International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 05 Issue 06 June 2022
DOI: 10.47191/ijcsrr/V5-i6-23, Impact Factor: 5.995
IJCSRR @ 2022
www.ijcsrr.org

Influence of Adequacy of Financial Resources on Quality of Education in Public Day Secondary Schools in Embu County, Kenya

Simon Muchira Mbogo[1], Dr. Khatete Ibrahim[2], Prof. Akala Jumba[3]
[1,2,3] Department of Educational Administration and Planning, University of Nairobi

ABSTRACT: This paper is conceptualized on the existing researches which propound that financial resources are fundamental enablers to an educational system or learning institution in providing quality education. The study sought to examine the influence of adequacy of financial resources on quality of education in public day secondary schools in Embu County, Kenya. The study drew on correlational research design. Using stratified random sampling and purposeful sampling 35 principals, 97 teachers and 384 students were sampled-all drawn from 35 public day secondary schools. The tools of data collection were questionnaires, interview schedule and observation checklist. The findings of the study revealed that the government was the main financier of public day secondary education and the parents were expected to meet the costs of transport, lunch, uniform and stationery for their children. The main challenge with finances from the government was late and untimely disbursement of funds. The study also found that the occupations of a majority of parents were those of low economic status and as such they had difficulties in meeting educational expenses of their children. The study established that the relationship between adequacy of financial resources and quality of education was statistically significant. The study recommends that the government should include the lunch levy in the student's capitation. The study also recommends for introduction of free bicycle to school scheme by the government to improve on punctuality and also save on time spend on the way to school and increase the time for personal study. The study further recommends for termly stipend for uniform and stationery to the very needy cases.

KEY WORDS: Completion rate, Dropout rate, Financial resources, Quality education, Repetition rate.

INTRODUCTION

The realization of the implicit function of quality education in development has seen many governments give more budgetary allocation to their education systems to improve on quality of education. This is with the understanding that the availability of other educational inputs such as teachers, instructional materials and physical facilities is informed by the funds available. That is, the amount of funds available to a school or an educational system informs the number and qualification of teachers to be hired, the quantity and quality of teaching and learning resources to be availed and the number and type of physical facilities to be acquired. Although governments are the main financiers of basic education parents are expected to meet certain costs such as school uniform, transport cost, meals and stationery for their children. This suggests that the economic status of parents informs the affordability of the cost of education for their children. As such any change in educational finances can have diverse impacts on the educational attainments of leaners.

The Master Card Foundation (2018) in Uganda found that students from poor households were late enrollees, scored poorly in exams, were more likely than their counterpart to repeat a class and or withdraw from school. The study revealed that 25 percent of these students would re-open a new term/year late as their parents struggled to get money to pay for their fees. They would also be sent home to collect school fees within the course of the term. Reporting late back to school and being sent home frequently reduces instructional time hence students learn less. In another study by Ngwacho (2015) in Kisii found that inability to pay a number of school levies had detriment effect to learning outcomes. The study observed that in a year 14 students could repeat a class at an average school levy of Ksh 23,875. With a levy of Ksh 20,000 in a year 30 students would fail to complete secondary education and if the levy was Ksh 35,000 in a year 60 students would fail to complete secondary education in four years. Frequent absenteeism eats into the instructional time and students may fail to score good grades. This increases the probability of a student repeating a class or withdrawing from school.

International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 05 Issue 06 June 2022
DOI: 10.47191/ijcsrr/V5-i6-23, Impact Factor: 5.995
IJCSRR @ 2022
www.ijcsrr.org

Empowering poor households has been found to have a positive effect on education attainment of the children. According to a study by Evans, Gale and Kosec (2021) in Tanzania a conditional cash transfer programme increased school participation by between 8-10 percent points and primary school completion rate by between 14-16 percent points. The very vulnerable including the orphans benefited the most. The money given to the poor families was reasonable to pay for the educational expenses of the children. Another study by Mwangi (2018) in Kitui County, Kenya found that introduction of free day secondary education and government bursaries led to increase in completion rate from 70.4 percent in 2007 to 72.6 percent in 2013. When education is made affordable students are able to concentrate with studies as there are no interruptions.

Day secondary education in Kenya is mainly funded by the government; the households are expected to meet the cost of school uniform, lunch levy, transport and stationery for learning. The costs of these items are still a heavy financial burden to parents. It is against this state of affairs that the intent of the study was to examine the influence of adequacy of financial resources on quality of education in public day secondary schools in Embu County.

