

Factors affecting lower primary pupil retention in low-cost private schools post-covid-19 in Kisumu East sub-county, Kenya

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Abstract:

Background: The COVID-19 pandemic disrupted schooling and household livelihoods, with potentially lasting consequences for pupil retention in low-cost private schools. This study examined the factors affecting lower-primary pupil retention in low-cost private schools in Kisumu East Sub-County, Kenya, following the COVID-19 pandemic. Specifically, the study investigated household socio-economic, socio-cultural and school-related factors associated with pupil retention.

Materials and Methods: A cross-sectional survey design was employed. The study targeted 56 low-cost private primary schools, from which 40 schools were selected across Kajulu, Rweya and Ragumo zones. The study targeted head teachers, lower-primary teachers, parents and Curriculum Support Officers. Data were collected using questionnaires and semi-structured interview guides, with quantitative data analysed using descriptive statistics, chi-square tests and binary logistic regression, while qualitative data were analysed thematically.

Results: Of the 283 targeted respondents, 207 returned the instruments, representing a response rate of 73.1%. School enrolment declined from 3,051 pupils before COVID-19 to 2,617 after the pandemic, representing a 14.2% reduction. The findings indicate that pupil retention was influenced by the interaction of household and school-level factors. Income loss significantly reduced the odds of retention in the multivariable model (OR = 0.210, $p = .002$), while food insecurity also reduced retention (OR = 0.332, $p = .023$). Positive parental attitudes towards schools increased the likelihood of retention (OR = 2.328, $p = .045$). School feeding programmes were the strongest predictor of retention (OR = 6.973, $p < .001$), whereas school facilities were not statistically significant ($p = .178$).

Conclusion: The study concludes that improving pupil retention requires an integrated approach combining household economic support, positive parent-school relationships and school-based interventions, particularly feeding programmes.

Keywords: COVID-19; pupil retention; low-cost private schools; lower primary education; socio-economic factors; parental attitudes; school feeding; Kisumu East Sub-County.

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I. Introduction

The COVID-19 pandemic, caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), was first reported in Wuhan, China, in December 2019 and rapidly spread internationally (Huang et al., 2020; Zhao et al., 2020). The pandemic generated a major public-health and economic crisis, producing simultaneous supply, demand and financial shocks and disrupting social and economic activities worldwide (Triggs & Kharas, 2020). Beyond its health consequences, the pandemic severely disrupted education systems, with school closures affecting learners, households, teachers and educational institutions. The disruption was particularly consequential for vulnerable children and households whose educational participation depended heavily on household income and the continued availability of affordable schooling.

In Kenya, the first confirmed COVID-19 case was reported in March 2020, after which the government implemented measures consistent with World Health Organization guidance, including physical distancing, hygiene, quarantine and restrictions on movement (Ministry of Health, Kenya [MoH], 2020; WHO, 2020). Schools and colleges were closed nationwide as part of the containment measures, disrupting learning programs and generating financial and social challenges for learners, households, teachers and educational institutions (Gathuru & Mweyeri, 2021). Schools subsequently reopened in phases from October 2020, with all remaining classes returning by January 2021 under enhanced health and safety measures (Asamba, 2020). Although reopening restored access to formal education, it did not immediately restore the economic and social conditions that had supported children's enrolment and continued attendance before the pandemic.

The disruption was particularly consequential for private schools because their financial sustainability depends substantially on fee payments. In Kenya, educational institutions are broadly classified as public or private, with public schools primarily supported by government resources while private schools rely largely on user fees. Low-cost private schools (LCPS) generally serve children from lower-income households, including families living in informal settlements and rural communities, and charge relatively modest fees. Consequently, these schools occupy an important position in providing educational opportunities to children whose families may face barriers to accessing private education at higher cost. However, their dependence on household fee payments also makes them particularly vulnerable to economic shocks affecting parents and caregivers.

Following the reopening of schools, many LCPS experienced substantial financial and operational pressures. Job losses and reductions in household income constrained parents' capacity to meet school fees and other educational expenses, contributing to transfers of learners from private to public schools (Habimana et al., 2022). The Kenya private-school sector also experienced employment and salary disruptions among teachers, with many institutions facing severe financial stress and some experiencing permanent closure (Mulinya, 2021). More broadly, evidence indicates that private-school enrolment may decline during crises as learners transfer to public schools, delay school entry or leave education altogether (Alam & Tiwari, 2021). These developments suggest that pupil retention in LCPS cannot be understood solely in terms of school-level conditions but must also be considered in relation to household economic circumstances and parents' decisions concerning educational investment.

The effects of the pandemic were also evident in Kisumu East Sub-County. More than 15 low-cost private schools in the Kajulu, Rweya and Ragumo areas reportedly closed following the pandemic, affecting more than 4,500 pupils, while some school premises were repurposed for shops, storage, businesses and residences (Carvalho & Hares, 2020). At the same time, many parents, including those from low socioeconomic backgrounds, continued to prefer private schools because of their perceived quality of education and care. The resulting movement of learners towards public schools placed additional pressure on an already constrained local education system. The coexistence of school closures, learner transfers and continued parental preference for some private schools illustrates the complexity of pupil retention in the post-COVID-19 period.

