

Direct Educational Costs and Students' Retention Rate in Public Boarding Secondary Schools in Kenya

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Abstract

Student retention in secondary school is paramount for the ultimate achievement of goals in education. This is the reason why individuals, societies, education partners and stakeholders pull together to finance education at all levels. Despite this effort, student retention in public boarding secondary schools in Kenya is wanting. Literature indicates that, costs incurred while going through secondary education may have an effect on the retention of students. This study therefore sought to establish the extent to which direct costs of education affect student retention rate in public boarding secondary schools in Uasin Gishu County, Kenya. A convergent parallel mixed methods design was used to gather both the qualitative and quantitative data. The target included 31 principals and 4012 parents. All the 31 principals were purposively selected. Yamane simplified formula was used to sample 399 parents who were then distributed among the sub counties using proportionate random sampling. Questionnaires were utilized to collect quantitative data from parents while an interview schedule helped to gather qualitative data from the principals. Document analysis provided secondary data on students' retention. Quantitative data was analyzed using both descriptive and inferential statistics. Qualitative data on the other hand was analyzed thematically. The study findings showed that, direct educational costs are crucial predictors of students' retention rate in public boarding secondary schools. They account for 94.1% of the variance. Costs of meals, accommodation, activity fee, parents' association fund and the costs of repairs, maintenance and improvement all contributed to the variance. However, the cost of repairs, maintenance and improvement accounts for the highest contribution (90%) as the cost of activity fee accounts for the lowest (0.01%). The study concludes that, direct educational costs affect students' retention rate in public boarding secondary schools. The study recommends the government through the departments of basic education and early learning to reconsider waiving all the boarding costs so as to lessen the cost burden and hence enhance student retention.

Keywords: Direct educational costs, Retention, Boarding secondary schools.

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1.0 Introduction

Education stands out as a critical pillar of social, political and economic and development. It aids the reduction of poverty through an improved productive capacity of individuals and societies. This provides the answer as to why donor agencies, governments and non-governmental organizations acknowledged Education for All (EFA) and embraced the idea of offering basic education for all. (UNESCO, 2005). The Sustainable Development Goals were created by the international community after the MDGs and EFA Goals were officially retired. Fourthly, ensuring access to high-quality education for all is crucial to achieving the other Sustainable Development Goals and bettering people's lives in the long run (UNWomen, 2022). The goal is provided through different levels which include; primary, secondary and tertiary.

According to Wachiye and Nasongo (2010), in any education system, secondary education is a critical level due to the vital role it exercises in spurring and enhancing national development. Based on this, countries have embraced various policy frameworks to guarantee quality basic education, enhanced productivity and reduce poverty (UNICEF, 2007).

Globally, UNESCO (2015) as quoted by Kiruru et al. (2020) noted that countries have adopted policy frameworks that work towards enhancing access, participation and quality education. GEMR (2021) reports that despite legislative reforms, 20% of potentially eligible students are not enrolled in high school. Bennell, Bulwani & Musikanga (2016) notes that in Zambia, 30 percent of secondary school –aged could not remain in school due to high dropout rates. This could be due to the high costs of secondary school education. This concurs with Muganda *et al* (2016) who notes that, despite the developed strategies and policies to boost transition and retention in schools, some students still withdraw prematurely from secondary schools.

Likewise, Williams, Abbott & Mupenzi (2015) reiterates that schools still demand extra money from parents despite Free Education. These payments are referred to as hidden costs of education. They are paid outside the fee guidelines. As indicated by several studies, these costs are known to constraint student transition and retention in secondary schools. Ogawa (2021) claims that high school and university dropout rates are

largely attributable to financial constraints. In such a case the study maintains that parents/guardians opt to withdraw and enroll their sons and daughters in low-paying private secondary schools that charge lower in comparison

World Bank (2009) notes that people invest in education because of anticipated future returns which increase by 10 percent as an individual adds one more year in school. Likewise, education has numerous and unique individual and societal benefits which include improved health. These are the push factors towards enhancing access to education which in turn enhance development. However, this report indicates that school fees stand out as a barrier preventing poor households from educating their children.