Statement of the problem

In her regard of the significant role of quality education the Kenyan government has taken a number of measures to improve on quality of education. Some of the key measures include increasing of learner capitation from Ksh 12,870 to Ksh 22,244, formulation and adoption of ICT policy on the use of ICT in school to support in curriculum delivery and school management. Other measures include giving out bursaries to students, employing more teachers to replace those who exit the service. The government also sponsors the training of school managers at the Kenya education management institute to improve their managerial skills. Besides the education sector gets the lion share of the budgetary allocation. Despite these efforts the quality of secondary education remains unsatisfactory. For instance, according to the Global partnership for education (2019) the ministry of education fell short of $283 million needed especially in financing the free day secondary education. The sector also lacks adequate qualified teachers particularly in science and technical subjects. Other challenges facing education sector include pitiful facilities as well as insufficiency of instructional materials and the inefficiency arising from grade repetition and dropout cases.

Statistics on education attainment in Embu County are no any better. For instance for the period
2016-2019 only 17.1 percent of students attained the minimum grade of C+ to join public Universities. Meanwhile during this period 60.3 percent of students attained grades of D+ and below. In 2014 and 2016 the county enrolled 12,099 and 12,885 form one students respectively and in 2017 and 2019 the students who registered for the final exams were 10,653 and 11,593. This indicates education wastage either through grade repetition or dropping out of school. As such the intent of the study was to explore the influence of adequacy of financial resources on quality of education in public day secondary schools in Embu County

RESEARCH OBJECTIVE

The objective of the study was to explore the influence of adequacy of financial resources on quality of education in public day secondary schools in Embu County.

Null hypothesis

There is no significant relationship between adequacy of financial resources and quality of education in public day secondary schools in Embu County.

THEORETICAL FRAMEWORK

The study drew on the education production function theory. The proponents of education production theory include Coleman (1966), Mincer (1970), (Hanushek, 1979; 1986), Card & Krueger (1996). The theory likens education to a factory or an industry that processes the educational inputs into educational outputs. According to the theory the quality of the educational output depends on the quality of educational input and the effectiveness of the process. Educational inputs include but not limited to finances, teachers, facilities and instructional materials while the educational outputs include test scores, rates in completion, enrollment, repetition, dropout, and participation among others. Education production function can be represented as;

$Y = f(u, v, w, x\ldots\ldots)$ where Y is the educational output while u, v, w, x…. are the various educational inputs such as instructional materials, facilities, finances and teachers.

International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 05 Issue 06 June 2022
DOI: 10.47191/ijcsrr/V5-i6-23, Impact Factor: 5.995
IJCSRR @ 2022
www.ijcsrr.org

LITERATURE REVIEW

The convention sources of educational finances include funds from the government, global institutions like the World Bank, and the households. The success of educational programmes, activities and operations in learning institution is subject to the adequacy of funds available. Financial resources are therefore vital components in the improvement to access and quality of education (Baker, 2016). As such any change to the educational finances or the funding mechanism can have great impact on the educational outcomes. For example a study by Backer (2017) in United States found that a 10 percent rise of student capitation for 12th graders surged the probability of high school graduation by 7 percent for every student and by 10 percent for students from families of low socio-economic status. More financial resources enable the schools to acquire more instructional materials, hire more teachers, and also expand and improve on the physical facilities.

Many studies have found that programmes of giving cash to poor households have enormous impact on educational realization of children. The Bolsa Familia conditional cash transfer programme in Brazil improved the probability of enrollment of a beneficially male child by 0.97 and that of girl child by 0.92. The poor households would be provided with cash transfer on condition that their children had attained 85 percent of school attendance. Economic hardships are stabling blocks that prevent parents from sending their children to school. The cash transfer raised the level of family income and so they could afford to send their children to school (Buchstab, 2021). Elsewhere in Colombia Garcia and Hill (2010) established that such a programme reduced class repetition and improved on test scores. Test scores of mathematics of 5th grade students improved by 0.4 of a standard deviation and that of language by 0.7 of a standard deviation. Grade stagnation also reduced by 3 percent points. For a family to benefit from the programmes it was expected to enroll their children to school and also attain an attendance rate of 80 percent. For every child in primary school the family was given US$6 and for every child in secondary school the family was given US$12. The cash empowered the families economically and minimized the tendencies of children to work for money. This allowed them time to concentrate with their studies. With the cash transfer the families could afford to purchase learning materials for their children.

