

**INFLUENCE OF SCHOOL DISTANCE ON PUPILS' ACADEMIC PERFORMANCE IN PUBLIC PRIMARY SCHOOLS IN BUNGOMA NORTH SUB-COUNTY, KENYA**

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**ABSTRACT**

Public primary school pupils' especially from rural areas who travel long distances to school face some challenges that make them perform poorly. This study aimed at examining the influence of school distance on pupils' academic performance in public primary schools in Bungoma North Sub- Sub-county, Kenya. The study specifically: assessed the influence of School location on pupils' academic performance in public primary schools in Bungoma North Sub- Sub-county, Kenya and examine the influence of Perceived factors on pupils' academic performance in public primary schools in Bungoma North Sub- Sub-county, Kenya. The study will benefit the academicians, policymakers, and community members. This study was guided by the theory of justice and equality. The study adopted descriptive research design with a target population of 1091 persons. The study adopted a stratified random sampling technique and sample size of 291 determined using Krejcie & Morgan table (1970). The study used structured questionnaires and interview guides as the main tools of data collection. The instrument was validated by the supervisors. The reliability of the instrument was determined through a pilot study. Quantitative data was analyzed using descriptive statistics and presented in tables, while qualitative data was analyzed according to the themes based on research questions and the objectives and thereafter, inferences and conclusions drawn. The study concluded that school locations and perceived factor influence pupils' academic performance in public primary schools. It was recommended that the policy makers and community should consider School distance such as school locations and perceived factors when working towards improving pupils' academic performance in public primary schools in Bungoma North Sub- Sub-county, Kenya.

**Keywords:** *School Location, Perceived Factors, Academic Performance*

**INTRODUCTION**

An important factor that has received little attention from researchers is the time public primary pupils' spend traveling from home to school, known as "commute time." As noted by Rifkin, Hanushek, & Kane (2005), formal education is a function of many factors, including knowledge of the school community, family, and other factors. Improving educational outcomes alone cannot lead to economic growth, as the quality of education is important for growth (Hanushek & Vosman, 2007). Thus, travel time not only affects the learning process, but also the well-being

of primary pupils' in general. Fryer and Levitt, (2010); Paredes (2014), absent teachers (Duflo & Hana, 2005; Banerjee & Duflo, 2006) among others. Several authors have studied the impact of classrooms on pupils' academic performance in public primary schools (Anrist & Levy, 1999; Krueger, 2003); the impact of pupils and teacher sexual orientation in public primary schools (De, 2007; other books discuss economics).

United Kingdom, Gibbons and Venalls (2012) found that geographical distance had little or no influence on the decision to attend higher education, but had a significant impact on institutional choice, as did Dickerson and Mackintosh (2013). The pupils is very bright ... The impact on the primary environment affects their access to temporary school education. In the Netherlands, Sa et al. (2006) found that proximity increased the likelihood of high school graduates continuing their studies at a science college or university, while Kobus et al. (2015) found that public primary school pupils' rarely attended university, and when they did graduate, they stayed longer and performed worse than other public primary school pupils'. Several reports support the idea that walking reduces the graduation rate of Norwegian primary school pupils' (Falch et al. 2013) and that walking reduces the graduation rate by 6. Schools negatively affect pupils' academic performance (Tigre et al. 2017). Several articles examine the relationship between travel and success in four countries. In higher education and according to Vestman et al (2015), travel time pattern generally affects the pupils' academic performance, perception and mood of primary school pupils'.

Because the Chilean education system determines the enrollment of families in different schools, our commute time sample is an unavoidable problem because we do not know the reasons for the family situation of public primary school pupils'. Product so we need to create a system that allows us to manage the importance of these options and helps us determine if the time spent on success is really having a good impact and what our model is. Automated statistics based on research and guidelines since early 2012. In our case, we have a database of over 23,000 8th grade pupils' supported by nearly 1,400 different schools, including public and private, who bringing together primary and academic schools. Performance and three schools for our class.

Zhou He and his colleagues. (2011) using better information on home-school distance. In South Africa, there is no clear evidence of the impact of travel time on performance. Related to this is Asahi (2016) who attempts to analyze the impact of the expansion of the Sofito metro network on the skyline and the development of kindergartens and schools. Some authors have analyzed the relationship between school choice and grades, Gallego and Hernando (2008) found that the two most important factors that parents consider when choosing a school are the number of school-level exams. Distance and choice between parents and work.

For example, in Tigrinya, etc. In 2017, they worked with 2,483 pupils' in 118 public school classrooms in Abuja, Nigeria, and the relationship between travel time and achievement was weak. During data collection, at least 2% of parents chose to stay at home based on proximity to schools and encouraged parents to enroll their children in accessible schools. Some features of the Nigerian educational system make it difficult to determine the impact of travel time on Pupils' academic performance on our private website; Driving distance and selection are secondary issues, but I use flex to get around the different distances.

Using our adaptive approach, Kobus et al. 2015 E-Tijger et al. In 2017, we use the arrival times of the two closest schools to estimate arrival time; here the flexibility of our tool allows us to visit and leave local schools. This will help us solve the problem of choosing schools and classes. The bottom line is that while consistent results help us choose schools, they don't completely

solve our problems. Because families have their children because of school quality and proximity to home, our next effect on this decision is not based on the local level.