Globally, cost remain a barrier to societies dominated by low-income households. Even though quite a range of costs is paid by either the government or other financing agents, very poor households still suffer the effect of educational costs. Poverty has been cited as a major obstacle to education. Despite the government subsidy, costs for teachers' salaries, school maintenance and improvement and school uniforms build barriers to student participation. Studies have shown that, in countries that offer Free Education policies, poor households still cry out that both direct and hidden costs prevent them from taking their children to school. An immense increase in student enrollment has been seen in nations that have instituted laws to do away with school fees and other levies to parents or that have instituted cash transfer programmes for low-income families to overcome the fees barrier. For instance, in Uganda, when tuition was eliminated in Timor and Kenya, enrollment increased by 10-20%. This elucidates the significance of financial constraints as a barrier to education, especially for less financially secure families (Educate a Child, 2021).

In America, 12 percent of all students in high school do not graduate from public high school as expected (Bridge *et al.*, 2011). Rumberger (2011) claims that in the United States of America, most school-aged youngsters were prohibited from attending or continuing their education due to financial difficulties. In New Delhi, a minute number of children attain secondary school education. Notably, the retention rate in the same tier is 65.96 percent (Chugh, 2011).

According to UNICEF (2011), 49 percent and 40 percent of girls aged 19 years and below in West and Central Africa respectively withdraw from school to get married compared to 20 percent in Northern and Southern Africa and 27 percent in East Africa. Due to expenses like uniforms, school fees, and lost earning potential, Croft (2011) reports that in Nigeria, a family's finances is the primary factor in determining whether or not their child attends school. This study then provided the situation in Kenya.

According to the Government of Kenya (2000), completion rates among students in Kenya provoke attention because the rate is far below one hundred percent. According to Tuwei (2013), despite the generosity of Kenya's government in allocating resources for Free Day Secondary Education, parents are still expected to pay for PTA levies, activity fee, cost of repairs, maintenance and improvement, fare to school and lunches among other levies.

Ohba (2009) argues that, despite the Free Day Secondary Education, schools still collect money for things like lunches, remedial classes, motivational programmes, sports equipment, and boarding. Free day secondary education has been adopted in the Republic of Kenya to increase both access to and the quality of education, as stated in Sessional Paper No. 14 of 2012 (FDSE). Njuguna & Muchanje (2019) similarly noted that, even with Free Secondary Education in place, students in secondary schools post low retention rates. The study revealed that factors such as high costs of education caused the drop. Kenya Government has struggled to achieve Goal number four of the Sustainable Development Goals by providing quality lifelong and inclusive learning for everyone, however, according to Abuya *et al* (2018), parents/ guardians are required to pay levies to cover expenditure on repairs, improvement and maintenance, activity, parents' association projects, accommodation and meals which may affect the retention of students from poor families.

Evidence shows that, in Uasin Gishu county, student participation in secondary schools is under question because of the worrying trends of students as they transit all through to the fourth form. Enrollment trends can shed light on the state of secondary school retention in Uasin Gishu County as a whole. Students access secondary schools in large numbers, but a few remain until completion. (Uasin Gishu County Education Office, 2021).

2.0 Literature review

2.1. Why Invest in Secondary Education?

Quality Secondary education is an essential ingredient for unlocking great opportunities for socio-economic growth (World Bank, 2011). This is why the government and individuals invest in education. World Bank (2010) while investigating economic returns to investment in education reported that individuals are ready to spend extra years of schooling to get better jobs and earn more money with more education. GoK (2010) maintains that, for many people, schooling can enhance their social mobility, economic advancement and workforce productivity.

