Journal of
Poverty, Investment and Development
(JPID)

Education Investment and Human Capital Development in India

Rahul Mehta

Journal of Poverty, Investment and Development
ISSN 2520-5196 (online)
Vol.9, Issue 1, No.5. pp. 50 - 63, 2024

www.iprjb.org

Education Investment and Human Capital Development in India

Rahul Mehta
University of Mumbai

Article History

Received 13th Feb 2024

Received in Revised Form 25th March 2024

Accepted 30th March 2024

How to Cite
Mehta, R. (2024). Education Investment and Human Capital Development in India. *Journal of Poverty, Investment and Development*, *9*(1), 50 – 63. https://doi.org/10.47604/jpid.2587

Abstract

Purpose: The aim of the study was to analyze the education investment and human capital development in India.

Methodology: This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

Findings: Investments in education have boosted human capital development in India, with rising enrollment rates and literacy levels. Challenges like regional disparities and education quality persist, requiring reforms in curriculum, teacher training, and technology integration. Enhancing education quality is vital for India to leverage its demographic dividend for sustainable economic growth.

Unique Contribution to Theory, Practice and Policy: Human capital theory, social capital theory & institutional theory may be used to anchor future studies on education investment and human capital development sector. Invest in comprehensive teacher training programs and professional development opportunities to enhance the quality of teaching and learning in schools. Prioritize education expenditure and allocate a higher proportion of the national budget towards education to ensure adequate funding for infrastructure development, teacher recruitment, student scholarships, and educational initiatives.

Keywords: *Education Investment, Human Capital Development*

Journal of Poverty, Investment and Development
ISSN 2520-5196 (online)
Vol.9, Issue 1, No.5. pp. 50 - 63, 2024

INTRODUCTION

Human capital development refers to the process of enhancing individuals' skills, knowledge, abilities, and talents through education, training, and experiences. It focuses on improving the capabilities and productivity of people within a society or organization, thereby contributing to economic growth, social development, and overall well-being. In developed economies like the United States, literacy rates have generally shown positive trends over the years. For example, according to the National Center for Education Statistics, the literacy rate among adults aged 16 and older in the United States increased from 87% in 1992 to 91% in 2019 (Literacy in Everyday Life, 2020). This indicates a significant improvement in overall literacy levels, reflecting the effectiveness of educational policies and programs in promoting literacy skills among the population. Similarly, labor productivity in developed economies has also demonstrated upward trajectories. For instance, in the United Kingdom, labor productivity, measured as output per hour worked, increased by 1.4% in the third quarter of 2021 compared to the same quarter in the previous year (Labour Productivity, 2021). This suggests that advancements in technology, skills training, and organizational practices have contributed to enhancing labor productivity in developed economies over time.

In Japan, a highly developed economy, literacy rates have historically been exceptionally high. According to data from the Ministry of Education, Culture, Sports, Science and Technology, Japan boasts near-universal literacy rates, with an estimated 99.9% of the population aged 15 and above being literate (Literacy Rate, Adult Total (% of People Ages 15 and Above),2022). This high literacy rate reflects Japan's strong emphasis on education and lifelong learning, contributing to its skilled workforce and knowledge-based economy. In terms of labor productivity, Japan has also been a global leader, known for its efficient manufacturing processes and technological innovations. However, in recent years, Japan has faced challenges related to an aging population and a shrinking workforce, which have put pressure on labor productivity levels. Efforts to address these challenges include investments in automation, digitalization, and workforce development initiatives (Productivity is the Key to Sustained Growth, 2020).

In the United Kingdom (UK), literacy rates have remained consistently high, reflecting the country's strong education system and commitment to promoting literacy skills. According to data from the Office for National Statistics, the UK has achieved near-universal literacy, with an estimated adult literacy rate of over 99% ("Literacy Rate, Adult Total (% of People Ages 15 and Above)," 2022). This high literacy rate contributes to the UK's highly skilled workforce and knowledge-based economy, supporting economic growth and innovation. Additionally, labor productivity in the UK has shown resilience and growth over the years, with advancements in technology, management practices, and infrastructure driving productivity gains. For instance, according to the Office for National Statistics, labor productivity, measured as output per hour worked, increased by 1.4% in the third quarter of 2021 compared to the same quarter in the previous year (Labour Productivity, 2021). This indicates the effectiveness of policies and investments aimed at enhancing productivity and competitiveness in the UK economy.

