



ASSESSING THE RELATIONSHIP BETWEEN HOUSEHOLD FINANCIAL STABILITY AND THE ACADEMIC PERFORMANCE OF PUPILS IN PRIMARY SCHOOLS IN DONHOLM AND MUKURU KWA NJENGA WARDS IN NAIROBI, KENYA

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ABSTRACT

Purpose of the Study: The study examined the socio-economic factors affecting primary school students' academic performance in Donholm and Mukuru Kwa Njenga Wards, Nairobi County, Kenya.

Statement of the Problem: Socio-economic inequalities continue to influence academic performance among learners in urban areas. Students from economically disadvantaged households, particularly in Mukuru Kwa Njenga, may experience financial constraints, inadequate educational resources, poor school facilities, and limited parental support.

Methods: The study used a sequential explanatory mixed methods design, sampling 372 students, five head teachers, and five parents, with quantitative data analysed statistically and qualitative data thematically.

Findings: Household financial stability significantly improved academic performance ($\beta = .248, p < .001$), while school infrastructure, parental participation, teacher capacity, and the learning environment showed positive but statistically insignificant effects.

Conclusion: The study concludes that household financial stability was the most influential socio-economic factor affecting primary school students' academic performance.

Recommendation: The study recommends supporting vulnerable households, improving school infrastructure, strengthening teacher development, and enhancing parental involvement to promote equitable academic achievement.

Keywords: *School safety standards; physical infrastructure; water and sanitation; school community well-being; public secondary schools; West Pokot County; Kenya.*

BACKGROUND OF THE STUDY

Children's learning outcomes are strongly influenced by their socio-economic status, particularly household financial stability, which determines access to essential learning resources, nutritious meals, healthcare, and educational support. Financially stable households are better able to provide books, school supplies, and private tutoring, all of which enhance pupils' concentration and academic performance (Gilbert & Shi, 2023). Conversely, children from economically disadvantaged households often experience overcrowded classrooms, inadequate learning materials, poor attendance, and an inability to meet basic educational needs, resulting in lower academic achievement (Bradley, 2022). These challenges are particularly evident in disadvantaged urban settlements where poverty limits educational opportunities and contributes to persistent inequalities in learning outcomes (Gilbert & Shi, 2023).

Globally, socio-economic disparities continue to influence educational achievement across both developed and developing countries. Studies have shown that pupils from affluent communities consistently outperform those from disadvantaged neighbourhoods because of better educational resources, qualified teachers, supportive learning environments, and stronger parental support (Bradley, 2022; Guo & Li, 2024; Morris, 2024). Similar inequalities have been reported in China, where urban pupils benefit from greater government investment and better educational infrastructure than their rural counterparts (Guo & Li, 2024). Comparable disparities also exist in Germany, where educational attainment differs according to household income, parental education, and access to learning resources. These findings demonstrate that socio-economic conditions remain important determinants of pupils' academic achievement across diverse educational contexts.

In Africa, household financial circumstances continue to shape educational outcomes. Pupils attending well-resourced schools in affluent areas generally perform better than those in informal settlements characterized by poverty, overcrowding, inadequate school facilities, and limited educational resources (Gilbert & Shi, 2023). Similar patterns have been reported in South Africa, Ethiopia, and Ghana, where poverty, inadequate infrastructure, child labour, and limited parental support reduce pupils' academic performance (Berhanu *et al.*, 2022; Kutwayo *et al.*, 2022). These studies consistently

demonstrate that household economic conditions and access to educational resources play a significant role in determining pupils' learning outcomes.

The Kenyan education system similarly reflects substantial socio-economic inequalities. Pupils in well-resourced urban schools generally attain better academic outcomes than those in marginalized communities, where poverty, poor infrastructure, inadequate learning resources, and long distances to schools constrain educational achievement (Sanz, 2024; Wamukoya *et al.*, 2020; Kenya National Examination Council, 2025). These disparities are particularly evident within Nairobi County, where Donholm, a relatively middle-income neighbourhood, contrasts sharply with Mukuru Kwa Njenga, an informal settlement characterized by widespread poverty and inadequate educational resources. Consequently, pupils in Mukuru Kwa Njenga consistently record lower examination performance than those in Donholm, reflecting the influence of household financial stability on educational outcomes (Mukuru Promotion Centre, 2021; Kenya National Examination Council, 2025).