Investment in secondary education, according to the World Bank (2001), as cited by Nderitu (2011), yields

respectable private and social benefits. As an example, in Sub-Saharan Africa, there are three compelling incentives for governments to fund secondary education. First, secondary education matters for economic growth because it provides individuals and societies with the foundational knowledge, values, and skills necessary for progress. Second, attending secondary school may encourage young people to exhibit admirable civic and social values. Third, it gives reasonable private benefits enabling the youths to acquire attitudes and skills that were not developed in primary grades. Nderitu (2011) posits that the benefits enable the youth to participate fully and become useful citizens in the society.

Kenya Institute of Public Policy Research and Analysis (2011) identifies secondary school education as a very crucial bridge between basic education, training and the world of work. The significance of secondary school education, therefore, dictates that all necessary resources must be provided to ensure access, retention and successful completion of the level. This explains why countries are heavily investing in education. The Kenya government, for example, established bursary schemes for secondary education through an Act of parliament (GoK, 2003). Its aim was to enhance access and retention in secondary schools. (GoK, 2012).

2.2. Direct Educational Costs

Investment in education involves incurring both direct and indirect costs. The direct costs refer to expenditures of learning such as school fees, cost of meals and accommodation, activity fees and Parents' Association funds. They are the costs incurred by individuals and families while investing in their education and/or that of their children. They are reflected in the fee structure (Akaguri, 2011). World over, the cost impedes societies with households possessing low economic power from providing secondary education to their children. Literature reiterates that the stalemate led to high dropout rates among students. (<https://googleweblight.com>).

i. Cost on Accommodation and meals

Ogola, Nyerere & Njihia (2021) while studying the effect of private education costs on retention in public schools in Homa Bay notes that boarding cost is utilized in the purchase and maintenance of boarding facilities like beds and the purchase of disinfectants. The study found out that the cost of boarding and the cost of lunch affect the retention of students. The study concludes that private costs of education affect the retention of students. The study considered the costs of boarding and lunch using a descriptive survey design thus paved way for this study to establish the quantity of more costs and elaborate in detail on their effects on student transition and retention using the convergent parallel mixed methods.

According to Amjad & Maclean (2014) in a study on the effectiveness of private-public collaboration sought to establish if the amount of school fees correlates with student achievement. The study found out that even though boarding schools are expensive, they outperform day schools. The underlying reason is that students in boarding schools enjoy extra hours of tuition over those in day secondary schools. Also, students in boarding schools tend to excel especially in English because their mode of communication is controlled and limited to mostly English as their mother tongue is not allowed. The study concludes that there are concerns about the performance gaps in different categories of schools. It recommends to the government to seek ways to enhance efficacy and efficiency in schools other than financial support. The study failed to look at costs incurred in boarding schools and hence neglected their possible effects on students' retention. The present research fills this gap.

Ahmed (2011) in a review on access to education in Bangladesh focussed on the effects of the school meals program on enrolment rates in pre-schools. The study noted that a year after the Bangladesh government started a school meals program in food insecure communities, dropouts among students was reduced by 7.5 percent in schools with the feeding programme. It was then concluded that there is a high correlation between school meals and retention rates. The study recommended the government to re-direct more resources to the food program to guarantee the retention of learners in school. It is also recommended for a study determine dropout patterns in primary and secondary schools. The study was in preschools paving way for replication in secondary schools. The said study did not establish whether school meals had any effect on the retention rate of students. Again, the study did not consider the costs involved. This allowed the current study to fill the gap.

The Kenyan government started offering free secondary education to all enrolled students in January 2008 by paying a tuition of Kshs 10,265 per year, as reported by Mutege's (2015) research on the unit cost of education and its impact on student enrollment rates in secondary schools in the Tharaka South sub-county. However, parents were to meet the costs for requirements such as lunch, boarding fees, building of extra classrooms, dormitories, purchase of a school bus and transport to and fro school. The key objective was to examine the effects of the average household expenditure on student enrolment. The study demonstrated that a child is unlikely to enroll if the expenditure exceeds the government expenditure. The study used the census to access study samples while the current study utilized purposive and proportionate random sampling procedures.