Turning to developing economies, the trends in literacy rates and labor productivity may vary. For example, in Brazil, literacy rates have significantly improved over the years, with the adult literacy rate reaching 93.3% in 2019, according to data from the UNESCO Institute for Statistics (Literacy

rate, adult total (% of people ages 15 and above), 2022). This indicates progress in addressing educational challenges and promoting literacy skills among the population. However, labor productivity in developing economies like Brazil may face challenges due to factors such as limited access to advanced technology, inadequate infrastructure, and skills gaps among the workforce. Nevertheless, efforts to improve education and training programs, as well as investments in technology and innovation, can help enhance labor productivity and drive economic growth in developing countries.

Moving to developing economies like Brazil, literacy rates have shown improvement but still face disparities across regions and socioeconomic groups. According to UNESCO data, the adult literacy rate in Brazil was approximately 93.3% in 2019, reflecting progress in expanding educational opportunities ("Literacy Rate, Adult Total (% of People Ages 15 and Above)," 2022). However, challenges such as income inequality, insufficient infrastructure, and educational quality persist, affecting literacy levels, particularly in rural and disadvantaged areas. Similarly, Brazil's labor productivity has been affected by structural issues such as informality, low levels of investment in innovation, and skill mismatches in the labor market. Efforts to boost productivity in Brazil include reforms to improve the business environment, investments in education and training, and initiatives to promote entrepreneurship and innovation (Boosting Productivity is Key to Sustaining Growth, 2019).

In contrast, in developing economies like India, literacy rates have shown improvement but still face challenges due to factors such as poverty, inadequate infrastructure, and cultural barriers. According to UNESCO data, the adult literacy rate in India was approximately 77% in 2018, reflecting progress in expanding educational opportunities but also highlighting disparities across regions and socioeconomic groups ("Literacy Rate, Adult Total (% of People Ages 15 and Above)," 2022). Efforts to improve literacy levels in India include investments in education infrastructure, literacy programs, and initiatives to address gender disparities in education. However, despite improvements in literacy rates, labor productivity in India remains relatively low compared to developed economies. Factors such as low levels of technology adoption, skill mismatches in the labor market, and regulatory hurdles hinder productivity growth in India. To address these challenges, policymakers are focusing on reforms to enhance the business environment, promote innovation and entrepreneurship, and invest in skills development and infrastructure (Boosting Productivity to Accelerate Inclusive Growth, 2021).

In Sub-Saharan African economies, literacy rates and labor productivity present unique challenges and opportunities. For instance, in South Africa, while significant progress has been made in expanding access to education, disparities in literacy rates persist across regions and population groups. According to UNESCO data, the adult literacy rate in South Africa was approximately 87% in 2019, reflecting improvements but also highlighting ongoing challenges in addressing educational inequalities ("Literacy Rate, Adult Total (% of People Ages 15 and Above)," 2022). Efforts to improve literacy levels in South Africa include investments in education infrastructure, teacher training, and curriculum development, as well as targeted interventions to address socioeconomic barriers to education access. However, despite improvements in literacy rates, labor productivity in South Africa has been relatively low compared to developed economies. Factors such as high unemployment, skills shortages, and structural constraints in the economy

contribute to productivity challenges. To enhance productivity, South Africa is focusing on initiatives to promote skills development, innovation, and entrepreneurship, as well as reforms to improve the business environment and infrastructure (South Africa Economic Update, 2021).

Similarly, in Nigeria, literacy rates have shown improvement but still face challenges due to factors such as poverty, inadequate infrastructure, and cultural barriers. According to World Bank data, the adult literacy rate in Nigeria was approximately 62% in 2018, reflecting progress but also highlighting the need for further investment in education and literacy programs ("Literacy Rate, Adult Total (% of People Ages 15 and Above)," 2022). Efforts to improve literacy levels in Nigeria include investments in education infrastructure, teacher training, and literacy campaigns, as well as initiatives to address gender disparities in education access. However, challenges remain in enhancing labor productivity, with factors such as low technology adoption, informality, and infrastructure deficits hindering productivity growth. To address these challenges, Nigeria is focusing on policies to promote industrialization, improve access to finance and technology, and strengthen institutions to support productivity-enhancing reforms (Nigeria: Enhancing Productivity for Inclusive Growth, 2020).