The impact of travel time is particularly evident in countries such as Tanzania and Kenya, where the average travel time for workers is one hour, compared to 50 hours for the average primary school pupils. The authors found that as enrollment in nearby schools increased with the advent of schools due to network expansion, their pupils' academic performance in primary schools increased. In our example, public school pupils' in private schools allowed these families to choose the distance between home and school, and they could choose between different schools because they would do both. The characteristics of public primary schools and how their parents make decisions help us narrow down the problem of school choice.

Public primary school pupils' may take time off to travel from home to school, read in between (reading support), sleep, or relax for fun. Health may improve. This tells us that learning is a complex combination of many factors, so different disciplines focus on variables that affect curriculum outcomes. In the absence of any evidence on this topic, the study investigated the impact of school level on the performance of public primary school pupils' in Northern Bungoma sub-county, Kenya.

### **Statement of the Problem**

Everyday distance from primary and secondary schools negatively affects enrollment. Children in the early stages of primary education often drop out because they cannot read. It's harder for kids than teenagers to walk a few miles a day. Compared to urban schools, rural schools are far from orphanages and can have significant barriers to access, such as poor infrastructure and poor teachers. Public primary school pupils' who travel long distances to school face additional concerns from parents about their safety. Bungoma North in the national tests. This raises some questions about their school performance and this study is considered relevant because in addition to this the school continues to improve the school performance of primary pupils'. This will affect the government's efforts to create empowered and empowered citizens. Children do not want to go to school if they are punished after a long walk or accused of being late for school. These factors, among others, constitute major barriers to keeping millions of children out of school around the world. The decisions of children and their families are important in overcoming these barriers. Therefore, it is important for researchers to study the impact on performance of public primary school pupils' in Bungoma North Sub- county, Bungoma County, Kenya.

### **Objectives of the Study**

The study was guided by the following objectives:-

- i. To assess the influence of School location on pupils' academic performance in public primary schools in Bungoma North Sub- Sub-county, Kenya.
- ii. To examine the influence of perceived factors that determined school distance on pupils' academic performance in public primary schools in Bungoma North Sub- Sub-county, Kenya.

## **LITERATURE REVIEW**

### **Empirical Review**

#### **School Location and Pupils' Academic Performance**

According to the May 2011 survey, attending a public primary school is important for mastering school management skills. However, 10 percent of first-grade kindergarten dropouts were 60 points higher than dropouts. Studies have shown that the worst day in primary school translates into poor reading skills and is an important reason for enrolling children in public primary school

and removing barriers to public primary school enrollment. A study of 640 young pupils' in California found a strong correlation between high grades and academic ability. However, 7 per cent of households in the country - nearly twice as many households as in the North East - take more than an hour to get to the nearest primary school. 17% of village children walk more than 3 km. In fact, these numbers are common in rural areas. While there may be safety concerns, the school's choice of location negatively impacts many female athletes. Primary school pupils' are more likely to be hungry, malnourished and unhealthy (NPC & RTI International, 2011).

Arubai, (2005) examined distance to school and its effect on pupils' participation in general primary school in Edo and Delta. They found that primary and middle schools in Ed and Delta lagged behind in primary and middle school enrollment, which correlates with school enrollment. Many Nigerians including Amber, Enugu and Ebonyi do not have physical evidence of education and its impact on primary and secondary education. Studies have also shown that schooling is one of the main reasons for the high graduation rate between primary and secondary schools in Nigeria, despite the fact that the country is located in the southeast of Nigeria and - See the many stopped (Arube, 2005; Duzer, 2005; Madumere, 1991; Onakaoma, 2008).

Children often continue in public primary school and move on in life. According to Bowman Donovan & Burns (2001), ECE programs aim to provide children with specific topics and interventions to help them meet the complex needs of formal education. Libvene in Mtahabva, Kenya demonstrates the main problem of ECE access in terms of geography and age (Mtahabva, 2011). In several parts of the world, including (Bangladesh (Nath, 2006), Kenya (UNESCO/OECD, 2005) and Ghana (Matapua, 2011), urban children also benefit from international travel. In Michigan, 3- and 4-year-olds from low-income families with no public education are five times more likely to be convicted by age 18 than children in public primary schools. The first applicant (1972) shows that income families participating in primary programs are less likely to have children, drop out of school early, break the law, or need special education.

Nigeria has a lower rate of enrollment than men (NPC & RTI International 2011). According to the NEDS 2010 report, the main reason is that parents and guardians do not come to school on time. Statistical analysis has also shown family survey data as a major determinant of school attendance (for example Linkov 2009; Kazim et al. 2010). School trips can also include traffic safety and off-school issues, identified by up to 16% of respondents, with figures particularly increasing in the Northeast and South-North Other qualitative studies suggest that primary school pupils' may be denied access to education, particularly for girls (Okoji 2008; Chege et al. 2008; Bakri 2013; Coinko 2012; Dunne et al. 2013. Research in Ethiopia has also found that the distance from home to school is an important factor in educational opportunities, especially in rural areas (Neketepe, 2002). While shopping, your child may not be involved. Schooling can lead to poor acceptance and suspension, which can lead to suspension (Kyoto, 2012).