Kisumu East Sub-County provides an important context for examining these dynamics because of variations in population density, livelihood patterns and socioeconomic circumstances. The study context includes areas such as Rweya and Kajulu, where many households depend on farming and casual employment, as well as Ragumo, where schools are more concentrated and communities participate in urban economic activities. Such contextual differences may shape parents' ability to meet school-related costs, their perceptions of private education and their decisions concerning whether children remain enrolled. Pupil retention is therefore likely to reflect the interaction between household economic circumstances, socio cultural perceptions and school characteristics rather than the influence of a single factor.

The global scale of the educational disruption further demonstrates the importance of examining post-pandemic retention. COVID-19 generated an education crisis affecting more than 1.5 billion students and placed considerable financial pressure on education systems, particularly private schools (UNESCO, 2023). In Kenya, pandemic-related income reductions encouraged some households to move children from private to public schools, affecting private-school enrolment and institutional viability (UNESCO, 2023). While considerable research has examined school closures, learning loss and the immediate educational consequences of COVID-19, comparatively less attention has been given to the longer-term determinants of lower-primary pupil retention in low-cost private schools following school reopening. In particular, limited empirical evidence exists on how household socioeconomic challenges, changing socio cultural perceptions and school-level conditions interact to influence the continued enrolment and attendance of lower-primary pupils in LCPS in Kisumu East Sub-County.

This gap is important because lower primary education represents a foundational stage of schooling, during which sustained attendance and enrolment are essential for learning, progression and subsequent educational participation. Household socioeconomic conditions may influence retention through parents' ability to pay school fees, provide learning materials and meet children's basic needs. Socio cultural factors, including parents' attitudes, beliefs and perceptions concerning education, may also shape decisions regarding whether children remain in a particular school. Similarly, school-related factors such as distance, physical facilities, teaching and learning materials and feeding program may influence parents' willingness and ability to maintain their children's enrolment. Understanding the interaction of these factors is particularly important in low-cost private schools, where both household capacity and school resources may be constrained.

The study was guided by Epstein's Theory of Parental Involvement and Human Capital Theory. Epstein's Theory of Parental Involvement, also referred to as the Overlapping Spheres of Influence, conceptualizes children's education as a shared responsibility involving the family, school and community (Epstein, 2001; Epstein et al., 2019). The theory identifies six forms of involvement: parenting, communicating, volunteering, learning at home, decision-making and collaborating with the community. These dimensions are particularly relevant to lower-primary pupil retention because young learners depend substantially on parents and caregivers for decisions concerning school attendance, payment of school-related expenses and continued enrolment. In the post-COVID-19 context, disruptions in household-school interactions, economic difficulties and changes in parental perceptions may affect the extent to which families support continued participation in education. Conversely, effective school-family communication, parental engagement and community collaboration may strengthen parents' perceptions of school value and support pupil retention.

Human Capital Theory, associated with Schultz (1961) and Becker (1964), views education as an investment that enhances knowledge, skills, productivity and future economic opportunities. Parents invest financial resources, time, school fees, uniforms and learning materials in their children's education with expectations of future benefits. Economic pressures following COVID-19 may therefore have reduced households' capacity to sustain these investments, potentially affecting pupil retention in low-cost private schools. The two theoretical perspectives are complementary: Epstein's framework emphasizes the social and relational dimensions of educational participation, whereas Human Capital Theory emphasizes the economic dimension. Together, they provide a basis for examining how household economic conditions, parental engagement, perceptions and school relationships interact to influence pupil retention.

Based on these perspectives, the study conceptualized pupil retention as being influenced by three broad groups of factors: household socioeconomic factors, household socio cultural factors and school-related factors. Socioeconomic factors included income loss, unemployment, food insecurity, poverty and household income level. Socio cultural factors comprised parents' attitudes towards education and their beliefs or misconceptions. School-related factors included distance to and from school, physical facilities, teaching and learning materials and school feeding program. Government measures relating to COVID-19 guidelines, school rules and regulations, and external support or sponsorships were considered intervening factors, while pupil retention was reflected through regular attendance and changes in enrolment.

Against this background, the study investigated the determinants of pupil retention in low-cost private lower-primary schools in the post-COVID-19 context of Kisumu East Sub-County, Kenya. Specifically, the study examined the household socioeconomic factors affecting pupil retention, analyzed the influence of household socio cultural factors on retention, and evaluated the influence of school-related factors on pupil retention in low-cost private schools. The study therefore sought to address the following overarching question: What factors influenced the retention of lower-primary pupils in low-cost private schools in Kisumu East Sub-County following the COVID-19 pandemic?

The study contributes empirical evidence on post-pandemic pupil retention in low-cost private schools in Kenya, a sector that serves substantial numbers of children from economically vulnerable households. The findings are relevant to school proprietors, head teachers and teachers seeking to reduce pupil attrition; education officials concerned with the sustainability and quality of private educational provision; and researchers interested in the educational consequences of economic and social disruptions. By examining socioeconomic, socio cultural and school-related factors together, the study provides a more integrated understanding of the conditions associated with continued pupil participation in low-cost private education.