Existing literature has established significant relationships between socio-economic factors, including household income, parental education, school resources, and parental engagement, and pupils' academic performance (Berhanu *et al.*, 2022; Gilbert & Shi, 2023; Kutuwayo *et al.*, 2022). However, most previous studies have focused on broad urban–rural comparisons or general socio-economic determinants of education, with limited attention given to differences between neighbouring urban communities that experience contrasting household financial conditions (Guo & Li, 2024). Furthermore, most studies have employed cross-sectional research designs and have recommended mixed-methods approaches to better explain the mechanisms through which socio-economic factors influence academic achievement over time (Morris, 2024). Wamukoya *et al.* (2020) further observed that few studies have examined the influence of household financial stability alongside school-level factors within Nairobi's informal settlements.

Therefore, this study sought to examine the relationship between household financial stability and the academic performance of pupils in primary schools in Donholm and Mukuru Kwa Njenga Wards, Nairobi County. By comparing two neighbouring communities with contrasting socio-economic characteristics, the study addresses an important empirical gap and provides context-specific evidence to inform policies and interventions aimed at improving educational outcomes among primary school pupils.

EMPIRICAL REVIEW

This section reviews empirical studies on the relationship between household financial stability and pupils' academic performance. The review synthesizes evidence from international and Kenyan studies, compares their findings and methodological approaches, and identifies gaps that justify the current study.

Household Financial Status and the Academic Performance of Pupils in Primary Schools

Empirical evidence consistently demonstrates that household socio-economic status (SES), particularly household financial stability, influences learners' academic performance, although the magnitude of this relationship varies across educational levels and contexts. Munir, Faiza and Daud (2023), in a study of secondary school students, found that parental income, education, and employment significantly influenced academic performance. However, they also reported that the effects of SES were moderated by parental involvement and well-resourced schools, suggesting that supportive family and school environments can lessen the disadvantages associated with low socio-economic status. Although their study focused on secondary education, its findings indicate that household financial resources alone do not determine academic achievement, highlighting the interaction between financial and educational support systems.

Similarly, Neupane and Gurung (2021) found that the influence of socio-economic status differs across educational levels. Their study reported that parental occupation and household expenditure were stronger predictors of academic achievement than parental education, while students' residential status also significantly influenced academic outcomes. Unlike Munir *et al.* (2023), who emphasized the buffering role of parental involvement, Neupane and Gurung (2021) demonstrated that different dimensions of socio-economic status become more or less important as learners progress through different educational stages. However, both studies were conducted outside the Kenyan context and focused on educational settings different from primary schools in urban informal settlements, limiting their direct applicability to the present study.

Bruce and Attom (2021) further demonstrated that household socio-economic conditions interact with home environmental factors to influence pupils' academic performance. Their

findings showed that parental warmth and supportive home environments complemented household financial resources in promoting academic success. Importantly, they observed that some pupils from low-income households still achieved high academic performance, suggesting that socio-economic status alone cannot fully explain educational outcomes. These finding complements those of Munir *et al.* (2023), who similarly argued that family support moderates the effects of economic disadvantage. Together, these studies emphasize that household financial stability should be examined alongside other home-related factors rather than as an isolated determinant of academic achievement.

Evidence from Kenya also supports the importance of household financial resources while demonstrating the influence of family circumstances. Igandu, Odek and Marima (2023) found that among single-parent households in Embu East Sub County, parental income, educational attainment, and social support positively influenced children's academic performance. Unlike Bruce and Attom (2021), who emphasized general household environments, their study focused specifically on single-parent families, illustrating how financial and psychosocial challenges jointly affect learners' educational outcomes. However, because the study concentrated on a specific family structure in a rural Kenyan setting, its findings cannot readily be generalized to pupils from diverse household backgrounds in urban Nairobi.

Kiruy, Manduku and Ngeno (2020) examined another dimension of household financial stability by investigating how parents' employment in multinational tea estates influenced children's academic performance. Their findings indicated that financial stress reduced parents' involvement in children's learning, thereby negatively affecting academic achievement. Unlike the previous studies, Kiruy *et al.* (2020) incorporated employer-related factors, including corporate social responsibility initiatives, into the analysis of educational outcomes. While this broadened the understanding of how economic conditions shape children's learning opportunities, the plantation-based context differs substantially from the urban socio-economic conditions experienced by households in Donholm and Mukuru Kwa Njenga.

