



Community Financing of School Transport and Travel and its Effects on Quality Secondary Education in Kisumu County, Kenya

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Abstract

Effectiveness of public financial support for secondary education is an issue of concern given the delay in submitting government grants, challenges of increased enrolment and inadequate resources to support quality teaching and learning. The Free Day Secondary Education Policy was implemented in 2008 with an aim of making secondary school education available and affordable to school going children regardless of their social class. In achieving equity, enrolment increased the inadequacy to sustain secondary schools towards achieving quality education. Kisumu County was chosen for its below average KCSE mean score of 4.08 (D+) in 2017 compared to the average mean of 6 (C); low teacher student ratio at 1:59 compared to the required 1:45 and absolute poverty index of 41% compared to the national poverty index of 35.6. The purpose of this study was to analyze community financing of public secondary schools and its effect on quality of education in Kisumu County, Kenya. It was guided by the following objective: community financing of secondary school transport and local travel of students and its effect on provision of quality education in Kisumu County.

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A descriptive and correlation research design was used in the study. The target population for this study comprised of 214 Secondary schools in Kisumu County, 214 school principals, 214 BOM chairpersons, the CDE, 48 CBOs and 50,243 students. Questionnaires, document analysis and interview schedule for school principals, BOM chairpersons, the CDE, CBOs and students were used in this study. Stratified simple random sampling procedure was used to sample the 64 public secondary schools in Kisumu County from which 64 school principals, 64 BOM Chairpersons, 16 CBOs and 387 purposively selected students were used for the study. Piloting of instruments was done in six schools. Content and face validity of the instruments were determined by employing experts in the department of education management and foundations. Reliability of the instruments was calculated by using the test re- test and was calculated at Pearson r coefficient of 0.879. The results showed that community financing transport, travelling and academic performance had a strong positive correlation of 0.919. The study concluded that community financing of adequate educational resources significantly influences the academic performance of learners to a great extent. The study recommended Free Day Secondary Education funding should be increased in order to achieve fully the objectives of the secondary education policy. The findings may be significant to policy makers, education planners and implementers on the requirement for the registration of institutions of higher learning.

Keywords: Education; Transport; Travelling.

1. Background of the Study

Education is an essential tool for human life that helps pupils to optimize their potential [1]. The last several decades have seen growing global interest in the potential for public investment in secondary education to improve the development of students especially those from socially disadvantaged groups [2]. The world community that assembled in Dakar Senegal in 2000 for the 10th anniversary of Education for All (EFA) reaffirmed its commitment to the development of secondary education [3].

According to the [4] In USA, parents of students at Horace Mann School in Northwest Washington, D.C., spent over \$470,000 of their own money to support the secondary school's programs. With just under 290 students enrolled for the 2013-14 school year, meaning in addition to public funding, Horace Mann spent about an extra \$1,600 for each student. Those dollars-equivalent to 9 percent of the District of Columbia's average per-pupil spending-paid for new art and music teachers and classroom aides to allow for small group instruction. During the same school year, the parent-teacher association, or PTA, raised another \$100,000 in parent donations and collected over \$200,000 in membership dues, which it used for similar initiatives in subsequent years. Not surprisingly, Horace Mann is one of the most affluent schools in the city, with only 6 percent of students coming from low-income families [4]. This particular study assessed the parental support to Secondary Schools in Kisumu County, Kenya.

In a study conducted in Malaysia, [5], it was concluded that parents with higher socio –economic status as reflected by higher income and educational attainment tend to spend more on their children's education. In addition, sufficient expenditure on education particularly on remedial classes (extra tuition) and books matters as it would likely produce students with better educational outcomes. In families with low socio-economic

status, majority of illiterate parents do not understand the requirements of their children in studies and in doing their home assignments, since they do not have enough resources to spend on extra tuition leading to poor performance in academics of their children. The finding of the study conducted by [6] also supports the view that economic circumstances are significantly correlated with academic achievement. The study will qualify community financing and its effect on academic achievement. The study will quantify community financing and its effect on academic achievement. Table 1 below is a trend in academic performance in Kisumu County between 2015 – 2019.

Table 1: Trend in Academic performance from 2015 – 2019 in Kisumu County

Grade in KCSE and the mean Score													
Year	Score												Mean
	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E	
2015	180	456	805	1352	1723	1854	1854	1895	1696	1273	486	21	6.352
2016	0	119	311	504	701	1107	1478	2044	2588	3359	3029	343	4.378
2017	2	91	231	392	649	904	1256	1853	2640	3827	3843	575	4.025
2018	13	138	269	429	712	972	1425	2217	3030	4256	3829	381	4.147
2019	25	372	372	713	1100	1329	1922	2481	3154	3986	3618	378	4.494

Source: Regional Director of Education – Nyanza (2022)

The performance over the period was below average and fluctuated on a reducing trend as shown in Table 1 in the year 2016, there was a sudden drop in performance in the country due to KNEC regulations and poor curriculum implementation [7].

