



HUMAN CAPITAL AND INDIA'S GROWTH

"The skills the labour force possesses and is regarded as a resource or asset." Oxford English Dictionary

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Introduction

Human capital is defined in the *Oxford English Dictionary* as "the skills the labor force possesses and is regarded as a resource or asset." It encompasses the notion that there are investments in people (e.g., education, training, health) and that these investments increase an individual's productivity. Today, the term is used as if it were always part of our lingua franca. But it wasn't. Not that long ago, even economists scoffed at the notion of "human capital." As Theodore Schultz noted in his American Economic Association presidential address in 1961 many thought that free people were not to be equated with property and marketable assets.

Human capital is the stock of skills that the labor force possesses. The flow of these skills is forthcoming when the return to investment exceeds the cost (both direct and indirect). Returns to these skills are private in the sense that an individual's productive capacity increases with more of them. But there are often externalities that increase the productive capacity of others when human capital is increased. (Diebolt and Hauptert)

Human capital is a term that economists invented to refer to the productive skills and technical knowledge of workers. It includes individuals' knowledge, skills, and abilities and the values and motivation they have to apply their skills to the organization's goals. Economists and business people call these individual characteristics "human capital" in order to emphasize the importance of employee skills and abilities and the need for organizations to invest in their people, just as they do in physical capital, in order to succeed. As we move into the knowledge economy, human capital has become far more important than physical capital (machinery and equipment) in producing value. (Milanowski and Kimball)

Human capital is a crucial factor that determines productivity of a country and is a key engine of economic growth. For employers it is an important factor that influences the competitive position on the product market. For employee's human capital investment improves their position on the labour market and is an important determinant of individuals' earning capacity and employability. Education is also associated with other personnel and social welfare benefits, including greater happiness, better health and greater longevity (see e.g., Booth and Snower 1996; Temple 2001; Ok and Tergeist 2003).

Evolution of human capital

The concept of human capital goes back at least to Adam Smith. In his fourth definition of capital, he noted: "The acquisition of ... talents during ... education, study, or apprenticeship, costs a real expense, which is capital in [a] person. Those talents [are] part of his fortune [and] likewise that of society" (Smith, 1776). The earliest formal use of the term "human capital" in economics is probably by Irving Fisher in 1897.

It was later adopted by various writers but did not become a serious part of the economists' lingua franca until the late 1950s. It became considerably more popular after Jacob Mincer's 1958 *Journal of Political*



Economy article “Investment in Human Capital and Personal Income Distribution.” In Gary Becker’s *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, published in 1964 (and preceded by his 1962 *Journal of Political Economy* article, “Investment in Human Capital”), Becker notes that he hesitated to use the term “human capital” in the title of his book and employed a long subtitle to guard against criticism.

The concept of human capital has recently received attention from many researchers. They hypothesized that it represents the human factor in the organization, the combined intelligence, skills and expertise that gives the organization its distinctive character. Human capital is the knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being. The aspects of human capital that are of most relevance to the organization’s workforce and productivity are: formal learning (learning leading to a qualification); non-certified learning (on-the-job training, work experience, or other learning not leading to a formal qualification); foundation skills; management skills and leadership skills. Employees’ knowledge and skills are known as human capital. It is the core of intellectual capital that drives business performance. (Ajisafe et al, 2015)

The importance of human capital

Schultz’s article (1961) demonstrates the importance of the concept of human capital in explaining various economic anomalies. Some are easy to figure out, such as why both migrants and students are disproportionately young persons. Some are more difficult, such as why the ratio of capital to income has decreased over time, what explains the growth “residual,” and why Europe recovered so rapidly after World War II. (Schultz, 1961). (Diebolt and Hauptert)

The thrust of human capital management in its entirety is that of improving how organisations employ, deploy and evaluate their workforce. For Youndit (2000), since organisations are undergoing fundamental shifts in the way they conduct business, effective organisations must however view the above thrust seriously. To survive in an environment where, all provide almost the same products and services, the quality of the human element is a major factor. (Olufemi, 2009)

Human capital management is an integrated effort to manage and develop human capabilities to achieve significantly high level of performance. Human capital management practices are set of practices that are focused on organizational needs to provide specific competencies. It is an approach to employee staffing that perceives people as assets (human capital) whose current value can be measured and whose future value can be enhanced through investment.

According to Gartner (2015), it is a "set of practices related to people resource management," specifically in the categories of workforce acquisition, management and optimization. In addition to the traditional administrative tasks, it includes workforce planning and strategy, recruitment on boarding, employee training, reporting and analytics. Human capital is for the purpose of working in an organization for optimum performance.

Organization is an organized group of people with a particular purpose. Performance is defined to include the action or process of performing a task or function seen in terms of how successfully it is performed. When these definitions are put together, we can say organization performance relates to how successfully an organized group of people with a particular purpose perform a function. Essentially, this



is what we are speaking about when we refer to organizational performance and achievement of successful outcomes.

