

Examining the Nexus: Socioeconomic Status and Access to Educational Resources among Secondary School Students in Sri Lanka

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ABSTRACT

This research, delves into the intricate relationship between socioeconomic status and access to educational resources among secondary school students in Sri Lanka. The study recognizes the fundamental role of educational resources in shaping the academic journey and overall well-being of students and aims to address the existing knowledge gap regarding equitable access across diverse socioeconomic backgrounds. The research employs a survey-based, quantitative research design, focusing on the impact of parental income and education on students' access to essential educational resources. The study's target population comprises 1350 secondary schoolchildren selected through a stratified random sampling method to ensure representation from various socioeconomic backgrounds. A structured questionnaire serves as the primary data collection instrument, comprising sections dedicated to assessing parental income, parental education, and students' perceptions of their access to educational resources. Utilizing a Likert Scale, the questionnaire evaluates students' satisfaction with resources such as classroom infrastructure, ICT facilities, library services, science laboratories, guidance and counseling services, home study space, and parental provision of educational materials. The data analysis involves both descriptive and inferential statistical techniques, including means, standard deviations, and Multivariate Analysis of Variance (MANOVA). The Statistical Package for the Social Sciences (SPSS) version 23 software ensures a comprehensive examination of student access to educational resources, specifically considering parental income and educational backgrounds. Key findings reveal significant variations in access based on parental education levels, with father's education showing notable distinctions. However, the study does not identify similar distinctions based on the mother's highest educational level, potentially reflecting evolving societal norms. Importantly, the research underscores the pivotal role of parental income, emphasizing a hierarchical pattern of access among different socioeconomic classes. In conclusion, the study provides valuable insights into the multifaceted nature of factors influencing students' access to educational resources in Sri Lankan secondary schools, offering implications for policymakers and stakeholders to address resource gaps and foster a more inclusive educational environment. The research contributes to the broader discourse on educational inequalities and highlights the need for targeted interventions to uplift disadvantaged students.

Keywords: Socioeconomic status, Educational resources, Parental income, Parental education, Secondary school students, Sri Lanka.

INTRODUCTION

In the vibrant landscape of Sri Lankan education, the accessibility and quality of educational resources stand as fundamental determinants shaping the educational journey and holistic wellbeing of secondary school



students. This research explores the intricate interplay between socioeconomic factors, namely parental income and parental academic level, and the access of secondary school students in Sri Lanka to essential educational resources. As Abeyasekera (2014), educational resources encompass a diverse array of material, natural, and intellectual dimensions, all of which are imperative for meeting fundamental human needs and cultivating an enriching learning environment. At the core of educational resources lies the infrastructure within schools, encompassing classrooms, libraries, and information and communication technology (ICT). Building upon the findings of Suleman and Hussain (2014), we recognize that an enhanced physical classroom environment significantly correlates with heightened student attentiveness, interest, and motivation. However, challenges persist, with studies such as Afework and Asfaw (2014) highlighting the inadequacy of library and laboratory services, posing substantial hurdles that impact student motivation and the broader teaching-learning processes. The indispensable role of guidance and counselling services in aiding students to discover their identities, abilities, and interests, thereby facilitating informed career choices, is evident. Yet, as illuminated by Kazimoto (2020) and (Yuca et al., 2017), the efficacy of such services is contingent upon the availability of proper facilities and qualified personnel. The barriers identified by Chen and Kok (2017) underscore the necessity for a holistic approach to counselling, addressing contextual issues, counsellor competencies, and time constraints.

Recognition of Information ICT resources as pivotal for effective teaching and learning is gaining prominence in Sri Lankan education. Studies by Nketiah-Amponsah et al. (2017) and Oyeboade and Gbotosho (2017) accentuate the critical correlation between infrastructure facilities and academic performance. However, challenges such as the lack of electricity, operational complexity, and student apprehension, as identified by Oyeboade et al. (2017) and Anil and Jayakumar (2018), pose substantial barriers to the seamless integration of ICT resources. Furthermore, the significance of well-equipped science laboratories underscores the centrality of science education. Olubu (2015) and Pareek (2019) emphasize the correlation between laboratory learning environments and academic performance, emphasizing the pivotal role of adequate facilities in effective science education. Conversely, the challenges identified by Olajide et al. (2017) and Zengele and Alemayehu (2016) in the absence of laboratory facilities pose a significant impediment to science instruction in the Sri Lankan context.