According to the World Bank (2019) schools financial project in Nicaragua reduced dropout and repetition rates thereby improving on pupils' retention. The project provided instructional materials, paid for teacher in-service training, acquired new facilities and maintenance of the old ones. The very vulnerable children were provided with school uniforms and stationeries. Inservice training of teachers improves on the effectiveness of the teacher; additional instructional materials enrich the teacher learner interaction while the physical facilities make the physical environment more conducive for learning. A study by Amos and Koda (2018) in Tanzania found that schools that run income generating projects posted better results in national examinations compared to their counterparts without such projects. The fund generated was used to pay for remedial sessions, improve on school diet, acquisition of more learning materials and incentivizing teachers. A balanced diet is important for child's cognitive development and hence can have high memory retention and can concentrate for a long period of time. Incentivized teachers have the enthusiasm to teach and devote their time to assist learners. Instructional materials improve on the effectiveness of content delivery.

Research shows that both direct and indirect educational costs raise economic pressure to the already constrained budgets of the poor households. This makes such families to deprioritize education. A study by Kapur (2018) in India found that poor families were constraining to send their children to school for lack of transport cost. A majority of children walked to school spending considerable amount of time on the way due to long distances from home to school. The walking got them exhausted and tied for meaningful learning. They also had little or no time to do homework. As a result their test scores were low and had to repeat grades with others opting to dropout. Meanwhile according to UNESCO (2018) economic hardships had pushed many children out of school in Yemen. The dropout rates had reached to highs of 16 and 11 percent in primary and lower secondary school respectively. The economic hardships had forced many children from poor families into child labour while still enrolled in school. When students engage in child labour they are left with less time for study. Out of tiredness they find it hard to concentrate or participate in class. They also get the tendency of absenting themselves from school to go and work with some opting to leave school altogether.

A study by Abdelmadjid (2013) in Algeria found that when the rate of food price increased from 3.5 to 4.5 percent for the period 2007- 2008, repetition rate rose from 11.95 to 13.57 percent while dropout rate rose from 5.61 to 7.48. In poor households cost of food takes the lion share of the household income. Therefore for children from poor households inflation on food prices can have adversarial impacts on their educational realization. The study revealed that most of the children walked to school and frequently got to school late. There was also the problem of forfeiting breakfast and lunch meals and besides a majority could hardly afford warm attires to brace the icy weather. Such inadequacies interfere with regular school attendance, the ability to participate and

International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 05 Issue 06 June 2022
DOI: 10.47191/ijcsrr/V5-i6-23, Impact Factor: 5.995
IJCSRR @ 2022
www.ijcsrr.org

concentrate in class. Lack of food can have detrimental effect on brain growth and development which can profoundly affect child's readiness for schooling and academic performance.

Li and Qui (2018) in China established that children of urban households outperformed their counterpart from the rural set up. The economic status accounted for 29.5 and 11.6 percent of difference in educational expenses for the urban and rural households respectively. Additionally economic status accounted for 20.8 and 6.4 percent of variation in test scores for the urban and rural households respectively. The occupations of the urban parents inspire their children to work hard in school. Their income levels afford them to buy reading materials for their children even while at home which may not be the case for the rural parents. These findings were confirmed by another study by Korir (2018) in Kipkelion sub-County, Kenya. The study found that academic scores of students were influenced by the occupations of their parents. The study established that a majority of students who scored at most grade C were children of parents earning a monthly income of Ksh 5,000 and were mainly peasant farmers. A majority of who scored at least grades C+ the minimum entry into public universities were children of parents whose income levels ranged between Ksh 10,000 and Ksh 15,000. A monthly income of at most Ksh 5,000 for peasant farmers is not only inadequate but it is also unreliable as it can fluctuate depending on rainfall patterns hence not easy to budget and pay the school expenditure of their children on time.

The number of students enrolled for some subjects is determined by the costs of stationeries required for study. In other words students who cannot afford to purchase stationeries for learning a certain subject are automatically excluded from enrolling. This is affirmed by a survey by the Child Poverty Action Group (2014) in the United Kingdom. The survey established that a majority of students from poor families were not studying photography, art, textile, design and food technology as these subjects required students to buy extra instructional materials for study. The few students from poor households who were studying these subjects scored relatively low test scores owing to inability to buy stationaries for the learning of these subjects.

When the Ghanaian Government implemented free senior secondary education and free meals in day secondary schools, the enrollment of girls increased by a significant margin (AbudulRahaman, 2020). The government catered for the levies charged there before which hindered enrollment of children who were economically disadvantaged. Elsewhere according to Adan and Orodho (2015) the introduction of free day secondary education led to increase in enrollment and improvement in the performance of students in KCSE in Mandera west sub-county, Kenya. Schools were able to acquire instructional materials and on time. Students were also able to study without disruption of being sent home to collect fees.