Organizational performance comprises the actual output or results of an organization as measured against its intended outputs (or goals and objectives). According to Richard (2009), organizational performance encompasses three specific areas of firm outcomes: (a) financial performance (profits, return on assets, return on investment, etc.); (b) product market performance (sales, market share, etc.) and (c) shareholder return (total shareholder return, economic value added, etc.). Organizations, irrespective of their related industry, are constantly exposed to competitions.

Jamal and Saif (2011) who opined that firm's human capital has a significant positive impact on organizational performance. Also, Hasanloo (2011) proved that there is a significant relation between human capital value and market values of companies. Huang and Lin (2011) suggested in their study that team work will enhance specific research and development human capital and in turn, increase higher creative performance of teams.

Fan and Lee (2011) observed that research and development firm gained their innovation performance through human capital. Iqbal et. al. (2011) again revealed in their study that human capital practice is positively correlated with employees' knowledge sharing and organizational capability. This view also supported the present study. Dodaro (2012) stated that integrating human capital planning with broader organizational strategic planning is essential for ensuring that organizations have the talent and skill mix needed to cost-effectively execute their mission and program goals.

Al-Ghazawi (2012) revealed that there is a significant impact of staffing, training and development, incentives and retention policy on the effectiveness of human capital, human capital return on investment and human capital value added. To ensure a competitive edge, it is essential to rely on their human capital as a resourceful asset. Designing a strategy to enhance productivity to improve market share of the organization is a critical area of concern (Marimuthu, Arokiasamy, & Ismail, 2009)

1.4 Literature review

The literature on human capital formation is abound with partial equilibrium analyses of production and cost functions of education (see Shri Prakash and Chowdhury (1994), Tilak (1985) and Tilak (1988), as well as of determinants of household expenditure on education (see Tilak (2001a), Tilak (2001b)), Tilak (2001c), Tilak (2002), and Shri Prakash and Chowdhury (1994)). The studies dealing with the production function of education (say, for example, Shri Prakash and Chowdhury (1994)) measure output in terms of 'enrolments and inputs in terms of 'number of teachers employed' and 'value of non-teaching inputs.

Such production functions are obviously useful in determining whether the "production" of education is subject to increasing, constant or diminishing returns and the relationships between the marginal productivities of the teaching and non-teaching inputs. (The cost functions of education are essentially a 'dual' of the production function and serve the purpose of merely confirming the results obtained from the production functions). However, from these essentially technical descriptions of the 'production' of education no policy conclusion of consequence is derivable. In other words, in so far as these studies determine neither the private nor social returns to education, their policy significance is limited.



The studies concerned with the determinants of household expenditure on education (for example, Tilak (2002) also treat education as an end in itself and fall short of explaining expenditure on education in terms of the expected private returns on education. Using state-wise cross-sectional state level data for his regressions, Tilak (2002) explains household expenditure on education in terms of household incomes, and other household characteristics such as educational level of the head of the household, occupation, caste, religion.

Choudhury and Nayak (2011) affirmed that people are the greatest asset, providing the intellectual capital that drives differentiation and value added. Westphalen (2009) opined that human capital can be defined strictly within an economic context as a production factor and Koednok (2011) described it as an economic term used to describe the skills and knowledge that individuals draw upon to generate outputs of value, such as innovation and productivity in job performance.

Moreover, Rephann, Knapp & Shobe (2009) defined it as the stock of knowledge and skills embodied in labor as a result of training and education that improves labor productivity. While, Papadimitriou (2011) affirmed it is investing in the skills and knowledge that faculty and staff need in order to be outstanding teachers, scholars, innovators and leaders. It is the stock of knowledge, habits, social and personality attributes, including creativity, embodied in the ability to perform labour so as to produce economic value. Alternatively, human capital is a collection of resources—all the knowledge, talents, skills, abilities, experience, intelligence, training, judgment and wisdom possessed individually and collectively by individuals in a population.

These resources are the total capacity of the people that represents a form of wealth which can be directed to accomplish the goals of the nation or state or a portion thereof. It is an aggregate economic view of the human being acting within economies, which is an attempt to capture the social, biological, cultural and psychological complexity as they interact in explicit and/or economic transactions.

Moreover, Enyakit, Amaehule & Teerah (2012) described it as the intangible factor of production that brings human intellect, skills and competencies in the production and provision of goods and services. Human capital therefore represents individual's knowledge and skills; it is not owned by the organizations, but it can be rented; it is in the minds of individuals (individual property) and finally, it goes with individual when he leaves the organization. According to Chen, Zhu, & Xie (2004), human capital refers to factors as employees' knowledge, skill, capability, and attitudes in relation to fostering performances which customers are willing to pay for and the company's profit comes from.

Wan (2007) asserts that human capital development policies can enhance employee satisfaction and it is evident from many research studies that employee satisfaction has positive significant relation with employee performance. According to Peccei (2004), satisfied employees are more willing to work hard and put in extra effort on behalf of the organization, thus actively contributing to the overall productivity and effectiveness of the system.