Studies have shown that attending public primary school has a positive impact on children's educational growth and development. This is associated with an increase in the number of primary schools, which is an important predictor of school success (reviewed by Dubois et al., 2007). It is believed that early childhood education can significantly contribute to children's educational growth and development (Barnett, 1995).

Some studies have analyzed enrollment rates based on household survey data. Kazam and others. (2010) compared enrollment patterns with 2004 NDHS data based on household characteristics in relation to various demographic factors such as wealth and remoteness. They found that family wealth, religious beliefs, parental education and distance to the nearest school were

important factors in enrolment. Researchers therefore wanted to examine the effect of home-to-school distance on attendance by senior pupils' in Bungoma North Sub-county, Bungoma, Kenya.

### **Perceived Factors and Pupils' Academic Performance**

Joshua and Modupe, (2012) used a descriptive survey of 60 principals and 540 teachers to examine the conditions of learning environments and facilities and their impact on teaching and learning. Their study concluded that schools need to work with schools and other stakeholders to improve resources, environment and learning to create an enabling working environment that maintains a trusting working environment for primary schools.

Some study participants focused on resources (Isaias 2013). Isaiah believes textbooks are important because they reflect the style and practice of school work, which he says has a profound impact on the work of teachers and pupils'. The authors suggest that school health plays an important role in influencing teacher satisfaction and performance or productivity. Thus, institutional status is an important indicator for teachers leaving their current position. Fomb,i (1998) argues that a rich country or society builds good schools with good teachers and educational resources where pupils can easily learn the application. This can lead to a good education.

Hallak, (1990) observes that resources (schools, classrooms, buildings, schools, future facilities, recreational facilities, aids and other learning materials) are important for the development of learning in the school system. Given its important role in pupils learning, he emphasized the need for a valuable educational environment that meets the needs of the workforce.

Halak, (1990) found that the proper location of schools and their resources has a significant impact on the curriculum. This is also suggested by Haverinen-Shaughnessi, Moschandrias & Shaughnessi, (2011) who noted that the primary school environment can lead to a poor learning environment and can undermine pupils' engagement, absenteeism and teacher shortage and the right to participate in teaching and learning.

Cohen (2010) acknowledged that many studies on environmental conditions and their impact on pupils well-being are lacking, suggesting that a healthy school environment is necessary to achieve good learning outcomes. Name two major causes of environmental problems in schools: the world around the school and the level of the school itself. Cohen (2010) also suggests that participants should focus on specific areas and areas where school resources are not available when dealing with academics. Because environmental differences affect pupils' and school personnel, school personnel must be involved. Their participation is important because their expertise and participation at the school level is lost if they don't have a stake that could affect or harm housing and other development in our state, city or region.

### **Theoretical Framework**

This study is guided by the theory of justice and equality (1971), which upholds the principle of justice governing modern society. "Justice as justice." politics, not metaphysics', John Rawls 1985. Through this, he expresses his vision of justice. There are two basic principles: liberty and equality. The second is the objective of equity, equal opportunity and diversity. It is "negotiable" in terms of freedom, equality of opportunity and diversity. If there is a conflict in this string, specify the expected value. However, this prophecy as a test of justice, "justice is justice", is not unique. Always follow these principles to overcome your "big mistake" and avoid injury or oblivion. Rawls developed this idea in his 1971 Theory of Justice and expanded on many themes in his new book, Political Liberalism. The first and most important principle is that everyone has an equal right to fundamental freedoms, and Rawls argues that "certain rights and freedoms are



more important or more 'important' than others. But, these are inviolable fundamental freedoms. They are not the freedoms of Thomas Mertens, says Rawls. Theoretically, Rawls defends the principle of liberty because fundamental liberty corresponds to the liberty of others. Later he changed it to political freedom, saying: "All are equally entitled to the full system of rights and freedoms." The principle of equality is an important part of the justice system that regulates the distribution of justice. Rawls's principle of diversity actually reflects the principle of equality of opportunity; society cannot control inequality, so the weight of the poor does not elevate them to a certain position or status. This principle is that "work and employment" should be open to all, regardless of race, ethnicity, or gender. This is more difficult than "equality of opportunity" because Rawls argues that people not only have the right to opportunity, but also the ability to create equality for everyone with equal natural rights.

Another principle governs inequality and it allows only the worst inequality of welfare. This is often misunderstood as bad economics. Rawls' argument is best characterized as a "distributive" system. Raphael masks the inherent inequalities that arise (human rights, such as the ability to emigrate) by ensuring that the poorest people in society get an equal deal. Rawls defends the principle of diversity, stating that because of equality, opportunity, fairness, and representativeness of context, rational choice and Pareto optimality can be better than worst.

**Conceptual Framework**

The conceptual framework consists of the independent variables and the dependent variable of the study. The independent variables are the school location and perceived factors while the dependent variable is pupils' academic performance in public primary schools in Bungoma North Sub- Sub-county, Kenya.

