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Urban Poverty and Primary Education Sustainability Access: The Influence of Parental Income in Nairobi Informal Settlements, Kenya

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Abstract: Children residing in urban informal settlements continue to have differing levels and access to education services despite the free primary education program and policies to support children's transition to school within Kenya. This study examines how parental income impacts the ability of children, living in three informal settlements (Kibera, Mathare and Korogocho), to gain access to primary education. Using a mixed methods approach, the study analyzed survey data from 347 respondents, 11 interviews and nine focus groups, and the findings supported Educational Productivity Theory and Classical Liberal Theory of Equal Opportunity. The results of the study indicated that having adequate school materials positively impacted the children's attendance and accessibility to school ($\beta = 0.35$). Poverty negatively impacted children's access to education ($\beta = 0.25$). There was a moderate association between unemployment and psychosocial factors, giving a moderate association ($\beta = 0.16$, $p = 0.031$). A connection also existed between job losses and psychosocial factors. From qualitative data from the participants, one can conclude that parents struggle to satisfy their children's educational requirements like buying school uniform and ensuring they have something to eat. The current study indicates that family material and financial resources are positively associated with educational opportunities for children.

Keywords: Parental income; access to education; informal settlements; primary education; Nairobi; Kenya

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1. Introduction

There are different international initiatives, such as the Global Partnership for Education and the United Nations Girls' Education Initiative, alongside technological solutions, namely Giga and the Learning Passport, that collaborate to increase access to primary education [1], [2]. Nevertheless, the retention rate is an obstacle, particularly in urban informal settings since they have poor conditions in terms of poverty, which makes it difficult for kids to come to school [3]. While these initiatives have reduced financial burden, there have been obstacles in certain communities preventing their children from enrolling consistently [4]. Urbanization has increased slum areas, which house about 60% of urban families in developing nations [4]. In Nairobi, only 35.6% of students in informal settlements complete school or progress to the next stage, compared to their peers in formal urban areas [5]. This clearly exemplifies that having a school nearby does not guarantee high attendance or retention, hence the need to examine how household factors influence sustained access to primary education in informal settlements.

In countries with large urban informal populations in Sub-Saharan Africa such as Nigeria and South Africa, there is a similar pattern in that indirect costs of schooling (e.g., uniforms, meals, transport and learning materials) still play a significant role determining whether children are able to participate in school even after tuition has been removed. As an example, in Nigeria, while studies have shown access to formal schooling, financial

strain at the household level is one of the barriers to children attending school regularly [6], [7]. In addition, research on South Africa has shown that hidden costs of education have had a negative impact on retention rates of children living in the informal settlement [8]. Households with unstable income and high costs associated with attending are under immense stress as a result of these hidden costs, leading to missed days at school, being irregularly in attendance, and dropping out of school early. Most studies to date have focused on enrolment or academic achievement, with less focus on longitudinal measures of access such as consistent attendance, progression and completion of schooling. As a result, there is not a good understanding of how economic conditions at the household level impact continued participation in schooling over time.

The main focus of this study centers on income because it determines which educational needs families can meet. Existing research studies income through its general and proxy methods but uses limited methods to investigate how material income and unemployment and income loss impact continuous access to resources. In light of this situation, the study uses both quantitative and qualitative research methods to investigate how different income factors relate to continuous access to primary education in informal settlements within Nairobi. The next section reviews relevant literature and presents the theoretical framework, followed by methodology, results, discussion, and conclusion.

Literature Review

Theoretical Framework

The research framework of this study uses two theories which are Walberg's Educational Productivity Theory and the Classical Liberal Theory of Equal Opportunity. Learning according to Walberg's educational productivity theory gets affected by three types of factors which include home environment elements and learner attributes and instructional condition elements. Walberg demonstrates how household resources affect how much households can produce which then affects how much their children can attend school and succeed in their studies [9], [10]. Low-income families in informal settlements focus on their essential survival needs because this choice restricts their ability to support their children's education which results in difficulties for their children to attend school and stay in school and finish their studies [11], [12]. The theory developed by Walberg proves limited because it examines only household-based factors [13], [14]. The system fails to identify the fundamental obstacles which prevent educational access for families who possess adequate resources (e.g., overcrowded schools; poor school infrastructure; and gaps in policy). The limitation leads to two effects because the definition of educational participation excludes all factors which influence learning in educational environments [13].

