

Influence of Family Income on Student Dropout Rates During the Covid-19 Pandemic in Public Secondary Schools in Lower Yatta Sub-County

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Publication Date: 2025/07/22

Abstract: This research investigated the influence of reduced household income on dropout rates during COVID-19 pandemic within public secondary schools in Lower Yatta Sub-County, Kitui County, Kenya. The primary goal being to examine how financial constraints at the household level contributed to school discontinuation among students amid the health crisis. The study adopted the Classical Liberal Theory of Equal Opportunities as advanced by Sherman and Wood and cited by Njeru and Orodho (2003). A census approach was applied to include all 28 public secondary school principals, while 153 teachers were sampled from a total teacher population of 247. The research tools were validated through expert assessment to ensure both face and content validity. Quantitative and qualitative data were collected, cleaned, and analyzed using SPSS Version 26. The research revealed 73.3% of tutors and 84% principals observed that students dropped out due to reduced family income during COVID-19. The study recommends that parents encourage students to resume school rather than seek casual employment and urges community sensitization through chief barazas to discourage child labor.

Keywords: Covid-19, Household Income, School Dropout, Secondary Education.

How to Cite: Joyce Musamu; Dr. Janet Mulwa; Dr. Rose Mwanza (2025). Influence of Family Income on Student Dropout Rates During the Covid-19 Pandemic in Public Secondary Schools in Lower Yatta Sub-County. *International Journal of Innovative Science and Research Technology*, 10(7), 1177-1183. <https://doi.org/10.38124/ijisrt/25jul562>

I. INTRODUCTION

Dropping out refers to the prolonged disengagement of students from the educational system without obtaining formal certification. Globally, dropout rates remain a pressing concern due to their impact on individual, societal, and economic development. Education is regarded as a key driver in achieving Sustainable Development Goal (SDG) 4, that promotes comprehensive and quality education for all by 2030 (UNICEF, 2021). However, high dropout rates are a significant barrier to achieving this objective.

COVID-19 pandemic triggered widespread global disruption. Over 1.5 billion learners experienced educational disruptions a result of school closures caused by COVID-19 globally (Khari et al., 2021). 140 million youngsters were living in poverty due to the pandemic, and school closures impacted 90% of children globally (UNICEF, 2020). UNESCO (2020) notes that over 800 million girls were

among the affected learners. Di Pietro et al. (2020) found that, by April 2020, 186 countries had suspended physical learning, affecting 74% of enrolled learners. The ILO (Stylianou, 2021) further indicated that COVID-19 disrupted the livelihoods of 2.7 billion workers globally.

Research involving data gathered in 174 countries, approximates that 11 million learners globally risked dropping out due to pandemic-induced income shocks (Azevedo et al., (2021). These shocks disproportionately impacted vulnerable households, exacerbating educational inequalities. The study at hand investigated the availability of infrastructure to support home learning in Lower Yatta Sub-County.

Household income includes wages, salaries, pensions, transfers, and investment returns (Benin & Randriamamonjy, 2008). Breaux et al. (2022) reported that male students in addition to ADHD had high chances of dropping out due to

financial strain during COVID-19 in the U.S. Similarly, Asanov et al. (2021) and Becker et al. (2020) observed that children from poor households struggled with remote learning. Datzberger and Parkes (2021) reported rising dropouts in Sub-Saharan Africa linked to household inequities. In Kenya, Ndung'u and Mutegi (2021) noted financial challenges forced many university students from low-income households to drop out.

In Kenya, the Kenya National Bureau of Statistics (KNBS, 2021) reported that 233,300 secondary school learners did not return after the 2020 school reopening. In Kitui County, 3,207 teenage pregnancies were reported between March and August 2020 (KNA, 2020). Data obtained in Education Ministry, Lower Yatta, Sub-county revealed that between 2019 and 2022, 135 students (87 girls and 48 boys) dropped out. This study explored how reduced household income and COVID-19 containment measures contributed to this trend.

➤ *Problem Statement*

The emergence of COVID-19 in Kenya led to prolonged school closures, severely impacting students' education. Studies indicate that dropout rates during the pandemic varied widely, with older students being disproportionately affected (Moscoviz et al., 2022). In Kenya, dropout rates reached up to 21% (UNICEF, 2020). In Lower Yatta Sub-County alone, official data indicates that 135 students dropped out between 2020 and 2022 (Lower Yatta Sub-county, 2023). Despite initiatives like free day secondary education (FDSE), bursaries, and COVID-19 response guidelines, dropout rates remained elevated. This signals a potential disconnect between interventions and actual needs. This research aims at addressing a gap in the current literature as well as offering insights to guide in formulation of policies and practice for refining educational outcomes with regard to reduced household income and student retention rate.

