AN EMPIRICAL STUDY ON HUMAN CAPITAL DEVELOPMENT AND HOW EDUCATION PLAYS A VITAL ROLE IN IT

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ABSTRACT

The structural development of a nation includes development of people and the organization of Human resources in its core. The traditional elements of growth like capital, natural resources, foreign aid and international trade, etc. they does play part but men’s power ultimately derive optimum utilization from them. All studies in this field recognize the importance of human capital factor. This paper presents a generalized concept of human as capital and how education plays an important role for its development.

INTRODUCTION

Recent challenges such as globalization, a knowledge-based economy, and technological evolution, have promoted many countries and organizations to seek new ways to maintain competitive advantage. In response, the prevailing sense is that the success depends in large part on the people with higher levels of individual competence. In the present Globalization scenario people are becoming valuable assets and can be recognized within a framework of human capital. Concept of human capital is basically the mixture of human and capital. In the economic perspective, the capital refers to ‘factors of production used to create goods or services that are not themselves significantly consumed in the production process’ Along with the meaning of capital in the economic perspective, the human is the subject to take charge of all
economic activities such as production, consumption, and transaction. On the establishment of these concepts, it can be recognized that human capital means one of production elements which can generate added-value through inputting it.

**BASIC CONCEPT**

The origin of human capital goes back to the emergence of classical economics in 1776, and thereafter, Theodore Schultz (1961) recognized the human capital as one of important factors for a national economic growth in the modern economy. After that many authors, theorists gave their contribution for human capital and they recognized human capital as the only asset that is not passive.

Human capital development plays an important role in the economic development of a country. Human capital development implies the development of skills and abilities among the population of the country. It is believed that the reason that the Third world countries have remained underdeveloped is due to the underdevelopment of its human resources. The constitution of India gives importance to the human resources. Before explaining the Human capital formation it is important to discuss about the human capital. Human capital is defined as a capital asset which yields a stream of economic benefits over their working life for the economic development of an economy, we need physical resources like land, building etc. and also Human capital like engineers, doctors etc. Every country need good human resources to generate Human capital. An improvement in the skills and physical capacities of the people constitutes an increase in the Human capital, as it enables them to produce as well as optimum utilization of organization’s resources. Organization structure of an organization has four elements which affect it, these are; Strategy, Organization environment, Technology, Human resource. Human resources of an organization is mainly includes the availability of human capital. Human capital development in developing countries is a continuing process through better education, Health, on the job training, Migration. Thus Human capital has played an important role in the designing of organization structure of the organization. Education has great impact on the Human capital development it adds more skilled and efficient Human workforces to the human capital each year through better education system in a country and helps them to be more innovative in their work and also helps them to provide more job opportunities through providing them better education and training.
ROLE OF EDUCATION IN HUMAN CAPITAL DEVELOPMENT

Education is an economic good because it is not easily obtainable and thus needs to be apportioned. Economists regard education as both consumer and capital good because it offers utility to a consumer and also serves as an input into the production of other goods and services. As a capital good, education can be used to develop the human resources necessary for economic and social transformation. The focus on education as a capital good relates to the concept of human capital, which emphasizes that the development of skills is an important factor in production activities. It is widely accepted that education creates improved citizens and helps to upgrade the general standard of living in a society. Therefore, positive social change is likely to be associated with the production of qualitative citizenry, this increasing faith in education as an agent of change in many developing countries. Human capital theory emphasizes how education increases the productivity and efficiency of workers by increasing the level of cognitive stock of economically productive human capability which is a product of innate abilities and investment in human beings. The provision of formal education is seen as a productive investment in human capital, which the proponents of the theory have considered equally or even more equally worthwhile than that of physical capital. Rationality behind investment in human capital is based on three arguments:

i.) The new generation must be given the appropriate parts of the knowledge which has already been accumulated by previous generations.

ii.) New generation should be taught how existing knowledge should be used to develop new products, to introduce new processes and production methods and social services.

iii.) People must be encouraged to develop entirely new ideas, products, processes and methods through creative approaches.
iv.) Investment in Human capital formation is helpful in the designing of Organization structure.