RESEARCH METHODOLOGY

Research design

The resolve for a research design is informed by its fitness in the techniques of handling the problem in question (Merriam, 1998).The study employed correlation research design. According to Creswell (2012) correlational design is used in researches that focus to establish how a variable or variables change with change in another variable or variables without their manipulation. The design was therefore relevant and fit in exploring the influence of adequacy of financial resources on quality of education.

Target population

The study targeted 192 principals, 1743 teachers and 35124 students in the 192 public secondary schools in Embu County (Office of the Embu county director of education, 2019).

Sampling technique and sample size

The schools were stratified based on the five administrative sub-counties: Embu East, Embu North, Embu West, Mbeere North and Mbeere South. Public day secondary schools and the form four students were purposefully sampled. The participants were then randomly sampled from each stratum. In the views of McMillan and Schumacher (2001) a representation of 20 percent is large enough when the population is small. In the same vein Bullen (2014) posit that a sample size of 10 percent is adequate so long as the sampled individuals do not exceed one thousand in number. The study used samples of 10 percent of teachers and 20 percent of principals.

Cochran's formula (1963, 1975) was used to determine the sample size for the students.

$n = \frac{z^2 pq}{d^2}$ Where,

n is the desired sample size,

International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 05 Issue 06 June 2022
DOI: 10.47191/ijcsrr/V5-i6-23, Impact Factor: 5.995
IJCSRR @ 2022
www.ijcsrr.org

z is the standard normal deviation set at 1.96 which corresponds to 95 percent confidence level, **p** is the proportion in the target population to have a specific attribute, **q** is 1-p, and,
d is the absolute precision set at 0.05 Upon substitution;

$n = \frac{1.96^2\ (0.5)(0.5)}{0.05^2}$ = 384 students.

The sample sizes are shown in Table 1

Table 1: sample sizes for the principals, teachers and students

Sub County	Principals			Teachers			Students		
	N	n	n-s	N	n	n-s	N	n	n-s
Embu East	34	7	1	218	22	3	848	75	11
Embu West	25	5	1	198	20	4	792	70	14
Embu North	23	5	1	172	17	4	838	75	15
Mbeere North	43	9	1	186	19	2	916	82	9
Mbeere South	45	9	1	202	20	2	956	87	9
Total	170		35	976		97	4347		384

Key: **N** = Sub-County population, **n** = sample size, **n-s** = respondents per school

From Table 1, principals of the sampled schools were automatically selected. The sample size of teachers in each stratum was a 10 percent of the population of that stratum and the respondent teachers in each school was a quotient obtained by dividing the stratum sample by the number of schools. The students' sample size of each stratum was calculated by the method of proportional allocation under which the sizes of the samples from the different strata are kept proportional to the sizes of the strata. The sample size in each stratum was then divided by the number of schools to get the number of respondent per school. The sample size of the study was 516 respondents.

Research instruments

Data from the principals was obtained through an interview schedule while for the students and teachers the data was solicited using two different questionnaires. An observation checklist was also used. The questionnaires for the teachers were administered by the researcher. For the students the questionnaires were administered with the help of the teachers. Afterwards the researcher held an interview session with the principal and finally filled the checklist before leaving the school. *Validity of the instruments*

According to Weiner (2007) validity is the degree to which a research instrument achieves in measuring what it is designed to measure. The concern with validity is the authentication of the findings of a research and to ascertain if the research examines what it is supposed to examine (Zohrab, 2013). Extensive and thorough review of related literature was carried in search of the relevant items of the instruments. The instruments were then checked by the two supervisors of the research. Their feedback assisted in modifying the instruments; some questions were revised and complicated words were also revised for ease of understanding.

Reliability of the instruments

According to Nunan (1999) reliability is concerned with the precision, sincerity and replicability of study findings. The reliability of the instruments was determined using data from a pilot study. The sample size of the pilot study comprised of 4 principals, 10 teachers and 36 students all drawn from 4 different schools in different sub counties. This was ten percent of the actual sample size as opined by Connelly (2008). The researcher administered the teachers' and students' questionnaires and interviewed the 4 principals. The data was collected again from the same respondents after 21 days. According to Kamta (2016) the gap in retesting should not be less than 15 days and should not exceed 30 days. With the aid of the SPSS programme the reliability of the instruments

International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 05 Issue 06 June 2022
DOI: 10.47191/ijcsrr/V5-i6-23, Impact Factor: 5.995
IJCSRR @ 2022
www.ijcsrr.org

was determined using the Pearson's correlation coefficient product moment by use of Cronbach- alpha statistics. The reliability coefficients of the instruments were above 0.7 which according to Bachir (2017) were reliable in producing infallible outcomes.