The reviewed studies consistently demonstrate that household financial stability is positively associated with learners' academic performance, although its effects are influenced by parental involvement, home environment, family structure, school resources, and broader socio-economic conditions. Nevertheless, important empirical gaps remain.

Most studies have focused on secondary schools, universities, single-parent households, or specialized economic settings such as tea estate communities, while relatively few have examined household financial stability among primary school pupils in contrasting urban settlements. In addition, many studies have been conducted outside Nairobi or outside Kenya, making their findings difficult to generalize to the unique socio-economic characteristics of Donholm and Mukuru Kwa Njenga. Furthermore, previous studies have rarely employed a mixed-methods approach to explain how household financial stability influences academic performance within neighbouring urban communities with markedly different socio-economic conditions. This study addresses these gaps by examining the relationship between household financial stability and the academic performance of pupils in primary schools in Donholm and Mukuru Kwa Njenga Wards, Nairobi County.

STUDY METHODS

This study adopted a sequential explanatory mixed methods research design, in which quantitative data were collected and analyzed first, followed by qualitative data to explain and enrich the quantitative findings. The design was considered appropriate because it enabled the researchers to establish the statistical relationship between household financial stability and pupils' academic performance before exploring participants' experiences and perspectives that explained the observed quantitative results.

The study was conducted in five primary schools located in Donholm and Mukuru Kwa Njenga Wards of Nairobi County. The schools were randomly selected from the study area to ensure representation of the two wards. The target population comprised 5,242 pupils, five head teachers, and 15 parents, giving a total population of 5,262 respondents. Using Yamane's (1967) formula, a sample of 372 pupils was determined and selected through proportionate stratified random sampling to ensure that pupils from different schools were adequately represented. For the qualitative phase, five head teachers and 15 parents were purposively selected because of their knowledge of pupils' academic performance and household socio-economic circumstances. Of the 372 questionnaires administered to pupils, 371 were successfully completed and returned, representing a response rate of 99.7%, and these were used in the final quantitative analysis.

The independent variable was household financial stability, measured using indicators including availability of learning materials, ability to pay school fees, parental employment

status, and pupils' involvement in family work. The dependent variable was academic performance, measured using pupils' academic performance records obtained from the participating schools and categorized into low and high academic performance for the cross-tabulation analysis, while continuous scores were used in the regression analysis. Structured questionnaires were administered to pupils to collect quantitative data on household financial stability, while semi-structured interview guides were used to collect qualitative data from head teachers and parents regarding their experiences and perceptions of how household financial circumstances influence pupils' learning.

The questionnaire items were developed from the study objectives and existing literature on household socio-economic status and educational achievement. Content validity was established through expert review by specialists in educational research and through pilot testing. Instrument reliability was assessed using Cronbach's Alpha, yielding an overall coefficient of 0.82, indicating good internal consistency.

Quantitative data were analyzed using SPSS Version 27. Descriptive statistics summarized respondents' characteristics and study variables, while cross-tabulation and chi-square tests examined associations between indicators of household financial stability and academic performance. Pearson correlation analysis assessed the strength and direction of relationships among the study variables, and multiple regression analysis determined the extent to which household financial stability predicted pupils' academic performance. Prior to regression analysis, the data were examined to ensure that the assumptions of multiple regression, including normality, linearity, multicollinearity, homoscedasticity, and independence of errors, were satisfied.

Qualitative data were analyzed thematically using NVivo software. Interview transcripts were coded, categorized into themes, and interpreted to explain and contextualize the quantitative findings. Integration of the two phases occurred during the interpretation stage, where qualitative findings were used to explain, support, and expand the quantitative results, thereby strengthening the credibility and comprehensiveness of the study findings.

Ethical clearance was obtained from St. Paul's University, the relevant education authorities, and the National Commission for Science, Technology and Innovation (NACOSTI). Parents and caregivers provided informed consent, while pupils provided assent before participation. Participation was voluntary, confidentiality and anonymity

were maintained throughout the study, and all research data were securely stored and used exclusively for academic purposes.