The Classical Liberal Theory addresses these gaps by focusing on structural inequalities that produce unequal opportunities. It assumes that all individuals should start life with an equal chance [15], yet systemic barriers, such as the shortage of public schools and reliance on low-cost private schools, create uneven access [16]. This theory highlights how formal policies, school distribution, and costs shape access. Its limitation is that it underplays household-level differences, including parental income and home support, which influence a child's ability to take advantage of available opportunities [17]. Ignoring these variations risks misrepresenting why some children succeed despite structural barriers [18].

These two theories complement each other in this research paper. In this case, the Walberg theory highlights differences in resources available at home and the level of parent support whereas the Classical Liberal Theory explains these issues from a perspective that includes systemic restrictions. The combination of both theories ensures that internal and external factors of education access are considered. The approach makes it possible to overcome the limitation of one theory as Walberg's theory ignores the system-related inequality and Liberal Theory does not consider the issue at the household level [9]. Both theories help understand how household income functions within a wider social environment. This is why they can be used to analyze attendance, retention, and completion in Nairobi informal settlements.

Review of Empirical Studies

In various contexts of low and middle-income countries, a strong association between family incomes and educational attainment has been consistently documented, particularly as regards retention and graduation rates. Among other things, a recurring theme has been the issue of persistence of income problems after school enrollment. Free education programs have succeeded in solving part of enrollment issues. The attendance pattern in informal areas shows irregularity because residents experience economic instability.

There is a clear connection between the income of a family and their ability to have access to education via material means in the research above. However, it must also be noted that the strength of this connection may vary from place to place. Popoola et al in their research illustrated the impact of low levels of economic stability by using different types of proxy methods like the inability to pay school fees or having limited support available from home or family members [6]. In fact, only 88.2% of children enrolled for school were able to participate in some way. Hossain and Kemanae and Mnjokaya discovered that people with higher income levels showed better academic achievement and increased access to educational resources [19], [20].

Furthermore, based on Jimbo and Muna's study that linked lower-level incomes to higher levels of conflict, there was evidence of decreased attendance and retention, particularly among female students. Ruiz-Valenzuela has also demonstrated that when parents lose their jobs, there will be a corresponding drop in their children's academic performance, especially when the parent continues to be unemployed for extended periods and where parental education levels are lower than average. Overall, across all of these studies there has been a consistent trend where fluctuations in household incomes and/or lack of access to capital result in poorer educational continuity. The only exception is that access to academic resources has been measured differently by different researchers; specifically, most researchers focus on academic performance to measure access instead of using direct indicators such attendance or retention [21].

Income interacts with both household composition and existing social frameworks that are present in society. Aregae and Kikechi found no connection between income and educational achievement because their study showed a weak relation between the two variables which produced a learning outcome coefficient of 164. The existing research shows that income produces a smaller effect than school resources and material conditions which we found to be more decisive in specific situations [22]. The research shows that poverty causes students in Nigeria to experience more educational challenges which include lower school performance and decreased attendance according to Adeniji who used Chi Square analysis [23]. The research identifies barriers that prevent people from meeting their basic needs which include educational access and recommends early childhood education funding and academic support programs as solutions. The research investigates educational results and institutional behavior which creates a gap in understanding how people from low-income urban communities maintain their educational enrollment. Bonneau and Grobon show that post-secondary education access requires students from wealthier families to maintain a 10-income growth which results in a 5.8 educational advancement. The established pattern remains stable across affluent systems yet creates a factual disparity when matched against informal settlements because their institutional framework differs from established norms [24].

The research studies exhibit specific limitations which become evident through their implementation patterns. The research studies implement descriptive designs which enable researchers to establish relationships between variables but fail to show how the results will connect different elements. A sample issue occurs in many studies, whereby there are problems concerning representativeness. Most studies face a common problem because researchers assess income data through broad categories or indirect methods which do not provide accurate income information. The study lacks performance evaluation because it fails to analyze enrollment patterns and student attendance rates and student retention rates which act as essential access indicators in informal areas.

Overall, existing studies establish that parental income level directly affects educational access variations while these access patterns show different results across

various research environments. One critical aspect that emerges is that low-income families continue to confront challenges in maintaining their participation. Research results demonstrate income effects which produce contradictory results because some studies show no connection between income and educational enrollment or attendance or completion rates. Research results remain inaccessible for comparison because inconsistent measurement together with contextual elements and different research methods block such analysis. The existing limitations stop researchers from fully understanding how income affects student enrollment and attendance and completion rates in informal settlement areas.