**Independent Variables**

- School Location**
  - i. Weaker reading skills
  - ii. High dropout rates
  - iii. Geographical distance favors urban children
  - iv. Low income families who did not attend
  - v. School attendance levels are lower for girls than for boys
- Perceived Factors**
  - i. Infrastructures, proximity, and other amenities
  - ii. School buildings, classrooms, accommodation, libraries, future, recreational equipment, apparatus and other instructional materials

**Dependent Variable**

- Pupils' Academic Performance**
  - Improved Mean Score

- i. School Policy
- ii. Community Cultures
- iii. Government

**Intervening Variables**

**Figure 1 Conceptual Framework**

Source: Researcher, (2023)

## RESEARCH METHODOLOGY

This study utilized a descriptive survey research design. The Mukuyuni Constituency served as the location for the research project. The study's population consists of 82 Headteachers, 820 classroom teachers, 636 parent representatives and 600 pupils from public primary schools in Kenya's Bungoma North Sub-County. The researchers relied on the sample size calculator by Krejcie and Morgan (1970) which indicated that a sample size of 291 respondents is required in order to properly reflect a population of 1091. This study focuses on primary and secondary sources of data. The study used structured questionnaires and interview guides as the main tools of data collection. The quantitative research employed both descriptive and inferential statistics. Frequency and percentage distributions were employed for description, while linear regression was used for inference. The regression coefficient test was selected as the suitable approach to employ for assessing each objective. In addition, the overarching themes were recognized, categorized and discussed.

## FINDINGS AND DISCUSSION

### Response Rate

A total of 291 questionnaires were sent to the participants, who were identified as instructors, with the purpose of obtaining their responses. Out of the total number of questionnaires sent, a total of 258 questionnaires were received and deemed suitable for analysis. A total of 258 questionnaires were returned, with a response rate of 88.66%. Mugenda & Mugenda (2003) argue that a response rate of 70% or more is considered sufficient. Therefore, the response rate of 88.66% obtained in this study may be deemed appropriate for the purpose of data analysis.

### School Location and Pupils' Academic Performance

This research made use of a scale that ranged from 1 to 5, with 1 representing the frequency of "Never," 2 representing the frequency of "Rarely," 3 representing the frequency of "Occasionally," 4 representing the frequency of "Often," and 5 indicating the frequency of "Always." During the inquiry, the frequency of responses, percentages of total responses, and mean scores for each question were all examined. Table 7 summarizes the findings of this investigation.

**Table 1: Descriptive Statistics**

Statement on School Location		Never	Rarely	Occasionally	Often	Always
Geographical distance favors urban children	F	7	35	23	102	91
	%	2.7	13.6	8.9	39.5	35.3
Low income families are affected by school distance	F	16	26	27	94	95
	%	6.2	10.1	10.5	36.4	36.8
School attendance levels are affected by school distance	F	17	40	24	92	85
	%	6.6	15.5	9.3	35.7	32.9
There is high dropout rate as a result of school distance	F	14	20	31	96	97
	%	5.4	7.8	12.0	37.2	37.6

**Source:** Field Data, (2023)

According to the data shown in Table 1, a significant proportion of participants (102 individuals, accounting for 39.5% of the total) hold the belief that geographical distance favors urban

children. Hence categorizing their frequency as either frequent, seldom, occasional, or nonexistent. These figures correspond to proportions of 35.3%, 13.6%, 8.9%, and 2.7% in relation to the whole sample. Based on the results of the survey, it was determined that a significant proportion of the participants, namely 74.8 percent out of a total of 193 respondents, held the belief that school location had an influence on pupils' academic performance in public primary schools in Bungoma North Sub-Sub-county, Kenya. This conclusion was corroborated by the statements provided by one of the participants during the interview, who expressed:

*"...Distance from home to school is an important factor in educational opportunities, especially in rural areas. The school's choice of location negatively impacts many girls and boys. Primary school pupils are more likely to be hungry, malnourished and unhealthy because of school distance....."*

Furthermore, it was found that 95 respondents, accounting for 36.8% of the entire sample, expressed their views that low income families are affected by school distance. Likewise, it is noteworthy that 94 participants (36.4%), 27 participants (10.5%), 26 participants (10%), and 16 participants (6.2%) expressed the interest for school attendance levels that affected by school distance.

In a similar context, it was found that a total of 92 participants, or 35.7% of the whole sample, held the viewpoint that school location had an influence on pupils' academic performance in public primary schools in Bungoma North Sub-Sub-county, Kenya. Furthermore, the results suggest that a significant proportion of school location namely 85 individuals or 32.9% of the whole sample, consistently communicated their expectations that there is high dropout rate as a result of school distance. In contrast, a lesser percentage of school location namely 40 individuals representing 15.5% of the whole sample, seldom conveyed such stipulations.

Furthermore, a total of 17 people (6.6%) refrained from providing this information, whereas 24 persons (9.3%) sometimes furnished it, therefore effectively communicating their expectations about their assigned responsibilities to the staff members. This is in agreement with Arubai, (2005) who examined distance to school and its effect on pupils' participation in general primary school in Edo and Delta. They found that primary and middle schools in Ed and Delta lagged behind in primary and middle school enrollment, which correlates with school enrollment. Many Nigerians including Amber, Enugu and Ebonyi do not have physical evidence of education and its impact on primary and secondary education. Studies have also shown that schooling is one of the main reasons for the high graduation rate between primary and secondary schools in Nigeria, despite the fact that the country is located in the southeast of Nigeria and - See the many stopped (Arube, 2005; Duzer, 2005; Madumere, 1991; Onakaoma, 2008).

