



Exploring the Impact of Household Spending Patterns on Education Outcomes among Residents in Malappuram District, Kerala, India

Saleel Ahammed A. K. ^{a++*} and Ibrahim Cholakkal ^{b#}

^a PG and Research Department of Economics, EMEA College of Arts and Science, Kondotty, [affiliated by Calicut University], India.

^b EMEA College of Arts and Science, Kondotty, Calicut University, India.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/SAJSSE/2023/v20i4746

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/109976>

Original Research Article

Received: 22/09/2023

Accepted: 26/11/2023

Published: 30/11/2023

ABSTRACT

This study investigates the relationships between household expenditure patterns and education status, based on 386 households in Malappuram district between December 2021 and September 2022. Malappuram district, located in the southern Indian state of Kerala, is known for its distinctive features that encompass cultural, historical, and demographic aspects. Employing statistical tools such as Correlation, multiple regression, ANOVA, and chi-square, the research scrutinizes and quantifies these relationships. Notable findings underscore the prioritization of food and education in household budgets, emphasizing their pivotal role. The strong connection between education level and marital status unveils the interdependence of these decisions, reflecting societal norms. Financial implications of educational achievement shed light on how education acts as a mitigator

⁺⁺Ph. D Research Scholar; Doctor;

[#]Professor in Department Economics;

^{*}Corresponding author: Email: saleel6120@gmail.com;

of economic inequality by exposing income disparities. The correlation between total expenditure and education is positive, indicating that household spending plays a crucial role in achieving educational goals. The impact of food and medical expenses in affecting educational status is further highlighted by the regression analysis. When taken as a whole, these results add to a more sophisticated picture of the relationship between spending patterns and academic achievement. In the particular context of the Malappuram district, this knowledge provides insightful information for policymakers and programmes aiming to improve economic prosperity and educational accomplishment at the same time.

Keywords: Household expenditure patterns; education status; socioeconomic relationships; economic inequality.

1. INTRODUCTION

One of the most significant factors influencing several dimensions of well-being is the distribution of financial resources among households, with educational status being one of the most significant. The decisions made by households about the amount of money they spend on everything from necessities to indulgences have an impact on members of the household's choice of educational paths in addition to their current consumption. This comprehensive study looks at the intricate relationship between family spending patterns and the educational attainment of its members to comprehend the fundamental mechanisms that impact educational outcomes [1-5]. Understanding household spending dynamics requires a thorough analysis that considers all of the factors that influence spending decisions. Economic theories state that wealth, tastes, and the availability of goods and services all influence how much money households spend. The complex web of decisions that households make on a daily basis is influenced by a variety of factors, including social influences, financial constraints, and individual priorities [6-9]. Examining the relationship between spending patterns and educational achievement is crucial, as education is both a basic human right and a driving force behind socioeconomic development. According to the Human Capital Theory, a person's productivity and earning potential are increased by education, which is like investing in their human capital [10-12]. According to this hypothesis, households should fund their children's education according to the expectation that doing so will raise their standard of living and income [13]. Moreover, behavioural economics sheds light on the reasons behind households' possible resource allocations for education by illuminating the psychological variables, biases, and heuristics that affect spending decisions. At the foundational level,

households allocate funds to basic necessities such as food, shelter, and healthcare. The adequacy of these allocations directly affects the ability of individuals to engage in educational pursuits. Malnutrition, inadequate housing, or health issues can hinder educational attainment (Sen -1999). In the digital age, technology plays a vital role in education. Access to computers, the internet, and educational software can enhance learning opportunities. Disparities in technological resources may contribute to educational inequalities [14]. Education can increase the value of labor force of individuals by developing their economic abilities, which can increase their wages and prevent poverty. For this reason, education is critical in reducing poverty [15]. Education provides people with the ability to improve themselves. Additionally, it increases the possibility of acquiring a profession and making progress in it [16]. Human capital theory argues that education enables individuals to acquire the knowledge and ability they need for a decent job accordingly, increases productivity and promotes economic growth [15].

1.1 Theoretical Framework

- The major theoretical innovation in the study regarding expenditure pattern and education system is The Human Capital Theory, which was formulated by economists Gary Becker [13] asserts that people can be thought of as investments. With regard to education, this idea contends that learning improves a person's human capital, which in turn raises earning potential and productivity. The amount of money that households spend on education is regarded as an investment in human capital that benefits both society and the individual economy.
- Microeconomics-based Intertemporal Choice Theory given by Friedman, M. (1957). it looks at how people choose to

allocate resources throughout time. Households must make trade-offs between their current and future consumption when it comes to schooling. This theory aids in the explanation of how households balance the projected future benefits of education against the immediate expenditures, taking into account things like higher earning potential and a higher standard of living.