2. Materials and Methods

The research study used descriptive mixed-methods convergent design to investigate how parental income affects educational access. The research collected quantitative data to examine parental income patterns which affected student school attendance while qualitative data revealed household decision-making processes and their actual school attendance problems. The research design of convergent research effectively demonstrates all the complicated elements which emerge during the transition process to Competency-Based Curriculum. The financial demands incurred by families extend beyond tuition fees and the typical visible costs associated with enrolling their child in school [25]. The study employed both quantitative and qualitative methods which enabled researchers to gain comprehensive insights about the educational barriers that students face.

The study was carried out in the informal settlements of Kibera Mathare and Korogocho which are found in Nairobi County. The researchers chose these locations because they contain many APBET institutions and have high population density. The study participants included head teachers facilitators and parents/guardians of Grade 7 students who were experiencing changes in both academic standards and school costs for upper primary education. The study used multi-stage sampling as its sampling method. The informal settlements contained so many non-state schools that researchers needed to separate schools into public and low-cost private/APBET school types A total of 45 schools from the Ministry of Education APBET registry were included in the sample. The study received responses from 300 participants out of 347 targeted respondents which resulted in an overall response rate of 86.5 percent. The current study demonstrates both reliability and representativeness because it exceeds Sataloff and Vontela's recommended 70 percent threshold [26].

Organized questionnaires were employed in order to obtain statistical data, whereas some of the respondents assisted through interview sessions to provide a qualitative insight into the conducted work. Data analysis included SPSS version 26 for quantitative data and NVivo 14 for qualitative data. Quantitative analyses consisted of descriptive statistics; chi-square tests; Pearson correlation coefficients; and multiple regression analyses. Monthly household income was used as the independent variable, which affected sustained access by measuring attendance days and completion rates. Regression analyses were conducted to determine if there was a relationship between household income and sustained access while controlling for all other household and school-related variables. Qualitative data were thematically analyzed in NVivo 14. Themes that emerged included financial strain, cost of educational materials, competing household demands, and informal employment pressures. Qualitative data contextualized quantitative findings, showing how household income and decision-making influence student continuation.

The pilot test was conducted in Kitengela which serves as a growing residential area between urban development and rural spaces in Kajiado County which borders Nairobi City. Kitengela contains informal and low-income areas which function like Nairobi slums because they have high population density and their residents depend on casual work for income. Research studies that focus on urban poverty and educational access consider this location because children from these areas face attendance and retention challenges together with resource difficulties which mirror the situation of children in Nairobi slums

[27]. The study included 34 participants who represented 10% of the total participant base which consisted of students and instructors and guardians.

The study relied on Cronbach's Alpha test to measure internal consistency of their quantitative instruments which established their reliability. Adequate reliability was achieved through a total Cronbach's Alpha score of 0.78 [28]. Adjustments were made by removing items which did not meet reliability standards because they showed low inter-item consistency with the study's school-quality assessment items. Pilot testing was employed to decrease random error occurrence. The study adhered to all ethical standards including informed consent from all participants and a coding system that protected their anonymity.

3. Results and Discussion

This part contains information on the effects of parental income characteristics on access to education for children. Descriptive statistics, correlation coefficients, regression analysis, and qualitative information are used in order to explain patterns found within the dataset. Income characteristics of parents were measured using several variables, which include income generated by business, self-employment, and agriculture, as well as family asset status, unemployment status, and loss of employment status. Access to education included such aspects as enrolment, retention, and completion of the learning process, days that have been missed because of inability to pay for basic needs, cost of learning materials, and interventions in the process.

The descriptive statistics show that financial restrictions create major obstacles to educational access. Table 1 below shows that respondents reported unemployment and poverty as factors that disrupted children's ability to attend school.

Table 1. Descriptive Statistics of Parental Income and Unemployment Variables

Statement	N	Min	Max	Mean	Std. Dev.
Unemployment raises family stress levels.	300	4	5	4.82	0.405
Wealthy families ensure school-going children's have necessary materials.	300	3	5	4.27	0.786
Unemployment hinders school-going children's development.	300	2	5	4.18	0.874
Job loss affects school-going children's educational access.	300	4	5	4.45	0.522
Poverty limits access to education.	300	3	5	4.55	0.688

Source: Researcher (2025)

The descriptive analysis showed that numerous respondents reported their educational experiences were affected by financial issues. "Unemployment causes more stress among families" received an average score of 4.82 with a standard deviation of 0.405 which showed that participants strongly agreed with the statement. Respondents assigned a 4.55 rating to the statement "Poor people lack educational opportunities" which they supported with a standard deviation of 0.688. This means that income level was what made it possible for students to participate in education.