Ohba (2009) in a study to find out whether free education support poor students to get entry, a study done in rural Kenya concurs with Mutege (2015) by noting that despite the struggle by the government, the cost burden in education is still huge because households pay levies on meals, boarding, school infrastructure and activity.

Furthermore, in households where parents cannot afford these costs children are unlikely to access nor complete secondary education. These studies did not quantify the costs parents/guardians pay for the mentioned requirements. Likewise, the studies were done in rural Kenya paving way for the current study to be done in both rural and urban settings.

ii. Activity Fee

Activity fees in this study refer to the cost allocated for participation in co-curricular activities. Co-curricular activities include and are not limited to ball games, athletics, drama, music festivals and contests. Literature indicates that active participation in co-curricular activities among students has a positive effect on their health and participation in education in terms of transition and retention in school. Nora (2016) in a study on discrimination against minority students found out that co-curricular activities engage learners in health interactions which boost their retention in school and improve school completion. Similarly, Yilzid (2016) while looking at the role played by co-curricular activities in promoting the academic performance of English in Iraq universities established that co-curricular activities play an outstanding role in the total development of an individual being. The study notes that co-curricular activities not only help students to develop physically but also socially and mentally. That students acquire and develop competence in communication and interaction. Thus, it concludes that co-curricular activities are key in laying the foundation for language acquisition and development. The study recommends thorough engagement of students in co-curricular activities to enhance their intellectual, academic, moral and social development. The two studies did not consider the activity fee involved and whether it affects students' participation in terms of retention in school. This was accomplished by this study.

Gasson, Pratt, Smith & Calder (2016) carried out a study on the cost impact on children's involvement in school-based experiences in New Zealand. The main objective was to establish how costs influence students' participation in school-based activities. The study showed that although the students were allowed to be in school before paying activity fees, parents felt that lack of payment would prevent their children from enjoying the ultimate gains while in school. It could also expose their children to intimidation and bullying. Using exploratory research design, the study involved parents as the respondents and found out that children from low economic status families were disadvantaged by the inability of their parents to pay school fees. It also found out that parents struggled to pay for school fees because they feel that their inability or failure to pay affected their relationship with the school administration and management which may as well make it difficult for them to air their views in other crucial areas. The study concluded that costs excluded students from full participation in educational experiences. It recommended another research to investigate the effect of the costs of school-based activities on academic achievements. (Gasson *et al*, 2016).

Ouma (2016) while studying boy-child education in Kenya had the key objective to advance the challenges affecting boys' retention in school. The study findings showed that poor engagement of learners in co-curricular activities pushes them into indiscipline acts in school. The study added that idleness after school lessons drive learners into unbecoming behavior which may push them out of school. The study recommended schools to give much attention to co-curricular activities so as to tame good discipline among students and thus enhance their retention. The study elaborated on the importance and usefulness of co-curricular activities at school. However, it did not establish whether activity fees affect the retention of students who may not afford to pay the fees.

The factors that prevent boys in Mathioya County, Kenya, from continuing their education to completion were uncovered by the research of Njuguna and Muchanje (2019). The study used a descriptive survey approach and found that male students are still being lost from the educational system despite the availability of Free Day Secondary Education. According to the results, school dropout is still a problem, especially among males. It suggests that the government and education stakeholders work together to educate communities about the importance of ensuring gender equality in educational opportunities. The research centered on the idea that, providing secondary school boys with free school lunches would increase their likelihood of staying in school. Because of this, the researcher was able to investigate how tuition and other school-related expenses affect students' ability to stay enrolled in school.

iii. Parents Teacher's Association fund (PTA fund)

According to Kingori (2015), Parents Teachers' Association also called the Parents' Association is a formal group comprised of parents and teachers that is focussed on enhancing parental engagement in school activities and programs. PTA/PA fund refer to financial obligations discussed and agreed upon by parents/guardians during their end year meeting. The fund is utilized in financing school projects/programmes such as; construction, repairs and maintenance of school infrastructure, motivation of teachers and students, payment of salaries for teachers under board employment, remedial lesson among others.