- Behavioral Economics theory was given Kahneman, D. & Tversky, A. (1979) incorporate insights from psychology into economic analysis, exploring how psychological factors influence decision-making. In the context of education expenditure, this framework helps to understand the role of cognitive biases, social norms, and heuristics in shaping household decisions. It acknowledges that decisions about education are not purely rational but are influenced by various behavioral factors.
- The Social Capital Theory introduced by Bourdieu, P. (1986) investigates the connections and social networks people form, highlighting the influence these connections have on financial results. Within the realm of education, this theory considers the ways in which social networks and relationships impact the availability of educational opportunities, resources, and data. Comprehending the influence of social dynamics on home schooling decisions is beneficial.

1.2 Statement of the Problem

Despite Kerala's global recognition for its significant achievements in social sectors, it still faces some issues especially in education sector. One special challenge is the growing number of highly educated people working in occupations that do not fully make use of their education. This problem centers on realizing how educational attainment and labour market demands do not align, as well as the possible fallout from an overeducated labour force. Kerala's highly educated population does not have easy access to work possibilities despite the state's economic progress. The challenge is realising how complicated the labour market is and how education and appropriate jobs don't always align, especially for the growing labour force. Kerala's highly educated workforce faces challenges related to unemployment and underemployment. There is a paradox between

the state's emphasis on education and the ability of the job market to absorb the skilled workforce effectively [17]. Despite significant public spending on education, there are concerns about the efficiency of this expenditure in terms of educational outcomes. The paradox lies in the need to align spending with tangible improvements in the quality of education [18]. All this situation leads to Kerala's education paradox pertains to the state's educational landscape's bewildering differences and obstacles, coexisting with high literacy rates and a strong cultural emphasis on education.

1.3 Objectives

1. To assess the expenditure pattern of households in Malappuram district.
2. To study the educational status of respondents in Malappuram District with consideration to various socioeconomic factors.
3. To explore the impact of household expenditure on the educational status of respondents in Malappuram District.

2. METHODOLOGY

The methodology employed in this research involves a systematic approach encompassing data collection, variable selection, statistical techniques, and analytical frameworks to effectively address the research objectives. Each component of the methodology is carefully designed to ensure the robustness and validity of the study's findings.

Data Collection: Primary data was collected through a cluster sampling technique in Malappuram district. Using Cochran's formula 386 samples were collected. The survey questionnaire comprised sections that captured demographic information, education status, and overall expenditure patterns of households. The data collection process was carried out with a rigorous approach to ensure the accuracy and reliability of responses.

Analytical Techniques: The analysis of the collected data employed a range of statistical methods to glean meaningful insights. Descriptive analysis was initially conducted, presenting percentages, means, and standard deviations for various variables. This approach provided a preliminary overview of the dataset, allowing for the identification of initial trends.

To discern statistically significant differences, Analysis of Variance (ANOVA) and chi-square tests were applied. ANOVA helped explore variations in means across different groups, while chi-square tests were used to analyze categorical variables and identify associations.

Regression analysis was a key component of the analytical framework, aiming to understand the impact of expenditure on the health status of households. Coefficients, significance levels, and goodness-of-fit measures were utilized to interpret and evaluate the regression model. Coefficients elucidated the magnitude and direction of the relationship between variables, while significance levels gauged the reliability of these relationships. The goodness-of-fit measures provided insights into how well the regression model explained the variability in the health status of households

3. RESULTS AND DISCUSSION

In this thorough examination, we investigate the complex relationship between spending habits and educational attainment in the heterogeneous Malappuram area. Our study aims to investigate many aspects that contribute to the comprehension of education dynamics and the utilisation patterns that are impacted by household spending. We want to shed light on the interactions that exist between demographic traits, socioeconomic factors, and educational results through close examination. The main objective of our research is to offer information that will help direct focused interventions and policy improvements, resulting in a more sophisticated comprehension of how spending patterns affect student status.

The objectives guiding this analysis are as follows:

Table 1 provides insights into the average percentage expenditure spent on several categories by sampled households in the Malappuram district based on primary survey in Malappuram district between December 2021 and September 2022 the information is based on a primary survey and provides insight into the priorities, spending habits, and financial practises of the participants. Key spending categories are shown in the table, which include medical, food, clothing, entertainment, luxury, fuel, functions, education, and others. The mean spending, standard deviation, and rank for each category are shown, providing important information on how money is allocated among various needs and preferences.