Respondents also discussed the impact of tangible support, indicating that family wealth is necessary to access school supplies; "Wealthy families provide required materials for children to attend school" (mean = 4.27, SD = 0.786), and reported how job loss impacted children enrolled in a school; "Loss of job will affect school-aged children's ability to get an education" (mean = 4.45, SD = 0.522) and "Unemployment will negatively affect school-aged children's development" (mean = 4.18, SD = 0.874). The research demonstrated that most families believed that a parent's financial status determined whether their school-aged children could obtain educational materials.

The study produced descriptive statistics from 300 sample size which showed that respondents held the same views. The study had minimum and maximum scores which indicate a few respondents did strongly disagree with either statement produced, and therefore it is reasonable to conclude that most respondents experienced similar circumstances. The data about parent income and children's educational access showed high reliability because moderate standard deviations showed that most responses stayed the same.

The descriptive analysis indicates that socio-economic factors including income levels impact the retention and attendance rates of students. Enrolment does not seem to be as sensitive to parental income as the scores are generally high irrespective of the economic status. The results show that financial constraints operate as a deterrent to respondents but their answers display different patterns.

Pearson correlation was used to analyze how parental income data affected students' educational opportunities. A composite variable that included six variables was created to define access to education. Parental income attributes included perceptions on unemployment, poverty, job loss, and provision of school supplies. The study used correlation to identify linear connections between income attributes and overall accessibility of services. The stronger the correlation, for instance, in the case of the provision of school supplies, the more related the particular income attribute is to consistent enrollment, retention, and completion. The study found that stress from unemployment and job loss created moderate correlations which affected access to services but did not control access as summarized in Table 2 below.

Table 2. Pearson Correlation Matrix of Parental Income Indicators and Access to Education (N = 300)

Variable	1	2	3	4	5	6
1. Unemployment raises family stress levels	1					
2. Wealthy families ensure children have materials	0.35**	1				
3. Unemployment hinders children's development	0.48**	0.41**	1			
4. Job loss affects children's educational access	0.52**	0.37**	0.43**	1		
5. Poverty limits access to education	0.49**	0.53**	0.46**	0.50**	1	
6. Access to Education Composite	0.42**	0.53**	0.38**	0.41**	0.46**	1

Significance: $p < 0.01$ (2-tailed)

Notes: *The Access to Education Composite includes enrolment, retention, completion, missed classes due to lack of basic needs, cost of learning materials, and interventions. The parental income variables include unemployment, job loss, poverty, and household wealth indicators.*

Parents' income is positively associated with access to education, but the intensity of correlation differs in each case. Unemployment leads to increased family stress is associated with the access composite through correlation value of 0.42, implying the presence of a medium relationship between these variables. Rich families provide their children with materials necessary for education is the variable most strongly correlated with access (value is 0.53), which means that having access to school materials is a factor contributing to children's attendance and education. Unemployment prevents children from proper development (correlation coefficient is 0.38) and negatively influences access to education with the correlation of 0.41. "Poverty limits access" correlation coefficient equals 0.46.

The correlations show important links between income related pressures and direct support through school material provision which has the strongest relationship with access outcomes. General economic pressure has an indirect contribution towards access but still some level of contribution. The difference between the two types of pressures is very important because meeting material requirements will take care of the immediate obstacles to education. The linkage of welfare and income programs to educational programs can make more people educated.

The qualitative data confirms these themes. The parent explained their financial situation by saying that “ *Sometimes we can't even pay for uniforms or lunch, so some children just stay at home. Even if they want to go to school, money stops them*” (FGD 01, 2025). The comment demonstrates how the correlations function between material provision (r .53) and access. Statement on stress and unemployment correlate moderately with other variables, indicating indirect impacts on access.

The results demonstrate that there is no single factor that influences access to education based on income levels, but material provision has the highest correlation. Other factors such as unemployment, job losses, and poverty are instrumental. The research establishes basic principles which families use to make decisions about their children's educational paths. The results provide schools with specific intervention requirements which need actual school-based material support.

