

# A Review Study on the Strategic Importance of Human Capital Through Education in Driving Socio-Economic Development

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## Abstract

Human capital through education is the most important key factor in production/output (national income) and, therefore, in the socio-economic development of any country. Education fosters workers' creativity and productivity, promotes entrepreneurship, and contributes to socio-economic development. The main aim of the present study is to increase understanding of the indispensable role played by education in promoting social welfare. After reviewing prior theoretical and empirical studies, the results indicate that education is the most significant factor in the process of socio-economic development and, thereby, sustainable development goals of the United Nations. The results of the present study recommend that policymakers focus on promoting the education sector. Consequently, this will further enhance the social welfare of the people.

**Keywords:** human capital, education, socio-economic development, sustainable development goals

## Introduction

"Education is a fundamental right and the basis for progress in every country. Parents need information about health and nutrition if they are to give their children the start in life they deserve. Prosperous countries depend on skilled and educated workers. The challenges of conquering poverty, combatting climate change, and achieving truly sustainable development in the coming decades compel us to work together. With partnership, leadership, and wise investments in education, we can transform individual lives, national economies, and our world" (Ki-Moon, 2014).

In a study, Becker (1962) claims that "many ways to invest include schooling, on-the-job training, medical care, vitamin consumption, and acquiring information about the economic system. They differ in the relative effects on earnings and consumption, in the amount of resources typically invested, in the size of returns, and in the extent to which the connection between investment and return is perceived. But all improve the physical and mental abilities of people and thereby raise real income prospects" (p. 9). Education helps to ensure that a country is accomplished in world markets currently characterized by changing skills, technologies, and production methods. Education contributes significantly to nation-building and relational broad-mindedness. Education is also an important source of technological competence and technical improvement in the industry. In the words of Wood (1994), education and competencies, as well as the skills of a less developed country's labor force, affect the nature of its factor talent and, subsequently, the structure of its trade. Education is an important issue in

controlling whether resources are used well in the production of goods and services. The efficient use of new technologies requires the employment of a better-educated staff that is able to work with these technologies (Stevens & Weale, 2003). Therefore, education inequity is expected to play an important role in determining economic growth through its effect on economic productivity.

Harbison (1973) noted that "human beings are the active agents who accumulate capital, exploit natural resources, build social, economic, and political organizations, and carry forward national development. Clearly, a country that is unable to develop the skills and knowledge of its people and utilize them effectively in the national economy will be unable to develop anything else" (p. 3). Spence (1973) opines that education is used as a marketplace signal to signify the potential production or output of laborers (workers). Schultz (1975) proposes that education increases an individual's talent and ability to successfully contract or deal with imbalances in changing economic circumstances. Mincer (1981) mentions that human capital at the national level can be considered as a factor of production brought together with physical capital. This indicates that human capital's contribution to economic growth is more significant the larger the volume of physical capital and vice versa. Human capital activities encompass not simply the transmission of existing knowledge in people but also the creation of new knowledge.

Several theoretical models of economic growth, including Becker et al. (1990), Lucas (1988), Mulligan and Sala-i-Martin (1992), and Nelson and Phelps (1966), have highlighted the role of human capital in educational attainment. Many other quantitative studies of economic growth, such as Barro (1991), Barro and Lee (1993), Benhabib and Spiegel (1992), and Romer

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(1990), have used education attainment as a proxy for human capital. Barro (1991) found a positive impact of education on economic growth. The study also added that increasing investment in human capital (education) would certainly help in development and ultimately mitigate the gap between poor and rich countries. Additionally, Levin and Kelley (1994) propose that education can improve output or productivity. The study by Ramirez et al. (1997) provides work on cross-country data and explores the paths or channels through which education development influences economic prosperity. The study finds that there are causal linkages between human and economic development. Higher levels of economic growth undoubtedly promote human capital development, stimulating economic growth.

Education is the process of educating or being educated. It involves the training given to students both theoretically and practically. Education is undoubtedly one of the vital factors for production and development. No country can achieve sustainable economic development without significant investment in human capital (education). Education enhances people's understanding of themselves and the world. It improves living standards and leads to extensive social benefits for individuals and society as a whole. Education increases people's creativity and productivity and promotes technological advances and entrepreneurship. Additionally, it plays a crucial role in securing social and economic progress and improving income distribution.