Food Spending is a primary allocation with a mean expenditure of Rs. 4135.68, food expenses rank highest among household priorities. This highlights the critical role that nourishment and subsistence have in the spending habits of the households examined. The sampled group appears to have some regularity in their food expenditure. The second most expensive item is education, coming in right behind food with an average cost of Rs. 3858.71. This is a significant investment. This demonstrates how much value families place on investing in their children's education. Due to respondents' varying financial capacity and priorities, the standard deviation (2155.596) indicates a moderate degree of heterogeneity in education spending.

Medical Spending which is Moderately Prioritised its ranks fourth in terms of priority, with an average expenditure of Rs. 3646.55. The standard deviation (5474.830) suggests a higher degree of fluctuation in medical spending, even if it still represents a sizable share of the budget. Variations in home health conditions and erratic healthcare needs could be the cause of this.

Table 1. Average percentage expenditure on various categories (Monthly)

Particular	N	Mean (in Rs.)	Std. Deviation
Medical	386	3646.55	5474.830
Food	386	4135.68	2455.378
Clothes	386	3666.30	3902.365
Entertainment	246	2320.93	3461.219
Luxuries	58	2852.68	1988.203
Fuel	288	2837.50	3463.333
Functions	229	3032.53	2339.394
Education	386	3858.71	2155.596
Others	212	2932.55	2278.797
Total expenditure	386	19792.977	12924.9995

Source: Primary Survey, 2022

Entertainment, Luxuries, and Clothes, when it comes to spending, these three categories fall in the middle. Luxuries come in sixth place with a mean expenditure of Rs. 2852.68, while Clothes and Entertainment come in third and eighth place, respectively. Discretionary spending patterns and a range of preferences are indicated by the standard deviations, which show significant variety in expenditure across various categories.

Table 1 presents a comprehensive overview of the spending trends in the Malappuram district, which leads us to a conclusion. The allocation of primary funds to food and education highlights their importance in household budgets. The survey population exhibits a range of requirements, preferences, and financial capacity, which is reflected in the variety of expenditure between categories. This highlights the significance of comprehending these subtleties to inform policymaking and implement targeted interventions.

3.1 Access to Education

The research, titled "Socioeconomic Factors Affecting School Education: A Case Study of India," conducted by Kumar, P., and Kumar, N., and published in the International Journal of Educational Planning & Administration in 2013, explores how things like money, parents' education, and jobs affect whether kids in India can get a good education. The study highlights how these factors are crucial in determining the chances children have for quality education and how well they do in school. Education is fundamental to human rights, a potent growth-

promoting agent for individuals, and a key component of society progress. Education is widely acknowledged as a fundamental entitlement, as it provides people with the necessary information, abilities, and channels to direct their own lives, participate meaningfully in their local communities, and access the global economy. Education is a force that has the power to shatter bonds, tear down barriers, and move people and society forward that is capable of much more than just imparting knowledge.

This section analyze how socioeconomic factors influences the education status of respondents in Malappuram district.

Regarding the distribution of educational attainment among various age groups, Table 2 provides a thorough overview of the relationship between age and education status among the population questioned. Drawn from a main survey carried out in 2022. the data illustrates the frequency of different degrees of education within different age groups, ranging from illiteracy to higher education.

Certain trends become apparent when the table is examined from the prism of human capital theory. A significant percentage of people with educational attainment up to these levels are found in the age groups "Up to Secondary School Leaving Certificate (SSLC)." and "Secondary School Leaving Certificate (SSLC)." This supports the idea of the theory, which holds that a person's human capital increases dramatically with a basic education, making it possible for them to engage in the workforce more successfully.