The results of multiple linear regression analysis enabled us to build upon our earlier correlation results. The method assesses how each educational variable affects educational access while keeping all other educational variables at their constant values. The Access to Education dependent variable was created as an aggregate measure which combines six educational variables that include enrollment rate retention rate completion rate missed school days due to inability to afford basic necessities and the cost of learning materials and intervention rate. The analysis shows that there are multiple family characteristics that are associated with barriers to accessing education because of the family's economic situation. Families that were unemployed could access educational resources according to their income bracket while family member unemployment affected children's development and educational access.

Linear regression was selected instead of correlation/crosstab analysis because the research contains continuous data and six ordinal independent education variables can be treated as an interval-level independent education variable. The analysis of independent education variables through linear regression showed their model contributions while correlation/crosstab analysis demonstrated the relationship between two independent education variables. Standardized coefficients from the Linear Regression proves how parental income immediately follows other two income-related parameters. R² figure from the regression analysis reveals how much change in the Access to Education Composite is attributed to the independent variables.

Regression Model

$$\text{Access_to_Education} = \beta_0 + \beta_1(\text{Unemployment stress}) + \beta_2(\text{Material provision}) + \beta_3(\text{Development impact}) + \beta_4(\text{Job loss}) + \beta_5(\text{Poverty}) + \varepsilon$$

Table 3 presents the regression analysis which shows that parental income variables directly impact children's access to education. The material support which families give to their children through school supplies and uniforms and learning materials shows the strongest impact on school enrollment which leads to higher attendance and completion rates ($\beta = .35$, $p < .001$). The connection between poverty and educational access shows that children from low-income families face challenges when trying to access educational opportunities ($\beta = .25$, $p = .001$). The relationship between unemployment-related stress and unemployment shows that both factors lead to moderate disruptions which make it difficult for children to maintain their school attendance ($\beta = .21$, $p = .001$) ($\beta = .18$, $p = .003$). The impact of unemployment on children's development shows a minor effect

which researchers measured through their investigation of children's access to broader psychosocial challenges ($\beta = .16, p = .031$).

Table 3. Multiple Linear Regression Analysis of Parental Income Factors and Children's Access to Education

Predictor Variable	B (Unstandardized)	Std. Error	Beta (Standardized)	t	p
(Constant)	1.05	0.21	-	5	0.000
Unemployment stress	0.17	0.05	0.21	3.4	0.001
Material provision	0.28	0.06	0.35	4.67	0.000
Development impact	0.13	0.06	0.16	2.17	0.031
Job loss	0.15	0.05	0.18	3	0.003
Poverty	0.21	0.06	0.25	3.5	0.001

Model Summary: $R^2 = 0.38$, Adjusted $R^2 = 0.37$, $F(5, 294) = 35.8$, $p < 0.001$

The research suggests that schools need two kinds of support which include material resources and solutions to financial problems to establish their programs. The evidence which supports these results consists of extensive qualitative research. One mother stated, "Some times we don't have enough money to buy uniforms and food for lunch so children have to stay at home although they want to attend school" (FGD 01, 2025). A different person said, "Our children had to attend school in shifts because my husband lost his job" (FGD 03, 2025). The study demonstrates that financial and material resources determine how children access educational opportunities which proves that these two factors serve as the primary reasons which affect school enrollment.

Discussion

Overall, the findings reveal that income levels of parents play a role in education accessibility of their children through different mechanisms. The provision of learning materials by the family is found to be the most important determinant of attendance, retention, and completion of schooling, supported by a regression coefficient of $\beta = 0.35$. Surprisingly, broader psychosocial effects, such as unemployment affecting children's development, have a smaller role than expected ($\beta = 0.16, p = 0.031$), showing that direct material support is more critical as supported by qualitative data support these findings. Material and financial considerations emerge as the primary influences on accessibility, whereas secondary stress-related influences have less impact. From the results, it is evident that any intervention that supplies materials and finance would be most effective at dealing with current challenges.