Against this dynamic backdrop, the present study seeks to enrich the existing literature by closely examining the nexus between socioeconomic status and the access of secondary school students in Sri Lanka to a spectrum of educational resources. Drawing upon diverse scholarly perspectives, this research aims to unravel the multifaceted impact of educational resource availability on students' learning outcomes, attendance, and overall academic achievement, thus offering valuable insights for educational policymakers, practitioners, and stakeholders, fostering an inclusive and equitable educational environment that addresses the unique challenges and opportunities within the Sri Lankan educational scenario.

Problem Statement

Despite the recognized importance of educational resources in shaping the academic journey of secondary school students, a critical issue persists in Sri Lanka concerning equitable access to these resources across diverse socioeconomic strata. The nexus between socioeconomic status and the accessibility of educational resources remains inadequately understood, potentially contributing to disparities in learning outcomes, attendance, and overall academic achievement among secondary school students. This research aims to address the gap in knowledge by systematically examining the relationship between socioeconomic status and access to educational resources, shedding light on the specific challenges faced by students from varying socioeconomic backgrounds in Sri Lanka. Through this inquiry, we seek to identify critical barriers hindering equal access, ultimately contributing to informed interventions and policy recommendations for a more inclusive and equitable educational landscape in the country.



METHODOLOGY

Research Design

This study employed a survey-based, quantitative research design to investigate secondary school children's access to educational resources based on socioeconomic status, precisely parental income and education.

Participants

The target population for this study comprised secondary schoolchildren throughout Sri Lanka. Utilizing a stratified random sampling method, a study sample of 1350 secondary schoolchildren was selected to ensure representation from diverse socioeconomic backgrounds.

Instrumentation

A structured questionnaire served as the principal instrument for data collection, aligning with the research objectives. The questionnaire comprised two distinct sections: one dedicated to assessing the socioeconomicstudents' socioeconomic status aimed at gauging the students' perceptions regarding their access to educational resources.

To quantify access to educational resources, a Likert Scale was employed, offering respondents five response options: Strongly Disagree (1), Disagree (2), Neither Disagree nor Agree (3), Agree (4), and Strongly Agree (5). Rigorous measures were undertaken to ensure the questionnaire's validity and reliability, including seeking expert opinions. The instrument's internal consistency was assessed using Cronbach's alpha coefficient, which yielded a robust value of 0.926, signifying a high level of reliability.

Data Collection

The administration of the questionnaire was carried out across selected secondary schools, ensuring a diverse representation of socioeconomic backgrounds. The researchers obtained informed consent from both students and their parents or guardians prior to data collection. Trained enumerators facilitated the distribution and collection of the questionnaires, maintaining confidentiality and anonymity to encourage candid responses.

Data Analysis

Following data collection, both descriptive and inferential statistical analyses were employed. Descriptive analysis involved calculating means and standard deviations to provide insights into student access to educational resources. Inferential statistical techniques, specifically the Multivariate Analysis of Variance MANOVA was conducted to explore potential significant differences in student access to educational resources, considering parental income and academic level variables.

The researchers utilized the Statistical Package for the Social Sciences (SPSS).on 23 software for data analysis. This widely recognized tool in social science research facilitated a comprehensive examination of student access to educational resources, explicitly identifying potential disparities associated with parental income and educational backgrounds. The robustness of the methodology aimed to ensure the reliability and validity of the findings, contributing valuable insights to the broader discourse on socioeconomic influences on student education in Sri Lanka.

Findings

Demographic Factors

The demographic factors considered in this study include parent income and parental educational level. The



respondents' demographic information was analysed using frequency and percentage measures, as shown in Table 01.