Table 2. Age and education status

Education	Age Category				Total
	Below 18	18-40	41-60	61-80	
Illiterate	0	3	22	3	28
	0.0	1.2	20.4	27.3	7.3
Up to SSLC	0	17	22	2	41
	0.0	7.0	20.4	18.2	10.6
SSLC	11	60	35	3	109
	44.0	24.8	32.4	27.3	28.2
+2	14	94	16	0	124
	56.0	38.8	14.8	0.0	32.1
Higher Education	0	68	13	3	84
	0.0	28.1	12.0	27.3	21.8
Total	25	242	108	11	386
	100.0	100.0	100.0	100.0	100.0
Chi-Square Result	Value= 101.512, df=12, p=0.000				

Source: Primary Survey, 2022

Higher education and the "+2" (Higher Secondary) categories, which are more common in the "18-40" age range, indicate an investment in higher education. This investment should increase productivity, earning potential, and overall financial well-being, according to the Human Capital Theory. Higher education attainment is becoming less common in older age groups, which could be a reflection of how education and job have changed over time. Additionally, the Chi-Square result, with a significant p-value of 0.000, suggests a relationship between age and education status. This statistical association underscores the economic implications of education at different life stages. For instance, individuals in the "+2" and "Higher Education" categories within the "18-40" age group may contribute more substantially to economic activities due to their advanced skill sets. To sum up, Table 2's observed patterns are consistent with the principles of Human Capital Theory, showing how education is allocated across age groups when seen as an investment in human capital. This economic viewpoint supports the idea that investments in education have a major positive impact on economic development and prosperity by highlighting the role that education plays in influencing both individual outcomes and broader economic trajectories.

Table 3 presents a socio-economic analysis of the data, revealing an uneven distribution of educational attainment among different marital statuses. A considerable proportion is married, particularly among those with educational levels ranging from Up to Secondary School Leaving

Certificate to Secondary School Leaving Certificate (SSLC), indicating a diverse range of educational backgrounds within this marital category. This distribution aligns with societal and economic expectations, considering that marriage often coincides with reaching a certain educational level. The Chi-Square analysis of Table 3 shows a statistically significant correlation between marital status and education, with a significant p-value of 0.000. The statistical link between these variables highlights their interdependence, indicating that within the examined population, marital status and educational choices are not independent of one another. According to the statistics, decisions about schooling may be influenced by one's marital situation and vice versa. As an illustration of the historical setting in which education may have been less available for this group, consider the higher number of illiterate and SSLC-educated adults among the widowed category. However, the larger percentages of +2 and larger degree in the single category may indicate a trend where people value obtaining a higher degree more than getting married.

The Table 4 presents a thorough examination of the association between respondents' income and educational attainment, derived from information gathered between December 2021 and September 2022 with help of primary Survey. Interestingly, when education attainment increases the average income also rises. The average income of respondents who are illiterate is the lowest at 12,800, while the average income of respondents who have higher education is the greatest at 42,905.952. The standard deviation

Table 3. Marital status and education status

Education		Marital Status				Total
		Married	Separated	Single	Widow	
Illiterate	N	23	0	1	4	28
	%	7.6	0.0	1.4	44.4	7.3
Up to SSLC	N	35	2	3	1	41
	%	11.6	28.6	4.3	11.1	10.6
SSLC	N	85	3	18	3	109
	%	28.2	42.9	26.1	33.3	28.2
+2	N	87	1	36	0	124
	%	28.9	14.3	52.2	0.0	32.1
Higher Education	N	71	1	11	1	84
	%	23.6	14.3	15.9	11.1	21.8
Total	N	301	7	69	9	386
	%	100.0	100.0	100.0	100.0	100.0
Chi-Square Result		Value= 42.006, df=12, p=0.000				

Source: Primary Survey, 2022

Table 4. Income and education status

Education	N	Average income	Std. Deviation	Std. Error
Illiterate	28	12800.000	10060.9365	1224.2139
up to SSLC	41	17190.244	12400.8025	1936.6800
SSLC	109	27583.486	19789.3748	1895.4783
+2	124	26762.903	23766.9391	2134.3341
Higher Education	84	42905.952	27002.0452	2946.1647
Total	386	29928.756	23308.9053	1186.3920
ANOVA	F(4,381)=11.694, p=0.000			

Source: Primary Survey, 2022

measurements indicate the variation in income within each educational category, with the highest degree of diversity found in Higher Education.

Income differences between education levels are statistically significant, according to the ANOVA results (p=0.000). This demonstrates the substantial impact that educational achievement has on income disparities. The results indicate that education is an investment in human capital that increases earning potential, which is consistent with the Human Capital Theory (Becker, G. S. 1964). This study also supports the research work of David Card's study [19]. His study explores the causal relationship between education and earnings, contributing to the understanding of the economic returns to education and his findings indicate a positive causal effect of education on earnings, suggesting that individuals who attain higher levels of education experience an increase in their lifetime earnings.