A study by Zyngier (2012) on the relationship between the teaching/learning process and school environment posits that the teaching and learning process relies on the entire school learning environment. It reiterates that a conducive learning environment arouses a positive attitude and interest in schooling among students. The study found that a conducive school learning environment enhances students' retention in school. It

is recommended schools maintain good, supportive and conducive learning environments. In addition, it advocates for regular inspection, repairs, maintenance and improvement of school facilities and by extension the flower gardens. The study dwelled on the relationship between the school learning environment and how it affects student retention. The current study extended further to assess the effect of the cost of repairs, maintenance and improvement on students' retention and transition rates.

Nkinyangi (2014) argues in line with the earlier authors and indicates that, apart from the teaching/learning resources like textbooks, the status of the school's physical infrastructure/facilities affects student participation. To establish the effect of school physical infrastructure and resources on students' retention, the study found that, congested and poorly maintained classrooms and a shortage of teachers and textbooks significantly contribute to low student retention. The study recommended to schools and education stakeholders a regular review of the status of school facilities and resources. This implies that financial allocation for repairs, maintenance and improvement is inevitable. It also means that in case the government allocation is inadequate, the cost may be borne by the parents. This study, therefore, advanced knowledge by establishing whether this cost affects student retention and transition in public boarding secondary schools.

Learner retention in secondary schools in Kitui County, Kenya was analysed by Mutemi (2015) to determine the impact of PTA levies. Because most parents cannot afford to pay PTA levies, the study found that they have an effect on students' retention in school. In addition, the study noted that parents who attempted to meet the costs were inconsistent in making the payments. The study concluded that the cost of PTA affects retention in secondary schools as students were forced to break for home in search of fees. The study, therefore, made recommendations to the government and the school boards of management to regulate the costs charged by schools for parents to afford and in turn boost the retention of students. This study opted for a convergent parallel mixed method design, which allowed the researcher to seek convergence on the two types of data collected.

Ngina (2009) on the effects of hidden educational costs in public primary schools in Marafa Division, Malindi had the key objective to assess the effects of hidden education costs in public primary schools. The study discovered that despite the government commitment to Free Primary Education (FPE), there were levies attached to school going which all parents could not cope with. She noted that the costs constrain the participation of learners in public primary schools. The study concluded that hidden costs affect student participation in primary schools. It proposed that the government and school administration find funds to subsidise the hidden costs. The study was conducted in elementary schools, necessitating a similar study in high schools. In addition, the study did not examine the direct expenses.

3.0 Research methodology

The study was carried out in Uasin Gishu County, Kenya. Principals and parents in public boarding secondary schools were involved. A convergent parallel mixed methods approach was adopted. This design was selected because, Creswell (2014) argues that this design suits studies that concurrently gather both quantitative and qualitative data and analyze them separately before seeking convergence during the interpretation stage. In addition, the convergent parallel mixed methods design minimizes bias, weaknesses within data and enables the researcher to give a detailed analysis of the problem under research. The target entailed 4012 form four parents and 31 principals heading the 31 public boarding secondary schools. 399 parents were sampled using proportionate random sampling. Yamane simplified formula helped in calculating the sample.

Purposive sampling aided in sampling the 31 principals According to Kothari and Garg (2014) sampling provides each element in the study population an equal chance to participate in the study. Quantitative data obtained from parents were collected using a questionnaire while qualitative data were derived from the principals through the interview schedule. A document guide collected data related to the retention of students. Quantitative and Qualitative data were both analyzed using descriptive statistics blended with inferential statistics and thematic statistics respectively. The results generated from the quantitative data analysis were displayed in a correlation matrix as a narrative style suited the data acquired through qualitative data analysis.

