

Role of Education in Human Capital of Pakistan

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Abstract: *This study is an effort to check the impact of education on Human Capital in Pakistan. The theory is, increase in education will increase the Human Capital. We use annual data of education and health from 1970 to 2015 to apply our results according to the theory. By using OLS method we make analysis of our model and run the regression of education and health on the human capital in Pakistan.*

Key Words: *Human capital, Education, Health.*

1. INTRODUCTION:

Education is most important for building in valuable future. Main components of human capital are education, health, professional training, skill development, information technology, power planning and migration. Human capital depends on education according to Becker (1962). education technology, health all are main components of human capital.

Through advancement in education unemployment, poverty, corruption can be removed and economy can be developed through higher level of education. Income increase due to high level of education and peoples can developed their living standard. Educated peoples easily can get better job and can get more income. Higher level of education cause economic development of a country these economies which are developing their population is low and woman also participate in the economic development of the country. In such type of economies woman have better opportunities for getting education and participate in the development of country. Expenditure can also cause human capital development (Nazli & Nasir 2000).

If labors are better rent and can perform better the production capacity of such economies will increase more human capital has very important role in economic development. Economic growth can be measure through per capita income of an economy. From the past few decades due to increase in per capita income cause the expansion of human capital (Benhabib & Spiegel 1994).

Economic growth has increasing by new concepts and technology in developing countries. Production getting more attraction to invest in their own country and productivity of imports will gradually low.

2. PROBLEM AREA:

In Pakistan labor force is talented but not educated and trained scientifically because of low level of education and skills. In educational sector, there is low capacity of skills and knowledge in using of available resources and technology to overcome the facing problems. In addition, there is a gap of financial, and government policies due to poor administration.

3. OBJECTIVE OF THE STUDY:

The objective of this study is to check the role of education and health on human capital of Pakistan.

4. RESEARCH QUESTION:

What are the effects of education and health on human capital?

5. SIGNIFICANCE OF THE STUDY

The study may be helpful with respect to the following.

- It would be helpful for the policy makers to adopt proactive procedures before implementation of intellectual property rights.
- It helps concern department to improve the level of education to meet the international standards.
- This study provides opportunities for further research to extending this problem through quantitative measures.

6. LITERATURE REVIEW:

The importance of education and training programs providing the human capital needed for economic growth in Arab countries, Ali Abdel Gadir (2002) also discussed the expenditure on education in these countries. Researcher focused on investment in education, as education cause in enhancing technological capacity and reducing unemployment on the basis of the analysis, the paper suggest a reform strategy that comes to improve the quality of education systematic.

Using data which is recently available by the World Bank, have considered the relationship between depreciation and growth. By the results they conclude and pointed out, we would like to emphasize the following; increasing rate of people, increasing capacity, reduction and increased long-run growth also accelerates depreciation (Gylfason & Zoega, 2003).

A human capital model is developed by Nazli and Nasir (2000) they have taken the per capita income as a dependent factor which is depend on number of schools and training of teacher. According to him higher education will result in higher pays to teachers Staff.

This paper shows the theoretical literature on endogenous growth and empirical literature on research and development, productivity growth and productivity convergence. They have provide base for reduce form equation for total factor of productivity and research and developments effects the innovation. Research and development and total factor of productivity, research and developments are more beneficial from the endogenous growth of theory (Aghion P. & P. Hewitt, 1998).

International technology depends upon the availability of human capital and it exists due to education. Education has significant impact on human capital (Benhabib & Spiegel, 1994).

The role of human capital is to use the technology for progress of a country. According to them the natures of economic growth in Pakistan have the endogenous nature. Government policies for human capital development have poor performance in Pakistan. Because population is increasing day by day in Pakistan and the rate of increasing population is more than the rate of increase in education. Labors are not educated so this shows negative impact on growth (Abbas & foreman-peck, 2008).

The factor for theoretical research on human capital which is according to endogenous growth models is described by Lucas. Study shows that by increasing the investment in human capital and constant return can be provided (Lucas, 1988).

The human capital as a factor of production uses its skills in one profession. It can be useful for other organization (Uzawa, 1965).

Growth theory is that in order to live and positive growth rate of production in the long period of time. Due to advancement of the technological knowledge goods can be produces in better way and in large quantity and new process of providing goods can be introduced. Growth model is further developed by Solow and swan. According to them if technology not uses the production will be according to diminishing returns which will result economic growth to stop (Solow & Swan, 1956).

The higher level of education is more beneficial due to which a person knowledge increase and can get more income than others low educated persons. Income level is changed at different level of education (Irfan & Khan, 1985).

Lucas has given for empirical research on human capital which is according to endogenous growth models. The study showed that by increasing an investment in human capital and constant return is avoided (Lucas, 1988).

The economic growth on research and development in long run has been discussed in earlier studies. According to the study research and development technological changes occur in economies and it also enhances total factor of production which is cause of economic growth (Romer, 1990).

Infra-structure and economic growth are highly correlated which each other due to increase in infra-structure and economy can be developed their level of production (Canning D. & P. Pedroni, 1990).