The study focused specifically on low-cost private lower-primary schools in Kisumu East Sub-County and examined household socioeconomic factors, household socio cultural factors and school-related factors associated with pupil retention. Public primary schools were excluded because they operate under a different funding and management model. Consequently, the findings are principally applicable to low-cost private institutions serving communities with similar socioeconomic and educational characteristics.

II. Material And Methods

Study design and setting

The study adopted a cross-sectional survey design to examine factors associated with lower-primary pupil retention in low-cost private schools following the COVID-19 pandemic. A cross-sectional design was appropriate because it enabled the researcher to collect data from multiple respondents simultaneously within a relatively short period. The study was conducted in Kisumu East Sub-County, Kisumu County, Kenya, covering

the Kajulu, Rweya, and Ragumo educational zones. The area comprises both formal and informal settlements, including Manyatta, Nyamasaria, and Obunga, where households engage in small-scale farming, informal trading, and motorcycle and three-wheel transport activities. The area also experiences socioeconomic challenges, including unemployment and underemployment.

Study population and sampling

The target population comprised 3,643 respondents drawn from 56 registered low-cost private primary schools in Kisumu East Sub-County. The population consisted of 56 head teachers/managers, 224 lower-primary teachers, an estimated 3,360 parents, and three representatives of community-based/Curriculum Support Officer (CSOs). The estimated parent population was based on an average of 60 pupils per school across (Pre-Primary 1) PP1 to Grade 3.

A sample of 283 respondents was selected. The sample comprised 40 head teachers/managers, 160 teachers, 80 parents, and three CSO representatives. Schools were selected using proportionate stratified random sampling, with the three educational zones (Kajulu, Rweya, and Ragumo) serving as the strata. Forty schools, representing approximately 71.4% of the 56 registered schools, were selected. One head teacher or school manager was purposively selected from each sampled school, while four lower-primary teachers were selected using simple random sampling. Two parents were also selected randomly from each participating school using lists provided by the respective head teachers and a lottery procedure. Because only three CSOs were identified in the three study zones, all were included through a census approach.

Table 1: Sampling procedure

Category of respondent	Target population	Sample	Sampling technique
Head teachers/managers	56	40	Purposive
Lower-primary teachers	224	160	Simple random
Parents	3,360	80	Simple random
CSO representatives	3	3	Census
Total	3,643	283	

Data collection instruments and procedures

Data were collected using questionnaires and semi-structured interview guides. Questionnaires were administered to head teachers/managers and lower-primary teachers. The questionnaires contained both closed- and open-ended items addressing respondents' demographic characteristics, the effects of COVID-19, socioeconomic factors, socio cultural factors, school-related factors, pupil retention, and possible strategies for mitigating future disruptions.

Semi-structured interview guides were used with parents and CSO representatives. Parent interviews were used to accommodate differences in literacy levels and to obtain detailed information concerning household economic circumstances, parental attitudes, cultural perceptions of education, food security, and other factors potentially influencing pupil retention. Interviews with CSO representatives provided additional information on school enrolment and retention trends and community-level experiences following the pandemic.

Data collection was conducted after obtaining the necessary institutional and governmental permissions. An introductory letter was obtained from the Directorate of Postgraduate Studies at Masinde Muliro University of Science and Technology, followed by a research permit from the National Commission for Science, Technology and Innovation (NACOSTI). Authorization was subsequently obtained from the relevant education authorities in Kisumu County and Kisumu East Sub-County. The researcher visited the 40 sampled schools to obtain institutional clearance and agree on appropriate dates for data collection. Questionnaires were administered face-to-face, although a drop-and-pick approach was occasionally used for teachers who were unable to complete the instruments immediately. Interviews were conducted in English, Kiswahili, or Dholuo, depending on the preference and circumstances of the participants.

Validity and reliability of the instruments

The instruments were pilot-tested in six low-cost private schools, with two schools selected from each of the three educational zones. Schools and participants involved in the pilot study were excluded from the main study. The pilot study assessed the clarity, relevance, adequacy, and reliability of the instruments and helped identify ambiguous or repetitive items that required modification.

Face and content validity were established through expert review. The instruments were reviewed by the research supervisors and senior faculty members in the Department of Educational Psychology at Masinde

Muliro University of Science and Technology to assess the relevance, clarity, completeness, and alignment of the items with the study objectives.

Reliability was assessed during the pilot study. The thesis reports the use of a test-retest procedure, in which the same pilot participants completed the instruments twice at an interval of three weeks, with reliability, assessed using the Pearson Product-Moment correlation coefficient. A coefficient of 0.70 or higher was considered acceptable. The thesis also reports Cronbach's alpha coefficients ranging from 0.799 to 0.824 for the principal constructs. These values indicate acceptable internal consistency of the scales used in the study.

Statistical Analysis

The study employed a mixed-methods approach, integrating quantitative and qualitative data. Quantitative data were coded and analyzed using SPSS version 25.0. Descriptive statistics, including frequencies, percentages, measures of central tendency, and measures of dispersion, were used to summarize the characteristics of the respondents and study variables. The findings were presented using tables and graphical displays.