4.0 Discussion of findings

The study sought to establish the effects of direct costs of education on students' retention rates. First, a correlation between direct costs of education on students' retention rate was computed to establish the direction and magnitude of the linear relationship between the variables. Direct costs of education being the independent variable included the costs of accommodation, school meals, activity fees, Repairs Maintenance and Improvement. Students' retention rate, which was the response variable is the cohort of students who remained in the same school until their fourth year. Table 1 shows the correlation between the direct costs of education and students' retention rate.

Table 1: Correlations between Direct Costs of Education on Students Retention Rate

Direct costs of education		Accommodation	School Meals	Activity fees	RMI
Student Retention Rate	Pearson Correlation	-.172	-.210	-.123	-.864
	Sig. (2-tailed)	.005	.001	.013	.000
N		34	34	34	34

Key: RMI- Repairs, Maintenance and Improvement

Table 1 displays the results of a Pearson product-moment correlation coefficient analysis of the relationship between the variables, showing a positive and statistically significant correlation between the direct costs of education and the retention rates of students in secondary boarding schools. For instance, the correlation between accommodation and students' retention rate was negative and statistically significant, $r(34) = -.172, p = .001$, two-tailed. Equally, activity fee ($r = -.123, n=34, p=.013$) and RMI ($r = -.864, n=34, p < .001$) and the cost of school meals ($r = -.210, n=34, p = .001$) all had statistically significant negative effect on student retention rate in boarding secondary schools. Overall, there seemed to be a link between the direct costs of education and the number of students who stayed in school. Higher direct costs of education are associated to lower student retention rates in boarding secondary schools and vice versa.

Additionally, a summary of the model and the regression equation was produced, with the predictor variables being the various components of the directed cost of education and the dependent variable being the retention rate of students, which was calculated as the proportion of students who continued to attend the same class and school from form one to form four. Regression findings are summarized in Table 4.2.

Table 2: Regression of Direct Costs of Education on Students' Retention Rate

	B	Std. Error	Beta	T	Sig.	Part corr.
(Constant)	.876	.162		5.403	.000	
RMI	-.516	.023	1.244	-22.435	.000	-.949
Accommodation	-.136	.025	.322	-5.385	.000	-.228
Activity fees	-.041	.018	-.101	-2.238	.033	-.095
School meals	-.156	.026	.349	-5.883	.000	-.249
Adjusted R ²	.941					
F-ratio	132.46**		df1=4		df2=29	

Key: * $p < .05$ ** $p < .01$ *** $p < .001$

Exploration of Beta values from Table 2 illustrates that the individual aspects of direct costs of education vary in their level of effect on students' retention rate in boarding secondary schools. For instance, of these four variables, the cost of Repair Maintenance and Improvement contributes the largest unique value (beta= -1.244).

This suggests that when the cost of RMI is reduced in boarding secondary schools by one standard deviation, the students' retention rate would increase by 1.244 standard deviations and vice versa. Equally, reducing costs of accommodation and school meals each by one standard deviation would result in an improvement of students' rate of retention by .322 (beta=-.322) and .349 (beta = -.349) standard deviations, respectively. However, when activity fees are reduced in boarding secondary schools by one standard deviation, the students' retention rate would improve only by .101 standard deviations and vice versa.

In addition, the study explored part correlation coefficients, which indicate the contribution of each of the aspects of direct costs of education to the total R squared. The results show that RMI cost has a part correlation coefficient of -.949, accommodation of -.228, activity fees of -.095 and school meal of -.249. The square of these values illustrates what percentage of the overall variance in the student retention rate can be uniquely explained by the variable, as well as what percentage the R squared value would reduce by if the variable were removed from the model. Given that the cost of RMI uniquely explains nearly 90% (part correlation squared = - 0.949) of the variance in students' transition rate, this indicates that it has the highest contribution to the model. Activity fee had the least contribution to the total R-Squared as reflected by part correlation of -.095, suggesting that it only contributes 0.01% of the total R-squared.