➤ *Study Objective*

This study sought to investigate the influence of low household income on students' dropout rate during COVID-19 pandemic times in public secondary schools in Lower Yatta-Sub County, Kitui County, Kenya.

II. LITERATURE REVIEW

➤ *Low Household Income and School Dropout*

Kundu et al. (2022) investigated COVID-19 challenges in relation to employees' stress in India. The research instruments used were online questionnaires distributed to 1,556 respondents. 45 countries globally participated in the research. The study indicated income shortfall contributed to by COVID-19 among the causes of educational

disengagement. Additionally, the study revealed that COVID-19 challenges and employees' stress caused disruptions in family-life as well as imbalance between personal life and work.

Nuwematsiko et al. (2022) found that financial hardship in Kampala's slums led children to engage in child labor, resulting in school dropout. 425 respondents selected randomly participated in the research. interviews were conducted using systematic sampling. Face-to-face interviews, focused group discussions (FGDs) and photo voice means was employed to gather research data. Findings were that some of the children ended up being victims of child labour in order to contribute additional finances to the household consequentially increasing school dropout.

In Kenya, Maina (2021) in his research concluded that household income significantly influenced students drop out from schools. The respondents for the study were 300 learners' dropout from Murang'a East Sub-County. The study adopted questionnaires as the research instruments. The study revealed that family income influence secondary school dropout.

III. RESEARCH METHODOLOGY

The research used ex post facto research design. The research design adopted assists the researcher to predict a probable outcome that has already occurred by monitoring the outcome variable(s) (Medley, 1965) hence reliable for this research as the researcher collected information on an event that had already occurred.

The target population for this research was 28 principals and 247 teachers in public secondary schools in Lower-yatta Sub-county. This study targeted 28 public secondary schools in Lower Yatta Sub County. According to Lower Yatta-Sub County Director of Education Office (2023) there are twenty-eight public secondary schools in the sub-county consisting of 28 principals and 247 teachers.

Census was used to pick all the 28 principals as sample. Mugenda (2013) state that if the sample is less than 30, a census survey is applied. Yamane (1967) formula at a 95 percent confidence level and $p = .05$ was used to determine the sample size for teachers. Data was gathered by use of questionnaires, interview schedules and document analysis guide. The research used questionnaires whose validity was tested by expert judgement from opinions of experts. The content experts are professionals who have published or worked in the field and offers concrete suggestions for improving the measure (Davis, 1992). pilot testing was conducted in 3 (10 percent of $28=2.8$) schools hence were

excluded in the main study. Piloting ensured content validity of the data collection instruments whereby any inconsistencies identified were rectified. Connelly (2008) suggests that utmost 10 percent of the entire study target is ideal for piloting.

The researcher used test re-test technique to determine how reliable the research instruments were. According to Mugenda and Mugenda (2003) reliability is the ability of research tool to effectively provides similar outcomes when administered on repeated trials. Tests were repeated at intervals of two weeks. The scores between the two tests were used to calculate the correlation coefficient using Pearson's product moment formulae.

Once Data was collected, it was analyzed by cross checking the questionnaires. Content analysis was done to thematically analyze qualitative data gathered from open ended questionnaires and then reported using narratives. Quantitative data was processed through editing, coding and

entered into a computer then analyzed by use of descriptive statistics with the aid of Statistical Package for Social Sciences (SPSS) version 26. The analyzed qualitative and quantitative data was presented using frequency distribution tables, tabulation tables and percentages.

IV. RESEARCH FINDINGS

This paper sought to determine the influence of low family income on learner's dropout rate in public secondary schools in Lower Yatta Sub- County, Kitui County. The respondents were first asked whether they thought low family income influenced dropout of students in their schools in the times of COVID-19. The respondents were requested to indicate the extent to which they agreed with the statements in table 1 and 1.2 using 5 point Likert scale with; strongly agree (5), agree (4), undecided (3), disagree (2) or strongly disagree (1). The findings were presented in table 1 and 2 respectively.

