 \). Therefore alternative hypothesis \((H_1)\) is accepted with the corresponding research done by Ismail and Yussof (2010).

The regression test shows that value of \( R^2 = 0.851 \). This represents 85.1% changes in the dependent variable economy growth together with independent variables education and human capital while the rest of 14.9% can be explained by other variables excluding education and human capital.

In conclusion, there are two hypotheses that are accepted; there is a positive relationship between education and economy growth in Malaysian and there is a positive relationship between human capital and economy growth in Malaysia. Education and human capital shows a significance positive outcome into economic growth. There is a strong relation between education and human capital that involves a better knowledge, training and support in economic growth (Suriyani et al., 2012). Higher education shows more skilled and productive worker. In order to improve education quality, the effectiveness of education input has to be increase.

In terms of research methodology, this research explained the findings based on the questionnaire survey approach. The questionnaire forms have been distributed directly to 100 respondents whom are from various category of working people at Bahau, Negeri Sembilan. The usage of reliability test and statistical analysis describes in general about the incidence of education and human capital that influences the economy growth in Malaysia.

### REFERENCES


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Table 9: Model summary

<table>
<thead>
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<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Standard error of the estimate</th>
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<td>0.851</td>
<td>0.848</td>
<td>0.25472</td>
</tr>
</tbody>
</table>

*Predictors: (Constant), capital, education