Because pupil retention was treated as a dichotomous outcome, with 1 representing retention and 0 representing non-retention, binary logistic regression was used to examine the association between selected explanatory variables and pupil retention. The explanatory variables included income loss, unemployment, food insecurity, poverty, parental income, parental attitudes, and distance to school, school facilities, and school feeding program. Statistical significance was evaluated at the 5% significance level ($p < 0.05$).

Qualitative data obtained from open-ended questionnaire items and interviews were analyzed thematically. The analysis followed the six stages of thematic analysis proposed by Braun and Clarke (2006): familiarization with the data, generation of initial codes, identification of potential themes, review of themes, definition and naming of themes, and production of the final report. Interview transcripts were cross-checked against field notes, and emerging themes were organized around socioeconomic, parental, socio cultural and school-related factors affecting pupil retention.

Findings from the quantitative and qualitative analyses were subsequently triangulated. Quantitative results, particularly the statistical associations between explanatory variables and pupil retention, were compared with narratives obtained from parents and CSO representatives. This approach enabled the study to identify areas of convergence and divergence between statistical evidence and participants' experiences.

III. Result

Of the 283 questionnaires administered to the sampled respondents, 207 were completed and returned, representing a response rate of 73.1%, while 76 questionnaires (26.9%) were not returned. The response rate provided an adequate basis for analysis of the quantitative component of the study.

Table 2. Response rate of the study

Response status	Frequency	Percentage (%)
Returned questionnaires	207	73.1
Not returned	76	26.9
Total	283	100.0

The sampled schools were distributed across the Kajulu, Rweya and Ragumo educational zones. Across the schools for which staffing data were reported, the number of lower-primary teachers declined from 240 before COVID-19 to 221 after the pandemic, indicating a reduction in staffing following the disruption.

Table 3. Lower-primary teacher numbers before and after COVID-19

Educational zone	Before COVID-19	After COVID-19
Kajulu	90	75
Rweya	78	74
Ragumo	45	45
Total	240	221

Among participating parents, 85.3% were female and 14.7% were male, indicating that women constituted the majority of caregivers engaging with schools in the study. Most parents were aged between 30 and 39 years

(61.8%). The occupational profile was diverse, including teaching, business, farming, domestic work, skilled trades and other informal occupations.

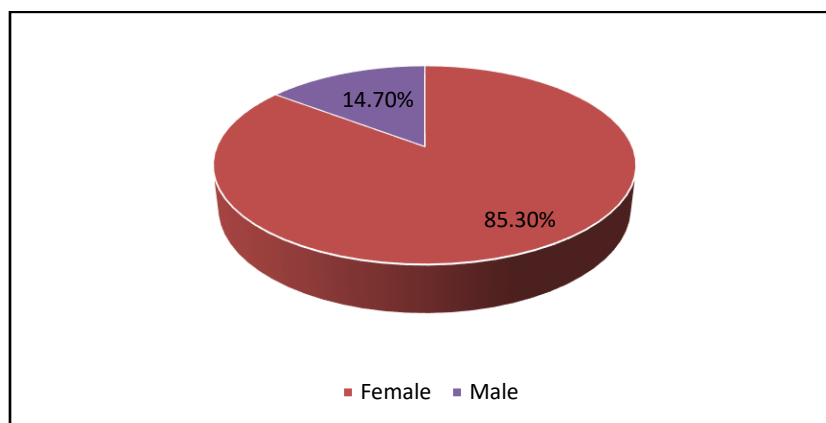


Figure 1: Gender distribution of parent respondents

The majority of teacher respondents had between one and five years of teaching experience (61.8%), while 17.6% had six to ten years of experience, 14.7% had less than one year, and 5.9% had more than ten years of experience.

Changes in pupil enrolment and school financial status after COVID-19

The findings indicate a decline in lower-primary enrolment following the COVID-19 pandemic. Across the schools included in the enrolment comparison, total enrolment declined from 3,051 pupils before COVID-19 to 2,617 after COVID-19, representing a reduction of 434 pupils (14.2%). Average enrolment per school decreased from 74.4 to 63.8 pupils.

Table 4. Lower-primary enrolment before and after COVID-19

Enrolment indicator	Before COVID-19	After COVID-19	Change
Total enrolment	3,051	2,617	– 434
Average enrolment per school	74.4	63.8	– 10.6
Minimum enrolment	30	29	-1
Maximum enrolment	180	102	-78

The financial position of schools also deteriorated. Among the 40 schools reporting financial status, 38 (95.0%) reported a decrease in financial status, while only two schools (5.0%) reported improvement.

Table 5. Change in school financial status after COVID-19

Financial status	Frequency	Percentage (%)
Decreased	38	95.0
Improved	2	5.0
Total	40	100.0

Qualitative responses indicated that schools attempted to maintain learning through online classes, WhatsApp communication, worksheets, textbooks, home visits and extra tuition. However, access to digital learning was constrained by inadequate technological infrastructure, limited ICT skills, weak internet connectivity and parents' inability to meet the costs associated with online learning.