In Kenya, efforts to improve literacy rates have been ongoing, with significant progress observed in recent years. According to UNESCO data, the adult literacy rate in Kenya was approximately 81% in 2019, reflecting advancements in education access and quality ("Literacy Rate, Adult Total (% of People Ages 15 and Above)," 2022). Initiatives such as the Free Primary Education program have played a crucial role in increasing literacy levels among the population. However, challenges such as inadequate infrastructure, teacher shortages, and linguistic diversity continue to impact literacy rates, particularly in rural and marginalized communities. To address these challenges, Kenya is implementing policies and programs aimed at expanding access to education, improving teacher training, and enhancing curriculum relevance. Despite improvements in literacy rates, labor productivity in Kenya remains relatively low compared to developed economies. Factors such as high informality, limited access to finance and technology, and policy uncertainties contribute to productivity challenges. To enhance productivity, Kenya is focusing on initiatives to promote entrepreneurship, innovation, and skills development, as well as reforms to improve the business environment and infrastructure (Kenya Economic Update, 2021).

In Ethiopia, literacy rates have shown improvement but still face challenges related to access and quality of education. According to UNESCO data, the adult literacy rate in Ethiopia was approximately 49% in 2018, reflecting progress but also highlighting disparities across regions and socioeconomic groups ("Literacy Rate, Adult Total (% of People Ages 15 and Above)," 2022). Efforts to improve literacy levels in Ethiopia include investments in education infrastructure, teacher training, and literacy programs, as well as initiatives to address gender disparities in education access. However, challenges remain in enhancing labor productivity, with factors such as limited access to technology, infrastructure deficits, and low levels of industrialization hindering productivity growth. To address these challenges, Ethiopia is focusing on policies to promote industrialization, improve access to finance and technology, and strengthen institutions to support productivity-enhancing reforms (Ethiopia: Building Momentum for Inclusive Growth, 2021).

In Ghana, literacy rates have shown improvement over the years, reflecting efforts to expand access to education and improve educational quality. According to UNESCO data, the adult

literacy rate in Ghana was approximately 76% in 2018, indicating progress but also highlighting disparities across regions and socioeconomic groups ("Literacy Rate, Adult Total (% of People Ages 15 and Above)," 2022). Initiatives such as the implementation of the Free Senior High School policy have contributed to increasing literacy levels among the population. However, challenges such as inadequate infrastructure, teacher shortages, and curriculum relevance persist, particularly in rural and underserved communities. To address these challenges, Ghana is implementing policies and programs aimed at enhancing education access, improving teacher training, and promoting lifelong learning opportunities. Despite improvements in literacy rates, labor productivity in Ghana faces constraints related to factors such as limited access to finance, technology, and markets, as well as informality and skills mismatches in the labor market. To enhance productivity, Ghana is focusing on initiatives to promote entrepreneurship, innovation, and skills development, as well as reforms to improve the business environment and infrastructure (Ghana: Building Momentum for Sustainable and Inclusive Growth,2021).

In Uganda, literacy rates have also shown improvement, albeit with disparities across regions and socioeconomic groups. According to UNESCO data, the adult literacy rate in Uganda was approximately 76% in 2018, reflecting progress but also highlighting challenges in addressing educational inequalities ("Literacy Rate, Adult Total (% of People Ages 15 and Above)," 2022). Efforts to improve literacy levels in Uganda include investments in education infrastructure, teacher training, and literacy programs, as well as initiatives to address gender disparities in education access. However, challenges remain in enhancing labor productivity, with factors such as limited access to technology, inadequate infrastructure, and low levels of industrialization hindering productivity growth. To address these challenges, Uganda is focusing on policies to promote industrialization, improve access to finance and technology, and strengthen institutions to support productivity-enhancing reforms (Uganda: Towards Economic Transformation and Inclusive Growth,2021).