FINDINGS AND DISCUSSION

Demographic Data

In this section, the quantitative and qualitative respondents who responded to the study are represented by their demographic profile. The profile for pupils is Age, sex, grade level, and school type, and for qualitative respondents (head teachers and parents), the profile is Age, sex, level of education, occupation, or income category as applicable. These characteristics are desirable qualities to look for when assessing the representativeness of the sample, where context matters for the interpretation of findings, where potential sources of bias are taken into account, and where socio-economic factors for pupils' academic performance are analyzed. Demographic information also enables the conclusions drawn to be generalized for populations with similar demographics.

Age of The Respondents

This subsection shows the percentage of respondents by Age (in years). It presents the age groups of the students who took part in the research and names the age groups which were mostly represented. This analysis is aimed at ascertaining that the sample is at an acceptable developmental level of an upper primary learner. In terms of socio-educational issues, the Age of the respondents would give the study a good background in understanding academic performance in the study.

Table 1: Age distribution of respondents

Age (Years)	Frequency (n)	Percentage (%)
8	16	4.3
9	51	13.7
10	101	27.2
11	110	29.6
12	67	18.1
13	21	5.7
14	2	0.5

Age (Years)	Frequency (n)	Percentage (%)
15	2	0.5
16	1	0.3
Total	371	100.0

Source: (Field Survey, 2026)

The age distribution of the respondents is given in Table 1. The results show that the majority of pupils were in the age range 10-12. Specifically, 110 respondents (29.6) were aged 11 years, 101 respondents (27.2) were aged 10 years, and 67 respondents (18.1) were aged 12 years. There were 51 respondents (13.7%) who were 9-year-old pupils and 16 respondents (4.3%) who were 8-year-old pupils. The number of learners aged 13 years and over was very few, and there was little representation of learners aged 14-16. The sample was typical of the target population as it covered the typical age group of upper primary school learners (Grade 4-6). The theories of Developmental Learning indicate that this age period is a pivotal one in students' cognitive development and that it is the appropriate time to focus on students' academic achievement and other socio-educational indicators.

Only pupil respondents were used in the age analysis as they were the primary group of quantitative data gathered using structured questionnaires. For the age distribution analysis, parents, teachers and head teachers who predominantly participated in the qualitative part of the study (interviews) were considered. These participants were, however, strategically chosen because of their roles and experiences in assisting pupils' academic performance in the selected schools.

Grade Level

In this subsection, data are presented on how the respondents were distributed by grade level (Grades 4, 5 and 6). It shows the percentage of students interviewed for each grade level and that the research was done with upper primary students. Analysis demonstrates that the sample reflects targeted academic levels where basic skills are taught and practiced. Knowledge of grade distribution also helps to give context to the understanding of differing levels of achievement and to consider the impact of education and socio-economic factors at varying levels of the upper primary cycle.

Table 2: Distribution of respondents by grade level

Grade Level	Frequency (n)	Percentage (%)
Grade 4	88	23.7
Grade 5	122	32.9
Grade 6	161	43.4
Total	371	100.0

Source: (Field Survey, 2026)

Table 2 shows the grade level distribution of the respondents. The findings revealed that the largest population in the school was of Grade 6 pupils (43.4%), and Grade 5 pupils (32.9%) were the second largest population in the school. The smallest number of respondents (23.7%) were found within the Grade 4 level. The higher proportion of Grade 6 pupils could be due to the Age of the pupils being nearer to the national assessment examinations and thus more engaged in education and available to participate in the study. In addition, upper grade students are cognitively more complex and can respond to a series of structured questions. The inclusion of learners from the upper primary level (Grades 4, 5 and 6 ensured appropriate assessment of the upper primary level, which is a critical stage in the assessment of academic achievement and a review of the socio-economic and school-related factors that impact on learner achievement.

Type of The School

The subsection discusses the sample size of the respondents by the type of school attended, hence the division between the public schools and the private ones. It shows the proportion of enrolled students in each category, and provides background information on the institution where the research was conducted. This analysis is intended to set up the circumstances under which the academic performance and other related aspects are analysed in schooling. The type of school helped to put in perspective the resources available, administration, and socio-economic factors that affect the performance of learners.

Table 3: Type of school attended by respondents

School Type	Frequency (n)	Percentage (%)
Private school	30	8.1
Public school	341	91.9
Total	371	100.0

Source: (Field Survey, 2026)

The type of school attended by respondents is given in Table 3. The data indicated that the majority of the pupils (341, 91.9%) were studying in public schools, while 30 pupils (8.1%) were studying in private schools; thus, the majority of cases were representative of pupils studying in the public-school setting. The percentage of public-school respondents may also be due to the greater access to public education over privately based education. Research-wise, this distribution is a valuable insight into the socio-economic and institutional issues that impact academic performance in predominantly public school settings where resources and infrastructure and parental participation may be different than a private school setting.