Household socio-economic factors and pupil retention

Financial constraints emerged as an important factor affecting pupil retention. Half of the respondents (50.0%) reported that financial constraints significantly affected the ability of families to retain their children in low-cost private schools, while 20.0% reported a moderate effect and 30.0% reported a slight effect.

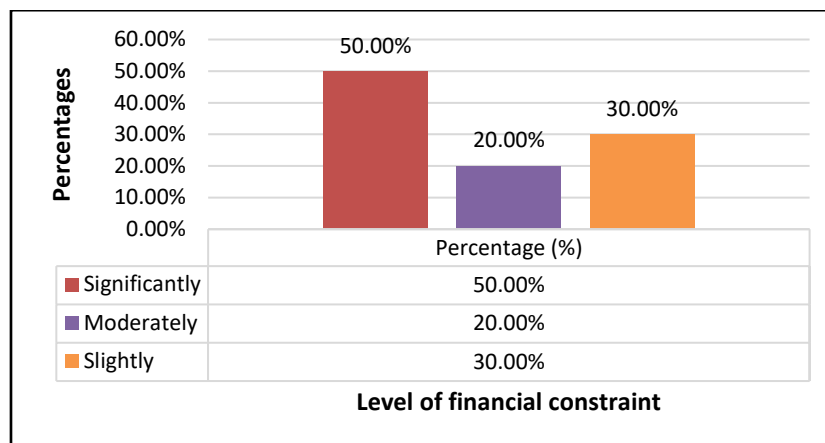


Figure 2: Perceived effect of financial constraints on pupil retention

Qualitative evidence reinforced the quantitative findings. Parents described job losses, business closures, delayed salaries and reduced household income as major barriers to meeting school fees. The evidence indicated that some households were forced to prioritize basic necessities, particularly food, over school fees. Schools responded by reducing or restructuring fees, allowing installment payments and extending payment deadlines, although external financial support was reported to be limited.

These findings suggest that the post-pandemic retention of pupils was closely connected to the ability of households to recover economically from COVID-19-related disruptions.

3.4 Socio-cultural factors and pupil retention

Community engagement was generally perceived to have a positive influence on pupil retention. Overall, 65.0% of respondents reported either a moderately positive (42.5%) or strongly positive (22.5%) influence of community engagement. However, 22.5% reported a negative influence and 12.5% were neutral.

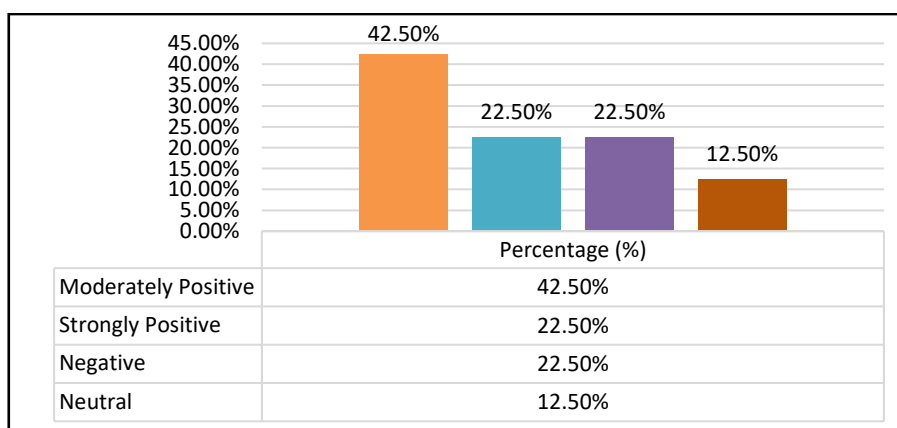


Figure 3: Perceived influence of community engagement on pupil retention

Parent involvement was particularly prominent. 47.5% of respondents considered parental involvement to have a significant influence on retention, while a further 47.5% considered its influence moderate. Only 5.0% reported no influence. Thus, 95.0% of respondents perceived parental involvement as having at least a moderate influence on pupil retention.

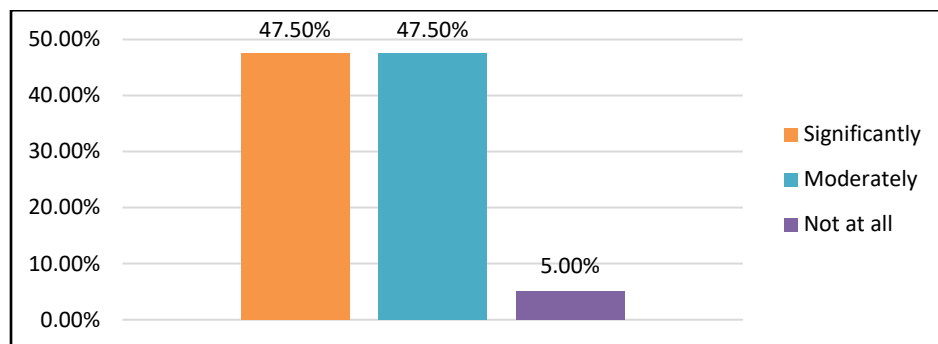


Figure 4: Influence of parental involvement on pupil retention

Language and communication barriers had a more mixed influence. Although 40.0% of respondents reported no effect, 30.0% reported a slight effect, 22.5% a moderate effect and 7.5% a significant effect. Overall, therefore, 60.0% reported experiencing some degree of communication-related difficulty.