Data analysis procedure

The data was first cleaned to clear errors. Data from each research instrument was organized according to the objectives of the study and then coded using numerical values. Quantitative data was analyzed descriptively and presented in frequency tables and their percentages. Qualitative data was put into categories of common attributes as per the objectives. The contents were then analyzed as per the meaning and perceptions of the respondents. Some responses were transcribed and presented in their raw form. With the help of the SPSS software the correlations of the independent and dependent variables were run and presented inform of tables. Chi-square statistics were then computed to determine if the relationships were significant at $\alpha = 0.05$.

RESULTS

The study sought to establish the various sources of school funds. The information was solicited from the school principals and their responses were presented in Table 2

Table 2: Sources of school funds

School of school funds	Frequency	Percentage
FDSE funds	26	100
Lunch levy	26	100
CDF bursaries	26	100
School income generating projects	3	11.5

As depicted in Table 2, FDSE, lunch levy and CDF were main source of funds. This indicates that the government is the main financiers of public day secondary education. The study sought to establish if there were challenges in obtaining the funds and the data is tabulated in Table 3

Table 3: Challenges in obtaining the school funds

Source of funds	Challenges	Frequency	Percentage
FDSE	Late and untimely disbursement	26	100
Lunch levy	Non- payment	4	15.4
	Delayed payments	22	84.6
Bursaries	Too little	15	68.2
	Unreliable	12	54.5

From Table 3 the challenges were late and untimely disbursement of FDSE funds, delay in payments of lunch levies while the bursaries were too little and unreliable for budgeting. In some of the interviews principals remarked:

'*We charge less than Ksh 10,000 for meals but do you know very few parents are able to clear by the year end. We have now started second term and I have some parents with balances of last year'* (interview session code IS-13).

'*You might think that the students get a lot of money from these bursaries. Some get as little as Ksh 1,000. Sometimes the deserving cases do not get these bursaries and you wonder the criteria used.* (Interview session code IS 17)

The lunch levy

The study sought to find out the amount charged as lunch levy by the schools and the responses from the students are shown in Table 4

Table 4: The amounts charged as school lunch levy

Lunch levy in a year in Kenya shillings	Frequency	Percentage
Less than 10,000	191	54.4
10,000-15,000	161	45.6
Total	352	100

International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 05 Issue 06 June 2022
DOI: 10.47191/ijcsrr/V5-i6-23, Impact Factor: 5.995
IJCSRR @ 2022
www.ijcsrr.org

From Table 4, almost a half of schools (45.6%) charged between Ksh 10,000 and ksh 15,000 as lunch levy.

Correlation analysis was done to establish the relationship between the amount charged as lunch levy and the aspects of quality of education. This is shown in Table 5

Table 5: Correlations between lunch levy and quality of education

		Repetition rate	Dropout rate	Completion rate
Lunch levy	Pearson Correlation	.187	.614	-.173
	Sig. (2-tailed)	.639	.814	.654
	N	352	352	352

**Correlations is significant at the 0.05 level (2-tailed)*

From table 5 lunch levy has strong positive correlations with dropout [r=.614, p=.814] and repetition rate [r=.187, p=.639]. This suggests that when the lunch levy charged is increased the dropout and repetition rate also increases. Lunch levy correlates negatively with completion rate [r=-.173, p=.654] suggesting that when the lunch levy is increased completion rate decreases.

Cost of uniform

The study sought to establish how much were the students spending annually on trouser (for boys), skirt (for girls), shirt, sweater, socks, shoes, and tie. The data is as shown in Table 6

Table 6: Cost of school uniform

Amount in Ksh	Frequency	Percentage
Less than 5,000	71	20.3
5,000 - 7,500	252	71.6
More than 7,500	17	4.7
Missing in the system	12	3.4
Total	352	100

As shown in Table 6 a majority of students were spending Between Ksh 5,000 and Ksh 7,500 on school uniform.