Economic growth and schooling are highly correlated across every country. In a model with finite lived individual who choose schooling effects growth, but by increasing technological growth increase more and technology improves by more investment in education (Barro, 1991).

Infrastructure, human capital and economic growth is discussed by canning that they are correlated with each other (Canning D., 1999).

The relationship between structures of capital technological progress is discussed by nelson and Phelps. Due to technology innovation, education is getting higher. So, people should use more resources for human capital formation. Lake of technology can be removed by investing more in education (Nelson & Phelps, 1966).

7. RESEARCH METHODOLOGY:

This research has been an attempt to check the effects of education on human capital of Pakistan.

Nature of the study:

This research is academic research and quantitative research.

Variables

Depended variables: Human capital
Independent Variables: Education, Health

Hypothesis

H0: There is negative relationship between health and human capital.

H1: There is positive relationship between health and human capital.

H0: There is negative relationship between education and human capital.

H1: There is positive relationship between education and human capital.

Data Analysis:

The data is analyzed by using regression model to find out the relationship between education, health and human capital.

$$HC = \beta_0 + \beta_1 Edu + \beta_2 Hlth + \epsilon$$

HC = Human capital

Edu = Education

Hlt = Health

Data Sources

The data which is used for analysis is time series. It is taken from 1970 to 2015 on annual basis. The main sources of both public and private sector data collection in detail are given below.

Economic survey of Pakistan.

Household Integrated Economic Survey (HIES).

Pakistan Social Living Standard Measurement (PSLM).

Pakistan Bureau of Statistics.

The dependent variable is measured in term of labor productivity. Per labor GDP is used as a proxy for human capital. We used data of public expenditure and private expenditure to GDP ratio for education. It is a huge work.

For public expenditure data is readily available on Economic Survey of Pakistan but data on private expenditure to GDP is not published by any organization. For capturing this indicator HIES data is used. The HIES data is collected by Pakistan Bureau of Statistics. The data covered different socio economic indicators like literacy rate, primary enrollment proportion of household with access to water etc. The survey mainly focuses on house hold expenditure on various needs. One of heads is expenditure on education. The household percentage expenditure on education of the total expenditure for whole country is taken. As the base for total household in the country. HIES is available on the official website of PBS since 2004. As HIES is conducted on alternate year. Full time series data is not available. The missing years are estimated using extrapolation method. Prior to 2014 HIES data is collected from PBS library.

After collecting HIES data from 1970-2015 and extrapolation completed, next step is the compatibility of private expenditure data on education with public data. For the purpose, this percentage data is multiplied with each year private consumption data in order to figure out total household expenditure on education. Division by GDP and addition to public expenditure to get final value. Similarly this process is carried out for health expenditure data. It is worthy to note that health expenditure data is not directly available in the HIES. HIES cover health data under the heads of miscellaneous expenditure of the household. Although health expenditure data is also collected from National Health Account of PBS but not used due to compatibility problem.

8. RESULTS AND DISCUSSION:

Dependent Variable: Y

Method: Least Squares

Date: 13/12/2017 Time: 21:20

Sample: 1970 2015

Included observations: 46

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	99793.05	4432.877	22.51	0.000
EDU	18564.1	3572.371	5.26	0.000
HLT	43992.54	5291.836	8.31	0.000

R-squared 0.8354 F-statistic 109.15
Adjusted R-squared 0.8278 Prob (F-statistic) 0.000

The upper tables show the positive relationship between the variables and shows the impact that the education is the basic component of human capital.

The results indicate that, education are positively influences the possibility of their involvement in economic activity. In Pakistan, education likely to participate in economic activities. Education plays an important role in human capital in Pakistan. The theory states that education is very important for developing countries. Our study support the theory empirical results are significant.

The developing country like Pakistan cannot make economic growth without education. In short, we can conclude that with the increasing level of education will increase the human capital and national income.

Similarly health is also playing a significant role on the prosperity of people. The above result shows that health has a positive and significant impact on human capital.

9. CONCLUSION AND RECOMMENDATION:

It is concluded that high level of education and health have positive impact on human capital. Therefore, null hypothesis have rejected according to which education and health have negative relationship with human capital. Education play very important role to raise level of human capital in Pakistan therefore high level of education is very important for development of an economy hence we have come to know that alternative hypothesis are accepted that there is positive relationship between education, health, and human capital,

10. SUGGESTION:

The suggestions have to improve the level of education in Pakistan.

- By improving the quality of education, the government spent more on education.
- Government may focus in giving scholarships to enhance the level of education in the less developed areas of a country.
- Merit and appropriate allocation of teaching staff may be first priority in educational institutions.
- Research, professional education and experience may be given incentives in terms of advance increments, promotion and performance based awards.

11. LIMITATION:

This study consists on secondary data from 1970 to 2015 collected from Economic survey of Pakistan. This study is limited on this time duration due to lack of availability of the data.

The second limitation in this study is that there are many other variables that can evaluate human capital but in this study we only include the health and education because we want to test only the role of these variables in human capital of Pakistan.

12. FUTURE GAP:

The world is becoming global village sharply in this modern women will participate not only in domestic institution but in foreign countries also researchers should make researches on the sources and determinants of role of education in human capital.

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