At present many of the developing nations have thus realized that the principal mechanism for developing human knowledge is the education system. Thus, they invest huge sum of money on education not only as an attempt to impact knowledge and skills to individuals but also to impart values, ideas, attitudes and aspirations which may be in the nation’s best developmental interest. For example Countries such as Hong Kong, Korea, Singapore, and Taiwan have achieved unprecedented rates of economic growth via human capital development while making large investments in education. Human capital development not only provides monetary benefits to Human capital but provides some nonmonetary benefits also like social benefits.

MAJOR CHALLENGES IN HUMAN CAPITAL DEVELOPMENT IN INDIA

One of the major challenge in effective education system is that What types of education should be emphasized, to what degree, and how soon. Some economist are of the view that the developing countries do not yet have an effective demand for a large number of educated workers; and they cannot afford to pay for as much education as can rich countries rather than on a greatly expanded system of formal education. In view of its high cost and the problems of absorption that it is creates, even the case for universal primary education is questionable. Some of the major challenges are as follow:

- Brain drain
- Poor quality of health care
- Poor investment in human capital
- Migration
- Lack of skilled manpower
- Asymmetric information
- Education system is less effective

LITRERARURE REVIEW

The literature review provides an insight into the issue of role of education in human capital formation taking into consideration the effect of education on the human capital formation in an economy. Many theorist and authors have given their opinion about the role of education in human capital formation. Some of these are Adam smith, Theodore W. Schultz, G. Becker, Robert, Rosenzweig etc. It is important to understand the current literature in relation to role of education in human capital formation.
Adam Smith in the Wealth of the Nation (Smith, 1776) set the stage for the study of human capital, he identifies the acquired and the useful activities of individuals and economic process of the country. Smith (1776) reflects such progressive contemporary thought when he wrote that by educating its people, a society:

Drives no inconsiderable advantage from their instruction. The more they are instructed, the less liable they are to the delusions of enthusiasm and superstition, which, among ignorant nations, frequently occasion the most dreadful disorders. An instructed and intelligent people besides, are always more decent and orderly than an ignorant and stupid ones. (Page 68)

Human capital is the concept introduced by Nobel laureate Theodore W. Schultz. According to Schultz (1961, 1971), forgone income comprises the greater part of the cost of building. Human capital. However this finding cannot be generalized as in many countries the lack of the national education capabilities lead to the significant number of the student seeking education abroad, the dominant part of the investment in human capital. His monograph The Economic value of education focused attention on the education as subject worthy of concentrated study of economist. Robert (1991) developed a human capital model which shows that education and the creation of human capital was responsible for both the differences in labour productivity and the differences in overall levels of technology that we observe in the world. Gary S Becker (1975) developed a theory of human capital formation and analyzed the rate of return to investment in education and training on growth. There is overwhelming evidence at the micro level, particularly at the firm and worker level, that education enhance productivity and hence earnings.

According to Rosenzweig (1990) as a general rule, high-income countries have been characterized by low fertility and high levels of human capital; low-income countries are characterized by high fertility and low levels of human capital. According to Welch (1970) education increase the worker’s speed and quality due to increased knowledge and understanding of the specific tasks within the context of a larger firm structure. In addition the worker makes better decisions about the allocation of resources. Secondly, this acquired knowledge can then be utilized to innovate and to create technological developments. Positive changes in technology will improve the production of materials and the communication of information. An educated labour force will be able to adapt to technology change. Therefore this human capital investment will reduce the costs of production and increase firms’ production possibilities.

In his opinion Landes (1980) argues that:

“The heart of the whole process of industrialization and economic development is intellectual: it consists in the acquisition and application of a corpus of knowledge concerning techniques”.