Correlation analysis was done to establish the relationship between cost of school uniform and aspects of quality of education as shown in Table 7

Table 7: Correlations between cost of uniform and quality of education

		Repetition rate	Dropout rate	Completion rat
Cost of uniform	Pearson Correlation	.619	.371	-.196
	Sig. (2-tailed)	.954	.752	.579
	N	352	352	352

**Correlations is significant at the 0.05 level (2-tailed)*

From Table 7 cost of uniform has strong positive correlation with repetition rate [r=.619, p=.954] and dropout rate [r=.371, p=.752]. This suggests that when the cost of uniform rises cases of repetition and dropout increase. The correlation between cost of uniform and completion rate is negative implying that any rise in cost of uniform leads to decrease in completion rate.

Cost of stationery

The study sought to establish the cost of pens, mathematical set and table, calculator, dictionary, kamusi, bible, atlas, set books and the bag. The data tabulated in Table 8

International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 05 Issue 06 June 2022
DOI: 10.47191/ijcsrr/V5-i6-23, Impact Factor: 5.995
IJCSRR @ 2022
www.ijcsrr.org

Table 8: Cost of stationery

Amount spent on stationeries in Kenya shillings	Frequency	Percentage
Less than 5,000	58	16.7
5,000 - 7,500	222	63.0
More than 7,500	72	20.3
Total	352	100

From Table 8, a majority of students (63%) of students indicated that they spent between Ksh 5,000 and Ksh 7,500 on stationeries. Correlation analysis was done to establish the relationship between the cost of stationary and the aspects of quality of education. The results are shown in Table 9

Table 9: Correlations between cost of stationery and quality of education

		Repetition rate	Dropout rate	Completion rate
Cost of stationery	Pearson Correlation	.394	.032	-.009
	Sig. (2-tailed)	.843	.417	.048
	N	352	352	352

**Correlations is significant at the 0.05 level (2-tailed)*

As shown in Table 9 cost of stationery has a strong positive correlation with repetition rate [r=.397, p=.843]. This suggests that rise in the cost of stationery leads to increase of repetition rate. Cost of stationery has very weak correlations with dropout rate and completion rates.

Fare to and from school

The study sought to find out the daily transport expenses to and from school. The data is presented in Table 10

Table 10: *Amount spent on fare to school*

Fare	Frequency	Percentage
Walk or ride to school	278	78.9
Ksh 50 and below	58	16.4
Ksh 51- Ksh 100	13	3.9
Above Ksh 100	3	0.8
Total	352	100

Table 10 depicts that a majority of students (78.9%) walk or ride to and from school. Further the researcher sought to establish the correlations between fare to and from school and the aspects of quality of education as shown in Table 11

Table 11: Correlations between fare to and from school and quality of education

		Repetition rate	Dropout rate	Completion rat
Fare to and from school	Pearson Correlation	.401	.583	-.612 .194 352
	Sig. (2-tailed)	.172 352	.822 352	
	N			

**Correlations is significant at the 0.05 level (2-tailed)*

International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 05 Issue 06 June 2022
DOI: 10.47191/ijcsrr/V5-i6-23, Impact Factor: 5.995
IJCSRR @ 2022
www.ijcsrr.org

From Table 11 fare to and from school has strong positive correlation with repetition rate [r=.401, p=.172] and dropout rate [r=.583, p=.822]. This suggests that when the fare to school hikes then dropout and repetition cases arise. Fare to and from school has a strong negative correlation with completion rate [r=-.612, p=.194] implying that when the fare is hiked completion rate decreases. Further the researcher sought to establish the distances covered by students to school. The data is presented in Table 12

Table 12: Distance from home to school

Distance to the nearest Kilometer	Frequency	Percentage
1	58	16.6
2	81	22.9
3	154	43.6
More than 3	59	16.9
Total	352	100

Table 12 shows that 60.5 percent of students commute for at least 6 kilometers to and from school.
The researcher sought to establish whether the students have ever been sent home for any of the above expenses and the data is presented in Table 13.

Table 13: Reasons for being sent home

Reason for being sent home	Frequency	Percentage
Lunch levies	103	29.2
Uniform	69	19.5
Lateness	90	25.5
Stationery	76	21.6
Others	25	7.0

As depicted in Table 13, 29.2 percent of students had ever been sent home for non-payment of lunch levy. This was followed by 25.5 and 21.6 percent of students who have ever been sent home for lateness and for missing stationery respectively.