Assistance on Schoolwork

The subsection is focused on the involvement of parents in pupils' work. It provides the distribution of the responses indicating the extent to which academic support is provided at home to learners. This analysis was used to determine the level of parental involvement in homework monitoring to provide insight into the quality of parent involvement in the production of academic results in after-school learning support.

Table 4: Parental or guardian assistance with schoolwork

Response	Frequency (n)	Percentage (%)
No	45	12.1
Yes	326	87.9
Total	371	100.0

Source: (Field Survey, 2026)

The results for the parents'/guardians' assistance with schoolwork are presented in Table 4. The findings revealed that a substantial percentage of the respondents' 326 pupils (87.9) reported being helped with schoolwork by their parents/carers, and 45 pupils (12.1)

reported that they were not helped. The level of parental support is good; this means that the level of interaction between the home and school is good for the subjects of the study. Homework supervision and students' continuous academic follow-up are typically linked to enhanced student motivation and better academic performance. The findings are descriptive evidence to help achieve the study aim: to investigate the role of parental engagement in affecting pupils' achievement.

Accessibility to Books and Materials

This subsection gives details of the achievements of pupils with regard to the availability of books and resources to support their learning. It presents the percentage that respondents said that there were enough teaching tools or that there were not enough. The purpose of this analysis was to assess the ease with which the required school curriculum content is available or not at school. The provision of learning support materials and textbooks is a crucial factor in good teaching and learning, and this information will give an indication of this resource availability and what effect this can have on learning.

Table 5: Accessibility to books and learning materials

Response	Frequency (n)	Percentage (%)
No	68	18.3
Yes	303	81.7
Total	371	100.0

Source: (Field Survey, 2026)

Table 5 shows results relating to access to books and learning materials. The study revealed that the majority of the respondents, 303 (81.7%), had adequate books and learning materials to support their learning, while 68 pupils (18.3) reported inadequate learning materials. The high proportion of learners gaining access to learning materials is a sign that most of the schools in the study area have basic learning materials, which need to be their focus in learning. Access to textbooks and learning aids has been considered the basic element of effective teaching/learning because it has a positive effect on better understanding, practice, as well as self-study. Those who receive inadequate materials (18.3 percent) may be at risk of a disadvantage in school. These results demonstrate the need to have a fair allocation of learning resources to enable the improved academic performance of all learners.

The demographic results suggest that the study sample is representative of the target population of the study, the upper primary school pupils in the selected schools. Most of the respondents were in Grades 5 and 6, were in public schools, and were between 10 and 12 years old; thus, capturing the educational setting of Donholm and Mukuru Kwa Njenga. The results also reveal that a significant proportion of children had been supported by their parents/guardians with their schoolwork and had access to school equipment. However, there was a significant minority who were not supported sufficiently in school or lacked adequate learning equipment. Overall, the demographic profile suggests that very few learners have had discouraging circumstances at home and at school, but there is inequity around the provision of learning resources. The features offer a suitable framework for analyzing the effect of socio-economic factors on educational outcomes and improve the generalizability and validity of the research results to other urban primary schools.

Analysis of the Study Variables

The study examined the relationship between household financial stability and the academic performance of pupils in selected primary schools in Donholm and Mukuru Kwa Njenga Wards, Nairobi County. The analysis specifically focused on household financial stability using indicators such as access to learning materials, payment of school fees, child involvement in family work, and parents' employment status. Quantitative data were collected from pupils using structured questionnaires, while qualitative data were obtained through semi-structured interviews with head teachers and parents to provide contextual explanations of the findings. The questionnaire comprised structured items that captured respondents' experiences and perceptions regarding household financial stability and pupils' academic performance. Quantitative data were analysed using descriptive statistics, cross-tabulation, chi-square tests, and multiple regression analysis, whereas qualitative data were analyzed thematically to complement and triangulate the quantitative findings. The findings are presented in the following sections.

The relationship between household financial stability and the academic performance of pupils

The subsection discusses the correlation between the economic status of households and the performance of pupils in school. It provides descriptive cross-tabulation and regression analysis results to see if the financial stability of the learners affects learners' achievement.