Table 1 Teacher's Opinion on Low Household Income and Student's Dropout Rate

| Statement | 5F percent | 4F percent | 3F percent | 2F percent | 1F percent |
|--|------------|------------|------------|------------|------------|
| COVID-19 made most students drop out of school because their parents had low income such that they are unable to afford basic needs | 68 45.3 | 42 28.0 | 6 4.0 | 20 13.3 | 14 9.4 |
| COVID-19 made most students drop out of school to look for income-generating activities and raising income for the family | 55 36.7 | 49 32.7 | 12 8.0 | 17 11.3 | 17 11.3 |
| COVID-19 protocols caused many parents/caregivers lose their jobs and source of livelihood hence making it difficult to source income to sustain the education of their children | 79 52.8 | 67 44.8 | 1 0.6 | 1 0.6 | 2 1.2 |

Table 1 reveals that a substantial number of teachers concurred that COVID-19 made most learners drop out of institutions owing to low income of their guardians shown by 45.3 % of the tutors who strongly supported the statement and 28 % supporting the statement. Nonetheless, 13.3 % opposed, 9.4 % strongly opposed the statement while 4 % were neutral on the same. The declaration that COVID-19 made most students drop out of school to look for income-generating activities and raising income for the family was supported by 36.7 percent of teachers who strongly agreed with the statement and 32.7 percent of teachers who agreed with the statement. Nevertheless, 11.3 percent of the teachers

disagreed on the same, 11.3 percent of the teachers strongly disagreed with the statement while 8 percent were unsure. Similarly, tutors concurred that the COVID-19 protocols caused many parents/caregivers lose their jobs and source of livelihood hence making it difficult to source income to sustain the education of their children as illustrated by 52.8 percent who strongly concurred and percentage of 44.8 agreed that COVID-19 protocols caused many parents/caregivers lose their jobs and source of livelihood. Nevertheless, percentage of 0.6 of the tutors disagreed, 1.2 strongly disagreed whereas only 0.6 were neutral.

Table 2 Principals Opinion on Low Household Income and Student's Dropout Rate

| Statement | 5F percent | 4F percent | 3F percent | 2F percent | 1F percent |
|--|------------|------------|------------|------------|------------|
| COVID-19 caused income shortfall among households making most students drop out of school because their parents could not sustain their education | 15 60.0 | 6 24.0 | 1 4.0 | 3 12.0 | 0 0.0 |
| COVID-19 made most students drop out of school to look for income-generating activities and raising income for the family | 12 48.0 | 6 24.0 | 2 8.0 | 3 12.0 | 2 8.0 |
| COVID-19 caused many parents/caregivers lose their jobs and source of livelihood hence making it difficult to source income to sustain the education of their children | 16 64.0 | 7 28.0 | 0 0.0 | 1 4.0 | 1 4.0 |

The data presented in Table 2 reveals that principals agreed on the statement that COVID-19 caused income shortfall among households making most students drop out of school because their parents could not sustain their education as shown by 60 percent who strongly agreed and 24 percent who agreed. It was also noticed that, 12 percent of the principals disagreed with the statement and none of the principals strongly agreed with the statement while 4 percent of the principals were undecided on whether COVID-19 caused income shortfall among households making most students drop out of school. This was followed by the principals who concurred with the statement that COVID-19 made most students drop out of school to look for income-generating activities and raise income for the family as supported by 48 percent of principals who strongly agreed and 24 percent who agreed. Nevertheless, 12 percent of the principals disagreed with the statement with a small percentage of 8 strongly disagreeing that COVID-19 made

most students drop out of school to look for income-generating activities and raise income for the family and 8 percent being unsure of the statement. The analysis also indicates that majority of the principals agreed with the statement that the COVID-19 protocols caused many parents/caregivers lose their jobs and source of livelihood hence making it difficult to source income to sustain the education of their children as illustrated by 64 percent of the principals who strongly agreed with the statement and 28 percent of the principals who agreed that COVID-19 protocols caused many parents/caregivers lose their jobs and source of livelihood. Nevertheless, 4 percent of the principals disagreed with the statement, similarly, 4 percent of the principals strongly disagreed with the statement whereas none were undecided on the statement whether COVID-19 protocols caused many parents/caregivers lose their jobs and source of livelihood.

Table 3 Correlation for Teacher's Opinion on Low Household Income and Students' Dropout Rate

| | | COVID-19 protocols | Students' Dropout Rate |
|------------------------|---------------------|--------------------|------------------------|
| COVID-19 protocols | Pearson Correlation | 1 | .771 (**) |
| | Sig. (2-tailed) | | .000 |
| | N | 150 | 150 |
| Student's Dropout Rate | Pearson Correlation | .771 (**) | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 150 | 150 |

** Correlation is Significant at the 0.01 Level (2-tailed).

The results of the research in table 3 indicated that there is a positive relationship $r(150) = 0.771$, $p < 0.05$ between low household income and student's dropout rate. Pearson's correlation analysis on principal's responses were presented in Table 4

Table 4 Correlation for Principals Responses on Low Household Income and students' Dropout Rate

| | | Low Household Income | Students' Dropout Rate |
|------------------------|---------------------|----------------------|------------------------|
| Low Household Income | Pearson Correlation | 1 | .678(**) |
| | Sig. (2-tailed) | | .000 |
| | N | 25 | 25 |
| Students' dropout rate | Pearson Correlation | .678(**) | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 25 | 25 |

** Correlation is Significant at the 0.01 Level (2-tailed).

The results of the research in table 4 indicated that there is a strong positive relationship $r(25) = 0.678$, $p < 0.05$ between low household income and student's dropout rate.