Occupation of parents/guardians

The study sought to establish the occupation of the parents and or guardians with a focus to gauge their ability to meet the costs of education of their children. The data is shown in Table 14

Table 14: Occupations of parents/guardians

Nature of parent/guardian occupation	Frequency	Percentage
White color job	16	4.7
Casual labour	91	25.8
Business	20	5.7
Subsistence farming	210	59.6
Others	15	4.2
Total	352	100

As depicted in Table 14, the main occupations of the parents/guardians were subsistence farming (59.6%) and casual labour (25.8%). Correlation analysis was done to establish the relationship between occupation of parents and or guardians and the aspects of quality education as shown in Table 15

International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 05 Issue 06 June 2022
DOI: 10.47191/ijcsrr/V5-i6-23, Impact Factor: 5.995
IJCSRR @ 2022
www.ijcsrr.org

Table 15: Correlations between occupation of parents or guardians and quality of education

		Repetition rate	Dropout rate	Completion rate
Occupation parent/guardian	of Pearson Correlation	-.207	-.799	.701
	Sig. (2-tailed)	.114	.210	.031
	N	352	352	352

**Correlations is significant at the 0.05 level (2-tailed)*

Table 15 shows strong negative correlations between occupation and repetition rate [r=-.207, p=.114] and dropout rate [r=-.799, p=.210]. This suggests that children of parents of occupations of high economic status are less likely to repeat grades or drop out of school and vice versa. Occupation has a strong positive correlation with completion suggesting that the higher the economic status of occupation the more the likelihood of the child completing the school within the stipulated period.
To determine if the relationships between adequacy of financial resources and quality of education were significant, chi-square statistics were computed at α =0.05 and the results are shown in Table 16

Table 16: Chi-square statistics on the relationships between adequacy of financial resources and quality of education

Aspect	Value	df	P value
Cost of school uniform * dropout rate	12.931 [a]	6	0.044
Cost of stationary * repetition rate	12.255[a]	12	0.056
Lunch levy * completion rate	20.296[a]	12	0.027
Fare to school * dropout cases	8.082 [a]	9	0.021
Occupation of parents * completion rate	3.620[a]	8	0.034

Table 16 shows that fare to school, lunch levy, occupation of parents and costs of uniform have p-values less than 0.05. This implies that the relationships with quality of education are statistically significant. Only one (cost of stationery) out of five variables has a p-value greater than 0.05. Therefore the study rejects the null hypothesis that there is no significant relationship between adequacy of financial resources and quality of education in public day secondary schools in Embu County

CONCLUSION

The study found that public day secondary schools were relying mainly on finances from the government. Students were only expected to pay for meals, fare to school, stationeries and uniform. Small scale farming and casual jobs were the main occupations of parents/guardians and had difficulties in meeting educational expenses for their children as confirmed by the reasons for the students being sent home. The study established a statistically significant relationship between adequacy of financial resources and quality of education.

RECOMMENDATIONS

The study recommended for the inclusion of lunch levy in the student's capitation to relief parents and guardians the burden of educational expenses. The study also recommended for the introduction of free bicycles by the government to day scholars. On the same the study recommended for introduction of stipend for uniform and stationery to the very vulnerable.

REFERENCES

1. Abdelmadjid. (2013). *The Impact of Food Price Increase on Education in Algeria*. Geneva : UNICEF.
2. Abudul-Rahaman, N. (2020). The Impact of Government Funding on Senior School Enrollment in Ghana. *Souht African ournal of Education, Vol. 40, No. 4*, 1-10.
3. Adan, M. A., & Orodho, J. A. (2015). Constraints of implementing free seondary education in Mandera West sub-County, Mandera, Kenya. *Journal of Education and Practice, Vol.6, No. 9*, 102-111.

International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 05 Issue 06 June 2022
DOI: 10.47191/ijcsrr/V5-i6-23, Impact Factor: 5.995
IJCSRR @ 2022
www.ijcsrr.org