In a study, Rashid (2000) claims that human development is, in fact, economic development. According to Ozturk (2001), education increases the value and efficacy of labor, raising the overall productivity and intellectual mobility of the labor force. Education has a strong relationship with social and economic development. Education reduces poverty, social injustice, and inequality by providing deprived resources, chances, and opportunities for upward social inclusion and mobility. Education and health play a significant role in enhancing human capital in economic development. Human capital, or educational development, has become one of the key issues in deciding fund distribution in a country's development plan. It is believed that a population with good health and high education will have a positive impact on social, political, and performance aspects. In terms of higher productivity, education is an investment in human capital that pays off and is considered a significant source of economic growth. Education helps generate a more enlightened society through knowledge, information, and good cultural practices. Therefore, it is necessary for a country to continue investing in education to upgrade and maintain the quality of its human resources. The role of human capital through education in economic growth and development cannot be ignored. The development of human capital has been documented by economists as a key requirement for a country's socio-economic and political change. Javed et al. (2008) conclude that the economic growth and development of any country not only depends on physical capital but also on human capital (education). Thus, education is the most imperative and important factor in the entire societal environment. The studies of Azam (2019) and Azam et al. (2015) highlight the key role played by education in the process of economic growth and development.

The motivation for this study is based on the close correlation between education and economic growth and development, which has been theoretically and empirically analyzed by several prior studies (Abbas & Foreman, 2008; Alataş & Çakir, 2016; Azam & Ahmed, 2015; Azam & Raza, 2016; Becker, 1964; Idrees et al., 2021; Jehan et al., 2021; Khan, Khan, et al., 2024; Khan, Zahir, et al., 2024; Khembo & Tchereni, 2013; Levin & Kelley, 1994; Loening, 2005; Ozturk, 2001; Roseline & Esman, 2012; Schultz, 1975; Spence, 1973). Moreover, numerous conceptual approaches have been undertaken to analyze the linkages between human capital through education and training and economic development. The purpose of this review is to provide a broad overview of the importance of education and its role in economic performance. Additionally, it aims to shed light on the effects and influences of education on poverty, technology, trade, health, and labor productivity. Indeed, education is the main key to increasing economic efficiency and social equality. Education provides a foundation for development and improvement, and it is the basis on which much of our economic and social well-being is built.

## Review of the Related Literature

Prior studies have shown attractive and handsome profits from various forms of human capital accrual, including basic education, training, learning, and research, as well as on-the-job experience and skill development. No country or nation has achieved stable and consistent economic development without substantial investment in human capital (education). In the words of Dr. Jim Yong Kim, President of the World Bank Group, "Every child should have the opportunity not only to go to school but also to acquire the knowledge and skills needed to lead a healthy, productive life, take care of themselves and their families, and become empowered citizens. At the national level, countries need workforces with the skills and competencies required to keep farms and factories productive, create jobs, drive innovation and competitiveness, and stimulate economic growth that benefits everyone." Many studies have explored the relationship between education and economic growth and development, with most finding a positive correlation. Becker (1964) suggests that education enhances worker output by imparting valuable skills and knowledge and provides explanations for how education is linked to worker productivity.

Mukudi (2003) stated that education plays a significant role in accessing public information, particularly regarding health, nutrition, and hygiene. Acquiring knowledge on how to prevent and manage diseases is essential, as individuals with illnesses require more calories to achieve food security. Burchi (2006) also emphasized the importance of education, noting that over 800 million people are affected by food insecurity and illiteracy. Therefore, this study focuses on the role of education as a key factor in achieving food security for rural populations in less developed countries. Loening (2005) examined the relationship between human capital and economic growth using data from Guatemala and found that a healthier and better-educated workforce has a positive impact on production growth. Hanushek and Wobmann (2010) highlighted that education has long been recognized as a crucial determinant of economic well-being. The literature identifies three ways in which education can influence economic development or growth. Firstly, education can enhance the labor force, leading to increased productivity. Secondly, education can boost the economy's innovative capacity by introducing new technologies, ideas, and processes that drive growth. Lastly, education facilitates the dissemination of knowledge necessary for understanding and implementing new technologies, ultimately promoting economic growth and development (see also Khan, Uddin, et al., 2024; Khan, Khan, et al., 2024).