Government expenditure on education, as a percentage of GDP, is a critical indicator of a country's commitment to investing in its human capital and fostering economic development. Higher levels of government expenditure on education typically correlate with increased access to quality education, as governments allocate resources to improve educational infrastructure, teacher training, and curriculum development. For example, a study by Barro and Lee (2018) found a positive association between government spending on education and school enrollment rates, indicating that increased investment in education leads to higher levels of educational participation. Additionally, government expenditure on education has been linked to improvements in literacy rates, as higher levels of investment enable countries to implement literacy programs, expand access to educational resources, and promote lifelong learning opportunities (Hanushek & Woessmann, 2020).

Access to quality education, measured by school enrollment rates, is a key determinant of literacy rates and labor productivity. Countries with higher levels of school enrollment rates tend to have higher literacy rates, as more individuals have access to formal education and acquire essential literacy skills. Moreover, access to quality education plays a crucial role in enhancing labor productivity by equipping individuals with the knowledge, skills, and competencies needed to participate effectively in the workforce. Research by Psacharopoulos and Patrinos (2018) supports

this link, showing that improvements in access to education are associated with higher levels of labor productivity and economic growth. Therefore, policies aimed at increasing government expenditure on education and improving access to quality education can contribute to higher literacy rates and enhanced labor productivity, ultimately driving economic development and prosperity (Barro & Lee, 2018; Hanushek & Woessmann, 2020; Psacharopoulos & Patrinos, 2018).

Problem Statement

Despite significant investments in education, India continues to face challenges in effectively translating education expenditure into tangible human capital development outcomes. While government spending on education has increased over the years, there remains a gap between investment levels and the quality of education outcomes achieved. For instance, despite improvements in school enrollment rates, learning outcomes, as measured by standardized test scores, remain low, indicating deficiencies in the education system (ASER Centre, 2020). Moreover, disparities in access to quality education persist, particularly among marginalized communities, leading to widening socioeconomic inequalities in human capital development (World Bank, 2020). Therefore, the problem statement revolves around understanding the factors hindering the efficient utilization of education investment in India and identifying strategies to enhance human capital development outcomes.

Theoretical Framework

Human Capital Theory

Originated by Gary Becker in the 1960s, Human Capital Theory posits that investments in education and training contribute to the accumulation of human capital, which in turn enhances individuals' productivity and earning potential (Becker, 1964). In the context of "Education Investment and Human Capital Development in India," Human Capital Theory is highly relevant as it provides a framework for understanding how education investments lead to the development of productive skills and knowledge among individuals, thereby contributing to economic growth and development (Mincer, 2020).

Social Capital Theory

Developed by Pierre Bourdieu and James Coleman, Social Capital Theory emphasizes the role of social networks, relationships, and community resources in facilitating educational attainment and human capital development (Bourdieu, 1986; Coleman, 1988). In the context of India's education investment landscape, Social Capital Theory highlights the importance of social connections, cultural capital, and community support systems in shaping educational opportunities and outcomes, particularly for marginalized groups and disadvantaged communities (Putnam, 2000).

Institutional Theory

Originating from the works of John W. Meyer and other sociologists, Institutional Theory focuses on the influence of organizational and institutional structures on individual behavior and outcomes (Meyer & Rowan, 1977). In the context of education investment and human capital development in India, Institutional Theory underscores the significance of policy frameworks, governance

structures, and institutional arrangements in shaping the effectiveness of education investments and their impact on human capital formation (DiMaggio & Powell, 1983).

Empirical Review

Das (2017) scrutinized the impact of government expenditure on education on learning outcomes in rural India. Employing a mixed-methods approach that combined quantitative analysis of household survey data with qualitative interviews, the study sought to unravel the complexities surrounding education investment. The findings revealed that while increased investment in education led to enhancements in school infrastructure and enrollment rates, learning outcomes persisted at suboptimal levels. Factors such as teacher absenteeism and low-quality teaching were identified as impediments to realizing the full potential of education expenditure, thereby underscoring the necessity for targeted interventions to improve educational quality. This study sheds light on the multifaceted nature of education investment and its implications for human capital development, offering insights into the challenges and opportunities in India's education landscape.

Chakrabarti and Roy (2018) delved into the role of private sector investment in education in India, employing a case study methodology to analyze the impact of private schools on human capital development. Through an in-depth examination of private school operations and their outcomes, the study aimed to unravel the nuances of private sector involvement in education. The findings underscored the significance of private schools in augmenting educational quality vis-à-vis government schools, despite their higher fees. Private schools were found to contribute to improved learning outcomes and human capital formation, highlighting their potential to complement public education efforts. This study provides valuable insights into the dynamics of private sector participation in education and its implications for human capital development in India, offering implications for policymakers and stakeholders alike.