4. Amos, O., & Koda, G. M. (2018). Contribution of school-based income generating activities in quality education provision in secondary schools managed by the Catholic Diocese of Moshi, Tanzania. *European Cnter for Research Training and Development UK, Vol. 6 (4)*, 49-69.
5. Bachir, A. (2017). *What is the Acceptible Range for Cronbach alpha test of reliability?* . Retrieved from https://www.researchgate.net/post/What-is-the-acceptable-range-forCronbach-alpha-test-of-reliability/59f0e6914048543cdb03a62e/citation/download.
6. Baker , B. D. (2017). *How Money Matters for Schools.* Palo Alto CA: Learning Policy Institute.
7. Baker, B. D. (2016). *Does money matter in education?* Washington, D.C: Albert Shanker Institute.
8. Buchstab, A. (2021). *The Impact of Conditional Cash Transfer Programmes on Educational Outcomes in Developing Countries. A case Study of Bolsa Familia in Brazil.* Lund: Lund University.
9. Bullen, P. B. (2014, July 30). *How to choose a sample size (for the statistically challenged).*
10. Retrieved from Practical tools for International development: https://www.tools4deve.org/resources/how-to-choose-a-sample-size/
11. Card, D. A., & Krueger, A. B. (1996). School resources and students outcomes: An overview of literature and new evidence from North and South Carolina. *Journal of economic perspectives, Vol. 10(4)*, 31-50.
12. Child Poverty Action Group. (2014). *The Costs of Going to School, From Young People's Perspectives.* London: Author.
13. Coleman, J. S. (1966). *Equality of educational opportunity.* Washington, DC: US government printing office.
14. Connelly, M. (2008). Pilot Studies. *Medsurg Nursing, Vol. 17 (6)*, 411-412.
15. Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research.* Boston, MA: Pearson Education, Inc.
16. Evans, D. K., Gale, C., & Kosec, K. (2021). *The Educational Impacts of Cash Transfers for Children with Multiple Indicators of Vulnerability. CGD working Paper 563.* Washington, DC: Center for Global Development.
17. Fraenkel, J. R., & Wallen, N. E. (2003). *How to Dsesign and Evaluate Research in Education.(Fifth ed.).* New York: Mc Graw-Hill.
18. Global Patnership for Education . (2019, November 11). *GPE 2020 Country-Leve Prospective Evaluationsl* . Retrieved from https://www.globalpartnership.org/sites/default/files/document/file/2019-11-gpe-2020country-level-prospective-evaluations-kenya.pdf
19. Hanushek, E. A. (1979). Conceptual and Empirical Issues in the Estimation of Educatio Production Functions. *Journal of Human Resources, Vol,. 14 (3)*, 351-388.
20. Hanushek, E. A. (1986). The Economics of Schooling. *Journal of Economics Literature, Vol. 24, No.3*, 1141-1179.
21. Kamta, P. (2016). *RE: How many days between assessents for measuring a test-retest reliability?* Retrieved from https://www.researchgate.net/post/How_many_days_between_assessments_is_best_for_measuring_a_test-retest_reliability/ 57e60b26615e2725086a9484/citation/download.
22. Kapur, R. (2018). *Factors influencing the Students Academic Performance in Secondary Schools in India.* New Delhi: University of Delhi.
23. Li, Z., & Qui, Z. (2018). How Does Family Background Affect Children's Educational Achievement? Evidence From Contemporary China. *Journal of Chinese Sociology, Vol. 5, No. 13. https://doi.org/10.1186/s40711-018-0083-8.*
24. Mcmillan, J. H., & Schumacher, S. (2001). *Research in Education: A Conceptual Introduction, 5th Edition.* New York: Longman.
25. Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education.* San Fraciscal: Jossey-Bass.
26. Mwangi , G. (2018). *Influence of Educational Subsidies on Completion Rates in Public Secondary schools in Kitui County, Kenya (Doctoral Thesis).* Kitui: South Eastern Kenya University.
27. Ngwacho, G. A. (2015). *Effects of Hidden Costs in Free Secondary Education on Transition and Completion Rates in Public Boarding Schools in Kisii County, Kenya (Unpublished Doctoral Thesis).* Kabarak: Kabarak University.
28. Nunan, D. (1999). *Research Methods in Language Learning. Eighth Printing.* Cambridge: CUP.
29. Unesco Institute for Statistics. (2018, March 3). *Gross intake ratio to the last grade of primary education, both sexes(%).* Retrieved from http://data.uis.unesco.org/

International Journal of Current Science Research and Review
ISSN: 2581-8341
Volume 05 Issue 06 June 2022
DOI: 10.47191/ijcsrr/V5-i6-23, Impact Factor: 5.995
IJCSRR @ 2022
www.ijcsrr.org

30. Weiner, J. (2007). *Measurement: Reliability and Validity measures.* Baltimore: Johns Hopkins University.
31. World Bank. (2019). *Implementation, Completion and Result Report on Financial Credits to the Republic of Nicaragua for the Second Support to the Education Sector Project Pasen II.* Washington, DC: Author.
32. Zohrab, M. (2013). Mixed Methods: Instruments, Validity, Reliability and Report Findings. *Theory and Practice in Language Studies, Vol. 3, No.2* , 254-262.

Cite this Article: Simon Muchira Mbogo, Dr. Khatete Ibrahim, Prof. Akala Jumba (2022). Influence of Adequacy of Financial Resources on Quality of Education in Public Day Secondary Schools in Embu County, Kenya. International Journal of Current Science Research and Review, 5(6), 1985-1996