Many studies in Kenya have shown that government funding delays and is insufficient to sustain secondary school towards achieving quality in secondary schools; [8] study in Kisii County on alternative sources of funding secondary education had a correlation coefficient of 0.447 at 0.05 level of significance on the quality of secondary school education. The Study is based in Kenya but Kisumu County was chosen for its below average KCSE mean score of 4.08 (D+) in 2017 compared to the average mean of 6 (C), low teacher: student ratio 1:59 compared to the required 1:45 and absolute poverty index of 41% compared to the national poverty index of 35.6% contributing 1.7% to the national poverty index in 2014/15.

1.1 Statement of the Problem

In the developed world, community participation in educational development remains a vital instrument for transferring resources from the society to the youth. The transfer of resources from the community to the beneficiary schools has traditionally been through disintegrated approach as each interested group would initiate projects in their set goals. The traditional development strategies have largely failed to reach and benefit the rural poor. A possible reason for these failures is attributed to the lack of local community participation in identification, planning, design and implementation.

From the proceeding analogy, it is important to determine the effectiveness of public financial support to the secondary sector of education. Such information provide the basics and the starting point for restructuring of public financial support to this sector. The aim of this study will be an in-depth analysis of community financing of secondary school education in Kisumu County, Kenya.

1.2 Objective of the Study

To study objective was to determine the effect of Community financing of school transport and travel on quality secondary education in Kisumu County.

1.3 Limitations of the Study

The major limitations were:

- i. Some respondents may tend to conceal some information due to fear of victimization by the institutes' authorities. To mitigate this, respondents were ensured confidentiality would be upheld and ensuring that the respondents gave their responses anonymously where personal identifiers such as the names of the respondents were not disclosed.
- ii. The study may be limited by attrition bias, which can occur when participants drop out of the study, leading to a biased sample and potentially affecting the generalizability of the findings. To mitigate this, the researcher maintained regular communication with participants throughout the study to keep them engaged and motivated to continue participating.
- iii. Time was also a challenge as the institutions have a programmed timetable hence the respondents were busy. To solve this problem, the researcher collected data during free hours at break time, lunch time and after lessons. The researcher also communicated in advance to inform the administration of the impending visit.

2. Literature Review

Transporting students by use of school buses became popular in many parts of the world. In America and Latin America for example, larger proportion of students are using school buses rather than public transport. Transport is the process of shipping or moving item from point A to point B. It is the movement of people, animals and goods from one location to another [9]. [10] defines public transport as a shared passenger transport service which is available for use by the general public as distinct from modes such as taxicab or hired buses.

Referance[11] states that the buying of school buses for schools is typically financed through a combination of sources, including government funding, local taxes, and sometimes private contributions. In the United States, school districts often receive state and federal funds to purchase school buses. Government funding, local taxes, and private contributions are the primary sources of financing for school buses in the United States. This funding is essential for ensuring that students have safe and reliable transportation to and from school.

According to [12] when any person or group of people such as students for example decides to use public

transport they get the advantage of saving money. This is because they will pay a smaller amount while other passengers also contribute. But public transport has many other disadvantages that people who use it need to be aware of. These include irregularities in time and schedules, limited coverage, and somehow low levels of safety standards. It is therefore important for people who use public transport to well understand the transport system and prepare to meet these challenges.

According to [13] research literature points to the importance of transportation in its relationship with academic success, but this relationship is complex. There is a great need for methodologically rigorous research to better inform policy decisions affecting school transportation. Improving school transportation so that students have shorter, easier commutes is likely be needed to improve student academic performance and reduce achievement gaps, especially for students in rural, isolated areas.

Reference [14] study revealed a correlation between higher graduation rates and shorter distances to the nearest Chicago Transit Authority (CTA) train station. The findings suggested that public high schools with better accessibility to public transportation tended to exhibit improved graduation rates. Policymakers could use this information strategically, targeting transportation infrastructure investments in areas with lower graduation rates to potentially enhance student attendance and, subsequently, graduation rates. Proposed strategies included expanding CTA train stations, extending bus routes, and improving transportation reliability. Policymakers may also consider collaborations with transportation providers to offer discounted or free passes, promote alternative options such as carpooling, biking, or walking, and develop comprehensive strategies addressing both academic and transportation needs in underperforming schools.