4.1. Regression Model for Direct Costs and Students' Retention

Further, a regression equation was extracted from Table 4.11 to help predict the effect of direct costs of education on students' retention rate in boarding secondary schools in Uasin Gishu County. A general regression prediction model was used to guide the study as follows:

$$\text{Students' Retention Rate} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where; X_1 =Repairs, Maintenance and Improvement, X_2 =Accommodation, X_3 =Activity fees, X_4 = School meals and ϵ is the error term.

Therefore, the predicated optimum level of students' retention rate in public boarding secondary schools is

represented by:

$$Y = 0.876 \text{ units} - 0.516X_1 \text{ units} - 0.136X_2 \text{ units} - 0.041X_3 \text{ units} - 0.156X_4 \text{ units} + \epsilon$$

When all other factors remain the same, the coefficients from the model show by how much a change in some component of direct expenses affects the retention rate of students. For example, for a unit increase in the cost of accommodation, there is a subsequent drop in the level of students' retention rate by 0.136 units. Likewise, for each unit increase in the cost of Repair Maintenance and Improvement, there is an ensuing drop in the level of students' retention rate by 0.516 units among the public boarding secondary schools in Uasin Gishu County. Equally, when there is an increase in school meals by one unit, there would be a drop in the students' retention rate by 0.156. Further, it emerged that the decrease in activity fee would result in the least but statistically significant change in students' retention rate ($B = -.041$; $p = .033$). This suggests that the costs of school meals and activity fee have a negligible effect on the rate of student retention.

The findings concur with Nora (2016) who carried out a study on prejudices, discrimination and their role among minority students. The study found that co-curricular activities boost the retention of students. Gasson *et al* (2016) in a study on the cost impact on student participation in activities note that students are not sent home because of activity fees because sports activities are not compulsory. However, the study revealed that activities such as sports and athletics motivate students and promote good health and development. Nonpayment, therefore, disadvantage them from enjoying the experiences in totality. This may render the learning environment unfriendly. This implies that activity fee indirectly affects students' retention in school.

The study findings indicate that an increase in the cost of school meals had an insignificant effect on students' rate of retention. This may be because parents still need to meet the cost of feeding even at home when their children drop out of school. This can also be attributed to the fact that when students are fed in school, it is just like parents transferring their children's meals from home to school. The students have to whether they are at home or school. It means that the cost of meals would still be incurred either way. Rotich (2015) in his study on school feeding programme and their influence on student retention as quoted by Koskei (2021) had a contrary opinion that, even with school meals program in schools, students still dropped out of school to participate in income-generating activities in which earns them money for basic requirements.

Ogola *et al* (2021) in their study on private costs of education and student retention maintain that the cost of meals (lunches) significantly affects the retention of students. The study indicated that the cost of school meals was responsible for up to 86.2% of non-retention of students in secondary schools. Alderma *et al* (2012) reaffirm that free meals increase student retention as opposed to charged meals. This implies that, school meals have a positive effect on student participation (retention), but the issue is with the cost charged for the meals taken in by students in school.

5.0 Conclusion

The key objective of the study was to establish the effect direct costs of education have on student retention rate in boarding secondary schools in Kenya. Direct educational costs comprise the expenses on meals, repairs, maintenance and improvement (RMI), accommodation and activity fees. These are the expenditures parents/guardians pay directly to the school as their children go through secondary education. The explored literature demonstrated that there is a relationship between education costs and the retention of students in school. Through correlation and regression of the dependent and independent variables, the study established that educational costs are important predictors of students' retention rate and that they are responsible for the ability of students to remain in secondary education tier until completion. It was also found out that the individual components of direct costs of education affect students' retention differently. For example, the expenditure on Repairs, Maintenance and Improvement affect student retention highly while the effect by activity fees is the lowest. The study therefore concludes that, direct educational costs affect students' retention rate in public boarding secondary schools in Uasin Gishu County Kenya.

6.0 Recommendation

- i. Based on the study findings, the government through the state department of basic education and early learning should waive boarding expenses in secondary schools in order to reduce costs and enhance student retention.
- ii. Day secondary schools should be well equipped and staffed so as to attract more students who will be able to complete secondary school education without cost barriers

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