Table 1 Demographic Profiles of the Students
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Profile	Demographic	Frequency	Percentage
	Less than Rs. 15,000	487	36.1
Parent Income	Rs. 15,001 -46,000	609	45.1
	Rs. 46,001- 150,000	215	15.9
	More than Rs. 151,001	39	2.9
	No schooling	56	4.1
	Primary	332	24.6
Father's level of Education	G.C.E O/L	565	41.9
	G.C.E A/L	307	22.7
	Tertiary Education	90	6.7
	No schooling	47	3.5
Mathen's Level of Education la	Primary	292	21.6
Mother's Level of Educationle	G.C.E O/L	613	45.4
	G.C.E A/L	320	23.7
	Tertiary Education	78	5.8

In relation to the socioeconomic background of the respondents, a predominant cohort (609 individuals, constituting 45.1% of the surveyed sample) reported that their parental income fell within the bracket of Sri Lankan Rupees 15,001 to 46,000. A significant proportion of respondents (487, or 36.1%) indicated that their parents' income was below Rs. 15,000. Moreover, 215 respondents (15.9%) articulated that their parents' income ranged between Rs. 46,001 and 150,000. A markedly smaller subset (39, or 2.9%) disclosed that their parents' income exceeded Rs. 150,000.

Regarding the educational attainment of respondents' fathers, a predominant faction (565 respondents, accounting for 41.9%) reported that their fathers had completed the G.C.E.' O' Level. In contrast, a minority segment (56 respondents, constituting 4.1%) acknowledged that their fathers had not received formal education. A substantial cohort (332 respondents, or 24.6%) revealed that their fathers had only attained education. Conversely, a notable proportion of respondents indicated higher educational achievements for their fathers, with 307 (22.7%) citing G.C.E.E 'A' Level qualifications and 90 (6.7%) reporting education.

Turning to the educational background of respondents' mothers, a majority (613 individuals, representing 45.4%) asserted that their mothers heldG.C.E.' O' Level certificates. Conversely, a minority subset (47 respondents, or 3.5%) disclosed that their mothers lacked formal education, while a substantial contingent (292 respondents, constituting 21.6%) reported that their mothers had only completed education education. Additionally, respondents indicated varying levels of academic attainment for their mothers, with 320 (23.7%) citing G.C.E.E 'A' Level qualifications and 78 (5.8%) indicating Education education.



Assessing the Varied Levels of Student Access to Educational Resources

The descriptive analysis provides mean and standard deviation values that are used to determine the level of access to educational resources. Seven items were constructed to determine the respondents' 5-level rating (strongly agree, agree, undecided, disagree, strongly disagree) regarding students' access to educational resources, as shown in Table.

Table 2 Level of Students' Access to Educational Resources

No.	Item	Mean	S. D	Interpretation
I am s	atisfied with			
D1.1	desk, chair and blackboard/whiteboard/greenboard/screen in the classroom, enabling me to get involved in the lesson.	4.130	1.042	High
D1.2	accessingI.C.T.T at my school, which enables me to do computer practice and do assignments	3.335	1.334	Moderately High
D1.3	accessing library books, newspapers, journals, question papers related to my subjects at my school library	3.685	1.224	Moderately High
D1.4	the equipment at my school science laboratory, which enabled me to participate in science experiments	3.774	1.093	Moderately High
D1.5	educational guidance and counselling services at my school, which enabled me to get their support whenever needed	3.790	1.074	Moderately High
D1.6	the space at my home to inEducationmy education	4.262	0.979	High
D1.7	receiving educational materials from my parents	4.545	0.850	High
	Overall	3.932	0.717	Moderately High