According to [15] study on the impact of school transportation on student outcomes in Michigan, the findings revealed a significant decrease in the likelihood of chronic absenteeism for students eligible for school bus transportation, particularly benefiting economically disadvantaged students by up to four percentage points. Although there was no direct evidence of a causal relationship between district-provided transportation and student achievement, the study emphasized the crucial role of school buses in mitigating the negative impact of distance on attendance, especially for vulnerable students. Chronic absenteeism, addressed through school transportation, was highlighted as having substantial policy implications, impacting district budgets and school performance on state accountability systems.

According to [16] the national survey data across China examining variations in child psychological well-being (PWB) and academic performance concerning commute duration and mode in urban, rural, and urban fringe areas, revealed a significant negative correlation between commute times and children's PWB and academic achievements, with variations observed across different areas. Interestingly, children in urban fringe areas exhibited the longest average one-way commuting time but demonstrated a greater tolerance for longer commutes compared to those in city center and rural areas. The choice of travel mode also played a role, with walking positively associated with PWB in the city center, while bicycles and public transport positively impacted rural students' academic scores. Quantile regression results highlighted that students in lower quantiles of the PWB distribution tended to be more adversely affected by increased commuting time. Public transport in most African cities is poorly coordinated causing difficulties for young girls and boys to board. It requires a

stronger person to push other people when entering public buses [17]. [18] argues that public transport is not suitable for students with disability. Students with disability require special attention. Bus drivers and conductors working in public transport systems such as buses may not have skills to cater for students with special needs. The buses that provide public are in business. There provide little or no space or facilities to cater for people with disability. Where students share public transport with elders they receive no special attention when something goes wrong on the buses. This is different from special school buses where police and other authorities are more likely to pay attention when something gets wrong. There are countries where there are state laws that governs school bus safety standards, but this is not the case for public transport [17].

According to [18] the public transport system has a notable impact on the academic performance of primary school students who relied on these buses in Dar es Salaam. The investigation brought to light that the existing transport system involved privately owned buses operating without a regular time schedule, resulting in irregularities in service provision. The lack of control and coordination in the public transport system had a detrimental effect on students, leading to late arrivals at school, facing teacher punishments, and struggling to find sufficient time for homework and private studies due to extended travel times. The careless handling of the public transport system was identified as a contributing factor to poor academic performance, with students developing coping strategies such as enduring long wait times and seeking financial assistance from fellow passengers. The study concluded that the challenges posed by the inefficient transport system impacted students' daily routines and academic achievements, underscoring the need for improved coordination and control in the public transport system.

In Kenya [19], outlined the government policy of working towards integrating secondary education as part of basic education. The policy in the long term was to promote the development of day schools as a means of expanding access or reducing costs to parents, especially on the cost incurred by children as they commute from home to school. According to the Africa Population and Health Research Centre APHRC (2007) as cited by [20] lack of schools within a reasonable distance is a serious problem in rural areas, often marginal and remote parts of the countries. This limitation is shared with urban slums that are often neglected in the provision of basic infrastructure. The rural urban poor also share other common characteristics in constituting a majority of the poor that cannot afford and programme to significantly improve transition to secondary school in the region; they must target these segments of population. Hence, the implementation of FDSE policy in Kenya ensures all Kenyan children are able to access basic education in which secondary education has been integrated.

Reference [21] study in Kenya established that distance from household to school is a determinant to school access. This is attributed to the actual distance from households to schools which was found to be 25km on average especially for boarding schools and 12km for the day school. The long distance escalates the transport cost hence making it difficult for some parent to afford. The distance makes it difficult for children to walk to school. On the relationship between the distance and cost of transport, the study established that there is a statistically significant relationship between distance and transport cost ($P < 0.05$ and coefficient of 142) an indication that an increase in kilometer leads to an increase of transport cost by Ksh 142. According to [22] study which aimed to understand how school bus eligibility influences student attendance and achievement. The

analysis indicated that, overall, eligibility for school bus transportation did not have a significant impact on student attendance or achievement. However, it did reveal that economically disadvantaged students, eligible for district-provided transportation, were less likely to experience chronic absenteeism. This aligns with existing research emphasizing the positive outcomes linked to increased attendance for students, covering both cognitive and non-cognitive aspects. While the study did not compare school buses to other transportation modes or explore the effects of longer bus travel times, it offered valuable insights for district leaders. The results suggested that policymakers and district leaders might consider utilizing transportation as an intervention for chronically absent students, especially those from economically disadvantaged backgrounds, providing them with additional learning time in school that could positively impact their academic achievements.