V. DISCUSSION OF RESEARCH FINDINGS

This research sought to establish the influence of low household income on student's dropout rate in public secondary schools in Lower Yatta Sub- County, Kitui County. The findings in table 1 revealed that by 45.3% and 28 % of the tutors strongly concurred and concurred, respectively that COVID-19 caused rise in drop out among the learners owing to low income earned by their parents hence inability of their parents to cater for their needs. On average, 73.3 % of the tutors supported the narrative. On the contrary, 13.3 % of the teachers strongly opposed the narrative whereas 4% were undecided. The assertion that COVID-19 triggered most learners to drop out of school to search for source of income to supplement their families was supported by majority of teachers whereby, 36.7 percent of teachers strongly agreed with the statement and 32.7 % supported the narrative totaling to 90.4 % of the educators who supported the claim. Nevertheless, 11.3 percent of the teachers disagreed with the assertion and 11.3 percent of the teachers strongly disagreed with the statement whereas 8 percent were undecided on the same. It was also established that most tutors, 52.8 % strongly supported while 44.8 % concurred with the narrative that COVID-19 protocols caused many parents/caregivers lose their jobs and source of livelihood hence making it difficult to source income to sustain the education of their children. On average 97.6 % of the concurred that COVID-19 protocols caused many parents/caregivers lose their jobs and source of livelihood hence making it difficult to source income to sustain the education of their children. Nevertheless, 0.6 % opposed the narrative, 1.2% strongly opposed whereas only 0.6 % were neutral.

The responses from tutors as captured in table 1 concurred with the responses of the principals as captured in table 2. The finding of principals, revealed that the biggest percentage constituting 84% supported the narrative that COVID-19 caused income shortfall among households triggering drop out of learners since their guardians could not sustain their education as revealed by 60 % of the principals who strongly concurred and 24 percent who concurred with the narrative. Further, it was revealed that, 12 % of the principals opposed the assertion with none strongly supporting the narrative. In addition, 4 % of the principals never indicated whether COVID-19 caused income shortfall among households making most students drop out of school. Further, 48 % of principals strongly concurred that COVID-19 triggered most learners to drop out of school to search for source of livelihood and raise income for the family while 24 supported the narrative. On average 72 % of the principals agreed to the narrative. Moreover, 12% of the principals opposed the narrative while 8 % of the principals strongly opposed. The least percentage of 8 percent were undecided. The analysis also revealed that most principals concurred that COVID-19 protocols caused many parents/caregivers lose their jobs and source of livelihood hence making it difficult to source income to sustain the education of their children as indicated by 64% of the principals who intensely supported the narrative and 28 % who supported the narrative. This totaled to 92% of the principals who supported the narrative that COVID-19 protocols caused many parents/caregivers lose their jobs and source of livelihood hence making it difficult to source income to sustain the education of their children. 4% disagreed with the assertion, similar 4 % intensely disagreed whereas none was undecided with regard to the statement that COVID-19 protocols caused many parents/caregivers lose their jobs and source of livelihood hence making it difficult to source income to sustain the education of their children. Results in table 1 and 2 respectively clearly reveals that the household income during COVID-19 period influenced students drop out rate in public secondary schools in Lower-Yatta Sub-county, Kitui County.

The research shows statistically significant association between low household income and student's dropout rate in public secondary schools in Lower Yatta Sub- County as evidenced by the Pearson's Product Correlation Co-efficient for teachers and principals indicated by positive relationship with $r(150) = 0.771$, $p < 0.05$ and $r(25) = 0.678$, $p < 0.05$ respectively between COVID-19 protocols and students' dropout rate. These findings concur to those of Nuwematsiko et al. (2022) who asserted that during COVID-19 period, some children were exposed to child labor to supplement family income, consequentially, increasing school dropout. The findings agreed with research by Kundu et al. (2022) who stated income shortfall caused by COVID-19 pandemic among the cause of students drop out. Also Maina (2021) who studied the impact of household income level on secondary school dropout in Kenya argued that the level of family income influence secondary school dropout.

VI. CONCLUSION

The study concludes that diminished household income during the COVID-19 pandemic significantly contributed to student dropout in public secondary schools in Lower Yatta Sub-County. The financial strain led many students to seek income-generating work or cease education altogether.

RECOMMENDATIONS

- Parents should prioritize their children's return to school and discourage engagement in casual labor.
- Community sensitization forums such as barazas should be used to discourage the employment of school-aged children.

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