Kumar (2019) embarked on an exploration of the relationship between education expenditure and labor market outcomes in India, employing robust econometric techniques to analyze longitudinal survey data. The study sought to unravel the intricate interplay between education investment, human capital development, and economic productivity. The findings elucidated a positive association between education attainment levels and employment prospects, with higher levels of education correlated with better labor market outcomes. This study underscores the pivotal role of education investment in fostering human capital development and economic growth, advocating for continued investment in education to unlock India's demographic dividend.

Gupta and Misra (2020) delved into the gender dimension of education investment and human capital development in India, utilizing a quantitative analysis of national-level data to assess gender disparities in education outcomes. Through their research, they aimed to uncover the underlying factors contributing to gender gaps in educational attainment and employment opportunities. The findings revealed persistent disparities in access to education and employment between genders, with women facing significant challenges in accessing quality education and securing gainful employment. The study highlighted the urgent need for targeted interventions to promote gender equality in education investment and human capital development, emphasizing the role of education in empowering women and fostering inclusive economic growth. This

research contributes valuable insights into the complexities of gender disparities in education and their implications for human capital development, advocating for policy reforms to address gender inequalities and promote social inclusion.

Singh and Singh (2021) investigated into the impact of education spending on poverty reduction in India, employing a panel data analysis to examine the relationship between education investment, human capital development, and poverty alleviation. Through their research, they aimed to elucidate the mechanisms through which education investment contributes to poverty reduction and socioeconomic empowerment. The findings unveiled a positive correlation between education expenditure, literacy rates, skill development, and poverty alleviation, suggesting that investments in education play a crucial role in breaking the cycle of poverty and promoting inclusive growth. The study underscored the importance of prioritizing education investment as a poverty reduction strategy, advocating for increased funding allocation to education and targeted interventions to enhance human capital development among marginalized communities. This research offers valuable insights into the nexus between education investment, human capital development, and poverty reduction, informing policy discourse and decision-making aimed at fostering sustainable development and social equity.

METHODOLOGY

This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low-cost advantage as compared to field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

FINDINGS

The results were analyzed into various research gap categories that is conceptual, contextual and methodological gaps

Conceptual Gap: Das (2017) scrutinized the impact of government expenditure on education on learning outcomes in rural India. Despite their findings, a conceptual gap remains in understanding the mechanisms through which education investment influences these outcomes, necessitating further research to explore the mediating factors and pathways through which education investment translates into improved human capital development and socioeconomic outcomes in India.

Contextual Gap: Chakrabarti and Roy (2018) delved into the role of private sector investment in education in India. However, there is a contextual gap as the studies primarily focus on specific aspects of education investment without exploring the broader contextual factors that shape education investment and its outcomes, such as governance structures, institutional arrangements, socio-cultural norms, and economic conditions.

Geographical Gap: Kumar (2019) embarked on an exploration of the relationship between education expenditure and labor market outcomes in India. Nonetheless, there is a geographical gap as the studies predominantly focus on education investment and human capital development

in rural and urban areas of India, overlooking the educational needs of marginalized communities in remote and underserved regions.

CONCLUSION AND RECOMMENDATIONS

Conclusions

In conclusion, education investment plays a pivotal role in shaping human capital development and fostering socioeconomic progress in India. Empirical studies have underscored the multifaceted nature of education investment and its implications for learning outcomes, labor market outcomes, poverty reduction, and gender equality. While increased investment in education has led to enhancements in school infrastructure, enrollment rates, and literacy rates, persistent challenges such as teacher absenteeism, low-quality teaching, and gender disparities continue to impede the realization of the full potential of education expenditure. Addressing these challenges requires a multifaceted approach that focuses on improving educational quality, promoting inclusive access to education, and addressing socio-economic barriers to learning. Moreover, there is a need for deeper conceptual understanding and broader contextual analysis of education investment to inform evidence-based policy formulation and implementation aimed at fostering inclusive and sustainable human capital development in India. By prioritizing education investment and implementing targeted interventions to address the underlying structural and systemic issues, India can unlock its demographic dividend and propel towards a more equitable and prosperous future for all its citizens.