The existing literature extensively explores the impact of transportation on academic outcomes, emphasizing the importance of safe and reliable transportation for student success. However, a significant gap exists regarding the relationship between community financing models for school transportation and their effect on the quality of education. There is a lack of exploration into how communities themselves contribute to or finance secondary school transportation, especially in regions where government funding might be insufficient or inconsistent. Further research in this area is essential for informing policy decisions and optimizing transportation systems to support student success and equity in education.

2.1 Research Design and Methodology

The research designs adopted in this study was descriptive survey design and a correlational design. [23] assert that descriptive is designed to obtain current information and phenomenon and wherever possible draw valid general conclusions from facts discussed. [24] states that descriptive study design are quite important as they provide a foundation upon which correlational and experimental studies emerge. Correlational research designs investigates plausible and effect relationship by observing an existing condition or state of affairs and searching back in time for plausible causal factors [25].

2.2 Area of Study

The choice of Kisumu County as the area of study is influenced by the following factors; the area is a cosmopolitan region and the findings can apply to other regions in the country and also by the fact that despite the continued government support to the public primary schools in the area, the performance is stagnant compared to other counties. Kisumu County lies between longitudes 33⁰20'E and 35⁰ 20'E and latitude 0⁰ 20' South and 0⁰ 50' South. The County is bordered by Homa Bay County to the South, Nandi County to the North East, Kericho County to the East, Vihiga County to the North West, and Siaya County to the West (Kisumu County, 2018).

2.3 Study Population

The target population consisted of all the 72 public boarding and 142 public day secondary schools, 214 principals, 50243 students and the C.D.E Kisumu County. Others included; 214 B.O.M chairpersons, 48 community based organizations that support secondary schools education.

2.4 Sample and Sampling Technique

The study's sample size considered the population heterogeneity, encompassing national, extra-county, county, and sub-county schools. Recognizing resource limitations for a large and diverse population, [26] suggestion of a 30% sample size was used for Board of Management (BOM) members, principals, and Community Based Organizations (CBOs). However, to achieve a desired level of precision for the larger student population, Yamane's formula, suitable for populations exceeding 10,000, determined the student sample size. Stratified random sampling ensured participants from each school category. Finally, census sampling included one C.D.E in the study.

Yamane formula

$$n = N / (1 + N(e)^2)$$

where:

- n is the sample size
- N is the population size
- e is the margin of error

Table 2: Sample Frame

Principal	Population	Sample	%
.Principal	214	64	29.9%
Students	50243	387	0.77%
BOM chairs	214	64	29.9%
CBOs	48	16	33.33%
CDE	1	1	100%

2.5 Instruments of Data Collection

The study used questionnaires, Interview guides and document analysis to collect data for conclusion of the study. Five sets of questions were designed for students, principals, B.O.M chairperson, community-based organization and C.D.E. Kisumu County to comprehensively exhaust the aspect of the study. The interview guide was administered to the CDE in enhancing information from the school and the County. The interview assisted the researcher to collect data to clarify issues on the questionnaire and provided information that cannot be directly observed. The documents from schools, education offices and community based organization were read for further information. The schools budgets, strategic plan and development report, community based organization records, budgets and invitations.

2.6 Validity of Instruments

To check the content validity, the instruments were given to three experts from the department of educational management and foundation of Maseno University. They checked on the instruments' content coverage based on the study parameters. The instruments were also given to peers for further review to determine the internal consistency. Based on the experts' comments, the researcher made improvement on the instruments.

2.7 Reliability of Instruments

The researcher administered the instruments twice to the respondents at an interval of two weeks and the data from the two pilot tests were calculated by using the Pearson r coefficient. A Pearson r coefficient of 0.7 and above at a set p – value of 0.05 was considered reliable. The table 3 below shows the reliability of various scales of the questionnaires.

Table 3: Reliability output

Scale	No. of Items	Pearson Correlation
The principal as an agent of good academic performance contributes to provision of quality education in ways stated below	7	0.879
Principals Response on Community Financing Transport and Travelling	4	0.902

3. Presentation of Findings and their Discussion

3.1 Community financing and Transport and Travelling of Students

The study looked at the aspect of community financing and the transport provision in schools. The aspect of transport looked at provision of funding in regard to students going for games, field excursion, school symposiums, tour and travel, among others.