Religious and ceremonial factors appeared to have comparatively limited influence. Approximately 62.5% of respondents reported no effect, while 32.5% reported a significant influence and 5.0% reported a slight influence.

The analysis also showed that perceptions of school safety and educational value influenced parental decisions. Some parents preferred private schools because they perceived them as having better hygiene, smaller classes and stronger implementation of COVID-19 safety measures, whereas others preferred public schools because of lower costs and access to government-provided protective resources.

3.5 School-related factors and pupil retention

School-related characteristics were generally perceived as important for pupil retention. The quality of education had a significant influence according to 63.4% of respondents, while 31.7% reported a moderate influence and 4.9% a slight influence.

Figure 5. Perceived influence of quality of education on pupil retention

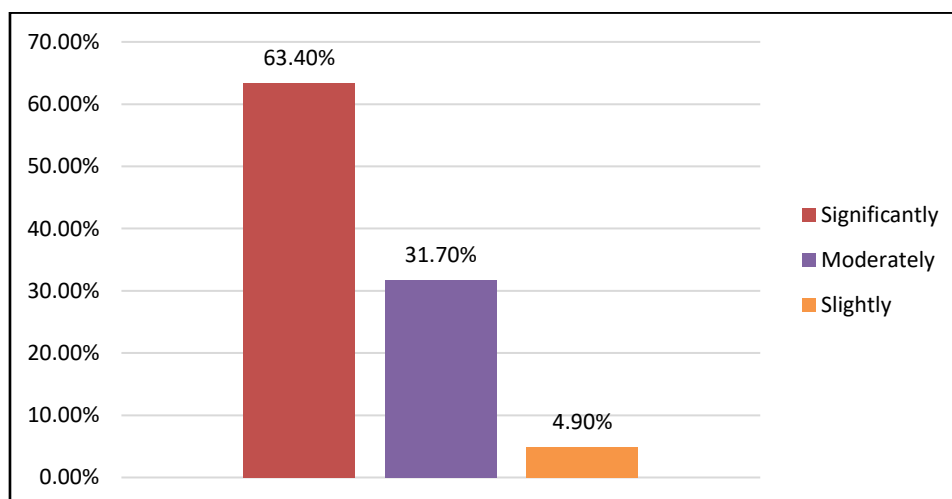


Figure 5: Perceived influence of quality of education on pupil retention

The teacher–pupil relationship showed particularly strong positive perceptions. 95.1% of respondents described its influence as strongly positive, while 4.9% described it as moderately positive. No respondent reported a negative influence.

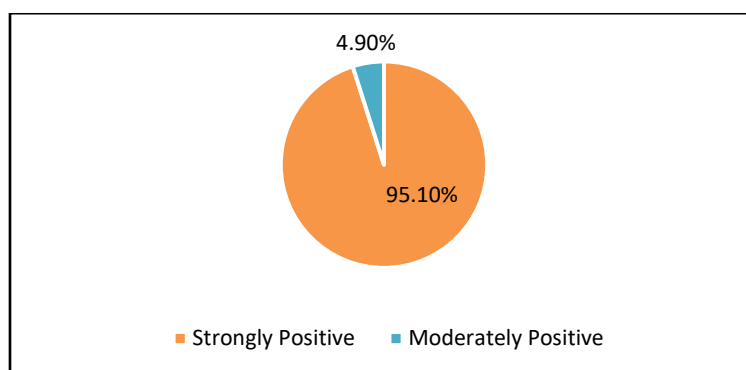


Figure 6: Influence of teacher-pupil relationships on pupil retention

The classroom environment was also viewed as important. More than half of respondents (51.2%) reported a significant influence, 39.0% reported a moderate influence and 9.8% reported a slight influence. Furthermore, approximately 95% reported that their schools had made changes to facilities following the pandemic, including improvements related to sanitation, hand washing, ventilation, classroom spacing and digital infrastructure.

Communication between schools and parents was similarly perceived as important. 78.0% of respondents reported a strongly positive influence, 17.1% a moderately positive influence and 4.9% a neutral influence. In addition, 80% reported that their schools had introduced changes or improvements in communication strategies after COVID-19.