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Psacharopoulos and Woodhall (1997)\(^5\) asserts that:

Human resources constitute the ultimate basis of wealth of nations. Capital and natural resources are passive factors of production, human beings are the active agencies who accumulate capital, exploit natural resources, build social, economic and political organization, and carry forward national development.

According to economic dictionary (Tahiret al., 1993), human capital means all productive investments in a person such ability, skill, expertise and health as a result of investment towards education, training and health care. Human capital growth, mainly in education is one of the largest sources of economic growth both in the past and in times to come. Based on some research done in the past, human capital has made larger contribution to a country's growth compared to contribution from factories and physical property. Human capital although not tangible will always be the most valuable asset of an individual.Grant (1996)\(^6\) argued that the firm’s collective knowledge resources that are networked, linked, and transferred to the organization define organization structure capital. The seminal work of Grant provided the framework for defining the process of knowledge integration.Benhabib and Spiegel (1994) said that education as a measurement for quantity, availability and human resource quality was the sole method which can be used to analyze the effect or human capital impact on economic growth .Broking (1996)\(^7\), human centered assets refers to skills and expertise, problem solving abilities, leadership style and abilities and everything that is embodies in the employees.

Edvinsson & Malone (1999)\(^8\), human capital includes the abilities, knowledge skills and knowledge of employees and manager. It incorporates knowledge, skills, innovation and the individual employee’s abilities to handle his/her task, and also includes the firm’s value, culture and Philosophy. Lynn (2000)\(^9\), human capital embraces all the skills and capabilities of people working in an organization, it is can be seen as an inventory of individual’s skills and knowledge with an organization.Barney(2002)\(^10\), thought that human capital is collection of training experience, judgment, wisdom relationship and insights from the companies managed and employees.According to Vandenbussche, Aghion, and Meghir (2006), several recent studies suggested that education is important both as an investment in human capital and in facilitating research and development and the diffusion of technologies, with initial phases of education more important for imitation and higher education for innovation.Dean and Kretschmer (2007)\(^11\) argue that we need to accept that human, social, and structural capital are only metaphorically

\(^10\)Barney, J.(2002), Gaining and sustaining competitive advantage (Second Edition), Prentice Hall.
‘capital’ and revert to resource-based or capabilities-based typologies, or alternatively develop a new theory of dynamic capital to account for them. Green (1993)\(^\text{12}\), training is distinguished from formal school and postschool qualifications (which are viewed as education) and is generally defined in terms of courses designed to help individuals develop skills that might be of use in their job. Dearden, Ferri and Meghir (1998), Heckman (1998)\(^\text{13}\). The observed patterns of provision of and participation in training therefore tend to amplify the skills gap rather than compensating for the low levels of educational attainment of many workers when they first enter the labour market. A number of studies point to the potential importance of early intervention even at nursery-education level: early achievement and qualifications appear to be key determinants of future educational attainment and wages. Rastogi (2000) stated that “human capital is an important input for organizations especially for employees’ continuous improvement mainly on knowledge, skills, and abilities.” It is “the knowledge, skills, competencies, and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being”.

Snell (1996) reports:

> ‘If the types and levels of skills are not equally distributed, such that some firms can acquire the talent they need and others cannot, then (ceteris paribus) that form of human capital can be a source of sustained competitive advantage’ (Snell et al 1996: 65).

Agarwala (2003)\(^\text{14}\), substantial studies have been carried out on human capital and their implications on firm performance; results shows that, human capital enhancement will result in greater competitiveness and performance. Griffin and McKinley (1992)\(^\text{15}\), human development is a way to fulfill the potential of people by enlarging their capabilities, and this necessarily, implies empowerment of people, enabling them to participate actively in their own development. Nelson and Phelps (1966), human capital as the primary source of innovation, increasing individuals’ capacity both to produce technical change and to adapt to it. Education levels (human capital stocks) are thus linked to productivity growth, and the returns to human capital accumulation are justified by the separate and crucial role human capital plays in the successful introduction of and the effective adaptation to technological and organizational changes. Lucas (1988), human capital just as an ordinary input in production: the level of output depends on the level of human capital. This implies that the growth rate of output depends on the rate at which countries accumulate human capital over time.