Table 4: Acquisition of School Transport

The school has a bus? If NO; how do you acquire school transports?	Frequency	Percentage
No	31	72%
Hire from other schools at a fee which is expensive/ Hire or use matatus(psv) for school transport/ Student walk while others use other means such as boda-boda or public vehicles		
Yes	12	28%
Total	43	100%

According to table 4, many principals stated that they did not have school bus and instead they had to hire from other schools at a fee which was expensive. Some also stated that they Hired matatus (PSV) for school transport and in some cases, students walk while others use readily available means such as “*boda-boda*”(motorcycle taxi) or public vehicles. However, some principals stated that they had school buses for school transport.

Table 5: No of Vehicles the School Owns

How many vehicles/ buses does the school have?	Frequency	Percentage
None	23	61%
One	11	29%
Two	3	8%
More than two	1	3%
Total	38	100%

Table 5 present the number of vehicles the school owns. According to the table, 61% of the respondents indicated that they did not have school bus. 29% of the respondents indicated that they had one bus. 8% indicated that they had two buses. 3% indicated that they had more than two buses.

3.2 Principal Response on Community Financing Transport and Travelling

Table 6 shows the response of the principal view on the aspects of community financing of transport and travelling. Statements were given to the principals from which they were expected to share their view on the items in terms of strongly agree, disagree, agree or strongly agree.

Table 6: Principals Response on Community Financing Transport and Travelling

Statements	SD	D	A	SA	mean
School has enough buses to transport students	45 (70.8%)	8 (12.5%)	9 (14.6%)	1 (2.1%)	1.48
The school has enough space for parking buses and vehicles for teachers	27 (41.7%)	8 (12.5%)	16 (25.0%)	13 (20.8%)	2.25
School has a bus driver	43 (66.7%)	1 (2.1%)	7 (10.4%)	13 (20.8%)	1.85
Student also pays for the use of the bus	47 (72.9%)	13 (20.8%)	3 (4.2%)	1 (2.1%)	1.35
Overall Mean					1.73

The table 8 shows that 70.8% of principals strongly disagree that community is funding buses in the schools

while 12.5% disagree. The table also show that minority of principal are in agreement that community is financing buses at 16.7%. In most cases those principals who are in support that community is financing buses have buses in their schools. The mean rating was 1.48 indicating that principals were in agreement that community financing of buses was very inadequate.

The study examined if the school has enough space for parking buses and vehicles for teachers. The study showed that 41.7% strongly disagreed while 12.5% disagreed. This amounted to 54.2% of secondary schools' principals who disagreed that spaces were sufficient for parking buses and teachers' vehicles. The mean ratings were 2.25 (very inadequate). The interpretation was that secondary schools' administration was in agreement that space for parking buses were inadequate.

The study also sought principal view on the availability of bus driver. The study showed that 66.7% strongly disagreed while 2.1% disagreed. This amounted to 68.8% of secondary schools' principals who disagreed that schools had a bus driver. The mean ratings were 1.85 (very inadequate). The interpretation was that secondary schools' administration was in agreement that bus drivers were not available.

The study also sought the principals' view on whether students pay for the use of the bus. The study showed that 72.9% strongly disagreed while 20.8% disagreed. This amounted to 93.7% of secondary schools' principals who disagreed that students pay for the use of school buses. The mean ratings were 1.35 (very inadequate). The interpretation was that secondary schools' administration was in agreement that students do not pay for the use of the buses at their disposals.

The overall mean was 1.73 indicating that principals were in agreement that the community financing of transport and traveling's were inadequate. This could be interpreted to mean that community performance towards financing transport and travelling was very low and could lead to poor performance

Table 7 show community Financing of travelling and transport for the period 2015 – 2019.

Table 7: Community Financed Transport and Travelling, Kisumu County,2015 - 2019

	2015	2016	2017	2018	2019
Games	548,450.00	340,000.00	350,000.00	385,300.00	414,300.00
Excursions	175,000.00	14,000.00	15,000.00	15,500.00	150,000.00
Symposiums	23,000.00	50,000.00	50,000.00	63,000.00	31,100.00
Tours and travels	16,800.00	55,000.00	65,000.00	125,000.00	7,600.00
Others (Specify)	21,400.00	10,000.00	11,000.00	11,500.00	20,000.00
TOTAL	784,650.00	469,000.00	491,000.00	600,300.00	623,000.00

Table 7 outlines annual expenditure, denominated in Kenyan shillings, across various categories from 2015 to 2019. Notably, the "Games" category witnessed a consistent increase in spending over these years, indicating a growing investment in recreational activities. In contrast, the "Excursions" category displayed fluctuations, with a significant drop in 2016 followed by a resurgence in 2019. Meanwhile, "Symposiums" maintained relatively

stable expenditure levels, and "Tours and Travels" experienced a peak in 2018. The others category exhibited some variability but stayed within a narrow range. Overall, the total expenses escalated over the five-year period, reaching the highest amount in 2019.