Children often continue in public primary school and move on in life. According to Bowman Donovan & Burns (2001), ECE programs aim to provide children with specific topics and interventions to help them meet the complex needs of formal education.

Libvene in Mtahabva, Kenya demonstrates the main problem of ECE access in terms of geography and age (Mtahabva, 2011). In several parts of the world, including Bangladesh (Nath, 2006), Kenya (UNESCO/OECD, 2005) and Ghana (Matapua, 2011), urban children also benefit from international travel. In Michigan, 3- and 4-year-olds from low-income families with no public education are five times more likely to be convicted by age 18 than children in public primary schools. The first applicant (1972) shows that income families participating in primary programs are less likely to have children, drop out of school early, break the law, or need special education. Nigeria has a lower rate of enrollment than men (NPC & RTI International 2011).



According to the NEDS 2010 report, the main reason is that parents and guardians do not come to school on time.

Statistical analysis has also shown family survey data as a major determinant of school attendance (for example Linkov 2009; Kazim et al. 2010). School trips can also include traffic safety and off-school issues, identified by up to 16% of respondents, with figures particularly increasing in the Northeast and South-North Other qualitative studies suggest that primary school pupils' may be denied access to education, particularly for girls (Okoji 2008; Chege et al. 2008; Bakri 2013; Coinko 2012; Dunne et al. 2013) Researchers examined the effect of school location on primary and middle school enrollment and why school facilities are moved from one building to another, but did not examine the impact of the school environment on overall pupils engagement in education Your funds. Identify local schools and families that work together to value and promote participation and identify factors that prevent young primary pupils' from attending public primary schools such as home schools, community colleges, and academics (DuBois et al., 2007).

Research in Ethiopia has also found that the distance from home to school is an important factor in educational opportunities, especially in rural areas (Neketepe, 2002). While shopping, your child may not be involved. Schooling can lead to poor acceptance and suspension, which can lead to suspension (Kyoto, 2012).

Studies have shown that attending public primary school has a positive impact on children's educational growth and development. This is associated with an increase in the number of primary schools, which is an important predictor of school success (reviewed by Dubois et al., 2007). It is believed that early childhood education can significantly contribute to children's educational growth and development (Barnett, 1995).

Enrollment refers to the enrollment of pupils in public primary schools, since school level contributes significantly to children's illiteracy, as well as educational attainment, since the number of pupils in a classes are inadequate to meet the needs of the school. (NPC & RTI International) 2011). NEDS 2010 assesses school programs directly, but it also assesses school programs according to its methodology. This is especially important because about a third of those surveyed thought it was a great idea to screen children in kindergarten, in addition to the growing number of poor and homeless families.

Some studies have analyzed enrollment rates based on household survey data. Kazam and others. (2010) compared enrollment patterns with 2004 NDHS data based on household characteristics in relation to various demographic factors such as wealth and remoteness. They found that family wealth, religious beliefs, parental education and distance to the nearest school were important factors in enrolment. Researchers therefore wanted to examine the effect of home-to-school distance on attendance by senior pupils' in Bungoma North Sub-county, Bungoma, Kenya.

Following the compilation of descriptive data pertaining to the initial objective, a linear regression analysis was conducted to examine the correlation between the school location and pupils' academic performance in public primary schools in Bungoma North Sub- Sub-county, Kenya. In the subsequent section, we engaged in a research endeavor pertaining to the present subject matter under discussion.

### **Inferential Statistics for school location and Pupils' Academic Performance**

School location has a statistically significant effect on pupils' academic performance in public primary schools in Bungoma North Sub- Sub-county, Kenya as shown by the linear regression coefficient test at a significance threshold of  $p$  less than 0.05. Therefore, the researcher

conducted a linear regression coefficient test to see whether school location affected pupils' academic performance in public primary schools in Bungoma North Sub- Sub-county, Kenya. In order to establish whether the regression model  $y = \beta_1 X_1 + \infty$  was possible, the researcher first conducted a Pearson correlation analysis to test the assumption of linearity, then a Summary model (Table 2), and finally an ANOVA.

**Table 2: Pearson Correlation Analysis**

	Pupils' Academic Performance	School Location
Pupils' Academic Performance	1	
School Location	.769**	1

\*\* . Correlation is significant at the 0.05 level (2-tailed).

**Source:** Researcher, (2023)

Pearson's correlation analysis shows a favorable relationship ( $r=0.769$ ) between the school location and the pupils' academic performance. Therefore, there is a very significant positive connection ( $r=0.769$ ) between the school location and the academic accomplishments of their pupils. Given this, the researcher may conclude that the linearity assumption was met. The Model summary then displayed the variation that could be accounted for. Tabulated below are the findings.

**Table 3: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.769 <sup>a</sup>	.591	.589	.51241

a. Predictors: (Constant), School Location

**Source:** Field Data, (2023)

Table 3 shows that there is a .769 correlation between the two groups of data. As a result, we may conclude that the two data sets are positively related. Pupils' academic performance serves as our dependent variable, while school location provide our independent variable. The R Squared value, or coefficient of determination, explains 59.1% of the variation in the dependent variable.

Furthermore, if there is empirical evidence to back up a regression model's findings, then such findings are said to be "fit." The outcomes of a regression model can be explained only by fitted models. Analysis of variance was performed to establish the need for a model. The results of testing the validity of the model  $y = \beta_1 X_1 + \infty$  are shown in table 4.