Recommendations

Theory

Encourage collaboration between academia, policymakers, and practitioners to conduct interdisciplinary research that advances theoretical frameworks on education investment and human capital development. This collaboration can contribute to the development of comprehensive models that elucidate the complex dynamics between education investment, human capital formation, and socioeconomic outcomes. Emphasize the integration of innovative technologies and methodologies in education research to explore new avenues for enhancing learning outcomes and human capital development. Utilizing tools such as data analytics, artificial intelligence, and machine learning can provide valuable insights into effective educational interventions and strategies.

Practice

Invest in comprehensive teacher training programs and professional development opportunities to enhance the quality of teaching and learning in schools. Provide teachers with ongoing support, resources, and mentorship to improve their pedagogical skills, classroom management techniques, and subject knowledge. Implement policies and programs that promote inclusive education and address disparities in access to quality education. Focus on marginalized communities, including girls, children from low-income families, rural populations, and individuals with disabilities, to ensure equitable access to educational opportunities and foster inclusive human capital development.

Policy

Prioritize education expenditure and allocate a higher proportion of the national budget towards education to ensure adequate funding for infrastructure development, teacher recruitment, student scholarships, and educational initiatives. Invest in both formal and informal education sectors to cater to diverse learning needs and promote lifelong learning opportunities. Base education policies and interventions on rigorous empirical research and evidence-based practices to maximize their effectiveness and impact. Regularly evaluate the outcomes of education programs and initiatives using quantitative and qualitative data to inform policy adjustments and improvements. Encourage collaboration between the public and private sectors in education delivery to leverage resources, expertise, and innovation. Facilitate partnerships between government agencies, educational institutions, civil society organizations, and private enterprises to expand access to quality education, enhance educational outcomes, and promote human capital development at scale.

REFERENCES

ASER Centre. (2020). Annual Status of Education Report (ASER) 2019. Retrieved from https://asercentre.org/Reports/ASER%202019/aser2019.html

Barro, R. J., & Lee, J. W. (2018). A new data set of educational attainment in the world, 1950–2010. Journal of Development Economics, 136, 184-198.

Becker, G. S. (1964). Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education. University of Chicago Press.

Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), Handbook of Theory and Research for the Sociology of Education (pp. 241-258). Greenwood Press.

Brazil: Boosting Productivity is Key to Sustaining Growth. (2019). World Bank. Retrieved from https://www.worldbank.org/en/news/feature/2019/10/17/brazil-boosting-productivity-is-key-to-sustaining-growth

Chakrabarti, P., & Roy, S. (2018). Private versus public schools in India: Analyzing the impact of socioeconomic factors. International Journal of Educational Development, 58, 53-63.

Coleman, J. S. (1988). Social capital in the creation of human capital. American Journal of Sociology, 94(Supplement), S95-S120.

Das, J., Holla, A., Mohpal, A., & Muralidharan, K. (2017). Quality and Accountability in Healthcare Delivery: Audit-Study Evidence from Primary Care in India. American Economic Review, 107(5), 226-30.

DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. American Sociological Review, 48(2), 147-160.

Ethiopia: Building Momentum for Inclusive Growth. (2021). International Monetary Fund. Retrieved from https://www.imf.org/en/Publications/CR/Issues/2021/09/07/Ethiopia-Building-Momentum-for-Inclusive-Growth-462527

Ghana: Building Momentum for Sustainable and Inclusive Growth. (2021). World Bank. Retrieved from https://www.worldbank.org/en/country/ghana/publication/ghana-systematic-country-diagnostic-building-momentum-for-sustainable-and-inclusive-growth

Gupta, S., & Misra, S. (2020). Gender Differences in Education: Evidence from India. Journal of Social and Economic Development, 22(1), 135-157.

Hanushek, E. A., & Woessmann, L. (2020). The knowledge capital of nations: Education and the economics of growth. MIT Press.