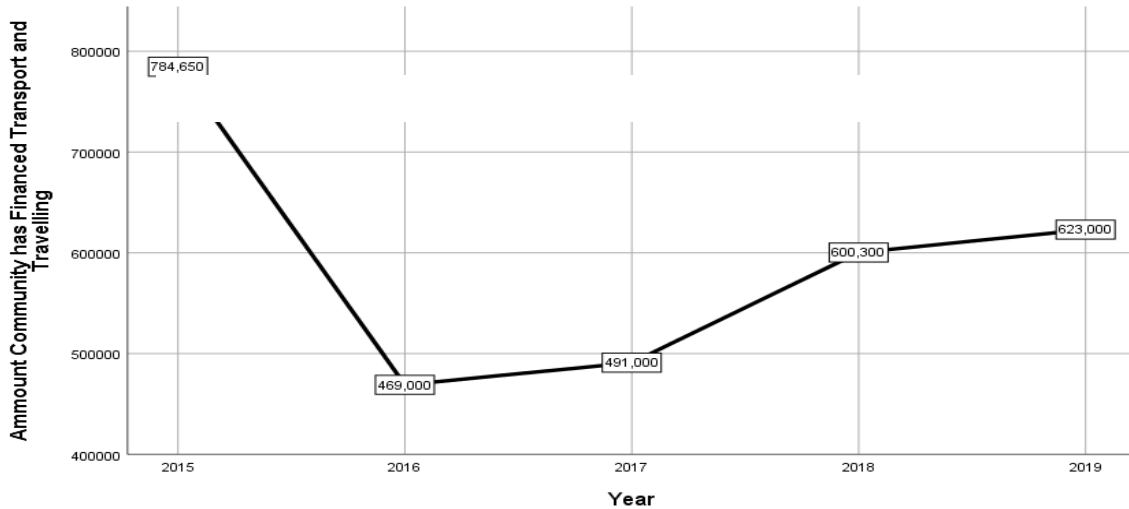


Figure 1: Trend of Financing of transport and Travelling, Kisumu County. 2015 – 2019

According to figure 1 over the five-year period from 2015 to 2019, community financing for transport and travel-related projects in Kenyan Shillings (KES) exhibited notable trends. In 2015, the community initiated its involvement with an initial investment of approximately 784,650 KES. A significant dip occurred in 2016, with funding dropping to 469,000 KES. However, from 2017 onwards, there was a consistent upward trajectory, reaching a peak of around 623,000 KES in 2019. This sustained growth signifies the community's increasing recognition of the importance of investing in transportation infrastructure and services, possibly influenced by evolving community needs or a growing population.

3.3 Regression Analysis of Academic Performance in K.C.S.E and Community Provision of Transport and Travelling

Pearson correlation analysis was used to establish the effect of community financing of infrastructure in secondary schools in Kisumu County. According to Sekaran (2003) the correlation analysis shows the direction, strength and significance of the relationships among the variables of the study. A positive correlation indicates that as one variable increases, the other variable also increases. Figure 2 shows the scatter plot of the community financing effect on the provision of transport & travelling resources. The variable shows strong positive relationship. The transport and travelling resources; buses, pick-ups, minibuses, vans and hiring of the same.