Table 2 shows the items and the level of access to students' educational resources with an overall mean of 3.932, a general of 0.717 and a moderately high interpretation. The item with the highest value for this aspect is D1.7, which is students' satisfaction with receiving educational materials such as pens, pencils, exercise books, etc., from their parents; the mean for this is 4.545, the.. 0.850 and the interpretation is high. The second highest item is D1.6, which is students' satisfaction with the space set aside in their homes for them to engage in their studies. The mean for this is 4.262 S.D. = S.D79), and the interpretation is high. The third highest item (D1.1) for this aspect is student satisfaction with desk, chair and blackboard/ whiteboard/ green board/ screen in the classroom, which are essential classroom adjuncts to get involved in learning activities; the mean for this item is 4.130, S.D. I S.D.042 and the interpretation high. The fourth, fifth and sixth items of this aspect are about students' satisfaction with access to educational guidance and counselling services at schools (mean =3.790; S.D. = S.D74), the equipment at the school science laboratory (mean =3.774; S.D., = S.D93), and reading materials at school libraries (mean =3.685; S.D., = S.D24), respectively; the interpretation for all three of these items is moderately high. The lowest item is about students' satisfaction with access to ICT, which is essential for them to use the computer for learning activities and do assignments; the mean for this is 3.335, and. is 1.334. The interpretation of this item is moderate.

Differences in Student Access to Educational Resources Based on Parental Education

The multiple Two-Way MANOVA were used to see the difference in mean scores for each dependent variable in the student's access to educational resources based on parents' education level as an extension of the MANOVA. Table 3 and Table 4 show the MANOVA is for the difference in mean scores on students'



access to educational resources based on parental education level.

Table 3 Two Way MANOVA Aspects of Student Access to Educational Resources Based on Parental Educational Level

Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Father's Highest Educational Level	5.374	4	1.343	2.673	0.031
Mother's Highest Educational Level	3.765	4	0.941	1.873	0.113
Father's*Mother's Highest Educational Level	9.520	15	0.635	1.263	0.218

Table 4 Mean Scores Difference Aspects of Student Access to Educational Resources Based on Parent Educational Level

	Father's Highest Educational Level	Mother's Highest Educational Level	Mean	Std. Deviation	Ν
		No Schooling	3.72	0.73	21
		Primary	3.84	0.68	19
	No Schooling	G.C.E(O/L)	3.45	1.16	14
		G.C.E(A/L)	3.07	1.53	2
		Total	3.66	0.85	56
		No Schooling	3.82	0.55	17
		Primary	3.83	0.80	183
	Dulus and	G.C.E(O/L)	3.99	0.65	116
	Primary	G.C.E(A/L)	3.99	0.60	15
		Tertiary Education	4.28	0.00	1
		Total	3.89	0.73	332
	G.C.E(O/L)	No Schooling	3.74	0.56	5
		Primary	3.72	0.72	77
		G.C.E(O/L)	3.92	0.70	357
Access to Educational Resources		G.C.E(A/L)	4.03	0.62	113
Resources		Tertiary Education	4.14	0.58	13
		Total	3.92	0.69	565
		No Schooling	3.78	0.30	2
		Primary	3.74	0.27	10
	C C E(A/I)	G.C.E(O/L)	3.88	0.72	114
	G.C.E(A/L)	G.C.E(A/L)	4.11	0.70	159
		Tertiary Education	4.00	0.59	22
		Total	4.01	0.70	307
		No Schooling	2.85	0.00	2
		Primary	2.85	0.49	3
	Tertiary Education	G.C.E(O/L)	3.84	0.95	12
	remary Education	G.C.E(A/L)	4.03	0.74	31
		Tertiary Education	4.12	0.53	42
		Total	3.98	0.72	90



	No Schooling	3.72	0.64	47
	Primary	3.79	0.76	292
	G.C.E(O/L)	3.92	0.72	613
Total	G.C.E(A/L)	4.06	0.68	320
	Tertiary Education	4.09	0.55	78
	Total	3.93	0.71	1350

Table 3 shows significant differences in access to educational resources [F = 2.673 and sig = 0.031] based on father's highest education level. Table 5 shows that students who have fathers with tertiary education have the highest mean compared to other students with respect to accessing educational resources. Based on the mother's highest academic level, Table 3 shows that there are no significant differences in terms of access to educational resources [F = 1.873 and sig = 0.113]. Table 3 show there are no interaction significant among father and mother's educational level towards student access to educational resources [F = 1.263 and sig = 0.218].