Access to learning materials, payment of the fees, child labour participation, and parents' work outside the school are considered. This section will gauge the impact of the home economy on students' performance in school. During this sub-section, this relationship will be explained and/or predicted with regard to the household's financial factors and its performance if it is done on its own and/or mediated by other socio-educational factors, which were included in the study.

Table 6: Cross tabulation analysis of household financial stability and academic performance

Crosstab Question	Response	Low Academic Performance n (%)	High Academic Performance n (%)	χ^2	df	p-value
Do you always have the books, pens, and materials you need for learning?	Yes	81 (25.6%)	236 (74.4%)	1.233	1	0.267
	No	10 (18.5%)	44 (81.5%)			
Have you ever been sent home from school for not paying fees?	Yes	49 (38.9%)	77 (61.1%)	21.255	1	0.000
	No	42 (17.1%)	203 (82.9%)			
Do you sometimes help your family by working?	Yes	60 (29.3%)	145 (70.7%)	5.561	1	0.018
	No	31 (18.7%)	135 (81.3%)			
Do your parents/guardians usually have work that pays for school needs?	Yes	67 (21.2%)	249 (78.8%)	12.736	1	0.000
	No	24 (43.6%)	31 (56.4%)			

Source: (Field Survey, 2026)

Table 6 looks at how selected indicators of household financial stability relate to pupils' academic performance. The findings showed that the availability of learning materials was associated with high academic performance but not statistically significant ($\chi^2 = 1.233$, $p = .267$), meaning that the availability of books and writing materials was not sufficient to explain high academic performance. The pupils who reported that they were sent home because of financial-related obligations to the school ($\chi^2 = 21.255$, $p < .001$), were involved in family work ($\chi^2 = 5.561$, $p = .018$), and the parents' employment status ($\chi^2 = 12.736$, $p < .001$).

.001) showed significant association. The findings show that their domestic economic position may impact the learners' learning experience or performance. However, the results do not validate the assertion that pupils from poorer families are poorer performers because there were good results for some pupils in the less privileged families. Therefore, the findings indicate that economic factors are not working independently but rather have an impact on other factors such as parental support, learner motivation, teacher commitment and school learning environment, all of which have an impact on academic performance.

Parents regularly associated economic disadvantage with the learning environment, and explained how financial disadvantage affects pupils' learning experiences. When parents said:

"When you do not have good finances, you find your child missing school due to school fees arrears; this makes him lag, hence affecting their performance." These were reiterated by head teachers who said that, "most of the children are from poor families, and as a result of this poor financial and economic status, their performance is affected; many children are not provided with any form of shelter, which affects their concentration, and some cannot afford the learning materials".

One head teacher explained:

"A high proportion of pupils in our school are from homes where there is financial disadvantage. Some do not come to school with their required learning materials, and others are often absent due to the inability of parents to provide for the education regularly. Even with all these challenges, teachers are striving to motivate the learners, and parents are supportive. However, there is also a problem of socio-economic hardships that hinder learners' academic performance."

The results are in line with the Human Capital Theory (Becker, 1964) that indicates that the investment of human capital and educational resources improves learning. They also provide support for Socio-economic Status Theory (Sirin, 2005), which states that household socio-economic status has an impact on the opportunities available for their children to learn and thus on their academic achievement. Also, in the study by Wambugu and Enose (2015) and Ngware *et al.* (2015), household income and parental support were

found to be significant factors that lead to improved academic performance among primary school pupils, with access to adequate school resources being significant factors as well.

To determine whether household financial stability significantly predicts pupils' academic performance, a simple linear regression analysis was conducted. Household financial stability was treated as the independent variable, while academic performance was the dependent variable. Prior to the regression analysis, diagnostic tests were performed to assess whether the assumptions underlying linear regression were reasonably satisfied.

Table 7 Regression Diagnostic Tests for Household Financial Stability Model

Diagnostic Test	Statistic	Interpretation
Sample Size (N)	371	Adequate sample size
Durbin–Watson	0.156	Residual independence statistic reported
Tolerance	0.954	No multicollinearity
Variance Inflation Factor (VIF)	1.048	No multicollinearity
Condition Index	8.505	No serious multicollinearity

Source: Field Survey (2026).