Blaug (1985)\textsuperscript{16}, explains that firms are looking for a “combination of particular personality traits and certain cognitive achievements”. In the economy the different sectors priorities between the human capital approach and the behavioral approach. Engineering firms generally require applicants to have studied engineering at university while business companies employ students from a wide range of background. Business companies use the level of education as a signal of the motivation and ability of its prospective employees. John Dewey (1997)\textsuperscript{17}, states “education is the fundamental method of social progress and reform... through education society can formulate its own purposes, can organize its own means and resources, and thus shape itself with definiteness and economy in the direction in which it wishes to move”. According to Odekunle (2001)\textsuperscript{18}, affirms that investment in human capital has positive effects on the supply of entrepreneurial activity and technological innovation.

According to Ayeni (2003)\textsuperscript{19}, asserts that education as an investment has future benefits of creation of status, job security and other benefits in cash and in kind. Van-Den-Berg (2001)\textsuperscript{20}, Education is seen as an input into the intentional and entrepreneurial efforts to create new technology and new products. Proponents of this view of education point out the close correlation between new product development and levels of education. The countries that are at the forefront of technology also have the most educated population. Vinokur et al. (2000)\textsuperscript{21}, not only one’s productivity but others are affected by the investment of human capital. Through participating in learning activity, the learning participators are likely to easily implement job-seeking activities with increasing the human capital. According to Rosen (1999)\textsuperscript{22}, human capital as ‘an investment that people make in themselves to increase their productivity’. Frank & Bemanke (2007)\textsuperscript{23}, define that human capital is ‘an amalgam of factors such as education, experience, training, intelligence, energy, work habits, trustworthiness, and initiative that affect the value of a worker's marginal product’. Rastogi (2000),\textsuperscript{24} the concept and perspective of human capital stem from that there is no substitute for knowledge and learning, creativity and innovation competencies and capabilities; and that they need to be relentlessly pursued and focused on the firm’s environment context and competencies logic.

\textsuperscript{18}Odekunle, S.O.(2001), Training and Skill Development as Determinant of Workers’.
\textsuperscript{24}Rastogi P.N.(2000), “Sustaining enterprise competitiveness-is human capital the answer?, Human system Management”.

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OBJECTIVES

The study “Human capital development: How Education plays a vital role” has many objectives and all these objectives are need to be study for getting the desired result. Some of these objectives are:

- It is helpful in studying the positive relationship between the education and Human capital development.
- It provides us information that how an efficient education system is important for the economic growth of a country.
- On the basis of our study it is clear that for a developing country it is important to have a efficient education system for enhancing the pace of their economic growth.
- Role of education in increasing the productivity of the workers through providing them education at initial stages.

RESEARCH HYPOTHESIS

H0-Null hypothesis (no positive relationship between education and human capital development)

H1-Alternative hypothesis (positive relationship between education and human capital development)

RESEARCH METHODOLOGY

This paper is a review based article which uses secondary data available in journals reports and government sources; the data provides a prospect to evaluate practices in India in relation with international trends and provides a podium to assemble data on more experimental knowledge about role of education in Human capital development.

CONCLUSION

We need to change our mind while not losing them, making everyone instantly functional, regardless of prior experience. Education is the scorecard on which we can write balance of human capital and development. We need political will for the growth of educated men’s power as education is the mean to progress and development. We have an education system and it can be improved by focusing on the flaws. Last but not least, development of human capital can be achieved through mobilization of domestic resources and above all the energy, skills, talent and creativity of a nation’s own people.

REFERENCE


Rastogi P.N. (2000), “Sustaining enterprise competitiveness-is human capital the answer?, Human system Management”.