Employee work performance is multidimensional and significant for organizational success (Dyne, Jehn, & Comings, 2002) and effectiveness (Ohly & Fritz, 2010). Work performance is described as synonymous with behavior; it is what people do that can be observed and measured in terms of each individual's experience or level of contribution (Pulakos, Arad, Donovan, & Plamondon, 2000). George and Jones (2008) further indicated that performance can be viewed as an evaluation of the results of a person's behaviour which includes determining how well or poorly a task has been completed.



Performance provides a comprehensive picture of subordinate workplace behaviour (Kacmar, Collins, Harris, & Judge, 2009).

1.5 Human capital and Economic Growth

Human capital and economic growth have a strong relationship. Human capital affects economic growth and can help to develop an economy through the knowledge and skills of people.

Human capital refers to the knowledge, skill sets and motivation that people have, which provide economic value. Human capital realizes that not everyone has the same skill sets or knowledge and that quality of work can be improved by investing in people's education.

Economic growth is an increase in an economy's ability, compared to past periods, to produce goods and services. It can be measured by measuring the percentage in the real gross domestic product (GDP) of a country. For example, suppose a country increased its real GDP at an annual rate of 2.5%. This country is experiencing economic growth and has an increase in the value of all goods and services.

Human capital is directly related to economic growth. The relationship can be measured by how much is invested into people's educations. For example, many governments offer higher education to people at no cost. These governments realize that the knowledge people gain through education helps develop an economy and leads to economic growth.

A company can help increase human capital and increase economic growth as well. For example, consider a computer programmer works at a technology company; she receives on-site training, attends in-house seminars and the company pays for part of her tuition for higher education. If she decides to stay at the firm, she may develop new ideas and new products for the company. However, she may leave the company later in her career and use the knowledge she attained to start a new company. This investment in human capital, then, eventually leads to economic growth.

1.6 Human Capital and India's Growth

Pradhan (2002) finds an interesting paradox in the growth process of the Indian economy, namely, that there is not much change in income inequality even though there are large changes in the educational levels of the population over time. He tries to resolve this paradox by using an applied general equilibrium model to simulate the impact of large changes in access to education on wage inequality. The model results clearly show that even for very large increases in access to education the wage inequality remains unchanged. Apparently, the dominant effect on the skilled labor wage rate is that of the changes in the relative product prices in the world market (i.e., the trade effect), rather than that of increased relative supply of educated labor ensuing from enhanced access to education.

The trade effect on the relative demand for skilled labor has been shown to be very important for India by Wood and Calandrino (2000) also in a SAM (Social Accounting Matrix) based comparative analysis of the impact of trade liberalization on human resources in India and China. Gidling and Robbins (2001) analyze the patterns and sources of changing wage inequality in Chile and Costa Rica during structural adjustment, using an econometric decomposition technique which splits the effects of enhancement of human capital into the 'education price' and 'education quantity' effects. Their exercise shows that the education price effects varied across sectors on account of the variation in the sectoral rates of growth in the demand for educated workers, and this lead to an increase in inequality in Chile despite a large equalizing education quantity effect.



Duflo (2002) in his paper on the effects of educational expansion in Indonesia shows a different impact on the relative wages of skilled labor. Using a two sector - formal and informal – econometric model, he shows that the skilled labor, employed exclusively in the formal sector, suffers a downward revision of relative wages, because the faster increase in human capital is not matched by a corresponding increase in physical capital in this sector. Interestingly, this paper indicates the possibility of there being competing demands of physical and human capital on the investible resources of the government for a mixed economy like India. That is to say, the public sector, which bases its investment decisions on long-term growth rather than on short-term profitability considerations, needs to define a trade-off between augmenting physical and human capital.

Most other general equilibrium studies on the shifts in the relative wages pertain to the U.S.A. Goldin and Katz (1999), Francois and Nelson (1998), Harrigan and Balaban (1999) and Baldwin and Cain (1997) are all concerned with explaining the “paradoxical” effect of educational expansion on the wage inequality – i.e., increased availability of education increases rather than decrease the relative wages for skilled labor. And, in fact, the paradox is resolved in almost all the cases by incorporating the effects of trade and technological changes on the relative demand for skilled labor.

1.7 Concluding Remarks

Ung and Thorbecke (2003) model is that an increase in public education expenditure per se can contribute positively to GDP growth. Improved labour market flexibility will enhance the positive impact of an expansion in public educational expenditure on GDP growth. Furthermore, the rise in public expenditure on education should ideally be complemented with an increase in public investment on physical capital. And, finally, the increase in educational expenditure must be better targeted to poor households if any improvement in the income distribution is to be expected. Organizations should hire the right people to do the right jobs by motivating, appraising and developing them.

- More human capital development practices should be adopted often to keep the employees up-to-date in their jobs.
- Training and development programmes should be prioritized in the banking industries and workers should be made to develop their careers by ensuring their job security and not just being used for the organizational growth; but later abandoned being useless and unproductive.

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