Many other studies have observed a positive association between education development and economic development (Abbas & Foreman, 2008). Several prior studies, including Azam and Ather (2010), Roseline and Esman (2012), and Soukiazis and Antunes (2012), have also confirmed the influence of education on economic growth in various countries. The role of human capital (education) development in economic development has long been documented in the literature. The education system always plays a crucial role in the development of society. The education system of any country performs main tasks, including: (1) handling fundamental and higher education, (2) offering superior opportunities for income earning, and finally, improving the living standards of the people and supporting social development. Therefore, education in any country is considered one of the most imperative drivers of socio-economic development (Misra, 2012). Arabi and Abdalla (2013) empirically examine the effect of human capital on Sudan's economic growth during 1982-2009 and find that the quality of education is a significant factor that plays a role in economic growth. The empirical findings of Khan et al. (2024) indicate that education, measured by school enrollment, has a statistically significant and positive effect on economic growth in seven Asian countries. The study by Pelinescu (2015) emphasizes the significance of human capital in confirming economic growth, measured by gross domestic product per capita. The results show a statistically positive relationship between GDP per capita, the innovative capacity of human capital, and the qualifications of employees with secondary education.

Similarly, the study by Hanif and Arshed (2016) reveals that tertiary education enrollment has the greatest influence on economic growth compared to primary and secondary education enrollment in the case of the South Asia Association for Regional Cooperation (SAARC) countries. Maitra (2016) found that both investments in human capital and employment contribute to an increase in economic growth in Singapore. In a study by Pegkas (2014), the correlation between educational levels and economic development, measured by gross domestic product (GDP), in Greece was explored. The study found obvious potential influences of the various educational levels on economic development in Greece. The study by Alatas and Çakir (2016) explored the empirical link between human capital (measured by years of schooling and returns to education) and infant mortality rate and growth in a panel of 65 countries from 1967 to 2011. The empirical results show that education and growth have significantly positive linkages in 65 less-developed countries.

Ali et al. (2018) empirically detected that human capital is strongly related to economic growth in the case of 132 countries, as the results indicate that human capital plays a constructive role in improving GDP per capita. Ali (2024) concluded that education greatly enables individuals to access better job opportunities, leading to personal growth, social development, and economic stability. Education equips individuals with the skills needed to sustain their careers, businesses, and financial lives. Higher educational attainment is often associated with higher wages in the workforce. In a study by Al-Zu'bi et al. (2024), it was found that a positive school environment can enhance the learning atmosphere, motivate students and teachers, support effective teaching practices, and impact teacher commitment and student achievement. The researchers recommended that school management focus on enhancing the overall quality of the school environment to inspire teachers to deliver high-quality education.

**Table 1**

*Previous Selected Studies on The Linkage Between Education and National Economic Development*

Author(s)	Country(s)	Variables	Findings
Hanif and Arshed (2016)	Pakistan	Economic growth, education, capital	Find the positive influence of education on economic development
Alataş and Çakir (2016)	65 countries	Economic growth, mortality rate, infant, schooling and returns to education,	Find the positive effect of education on economic development
Mitaj and Muco (2016)	Albania	Economic growth/ productivity, education expenditure, gross enrolment, and youth literacy	Education expenditure and gross enrolment have a positive impact on growth
Azam and Ahmed (2015)	10 Commonwealth Independent States	Economic growth, education, health, FDI, and inflation	Find the positive effect of education on economic development
Khan et al. (2015)	Pakistan	Economic growth, primary, secondary, and tertiary education	Find the positive influence of education on economic development
Azam and Gavrilă (2015)	10 African countries	Economic growth, FDI remittances, external debt, domestic investment, exports, and education (secondary school enrolment)	Find the positive influence of education on economic growth
Gebrehiwot (2014)	Ethiopia	Economic growth, education, health, labor force, investment, public spending and Aid	Find the positive effect of education on economic growth
Bakar et al. (2014)	Malaysia	Economic growth and education (education expenditure)	Find the positive impact of education on economic growth
Khembo and Tchereni (2013)	13 Southern African Development Community	Economic growth, secondary school enrolment, infant mortality, labor force, physical capital formation	Find the positive impact of education on economic growth
Hassan and Cooray (2012)	84 countries	Economic growth, capital, labor, life expectancy; primary and secondary enrolment	Find the positive impact of education on economic growth
Zaman (2012)	100 countries	Economic growth, average years of schooling (tertiary, secondary, primary)	Find the positive impact of education on economic growth
Danacica (2011)	Romania	Economic growth, School enrolment ratio	Find the positive impact of education on economic growth
Li and Liang (2010)	10 East Asia	Economic growth, schooling, investment in education, student-to-teacher ratio, life expectancy and mortality rate	Find the positive impact of education on economic growth
Haldar and Mallik (2010)	India	Economic growth, investment, outlay on education and health, growth of gross enrollment of class VIII	Find the positive impact of education on economic growth