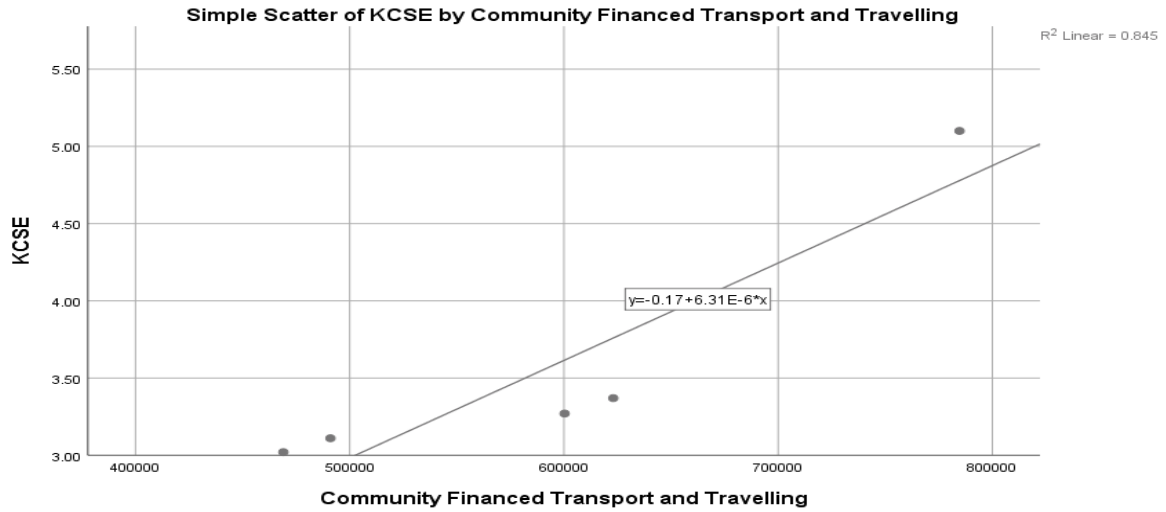


Figure 2: Community Financed Transport and Travelling, Kisumu County, 2015 - 2019

The scatter plot in Figure 2, vividly illustrates a strong and positive correlation between the amount of community financing for infrastructural resources and KCSE scores. The line's upward slope, extending from left to right, signifies that as the community invests more in infrastructural resources, such as classrooms, facilities, and other educational amenities, there is a corresponding increase in KCSE scores. This positive relationship implies that investments in infrastructure significantly influence academic performance by providing students with conducive learning environments and essential resources. While this correlation doesn't establish causation, it strongly suggests that improvements in transport and travelling resources can contribute positively to the academic success of students. Further analysis was done through the model summary to show how well the model explains the data and the significance of relationships between variables as presented in table 8(a).

Table 8 (a): Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.919 ^a	.845	.793	.39303

a. Predictors: (Constant), *Community Financed Transport and Travelling*

According to table 8 (a) The R Square value indicates that approximately 84.5% of the variance in the dependent variable can be explained by the predictor(s) in the model. The Adjusted R Square takes into account the number of predictors and adjusts the R Square value accordingly. The Std. Error of the Estimate represents the average distance between the observed values and the predicted values by the model. Thus community financing of travelling and transport plays a role in facilitating academic performance in secondary school in Kisumu County. This finding are high compared to the previous findings by Coleman and his colleagues, 1966;

Olel *et al*, 2003). However, the difference could be due to the countries and counties where the study was conducted. Further test was done by the anova to assess the model's overall fit and determine if it significantly explains the variation in the dependent variable as presented in table 8(b).

Table 8(b): Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.521	1	2.521	16.317	.027 ^b
	Residual	.463	3	.154		
	Total	2.984	4			

a. Dependent Variable: kcse performance

b. Predictors: (Constant), **Community Financed Transport and Travelling**

The ANOVA table in table 4.13(b) shows the sum of squares, degrees of freedom, mean squares, F-value, and significance level. The F-value of 16.317 suggests that there may be a significant relationship between the predictor(s) in the model and the dependent variable. The significance level of 0.027 indicates that the relationship is statistically significant at the 0.05 significance level. Lastly the coefficient test was done to show the effect of each independent variable on the dependent variable, indicating the direction and strength of the relationship as presented in table 8(c)

Table 8(c): Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	-.169	.943		-.177	.870
	Community Financed Transport and Travelling	6.302E-6	.000	.919	4.039	.027

a. Dependent Variable: kcse performance

According to table 8(c) The unstandardized coefficients show the estimated coefficients for the predictor and the constant. The standardized coefficient for " Community Financed Transport and Travelling " is 0.919, indicating its importance relative to other variables in the model. The t-value of 4.039 suggests that the coefficient for " Community Financed Transport and Travelling " is significantly different from zero. The significance level of 0.027 indicates that the coefficient is statistically significant at the 0.05 significance level. In other words, as amount of money is spent on transport and travelling programs increases by one-unit, academic performance in K.C.S.E score increases by 6.302E-6. Thus, the statistical model takes the form $Y = B_0 - B_1 X_1 + \dots + e^i$. Where Y represents the outcome variable while X represents the predictor variable i.e $Y = -0.167 + (6.302E-6 + \dots + e^i$.

4. Conclusion

According to the perspective of school principals, though communities were financing transport and travelling, the financing was inadequate with an overall mean of 1.73 (inadequate). This could be interpreted to mean that community performance towards financing transport and travelling was very low and could lead to poor performance. In other words, as amount of money is spent on transport and travelling programs increases by one unit, academic performance in K.C.S.E score increases by 1.705. Further analysis using regression show that there is strong positive effect of the correlation of 0.812 between the independent and dependent variable.

5. Recommendation

The schools should buy buses to enhance academic performance and therefore schools without buses should be encouraged to purchase one to enhance transport of the students and academic staff.