**Table 4: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	97.138	1	97.138	369.952	.000 <sup>b</sup>
	Residual	67.218	256	.263		
	<b>Total</b>	<b>164.355</b>	<b>257</b>			

a. Dependent Variable: Pupils' Academic Performance

b. Predictor: (Constant), School Location

**Source:** Researcher, (2023)

The viability of the proposed models was evaluated by analyzing the ANOVA findings. The results indicate that the F-statistic for  $y = \beta_1 X_1 + \infty$  is 369.952, and the p value is .000b. Table 4 displays the results. We may assume the model was correct since the p-value (.000b) is less than

the significance level of .05. Table 5 displays the results of the regression analysis, including the coefficient for the independent variable.

**Table 5: Variables Coefficient**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
	1 (Constant)	.559	.187		
School location	.861	.045	.769	19.234	.000

a. Dependent Variable: Pupils' Academic Performance

Source: Field Data, (2023)

The standard regression coefficient for school location is 0.769, and the p-value is 0.000, as shown in Table 5. According to these results, there is a 76.9% anticipated gain in pupils' academic performance for every one standard deviation increase in school location. Furthermore, the p value for the school location was 0.000, which is a lot less than 0.05. According to the results, (T= 2.997; p-value = 0.003), the p-value is less than 0.05 which implies that there exists a significant relationship between school location and pupils' academic performance. At  $\alpha = 0.05$ , 5% significance level there is sufficient evidence that the school location is a useful estimator of pupils' academic performance in Bungoma North Sub-County, Kenya.

#### Perceived Factors and Pupils' Academic Performance

The findings of our inquiry are shown in Table 6, which provides a summary of the data along with the frequencies, percentages, and mean ratings of answer for each item.

**Table 6: Descriptive statistics**

Statement on Perceived Factors		Never	Rarely	Occasionally	Often	Always
Infrastructures, Proximity, and other Amenities	F	6	29	18	107	98
	%	2.3	11.2	7.0	41.5	38.0
School Buildings and Classrooms	F	12	23	22	96	105
	%	4.7	8.9	8.5	37.2	40.7
Accommodation, Libraries, and Recreational Equipment	F	6	36	19	102	95
	%	2.3	14.0	7.4	39.5	36.8
Apparatus and other Instructional Materials	F	9	20	38	90	101
	%	3.5	7.8	14.7	34.9	39.1

Source: Field Data, (2023)

Table 6 shows that out of the whole sample, 41.5% (107 people) regularly report on infrastructures, proximity, and other amenities. In addition, 38 percent of respondents claimed they are always content, whereas 11 percent, 7 percent, and 2 percent, respectively, expressed infrequency with happiness. According to the findings, over eighty-nine percent of respondents (205 out of 295) reported being happy with their current situations on infrastructures, proximity, and other amenities. A respondent's comments supporting this finding included (in part) the following:

*“...Schools need to work with other schools and stakeholders to improve resources, environment and learning to create an enabling working environment that maintains a trusting working environment for primary schools....”*

Also, 105 people (or 40.7%) answered that resources (schools, classrooms, buildings, and other learning materials) are important for the development of learning in the school system. In addition, 37.2%, 8.9%, 8.5%, and 4.7% of respondents said they often, seldom, sometimes, or never looked up data on schools, classrooms, and buildings, respectively. The majority of respondents (201, or 77.9%) said learning materials are important for the development of learning in the school system.

Also, 102 people (or 39.5%) indicated they often ask whether there are any availability of accommodation, libraries, and recreational equipment. In addition, 95 participants (36.8%), 36 participants (14.0%), 19 participants (7.4%), and 6 participants (2.3%) reported they always, seldom, occasionally, or never looked for additional accommodation, libraries, and recreational equipment. The survey found that a massive 97 out of 76.3% of respondents believed they had requested more accommodation, libraries, and recreational equipment.

In conclusion, 101 people (39.1%) expressed persistent anxiety about apparatus and other instructional materials. Additionally, 34.9%, 14.7%, 7.8%, 3.5%, and 3.5% of respondents respectively reported worrying about availability of apparatus and other instructional materials often, sometimes, seldom, or never. A whopping 191 respondents (74%) expressed anxiety about their apparatus and other instructional materials in the survey. This is in agreement with Joshua and Modupe, (2012) who used a descriptive survey of 60 principals and 540 teachers to examine the conditions of learning environments and facilities and their impact on teaching and learning. Their study concluded that schools need to work with schools and other stakeholders to improve resources, environment and learning to create an enabling working environment that maintains a trusting working environment for primary schools.

Some study participants focused on resources (Isaias 2013). Isaiah believes textbooks are important because they reflect the style and practice of school work, which he says has a profound impact on the work of teachers and pupils'. The authors suggest that school health plays an important role in influencing teacher satisfaction and performance or productivity. Thus, institutional status is an important indicator for teachers leaving their current position. Fomb,i (2018) argues that a rich country or society builds good schools with good teachers and educational resources where pupils can easily learn the application. This can lead to a good education.