The regression diagnostic results indicate that the sample size of 371 respondents was adequate for the analysis. The tolerance value (0.954) exceeded the recommended minimum threshold of 0.10, while the VIF (1.048) was well below the acceptable limit of 10, indicating that multicollinearity was not a concern. Furthermore, the condition index (8.505) was below the critical value of 30, suggesting that the predictor variable did not exhibit problematic collinearity. The Durbin–Watson statistic was also reported as part of the regression diagnostics. The regression analysis examined the association between household financial stability and pupils' academic performance.

Table 8: Multiple Regression Analysis of Household Financial Stability and Academic Performance of Pupils

Predictor Variable	Unstandardized Coefficient (B)	Standard Error (SE)	Standardized Coefficient (β)	t-value	p-value
Constant	1.829	0.145		12.638	<0.001
Household Financial Stability	0.967	0.196	0.248	4.927	<0.001

Household financial stability was measured using a composite score derived from four indicators: availability of books, pens, and learning materials; whether pupils had ever been sent home because of unpaid school fees; whether pupils engaged in income-generating activities to support their families; and whether parents or guardians had regular employment to meet school-related expenses. Academic performance was measured using pupils' school academic performance records, which were coded as continuous scores for regression analysis. For descriptive and cross-tabulation analyses, academic performance was classified into high academic performance and low academic performance based on the schools' performance records. The regression model was statistically significant ($F(1, 369) = 24.279$, $p < .001$), indicating that household financial stability was significantly associated with pupils' academic performance.

Table 9: Model Summary

Statistic	Value
Sample Size (N)	371
R	0.248
R ²	0.062
Adjusted R ²	0.059
Standard Error of Estimate	0.836
F (1, 369)	24.279
p-value	<0.001

Source: Field Survey (2026).

The model explained 6.2% of the variation in academic performance ($R^2 = .062$; Adjusted $R^2 = .059$), suggesting that household financial stability accounted for a modest proportion of the differences in pupils' academic performance, while the remaining variation may be attributed to other factors not included in the model. The regression coefficient further

showed that household financial stability was positively associated with academic performance ($\beta = 0.248$, $p < .001$). Thus, pupils with higher household financial stability scores tended to have higher academic performance scores than those with lower household financial stability scores.

These findings indicate a statistically significant association rather than a causal relationship because the study employed a cross-sectional sequential explanatory mixed-methods design. The results therefore suggest that household financial stability is one of several factors associated with pupils' academic performance. This finding is consistent with Bruce and Attom (2021), who reported that favourable household socio-economic conditions provide greater access to educational resources and supportive home environments, and with Munir *et al.* (2023), who found that parental socio-economic status is positively associated with learners' academic achievement, although its influence interacts with parental involvement and school support..

CONCLUSION

This study found that socio-economic factors have a great impact on the academic achievements of children in the primary schools of Donholm and Mukuru Kwa Njenga Wards. Overall financial stability of the household was the most strongly associated with academic performance. At the same time, school infrastructure, parental involvement, teachers' capability, and the learning environment had positive associations with academic performance, though not statistically significant. The results show the need for integrated interventions to enhance pupils' academic success, which involve tackling socio-economic issues at the home level and learning contexts at the school level, especially in disadvantaged communities of poor urban families.

RECOMMENDATIONS

The study calls on the national and county governments to improve the economic empowerment programmes to remove financial barriers affecting pupils' learning. In order to improve the quality of teaching, it is recommended that schools improve the availability of learning materials, parent involvement programmes, and improve teacher skills. There is a need to pay attention to the investment in the infrastructure of the school, including classrooms, libraries, sanitation, and learning materials, particularly in informal settlements such as Mukuru Kwa Njenga. Anyone with an interest and responsibility for

education should also encourage co-operation between schools, parents, communities and the government in the creation of supportive learning environments which will help reduce educational inequality in primary schools.