The findings illustrate that parental income is associated with education of their children because it contributes to the provision of tangible assistance such as supplies and funds. The current study indicates that the distribution of supplies plays a critical role in increasing enrollment levels in the educational institution since children come to school as observed from the number of attendances as reported in the results of Popoola et al. and Hossain [6], [29], where children who hail from wealthy backgrounds continue in schools.. Poverty and/or joblessness in families were seen to reduce access to education; this outcome conforms to previous findings reported by Jimbo and Muna and Ruiz-Valenzuela [21], [28]. Both authors reported decreased access to education as children were unable to attend schools following the loss of their jobs or when their families faced difficulties because of poverty. The joblessness of parents led to further problems for children because the lack of parental employment affected children indirectly, resulting in lower than anticipated outcomes ($\beta = 0.16$). Aregae & Kikechi found few correlations between parental income and educational outcomes; however, this study found parents'

income to correlate more highly when measured based on educational access variables (enrollment; retention; completion; days missed) versus academic achievement variables. The study results show that material possessions and financial resources create a stronger impact on children's educational access than all other factors which include stress that results from financial needs in this study group [22], [30], [31], [32], [33], [34].

Through the theoretical framework of the study, which is an integration of Walberg's Educational Productivity Theory and Classical Liberal Theory of Equal Opportunity, the results indicate that learning material provisions and attendance, retention and completion ($\beta = 0.35$) are strongly associated with each other, reflecting Walberg's view of the home environment as a factor influencing educational productivity. Those families with sufficient resources increase their ability to provide an optimal learning environment by keeping their children engaged in learning throughout their childhood. Psychosocial factors such as unemployment are less influential on educational outcomes than the provision of immediate material support for children, and therefore partially refine the expected outcome of the theory ($\beta = 0.16$, $p = 0.031$). The Classical Liberal Theory of Equal Opportunity reflects the existence of structural inequalities as they relate to Free Primary Education. Structural inequality is evidenced by the fact that, despite the provision of Free Primary Education, there is still limited access to schooling due to the availability of schools, along with the reliance on low-cost private schools, leading to unequal access to schooling. For example, parents in informal settlements reported that they are unable to afford to send their children in uniforms or provide them with meals. The findings of the regression and correlation analysis confirm the mediating effect of parental income on the relationship between home environment and structural barriers for informal settlements. These findings advance theoretical understanding in that they demonstrate that physical and monetary resources exert a higher correlation on education than psychological pressures do. Questions remain about the impact of psychological variables, as some qualitative studies indicate that these can continue to play a role in participation despite being hard to quantify.

4. Conclusion

The research examined parental income and children's access to education in informal settlements. Provision of learning materials emerged as the most influential factor for attendance, retention, and completion, while broader psychosocial effects, such as unemployment impacting children's development, had a smaller role. Poverty, unemployment-related stress, and job loss were also associated with reduced access, with material and financial support showing the strongest links. Qualitative data confirmed these patterns, with parents reporting difficulties in buying uniforms and paying for meals, which disrupted consistent attendance.

Educational access appears shaped by household resources and structural barriers. Low-income families face challenges maintaining consistent attendance and completion, even with Free Primary Education policies, due to limited school availability and reliance on low-cost private schools. Direct material and financial support within households is more closely associated with access than indirect psychosocial effects, suggesting that interventions focused on supplying school materials and alleviating financial constraints address the most immediate barriers.

The study contributes to theoretical understanding through Walberg's Educational Productivity Theory and the Classical Liberal Theory of Equal Opportunity. The home environment, defined by household resources, influences the productive capacity for learning, while structural inequalities limit effective access. Findings show that direct material support dominates access outcomes, whereas indirect stress-related factors have weaker observable associations. Qualitative statements illustrate how parental income mediates access under structural constraints.

The study makes significant theoretical contributions by highlighting the fact that the most important determinant of children's access to education is their households' material

and financial conditions, followed by the indirect psychosocial determinants whose observable associations with access seem to be much weaker. In particular, the study demonstrates consistency with the Educational Productivity Theory formulated by Walberg by focusing on the impact that the home environment and its material nature have on learning potential. The theoretical framework is extended through the demonstration of how Classical Liberal Theory of Equal Opportunity relates to the structural barriers which exist due to inadequate school facilities that affect informal settlements and their connection to parental income. Indeed, this factor emerges as the key determinant that facilitates access to, attendance at, retention within, and completion of education in such contexts. This contribution is supported by qualitative evidence on how the supply of uniforms, meals, and school materials mediates parents' decisions about their children's education.

Limitations include the cross-sectional design, which prevents causal inference, and reliance on self-reported data, which may introduce bias. The study focuses on selected informal settlements, limiting generalizability. Future research should adopt longitudinal, comparative, and multi-method approaches to explore how household income, material support, and structural factors interact over time to sustain educational access in resource-constrained settings.

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