*Note.* Author's compilation. Economic growth is usually measured by real GDP per capita.

### Objectives

The main aim of this study is to emphasize the importance of education for both males and females. This is a review study where I have examined various related articles to illustrate the significance of education and its positive outcomes. A conceptual framework in the form of a chart is used to demonstrate the connections between education and enhanced social welfare.

### Methodology

This paper is organized as follows: Section 1 deals with the introduction, motivation, and objectives of the study. Section 2

discusses theoretical and empirical prior studies on the relationship between education and economic development. Finally, Section 3 relates to the findings, conclusions, and policy recommendations.

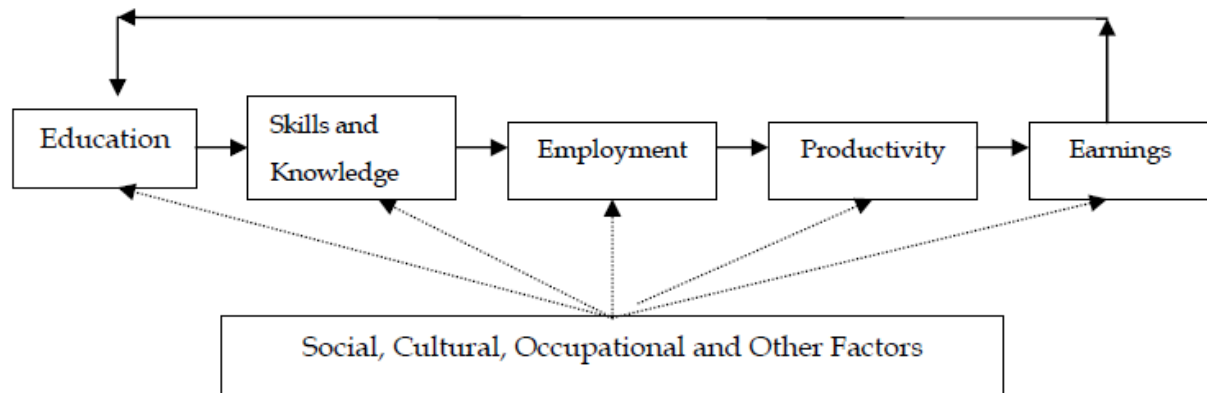
This study review approach is based on prior studies by Arksey and O'Malley (2005), Munn et al. (2018), and Mak and Thomas (2022), where they implemented a scoping review approach. A scoping review is a type of knowledge synthesis that employs a methodical and iterative approach to find and synthesize an existing or evolving body of literature on a given topic. The key reasons for utilizing a scoping review include mapping the level, range, and nature of the literature, as well as identifying potential gaps in the literature on an issue. Scoping reviews are not limited

to peer-reviewed literature. In contrast to a systematic literature review, which focuses on specific questions in specific populations, scoping reviews allow researchers to explore not

only etiologies, risk factors, or outcomes in studies but also aspects related to study design, theoretical models, specific populations, and more (Ruiz-Perez & Petrova, 2019).