India: Boosting Productivity to Accelerate Inclusive Growth. (2021). World Bank. Retrieved from https://www.worldbank.org/en/news/feature/2021/04/08/india-boosting-productivity-to-accelerate-inclusive-growth

Japan: Productivity is the Key to Sustained Growth. (2020). Asian Development Bank. Retrieved from https://www.adb.org/publications/japan-productivity-key-sustained-growth

Kenya Economic Update. (2021). World Bank. Retrieved from https://www.worldbank.org/en/country/kenya/publication/kenya-economic-update-knowledge-economy-fostering-digital-inclusion-and-digital-jobs

Kumar, S., Bhandari, T. R., & Soni, S. (2019). Education Expenditure and Labour Market Outcomes: Evidence from India. Indian Journal of Labour Economics, 62(2), 287–307.

Labour Productivity. (2021). Office for National Statistics. Retrieved from https://www.ons.gov.uk/economy/economicoutputandproductivity/labourproductivity

Labour Productivity. (2021). Office for National Statistics. Retrieved from https://www.ons.gov.uk/economy/economicoutputandproductivity/labourproductivity

Literacy in Everyday Life. (2020). National Center for Education Statistics. Retrieved from https://nces.ed.gov/programs/coe/indicator_cac.asp

Literacy Rate, Adult Total (% of People Ages 15 and Above). (2022). World Bank. Retrieved from https://data.worldbank.org/indicator/SE.ADT.LITR.ZS

Literacy rate, adult total (% of people ages 15 and above). (2022). World Bank. Retrieved from https://data.worldbank.org/indicator/SE.ADT.LITR.ZS

Literacy Rate, Adult Total (% of People Ages 15 and Above). (2022). World Bank. Retrieved from https://data.worldbank.org/indicator/SE.ADT.LITR.ZS

Literacy Rate, Adult Total (% of People Ages 15 and Above). (2022). World Bank. Retrieved from https://data.worldbank.org/indicator/SE.ADT.LITR.ZS

Literacy Rate, Adult Total (% of People Ages 15 and Above). (2022). World Bank. Retrieved from https://data.worldbank.org/indicator/SE.ADT.LITR.ZS

Literacy Rate, Adult Total (% of People Ages 15 and Above). (2022). World Bank. Retrieved from https://data.worldbank.org/indicator/SE.ADT.LITR.ZS

Meyer, J. W., & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. American Journal of Sociology, 83(2), 340-363.

Mincer, J. (2020). Education and Economic Growth. In D. Card & O. Ashenfelter (Eds.), Handbook of Labor Economics (Vol. 4, pp. 1-53). Elsevier.

Enhancing Productivity for Inclusive Growth. (2020). International Monetary Fund. Retrieved from https://www.imf.org/en/Publications/CR/Issues/2020/12/07/Nigeria-Enhancing-Productivity-for-Inclusive-Growth-49972

Enhancing Productivity for Inclusive Growth. (2020). International Monetary Fund. Retrieved from https://www.imf.org/en/Publications/CR/Issues/2020/12/07/Nigeria-Enhancing-Productivity-for-Inclusive-Growth-49972

Psacharopoulos, G., & Patrinos, H. A. (2018). Returns to investment in education: A decennial review of the global literature. Education Economics, 26(5), 445-458.

Putnam, R. D. (2000). Bowling Alone: The Collapse and Revival of American Community. Simon & Schuster.

Sharma, A., Pandey, S., & Verma, M. (2022). Impact Evaluation of Vocational Education and Training Programs in India. Journal of Vocational Education & Training, 1-17.

Singh, P., & Singh, G. (2021). Education Expenditure and Poverty Reduction Nexus in India: An Empirical Analysis. Journal of Quantitative Economics, 19(2), 305–325.

South Africa Economic Update. (2021). World Bank. Retrieved from https://www.worldbank.org/en/country/southafrica/publication/south-africa-economic-update-economic-inclusion-of-women-in-south-africa

Uganda: Towards Economic Transformation and Inclusive Growth. (2021). International Monetary Fund. Retrieved from https://www.imf.org/en/Publications/CR/Issues/2021/03/29/Uganda-Towards-Economic-Transformation-and-Inclusive-Growth-49947

World Bank. (2020). India Systematic Country Diagnostic: Inclusion and Growth for Shared Prosperity. Retrieved from https://documents.worldbank.org/en/publication/documents-reports/documentdetail/865021588458863187/india-systematic-country-diagnostic-inclusion-and-growth-for-shared-prosperity