REFERENCES

- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.
- Berhanu, G., & Asres, K. (2025). *The governance of Urban Productive Safety Net Program in Lideta Sub City, Addis Ababa, Ethiopia*.
https://www.researchgate.net/publication/391806456_The_Governance_of_Urban_Productive_Safety_Net_Program_in_Lideta_Sub_City_Addis_Ababa_Ethiopia_Pages_290-338
- Berhanu, G., Woldemikael, S. M., & Beyene, E. G. (2022). The interrelationships of sustainable livelihood capital assets deprivations and asset-based social policy interventions: The case of Addis Ababa informal settlement areas, Ethiopia. *Research in Globalization*, 4, 100081.
<https://doi.org/10.1016/j.resglo.2022.100081>
- Bradley, K. (2022). The socio-economic achievement gap in US public schools. *Ballard Brief*. <https://ballardbrief.byu.edu/issue-briefs/the-socioeconomic-achievement-gap-in-the-us-public-schools>
- Bruce, I., & Attom, L. E. (2021). Household conditions and academic performance of pupils from the Mfantseman Municipality in the Central Region of Ghana. *Research on Humanities and Social Sciences*, 11(24), 1–9.
- Gilbert, K. M., & Shi, Y. (2023). Slums evolution and sustainable urban growth: A comparative study of Makoko and Badia-East areas in Lagos City. *Sustainability*, 15(19), Article 14353. <https://doi.org/10.3390/su151914353>
- Guo, X., & Li, L. (2024). Educational disparities between urban and rural areas in China. <https://doi.org/10.1016/j.scs.2024.102280>

- Guo, Y., & Li, X. (2024). Regional inequality in China's educational development: An urban-rural comparison. *Heliyon*, 10(4), e26249. <https://doi.org/10.1016/j.heliyon.2024.e26249>
- Igandu, L. A., Odek, A., & Marima, E. (2023). Single parenting and children's academic performance in primary schools in Embu East Sub County, Kenya. *African Journal of Empirical Research*, 4(2), 916–928.
- Kiruy, F., Manduku, J., & Ngeno, V. (2020). Parents' economic status and academic performance in public primary day schools in multinational tea estates, Kericho County, Kenya. *East African Journal of Education Studies*, 2(1), 38–46. <https://doi.org/10.37284/eajes.2.1.164>
- Kutywayo, A., Mabetha, K., Naidoo, N. P., & Mahuma, T. (2022). Learner experiences of safety at public high schools in three South African townships: Baseline findings from the National School Safety Framework learner surveys. *Gates Open Research*, 6, Article 6. <https://doi.org/10.12688/gatesopenres.13328.1>
- Morris, A. (2024). Inequality and education in Australia. *The Economic and Labour Relations Review*, 35(2), 1–22. <https://doi.org/10.1017/elr.2024.18>
- Morris, J. (2024). Educational inequalities in Australia: A comparative study of reading and numeracy outcomes. Cambridge University Press. <https://doi.org/10.1017/ELR.2024.7>
- Mukuru Promotion Centre. (2021). *Empowerment step by step: Annual report 2021* (K. Kettle & D. Mwendwa, Eds.). Sisters of Mercy.
- Munir, J., Faiza, M., & Daud, S. (2023). The impact of socio-economic status on academic achievement. *Journal of Social Sciences Review*, 3(2), 695–705. <https://doi.org/10.54183/jssr.v3i2.308>
- Neupane, D., & Gurung, K. S. (2021). *Influence of parental socio-economic status on pupils' academic performance: Experience from Pokhara University, Nepal*. Pokhara University.

- Ngware, M. W., Oketch, M., & Ezech, A. (2015). Quality of primary education inputs in urban schools: Evidence from Nairobi. *Education and Urban Society*, 47(1), 91–111.
- Ngware, M. W., Oketch, M., & Ezech, A. C. (2015). Parental participation and children's schooling in urban Kenya. *Journal of Educational Research*, 108(6), 485–496.
- Sanz, A. (2024). *The impact of poverty on educational achievement: Understanding socio-economic barriers and opportunities for change* (Master's thesis, Bethel University). Bethel University Spark Repository.
- Sirin, S. R. (2005). Socio-economic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, 75(3), 417–453.
- Wambugu, P. W., & Enose, M. W. (2015). Effects of family socio-economic status on academic performance of pupils in public secondary schools in Kenya. *International Journal of Education and Research*, 3(3), 265–280.
- Wamukoya, M., Kadengye, D. T., Iddi, S., Chikozho, C., & for the Nairobi Urban Health and Demographic Surveillance System. (2020). The Nairobi Urban Health and Demographic Surveillance of slum dwellers, 2002–2019: Value, processes, and challenges. *Global Epidemiology*, 2, 100024. <https://doi.org/10.1016/j.gloepi.2020.100024>
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper & Row.