**Figure 1**

*Illustrates the Impact of Education on Earnings, Socio-Economic Development, and the Living Standards of People*



Note. From “Education and poverty,” by J. B. G. Tilak, 2002, *Journal of Human Development*, 3(2), p. 192 (<https://doi.org/10.1080/14649880220147301>). Copyright 2002 by the United Nations Development Programme.

### Results

The overall results on the role of education in Soviet social development after reviewing close relevant literature on the topic under the inquires, this study found that education is the key to social development, lowering income reality and alleviating poverty. The role of education is found to be a vital factor in shaping society by encouraging economic growth, diminishing poverty, boosting social inclusion, and enhancing health outcomes. Education is undeniably one of the key elements of economic growth and development. Indeed, no economic growth and socio-economic development are possible without quality and applicable education. A well-balanced education system encourages not only socio-economic development but also aggregate productivity, raises per capita income, and thereby improves living standards. The main finding of the study uncovers the importance of education in economic growth and socio-economic development. Therefore, after an extensive survey of prior studies, it can be safely concluded that education is indispensable for a higher level of economic growth, improving social welfare, helping in poverty reduction, and even helping individuals create a sound place in society. However, there are numerous factors responsible for economic growth and development, such as physical capital, human capital, land, technology, and many more required for production. However, the role of human capital through education is far better compared to the other inputs used in production.

### Discussion

Access to high-quality education for all children, regardless of their social or economic background, can help break the cycle of poverty and empower students to succeed. Progress has been made in improving educational outcomes, such as a decrease in the percentage of 25–34-year-olds without an upper secondary qualification from 17% in 2016 to 14% in 2023 in many countries (OECD, 2024). Many prior studies theoretically and empirically observed that education is the main pillar of socio-economic development. Khan et al. (2015, p. 290) also explain that “It is crystal clear that the role of education and teachers has become more important in improving human capital and consequently has a positive impact on national development and prosperity.”

Klyachko and Semionova (2018) conducted a study to investigate the relationship between higher education and socio-economic development in ten territorial subjects of the Russian Federation. They found a positive relationship between higher education and socio-economic development, emphasizing the

significant role of higher education in driving socio-economic progress. A study by Farswan (2023) highlighted that education plays a crucial role in enhancing personal social skills. It provides learners and young individuals with the opportunity to develop their social skills, which in turn contributes to social development. Farswan (2023) further added that education has an important role in social development. It is only through education that by imparting knowledge of various social values, beliefs, ideals, and cultural heritage in man,..... This process goes on continuously (p. 13). Overall, the results of this study align with the findings of Ali (2024), Alataş and Çakir (2016), Azam and Ahmed (2015), Bakar et al. (2014) and Hassan and Cooray (2012) on the role of education in social development and growth. Overall, the enhancement of promoting human capital through education is improving social uplift, which is in line with the UN Sustainable Development Goals (SDGs).

### Conclusion

Education is crucial for the socio-economic development of poor and developing nations worldwide. It forms the basis for creating human capital, which is essential for economic growth, poverty alleviation, and societal advancement. In these countries, education equips individuals with the knowledge and skills necessary to participate effectively in the workforce, boosting productivity and fostering innovation. Furthermore, education contributes to better health outcomes, gender equality, and social cohesion, all of which are essential for sustainable development. It enables people to make informed choices, encourages civic engagement, and promotes the creation of more inclusive and resilient communities.

### Recommendations

The findings of this study suggest that some policy measures are required in order to further strengthen the education sector and reap more benefits from it. Therefore, to harness the transformative power of education, policymakers and governments in poor and developing countries should prioritize investments in educational infrastructure, teacher training, and curriculum enhancement. Policies that enhance access to quality education, especially for marginalized groups, are critical. Moreover, integrating technology into education can help bridge the gap in resource-limited settings, offering opportunities for remote and underserved populations. Education is not only a fundamental human right but also a key driver of socio-economic progress. By prioritizing education, governments can empower

their citizens, stimulate economic growth, and lay the foundation for a prosperous and equitable future. Therefore, it is suggested that to enhance the outcomes of education on economic development, and policymakers are required to expand not only the quantity but also the quality of education by increasing the number of years of schooling, school enrollment, expenditures on education, and establishing more schools, colleges, and universities. Consequently, this will help increase national income and improve the social welfare of the people.

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