Table 5 presents the post hoc analysis from which we can see in great detail the mea differences in students' educational wellbeing based on father's highest education level.

Table 5 Post Hoc Analysis of Difference Aspects of Student Access to Educational Resources based on Father's Highest Educational Level

Dependent Variable	(I) Father's Highest Educational Level	(J) Father's Highest Educational Level	Mean Difference (I-J)	Std. Error	Sig.
		Primary	-0.23	0.10	0.276
	No Schooling	G.C.E(O/L)	-0.26	0.09	0.141
	No Schooling	G.C.E(A/L)	-0.34*	0.10	0.025
		Tertiary Education	-0.32	0.12	0.128
		No Schooling	0.23	0.10	0.276
	Primary	G.C.E(O/L)	-0.02	0.04	0.986
	1 milar y	G.C.E(A/L)	-0.11	0.05	0.403
		Tertiary Education	-0.09	0.08	0.882
Access to	G.C.E(O/L)	No Schooling	0.26	0.09	0.141
Educational		Primary	0.02	0.04	0.986
Resources		G.C.E(A/L)	-0.08	0.05	0.601
		Tertiary Education	-0.06	0.08	0.964
		No Schooling	0.34*	0.10	0.025
	G.C.E(A/L)	Primary	0.11	0.05	0.403
	O.C.E(A/L)	G.C.E(O/L)	0.08	0.05	0.601
		Tertiary Education	0.02	0.08	1.000
		No Schooling	0.32	0.12	0.128
	Tertiary Education	Primary	0.09	0.08	0.882
		G.C.E(O/L)	0.06	0.08	0.964
		G.C.E(A/L)	-0.02	0.08	1.000

Table 6 presents the post hoc analysis where we can see in greater detail the mean differences in students'



access to educational resources based on mother's highest education level.

Table 6 Post Hoc Analysis of Difference Aspects of Student Access to Educational Resources Based on Mother's Highest Educational Level

		(J) Mother's Highest Educational Level	Mean Difference (I-J)	Std. Error	Sig.
		Primary	-0.06	0.11	0.988
	No Cohooling	G.C.E(O/L)	-0.19	0.10	0.525
	No Schooling	G.C.E(A/L)	-0.33	0.11	0.053
		Tertiary Education	-0.36	0.13	0.094
		No Schooling	0.06	0.11	0.988
	During a surv	G.C.E(O/L)	-0.12	0.05	0.163
	Primary	G.C.E(A/L)	-0.27*	0.05	0.000
		Tertiary Education	-0.30*	0.09	0.022
	G.C.E(O/L)	No Schooling	0.19	0.10	0.525
Access to Educational		Primary	0.12	0.05	0.163
Resources		G.C.E(A/L)	-0.14	0.04	0.061
		Tertiary Education	-0.17	0.08	0.363
		No Schooling	0.33	0.11	0.053
		Primary	0.27*	0.05	0.000
	G.C.E(A/L)	G.C.E(O/L)	0.14	0.04	0.061
		Tertiary Education	-0.03	0.08	0.998
		No Schooling	0.36	0.13	0.094
	Toutions Education	Primary	0.30*	0.09	0.022
	Tertiary Education	G.C.E(O/L)	0.17	0.08	0.363
		G.C.E(A/L)	0.03	0.08	0.998

Table 5 shows a significant difference in students' educational wellbeing regarding access to educational resources between students who have mothers with primary education only and students who have mothers with G.C.E (A/L) and tertiary education.

Differences of Student Access to Educational Resources Based on Parental Income

Table 7 shows the MANOVA.is for the difference in mean scores on students' eaccess to educational resources based on parental income.

Table 7 MANOVA Analysis of Aspects of Students' Access to Educational Resources based on Parent Income Level

Variable	Income Level	N	Mean	S. D	Type III Sum of Squares		Total Square	F	Sig.	
Access to	>Rs. 15,000	487	3.856	0.744	-			Square		
	Rs.15,001-46,000		3.924							
Resources	Rs.46,001-150,00		4.116	0.631	10.247	3	3.416	6.718	0.000	
	< Rs.151,001	39	3.978	0.719						



Table 7 shows there are significant differences in children' access to educational resources [F = 6.718 and sig = 0.000] based on parental income.