Hallak, (2010) that resources (schools, classrooms, buildings, schools, future facilities, recreational facilities, aids and other learning materials) are important for the development of learning in the school system. Given its important role in pupils learning, he emphasized the need for a valuable educational environment that meets the needs of the workforce. He also found that the proper location of schools and their resources has a significant impact on the curriculum. This is also suggested by (Haverinen-Shaughnessi, Moschandrias & Shaughnessi, 2011) who noted that the primary school environment can lead to a poor learning environment and can undermine pupils' engagement, absenteeism and teacher shortage and the right to participate in teaching and learning.

Cohen, (2010) acknowledged that many studies on environmental conditions and their impact on pupils well-being are lacking, suggesting that a healthy school environment is necessary to achieve good learning outcomes. Name two major causes of environmental problems in schools: the world around the school and the level of the school itself. Cohen (2010) also suggests that

participants should focus on specific areas and areas where school resources are not available when dealing with academics. Because environmental differences affect pupils' and school personnel, school personnel must be involved. Their participation is important because their expertise and participation at the school level is lost if they don't have a stake that could affect or harm housing and other development in our state, city or region.

After collecting this information for the second objective, linear regression was utilized to analyze the effect that higher levels of perceived factors had on pupils' performance in public primary schools in the Bungoma North Sub-County of Kenya. This is divided into its essential elements in the next section.

### **Inferential Statistics for Perceived Factors and Pupils' Academic Performance**

Using a p-value of less than 0.05, a linear regression coefficient test shows that perceived factors significantly affect their pupils' performance in school in the Bungoma North Sub-County of Kenya. Table 13 displays the results of a linear regression coefficient test performed to see whether perceived factors affected pupils' achievement in public primary schools in the Bungoma North Sub-County in Kenya.

To check whether the linearity assumption holds, we first do a Pearson correlation analysis (Table 7), then a Summary model, and finally an ANOVA to see if the regression model  $y = \beta_2 X_2 + \infty$  is a workable solution.

**Table 7: Pearson Correlation Analysis**

			<b>Pupils' Academic Performance</b>	<b>Perceived Factors</b>
<b>Pupils' Academic Performance</b>		Pearson Correlation	1	
<b>Perceived Factors</b>		Pearson Correlation	.740**	1

\*\* . Correlation is significant at the 0.05 level (2-tailed).

**Source:** Researcher, (2023)

Table 7 shows that there is a favorable association between perceived factors and pupils' academic performance (Pearson correlation coefficient = 0.740). Therefore, there is a very significant positive link ( $r=0.740$ ) between perceived factors characteristics and pupils' academic performance. Since this is the case, we may conclude that the linearity assumption was met. The model summary then displayed the explained variation as the outcomes is shown in table 8.

**Table 8: Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.740 <sup>a</sup>	.547	.546	.53900

a. Predictors: (Constant), Perceived Factors

**Source:** Field Data, (2023)

There is a very high degree of positive correlation between the variables, as shown by the simple correlation index (R) of .740 in table 8. R Squared, a measure of how much variation in a dependent variable (here, pupils' academic performance) can be explained by variations in a set of independent (in this case, elements that inspire and perceived factors), is 54.7%.

Furthermore, if there is empirical evidence to back up a regression model's findings, then such findings are said to be "fit." The outcomes of a regression model can be explained only by fitted models. Analysis of variance was performed to establish the need for a model. In order to establish whether the model  $y = \beta_2 X_2 + \infty$  was suitable, it was analyzed.



**Table 9: ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	89.983	1	89.983	309.733	.000 <sup>b</sup>
	Residual	74.373	256	.291		
	<b>Total</b>	<b>164.355</b>	<b>257</b>			

a. Dependent Variable: Pupils' Academic Performance

b. Predictors: (Constant), Perceived Factors

**Source:** Researcher, (2023)

The findings from the ANOVA were evaluated to see whether or not the proposed models could really be implemented. The F-statistic and p value for the equation  $y = \beta_2 X_2 + \infty$  are the values 309.733 and .000b, respectively. Due to the fact that the p-value (.000b) was lower than .05, the model may be trusted. The resultant coefficient for the regression variable is shown in Table 10, which can be found here.

**Table 1: Variables coefficient**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.602	.201		2.992	.003
1 Perceived Factors	.861	.049	.740	17.599	.000

a. Dependent Variable: Pupils' Academic Performance

Table 10 displays the .740 standardized regression coefficient and the .000 p-value for perceived factors. This means that for every one standard deviation improvement in the rate at which factors are perceived, there is a possibility of a 0.74 standard deviation increase in pupils' academic performance. The perceived factors p value was also much lower than 0.05 ( $p = 0.000$ ). This suggests that in the public primary schools in the Bungoma North Sub-County of Kenya, a perceived factors has a statistically significant effect on pupils' academic performance.

### Conclusions

Pearson's correlation analysis shows a favorable relationship between the school location and the pupils' academic performance. Therefore, there is a very significant positive connection between the school location and the academic accomplishments of their pupils. Given this, the researcher may conclude that the linearity assumption was met. The model summary showed that there is a correlation between the two groups of data. As a result, we may conclude that the two data sets are positively related. Pupils' academic performance serves as our dependent variable, while school location provide our independent variable. The R Squared value, or coefficient of determination, explains 59.1% of the variation in the dependent variable.