In the below regression analysis, the model attempts to educational status of households based on several predictor variables: Medical expenditure, food expenditure, cloth expenditure, entertainment expenditure, Fuel expenditure, functions expenditure. Here is the interpretation of the results:

Model Summary:

R-squared (R²): The model explains 12% of the variance in educational status. This means that 12% of the variability educational status scores can be accounted for by the predictor variables included in the model.

Adjusted R-squared: When considering the number of predictors, the adjusted R² is 10.3%. It adjusts the R² for the number of predictors in the model.

F-Statistic: The F-statistic tests whether the overall regression model is statistically

significant. Here, the F-statistic of 7.343 is associated with a very low p-value (p < 0.001), indicating that the model is statistically significant.

Interpretation of Coefficients:

- Constant: The intercept is 0.381. It represents the expected educational status score when all predictor variables are zero.

Predictor Variables:

- Medical expenditure: For every one-unit increase in medical expenditure, educational status is expected to decrease by 0.176 points when the expenditure on other items is held constant.
- Food expenditure: For every one-unit increase in Food expenditure, educational status is expected to increase by 0.247 points when the expenditure on other items is held constant.
- Cloth expenditure: Not statistically significant; changes in Cloth expenditure do not have a significant impact on educational status when the expenditure on other items is held constant.
- Entertainment expenditure: Not statistically significant; changes in Entertainment expenditure do not have a significant impact on educational status when the expenditure on other items is held constant.
- Fuel expenditure: Not statistically significant; changes in Fuel expenditure do not have a significant impact on HDI when the expenditure on other items is held constant.
- Functions expenditure: Not statistically significant; changes in Functions expenditure do not have a significant impact on educational status when the expenditure on other items is held constant.

Table 5. Multiple regression analysis of impact of households expenditure on education status of respondents

Model Summary								
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson			
1	.346 ^a	.120	.103	.12027	1.493			
ANOVA								
1	Residual	Regression	.743	7	.106	7.343		
	Total	5.468	378	.014				
	Regression	6.211	385					
Coefficients								
		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
(Constant)		.381	.012		30.908	.000		
Expenditure for Medical		-.176	.040	-.283	-4.425	.000	0.567	1.762
Expenditure for Food		.247	.050	.320	4.905	.000	0.547	1.828
Expenditure for Clothing		.101	.092	.062	1.095	.274	0.736	1.359
Expenditure for Entertainment		-.073	.207	-.034	-.351	.726	0.247	4.042
Expenditure for Fuel		.037	.181	.019	.204	.839	0.274	3.648
Expenditure for Functions		-.010	.076	-.009	-.134	.894	0.476	2.102

Source: Primary Survey, 2022

Table 6. Correlation between educational status and total expenditure of households

Correlations			
		Total expenditure	education
Total expenditure	Pearson Correlation	1	.400**
	Sig. (2-tailed)		.000
	N	386	386
Education	Pearson Correlation	.400**	1
	Sig. (2-tailed)	.000	
	N	386	386

** Correlation is significant at the 0.01 level (2-tailed)

Source: Primary Survey, 2022

- Significant Predictors: Medical expenditure and Food expenditure are significant predictors of educational status. Changes in these variables are associated with significant changes in educational status scores.
- Insignificant Predictors: Cloth expenditure, Entertainment expenditure, Fuel expenditure, and Functions expenditure do not significantly impact educational status scores.

The Table 6 shows the correlation between household expenditure and educational, which offers important information on the link between these two variables. The positive association between total expenditure and education attainment is indicated by the positive correlation value of 0.400. One variable tends to increase along with the other. The correlation that has been detected is statistically significant, as indicated by the significance level (p -value < 0.01). The positive correlation implies that, on average, households with higher educational attainment tend to have higher total expenditures. This aligns with the notion that education enhances earning potential and economic well-being. The Human Capital Theory, which was developed by economists like Gary Becker, is supported by this positive correlation. This idea contends that investing in education increases human capital, which in turn raises revenue. According to the correlation, households with higher levels of education tend to devote more resources towards overall spending. Higher education can cause people to spend differently and make more deliberate and educated decisions, according to research on consumer behavior theory. To sum up, the results in the table demonstrate a strong and favorable relationship between household spending and educational attainment.