Table 8 Post Hoc Analysis of Difference Aspects of Student access to educational resources based on Parent Income

Dependent Variable	(I)Parental Income	(J)Parental Income	Mean difference (I-J)	Std. Error	Sig
		15,001-46,000	06744	.04335	.490
	>15,000	46,001-150,000	26039*	.05838	.000
		<151,001	12147	.11866	.790
	15,001-46,000	>15,000	.06744	.04335	.490
		46,001-150,000	19295*	.05657	.009
Access to Educational Resources		<151,001	05402	.11778	.976
	46,001-150,000	>15,000	.26039*	.05838	.000
		15,001-46,000	.19295*	.05657	.009
		<151,001	.13892	.12410	.740
		>15,000	.12147	.11866	.790
	<151,001	15,001-46,000	.05402	.11778	.976
		46,001-150,000	13892	.12410	.740

According to Post Hoc test results shown in Table 8 obtained using the MANOVA, access to educational resources aspect showed a significant difference between parental income below Rs. 15,000 and parental income in the Rs. 46,001-150,000 range. Moreover, according to the table, access to educational resources aspects showed a significant difference between parental income of Rs. 15,001-46,000 and parental income of Rs. 46,001-150,000. Based on Table 7 and Table 8 it can be concluded that the children's access to educational resources is highest among the Upper-Middle-Class children than Upper-Class, Lower-Middle-Class, and Poor children. On the other hand, Poor children's access to educational resources wellbeing in terms of access to educational resources lowest in Sri Lankan secondary schools.

CONCLUSION AND DISCUSSION

The findings of this study shed light on the nuanced factors influencing students' access to educational resources, emphasizing the role of parental education levels and income disparities. The observed significant variations in access based on the father's highest education level highlight the importance of parental educational background in shaping a student's educational experience. These results align with existing literature that underscores the positive correlation between parental education and children's academic outcomes (Davis-Kean, 2005; Sirin, 2005).

Contrastingly, the study did not identify similar distinctions based on the mother's highest educational level. This lack of significance could be attributed to evolving societal norms and changing roles within families, challenging traditional assumptions about the influence of maternal education on children's educational opportunities (Pleck, 2010). Further research may delve into the evolving dynamics of parental roles and their impact on students' access to educational resources.



The absence of significant interaction effects between father and mother's educational levels suggests that these factors act independently rather than synergistically. This finding contradicts studies that propose interactive effects, emphasizing the combined influence of both parents' educational backgrounds (Pong, Dronkers, & Hampden-Thompson, 2003). The unique context of Sri Lankan secondary schools may contribute to this deviation, warranting additional exploration into the specific mechanisms at play in this setting.

The study underscores the pivotal role of parental income in shaping access to educational resources, corroborating extensive research highlighting the impact of socio-economic status on educational outcomes (Reardon, 2011). The hierarchical pattern of access among Upper-Middle-Class, Upper-Class, Lower-Middle-Class, and Poor children emphasizes the persistence of educational inequalities linked to economic disparities. Policymakers must consider these findings when formulating interventions to address resource gaps and foster a more inclusive educational environment (Reardon & Portilla, 2016).

In the Sri Lankan context, the notably lower access to educational resources for Poor children raises concerns about the potential perpetuation of social inequality. Previous research has underscored the need for targeted policies and interventions to uplift disadvantaged students (World Bank, 2018). Initiatives that address financial barriers, such as scholarships or subsidized educational materials, could contribute significantly to narrowing the gap in resource access among socio-economic classes.

In conclusion, the study provides valuable insights into the multifaceted nature of factors influencing students' access to educational resources in Sri Lankan secondary schools. By highlighting the impact of parental education levels and income disparities, the findings contribute to the broader discourse on educational inequalities. However, it is essential to acknowledge the limitations of the study, such as the specific context and potential unexplored variables, warranting further research to deepen our understanding of the complex interplay between socio-economic factors and educational resource access.

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