Results from objective two shows that there is a favorable association between perceived factors and pupils' academic performance. Therefore, there is a very significant positive link between perceived factors characteristics and pupils' academic performance. Since this is the case, we may conclude that the linearity assumption was met. The model summary showed that there is a very high degree of positive correlation between the variables, as shown by the simple correlation index. R Squared, a measure of how much variation in a dependent variable (here, pupils' academic performance) can be explained by variations in a set of independent (in this case, elements that inspire and perceived factors ), is 54.7%.

## Recommendations

The study recommends that the Ministry of Education should develop a policy framework that addresses the issue of school location in terms of distance proximity. This will take into consideration factors like; weaker reading skills, high dropout rates, geographical distance favors urban children, low income families who did not attend and school attendance levels are lower for girls than for boys. Additionally, the study recommends that the Ministry of Education should develop a policy framework that would address the perceived factors as; infrastructures, proximity, and other amenities. School buildings, classrooms, accommodation, libraries, future, recreational equipment, apparatus and other instructional materials.

## REFERENCES

- Asahi, K. (2016). *Proximity to the subway network means lower test scores; evidence of subway spread.*
- Baker, Sue and Vossman, L. (2009). *Could the site be wrong ? Human Capital Theory and Puritan Economic History.* Quarterly Review of Economics, 124(2), 531-596.
- Banerjee, A. and Duflo, E. (2006). *No address is required.* Journal of Economic Theory, 20 (1), 117-132.
- Baum CF, Schafer ME, Stillman S. (2007) . *Advanced testing of GMM tools with means/variables.* Journal of Statistics, 7(4), 465-506.
- Chu Maseru RA, Gomez D., Walls RD (2011). *I travel 500 kilometers (if necessary). map and school options in Chile.* Economics of Education Review, 30(5), 1103-1114.
- Clebergen, F. & Son, R. (2006). *The low index uses the same hash value.* Journal of Economics, 133(1), 97-126.
- Dickerson, A. ; Mackintosh, S. (2013) . *The effect of distance from the nearest educational institution on post-compulsory educational decisions.* Community Studies, 50(4), 742-758.
- Duflo, E. and Hannah, R.; (2005) presented a paper. *Occupation: school teacher (number V11880).* National Bureau of Economic Research.
- Falcht T., Lozala B., Strom B. (2013). *Regional issues and learning opportunities.* Basic Science and Urban Economics, 43(1), 164-176.
- Gallego, FA, & Hernando, A. (2009). *School choice in Chile. as desired.*
- Gibbon, C. and. and Vignoles, A. (2012). *Choose geography and pursue higher education in Luxembourg.* Basic Science and Urban Economics, 42(1-2), 98-113.
- Hanushek E. and Vosman L. \_ . (2007) presented. *The impact of education quality on economic growth.* New Jersey. Princeton University Press
- Jr. RG, Levitt SD (2010) . *Effective analysis of gender differences in statistics.* American Journal of Economics. Applied Economics, 2(2), 210-40.
- Kjellstrom, C., Regner, H. (1999). *The impact of geographical distance on the university education decision.* Scandinavian Journal of Educational Research, 43(4), 335-348.
- Kobus MB, Van Ommeren JN, Rietveld P (2015). *When pupils' go to college and work in public schools.* Basic Science and Urban Economics, 52, 129-140.
- Lochner, L., & Moretti, E. (2004). *The impact of criminal education. evidence of arrest and detention of prisoners.* American Economic Review, 155-189.
- Milligan, K., Moretti, E. and Oriopoulos, B. (2004). *Can sex education improve? Evidence from the United States and the United Kingdom.* Journal of Social Economics, 88(9), 1667-1695.

- Northman, J., Olson, LE, Garling, T., & Freeman, M. Physiotherapy (2015). *School trips for children. Satisfaction with the present and understanding of the learning process.* Street, 1-18.
- Parada, F. (2014). *Teachers like me or pupils' like me? Participatory measures and outcomes of teacher support.* Economic Research in Education, 39, 38-49.
- Rifkin SJ, Hanushek EA, Kahn GF (2005). *School teachers and teaching practice.* Economics, 73 (2), 417-458.
- SA, C., Florak, RJ, & Rietveld, P. (2006) *Does secondary education matter? Holland High School Scholarship.* Home Economics Review, 1(2), 155-174. But class is different from poverty. Social Issues, Vol 50 (2); 181-2
- Stager DO, Stock JH (1997) . Submit changes to your device with vulnerable hardware. Econometrics, 65 (3), 557-586.
- Temple No. (2002). *Impact on Development, Education and Public Finance in OECD Countries.* Social work history, 5-46.
- Tiger R, Sampaio B. and Menezes, T. Natural therapies. (2017) presented a paper. *Effect of travel time on pupils performance.* Journal of Basic Science, 57(1), 28-47.
- Tools, JH, Wright, JH, & Yogo, M. (2002). *Check for faulty devices and look for common keystroke errors.* Journal of Economics and Business Statistics, 20(4), 518-529.
- Tools, J. H. and Yogo, M. (2005). *The car failed the test and crashed into the fourth row. Specifications and conceptual economic models.* courtesy of Thomas Rosenberg in the 1980s.
- Yu D., TS (2004). *Do citizens reward education?* Journal of Social Economics, 88(9), 1697-1720.