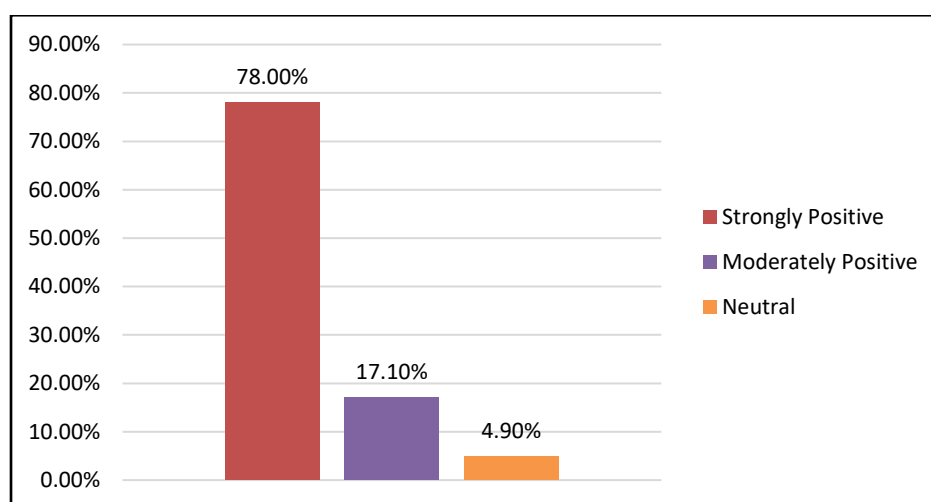


Figure 7: Influence of school-parent communication on pupil retention

Most respondents also considered their schools capable of adapting to changing circumstances. Approximately 61.0% rated their schools as moderately adaptable, 34.1% as very adaptable and 4.9% as poorly adaptable.

Bivariate analysis of factors associated with pupil retention

Chi-square tests were conducted to examine the association between selected categorical variables and pupil retention. The results are presented in Table 5.

Table 5. Chi-square analysis of selected factors and pupil retention

Variable value	Category	Not retained	Retained	χ^2	df	p-
Income loss	No loss	22	24	4.721	2	.094
	Minimal loss	25	18			
	Much loss	20	8			
School perception	Negative	35	12	10.655	2	.005
	Neutral	22	22			

	Positive	10	20			
School proximity	Short	25	24	3.012	2	.222
	Moderate	24	22			
	Long	18	8			
School facilities	Not much	32	14	5.418	2	.067
	Quite much	20	22			
	Very much	15	18			
School resources	Not much	30	16	2.144	2	.342
	Quite much	22	23			
	Very much	15	15			
Gender	Female	63	44	3.894	1	.048
	Male	4	10			

Note: Bold p-values indicate statistical significance at $p < .05$. Source: Research data (2026).

School perception was significantly associated with pupil retention, $\chi^2(2) = 10.655$, $p = .005$. Pupils whose families had positive perceptions of their schools had higher retention than those whose families expressed negative perceptions.

Income loss was not statistically significant at the bivariate level, $\chi^2(2) = 4.721$, $p = .094$, although the distribution indicated fewer retained pupils among households experiencing substantial income loss. School proximity was also not significantly associated with retention, $\chi^2(2) = 3.012$, $p = .222$. Similarly, school facilities did not reach statistical significance, $\chi^2(2) = 5.418$, $p = .067$, while school resources showed no significant association with retention, $\chi^2(2) = 2.144$, $p = .342$.

Gender was statistically associated with retention, $\chi^2(1) = 3.894$, $p = .048$, with the reported distribution showing a higher proportion of retained female pupils than male pupils.

Binary logistic regression analysis

Binary logistic regression was conducted to determine the independent predictive effects of socioeconomic, socio-cultural and school-related factors on pupil retention. Retention was coded as 1 = retained and 0 = not retained. The overall model was statistically significant ($p < .001$), and the Nagelkerke R^2 was 0.642, indicating that the predictors included in the model accounted for approximately 64.2% of the variation in pupil retention.

Table 6. Binary logistic regression predictors of pupil retention

Predictor	β	SE	Wald	df	p-value	OR
Income loss	-1.562	0.512	9.314	1	.002	0.210
Food insecurity	-1.104	0.485	5.182	1	.023	0.332
Parental attitude	0.845	0.421	4.028	1	.045	2.328
School facilities	0.512	0.380	1.815	1	.178	1.669
Feeding program	1.942	0.542	12.836	1	<.001	6.973
Constant	0.421	0.280	2.263	1	.132	1.523

Note: OR = odds ratio; SE = standard error. Bold p-values indicate statistical significance at $p < .05$. Source: Research data (2026).

Income loss was a significant negative predictor of pupil retention ($\beta = -1.562$, $p = .002$, OR = 0.210). This indicates substantially lower odds of retention among pupils from households experiencing income loss. Food insecurity was also negatively associated with retention ($\beta = -1.104$, $p = .023$, OR = 0.332), indicating reduced odds of retention among pupils experiencing food insecurity.

Parental attitude was a significant positive predictor of retention ($\beta = 0.845$, $p = .045$, OR = 2.328). Thus, pupils whose parents expressed more positive attitudes towards the importance and safety of private education had higher odds of remaining enrolled.

The strongest predictor in the model was the school feeding program ($\beta = 1.942$, $p < .001$, $OR = 6.973$). Pupils attending schools with feeding programs had substantially higher odds of remaining enrolled than those without such programs.

School facilities were positively associated with retention but did not reach statistical significance ($\beta = 0.512$, $p = .178$, $OR = 1.669$). Thus, although facilities were perceived as important in the descriptive analysis, they did not independently predict retention after the other variables were considered.