References

- [1]. Baller D. P. (2009). Importance of Education O.P papers.Com(online) <http://www.Papers.com/essays/importance-education /72816>.
- [2]. Nores, M., & Barnett, W. S. (2010). Benefits of early childhood interventions across the world:(Under) Investing in the very young. *Economics of education review*, 29(2), 271-282.
- [3]. UNESCO (2005a). *Aspects of Literacy Assessment: Topics and issues from the UNESCO Expert Meeting, 10 -12 June, 2003*. Paris, UNESCO.
- [4]. Brown, C., Sargrad, S., & Benner, M. (2017). *Hidden money: The outsized role of parent contributions in school finance*. Washington, DC: Center for American Progress. Accessed March, 5, 2018.
- [5]. Hassan, O. R., & Rasiah, R. (2011). Poverty and student performance in Malaysia. *Institutions and Economies*, 61-76.
- [6]. Okpala, C. O., Okpala, A. O., & Smith, F. E. (2001). Parental involvement, instructional expenditures, family socioeconomic attributes, and student achievement. *The Journal of Educational Research*, 95(2), 110-115.
- [7]. Republic of Kenya (2005a). *Sessional Paper NO.1 of 2005. A policy Framework of Education training and Research*. Nairobi, Government Printers.
- [8]. Getange, K.N. (2005). *Institutional Initiatives in Supplementing the Financing of Secondary School Education in Kisi General District, Kenya*. Unpublished M.ED. Thesis. Maseno University.
- [9]. Williams, B. (2005). Gender and urban transport in Habitat Debate, Key data on gender and urban transport *Journal*. 42(16), 2213 – 2223.
- [10]. Starkey, P. (2002). *Local transport solutions for rural development*. Department for International Development.
- [11]. Truong, T. M. T., & Nguyen, N. T. (2023, August). Electrifying School Bus in Hanoi, Vietnam—What are Barriers and Enablers?. In *IOP Conference Series: Materials Science and Engineering* (Vol. 1289, No. 1, p. 012055). IOP Publishing.
- [12]. Brushett, S. (2005). *Management and financing of road transport infrastructure in Africa*. World Bank

Sub-Saharan Africa Transport Policy Program, Discussion Paper, 4.

- [13]. Hopson, L. M., Lidbe, A. D., Jackson, M. S., Adanu, E., Li, X., Penmetsa, P., ...&Abura-Meerdink, G. (2022). Transportation to school and academic outcomes: a systematic review. *Educational Review*, 1-21.
- [14]. Maday, S., Goodelle, L., & Moy, G. T. (2023). Public Transportation Access and Academic Performance in the Chicagoland Area.
- [15]. Edwards, D. S. (2022). How Does School Bus Transportation Affect Student Attendance and Achievement? Policy Brief. National Center for Research on Education Access and Choice.
- [16]. Ding, P., &Feng, S. (2022). How School Travel Affects Children's Psychological Well-Being and Academic Achievement in China. *International journal of environmental research and public health*, 19(21), 13881.
- [17]. Alspaugh, J. W. (1998). Achievement loss associated with the transition to middle school and high school. *The Journal of educational research*, 92(1), 20-25.
- [18]. Mlagara, R. R. (2016). Impact of Public Transport System on the Academic Performance of Primary School Students in Dar es Salaam (Doctoral dissertation, The Open University of Tanzania).
- [19]. Republic of Kenya (2005). Session Paper No. 1 on educational Planning and Policy. Government Printers, Nairobi.
- [20]. Wanja, H. N. (2014). An understanding of the trends in the free secondary education funding policy and transition rates from primary to secondary education in Kenya. *Journal of Educafional and Social Research*, 4(1), 133-142.
- [21]. Mutegi, R. G. (2017). The influence of transport cost differentials on access to secondary education in Kenya.
- [22]. Edwards, D. S. (2023). Another one rides the bus: The impact of school transportation on student outcomes in Michigan. *Education Finance and Policy*, 19(1), 1-31.
- [23]. Best, John W. and Kahn, J.V. (2007), *Research in Education*, New Delhi, Prentice Hall of India Private
- [24]. Mugenda, O.M. & Mugenda, A.G. (2010). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts. Press.
- [25]. Cohen and Manion, L. (1994). *Research Methods in Education*. London; Croom Heron Limited.
- [26]. Mugenda M.O and Mugenda G.A (2003): *Research Methods, Quantitative and Qualitative Approaches*. Nairobi : Nairobi ACTS Press.
- [27]. UNESCO (2008). *National Education Support Strategy (UNESS) for the Republic of Kenya* Nairobi Kenya.