4. CONCLUSION

This study explores the complex relationship between respondents' educational status and household spending patterns in the Malappuram region a southern district in the Indian state of Kerala using data from a main survey conducted between December 2021 and September 2022. A thorough grasp of how money is distributed among different needs can be obtained by analysing the primary spending categories, which include functions, medical, food, clothes, entertainment, luxury, gasoline, and education. The importance of sustenance is highlighted by

the fact that food expenditure ranks first among household priorities, with a mean of Rs. 4135.68. Education comes in second with a mean of Rs 3858.71, highlighting the substantial investment made by families which means Food and education are prioritised, demonstrating how important they are to household budgets. Distributions of educational attainment between marital statuses are shown to be unequal, according to socioeconomic study. Indicating the interdependence of education and marital status, the Chi-Square analysis finds a statistically significant relationship between the two. Some indications of past educational accessibility and societal expectations include, for example, a higher percentage of singles with higher education and a higher proportion of illiterate respondents among widowed respondents. According to the regression study, food and medical costs have a big impact on one's educational standing. A higher level of education is positively correlated with higher food expenditure, as indicated by a positive coefficient for food expenditure. On the other hand, after controlling for other variables, non-significant correlations for clothes, entertainment, fuel, and function expenses imply that they have little effect on educational standing. The fact that total spending and education have a positive association ($r = 0.400$) shows that higher levels of education are correlated with higher levels of household spending. According to the Human Capital Theory, this conclusion, which is backed by a statistically significant connection, confirms the positive effects of education on earning potential and financial well-being.

Ethical Approval and Consent: Ethical standards were adhered to throughout the study. Informed consent was obtained from all participants, ensuring their willingness to participate. Data confidentiality and anonymity were maintained, and ethical guidelines were followed in data collection, storage, and analysis.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Haveman R, Wolfe B, Pence K. Intergenerational Effects of Nonmarital and Early Childbearing. Carsey Institute; 2001.
2. Irudaya Rajan S, Sunitha KS. Dynamics of Educational Disparities: A Case Study of

- Kerala. Social Science Spectrum. 2009; 5(1):28-39.
3. Kambhampati US. Does household expenditure on education in India depend upon the returns to education? Henley Business School University Whiteknights Reading RG6 6AA United Kingdom; 2008.
 4. Kumar P, Kumar N. Socioeconomic factors affecting school education: A Case Study of India. International Journal of Educational Planning & Administration; 2013.
 5. Laibson D. Golden Eggs and Hyperbolic Discounting. Quarterly Journal of Economics. 1997;112(2):443-477.
 6. Bayar AA, Yanik İlhan B. Determinants of household education expenditures: Do Poor Spend Less on Education? Topics in Middle Eastern and North African Economies; 2016.
 7. Chaudhuri K, Roy S. Do parents spread educational expenditure evenly across the two genders? Evidence from two North Indian States. Economic and Political Weekly. 2006;5276-5282.
 8. Chandrasekhar S, Rani PG, Sahoo S. Household expenditure on higher education in India: What do we know & what do recent data have to say? (No. 2016-030). Indira Gandhi Institute of Development Research, Mumbai, India; 2016.
 9. Coleman JS. Social Capital in the Creation of Human Capital. American Journal of Sociology. 1988;94:S95-S120.
 10. Thaler RH, Sunstein CR. Nudge: Improving decisions about health, wealth, and Happiness. Yale University Press; 2008.
 11. World Health Organization. World Health Statistics 2021: Monitoring health for the SDGs. World Health Organization; 2021.
 12. Zachariah KC, Rajan SI. An Overeducated Workforce? Some Evidence from Kerala. In J. J. C. Bijman & C. Kleine Deters (Eds.), Development and Social Justice. Springer. 2011;221-240.
 13. Becker GS. Human Capital: A theoretical and empirical analysis, with Special Reference to Education. University of Chicago Press; 1964.
 14. Warschauer M. Laptops and Literacy: Learning in the Wireless Classroom. Teachers College Press; 2006.
 15. Song L, Zhou W. Human capital theory: The role of education in enhancing knowledge, skills, and economic productivity; 2019.
 16. Cavus Mustafa, Kan Kılınç, Betül Yazıcı, Berna Tekeli, Seda Günsoy, Güler Gunsoy, Bulent, et al. Modeling the contribution of distance education to students' preparation for the professions. Turkish Online Journal of Distance Education. 2021;22:106-119.
 17. Zachariah KC, Rajan SI. Education and Employment in Kerala: Some Neglected Questions. Economic and Political Weekly. 2009;44(17):57-65.
 18. Government of Kerala. Economic Review of Kerala 2018. State Planning Board, Thiruvananthapuram; 2019.
 19. Card D. The Causal Effect of Education on Earnings. Handbook of Labor Economics. 1999;3(1):1801-1863.

© 2023 Ahammed and Cholakkal; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/109976>