Summary of key results

Overall, the results demonstrate that pupil retention in low-cost private lower-primary schools following COVID-19 was influenced by a combination of household economic vulnerability, parental attitudes and school-level support mechanisms. The descriptive findings showed a 14.2% decline in lower-primary enrolment and a substantial deterioration in the financial position of schools after the pandemic. Household financial constraints, parental involvement, school quality, teacher–pupil relationships and communication were widely perceived as important factors affecting retention.

The inferential analysis provided stronger evidence for specific predictors. Income loss, food insecurity, parental attitude and school feeding programs were significant predictors in the logistic regression model, whereas school facilities were not statistically significant. The school feeding program had the largest estimated association with retention, with an odds ratio of 6.973.

IV. Conclusion

The study concludes that the retention of lower-primary pupils in low-cost private schools in Kisumu East Sub-County following the COVID-19 pandemic was shaped by the interaction between household socio-economic vulnerability, socio-cultural factors and school-level resilience. The findings demonstrate that pupil retention is not determined by a single factor but by the capacity of families and schools to respond to economic, social and educational pressures created or intensified by the pandemic.

Household economic conditions emerged as an important determinant of retention. Income loss and food insecurity significantly reduced the likelihood of pupils remaining in low-cost private schools. The decline in household income, loss of employment and disruption of small businesses placed considerable pressure on parents to meet school-related expenses. Consequently, some families transferred their children to public schools or experienced interruptions in schooling. The findings therefore indicate that economic hardship remains a major barrier to sustaining enrolment in low-cost private schools.

The study further concludes that parental attitudes and perceptions of schools play an important role in retention. Positive perceptions of school safety, educational quality and the value of private education were associated with greater likelihood of pupils remaining enrolled. Parental involvement was also widely perceived as important, suggesting that sustained communication and engagement between schools and families can strengthen educational continuity during and after periods of disruption.

At the school level, the findings demonstrate that institutional resilience can mitigate some of the effects of household economic vulnerability. In particular, school feeding programmes emerged as the strongest predictor of pupil retention in the logistic regression model, with pupils in schools offering feeding programmes having substantially higher odds of remaining enrolled. Although school facilities were perceived as important, they did not independently predict retention in the multivariable model.

Overall, the study concludes that low-cost private schools serve not only as places of academic instruction but also as important sources of social and material support for children from economically vulnerable households. Sustaining pupil retention therefore requires a multi-dimensional response involving schools, parents, communities and government. Strengthening household economic support, maintaining effective school–parent communication, improving learning environments, and expanding school feeding and other social-support mechanisms are likely to be important in enhancing the capacity of low-cost private schools to retain pupils during future crises.

Implication of the Findings

The findings have important implications for education policy and school management. Efforts to improve pupil retention in low-cost private schools should move beyond an exclusive focus on academic quality to include economic and social protection measures. School feeding programmes, flexible fee arrangements, strengthened parent–school partnerships and improved preparedness for future disruptions could help reduce the risk of pupil withdrawal. The findings also suggest that government and other stakeholders should consider mechanisms through which vulnerable low-cost private schools can access support during major educational or economic crises.

References

- [1]. Alam, A., & Tiwari, P. (2021). Implications of COVID-19 for low-cost private schools. UNICEF.
- [2]. Asamba, M. (2020). Schools to re-open on October 12. Association for the Development of Education in Africa (ADEA).
- [3]. Bauer, L., Broady, K., Edelberg, W., & O'Donnell, J. (2020). Ten facts about COVID-19 and the U.S. economy. Brookings Institution.
- [4]. Carvalho, & Hares. (2020). [Full bibliographic details not provided in the thesis reference list].
- [5]. Epstein, J. L. (2001). [Full bibliographic details not provided in the thesis reference list].
- [6]. Epstein, J. L., et al. (2019). School, family, and community partnerships: Your handbook for action (4th ed.). Corwin Press.
- [7]. Gathuru, G., & Mweyeri, M. (2021). The impact of COVID-19 on education in Kenya.
- [8]. Habimana, et al. (2022). [Full bibliographic details not provided in the thesis reference list].
- [9]. Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., et al. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*, 395(10223), 497–506. [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5)
- [10]. Ministry of Health, Kenya. (2020). COVID-19 outbreak in Kenya: Daily situation report. Ministry of Health.
- [11]. Mulinya, B. (2021, January). Pandemic closes, repurposes Kenya's private schools. *Voice of America*.
- [12]. Schultz, T. W. (1961). Investment in human capital. *The American Economic Review*, 51(1), 1–17.
- [13]. Triggs, A., & Kharas, H. (2020). The triple economic shock of COVID-19 and priorities for an emergency G-20 leaders meeting. Brookings Institution.
- [14]. UNESCO. (2023). Global education monitoring report 2023: Gender report—Technology on her terms. UNESCO.
- [15]. World Health Organization. (2020). Coronavirus disease 2019 (COVID-19): Situation report–51. World Health Organization.
- [16]. Zhao, X., Li, X., & Nie, C. (2020). Backtracking transmission of COVID-19 in China based on big data source, and effect of strict pandemic control policy. *Bulletin of the Chinese Academy of Sciences*, 35(3), 248–255.