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RESEARCH ARTICLE

INFLUENCE OF ENTRY BEHAVIOUR OF STUDENTS ON QUALITY OF SECONDARY SCHOOL EDUCATION IN KENYA. A CASE STUDY OF MIGORI COUNTY

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ABSTRACT

Institutional inputs are resources invested in the school system with an aim of enhancing quality education. In Kenya quality education is measured primarily by performance in education, access availability, adequacy and utilization of resources. There are several ways of measuring performance including achievement in national examinations. In Kenya there are differences in the quality of education as some students perform better than the others due to certain factors as revealed by regional mean scores. For example studies in Kakamega County revealed that entry behaviour had a coefficient of 0.50 at the 0.05 level of significance while in Kisii financing had a correlation coefficient of 0.447 at the 0.05 level of significance on the quality of secondary school education. The overall mean score in Kenya Certificate of Secondary Education Examination between 2011 and 2017 in Migori County was 4.530 lower than the of 4.617. The objective of this study was to establish the influence of entry behaviour of students on quality of secondary school education in Migori County, Kenya. The study established that entry behaviour of students accounted for 54.1% of the variation in the quality of secondary school education in Migori County as signified by Adjusted R square of 0.541. This means that entry behaviour of students had a strong positive influence on the quality of secondary school education. The study concluded that entry behaviour plays an important role in enhancing the quality of secondary school education.

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INTRODUCTION

Provision of quality education will be a key ingredient in achieving Kenya's Vision 2030 which aims at making Kenya a middle income country by the year 2050. Republic of Kenya (2014) defines quality education as adequately and equitably resourcing education institutions and programmes with core requirements of safe, environmentally, friendly and easily accessible facilities, well motivated and professionally competent teachers and books, other learning materials and technologies that are context specific, cost effective and available to all learners. This definition is reinforced by Orodho (2002) who defines quality of education as the development of student's potential measured by indicators of quality comprising availability, adequacy and state of inputs namely teaching force in terms of student/teacher ratio, physical facilities, instructional materials as well as the curriculum and hours taught and also addresses indicators like performance in the Kenya Certificate of Primary Education and Kenya Certificate of Secondary Education; transition rates from primary and secondary schools and the overall survival rate from primary standard one level up to the university. There are institutional inputs that affect quality of secondary school education. The African Union (2006) has identified institutional inputs of physical and infrastructural resourcing for learning environment, learner characteristics, teacher qualification, competence and motivation, relevance of subject matter and of teaching and learning material, professional support for teachers, good governance both at the system and institutional levels. There are also other variables inform of retention rates and the legal framework which impact on the quality of secondary school education. Entry behaviour was chosen as an institutional input for the study because it refers to the academic ability of the student who is admitted to secondary school on attaining a particular Kenya Certificate of Primary Education score.

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It is a resource the institution uses just like physical resources, teaching and learning resources, teachers and level of financing above free secondary education. Moreover other studies have often focused on home background factors on performance in Kenya Certificate of Secondary Education. Oghuvbu (2007) in a study on family history as a tool for adequate management of pupils and students in schools focused his investigation on home background factors. This study however will focus on the influence of the students' academic ability which is an institutional input. Korinek and Punpuing (2012) in a study in Thailand on the effect of household and community on school attainment of Thai youth established that the risk of dropping out of school is lower among girls than boys in an array of contexts including relatively economically disadvantaged households and in local communities that have diversified beyond agriculture into services and manufacturing reward girls human capital at par with or even beyond the boys. The study was a longitudinal design with a sample population of 3,202 students children between ages 11-14 taken in 2001 out of which 2739 (86%) of the 3202 youths enumerated in the data were respondents. The response rate was high and this enhanced the reliability of the outcomes.

A longitudinal research design was a good choice as it gave trend analysis and perspective and clarified relationships between student outcomes and their family and community data collection. Discrete time hazard rate was used. This method is more flexible and robust than the other tools of analysis. The instruments used were observation, interviews, questionnaires and census. The variety of instruments used enriched the information obtained thus enhancing its validity and reliability. Afolabi, Lijoka and Awolowo (2005) in a study in Nigeria on the relationship between National Common Entrance Examination and Federal Junior Secondary Certificate Examination (found out that performance of students in the National Common Entrance Examination compared favourably with subsequent performance at the Junior secondary school level. The correlation of coefficient between National Common Entrance Examination and Junior Secondary Certificate Examination of r is 0.50 at the 0.05 level of significance. This study shows that entry behaviour inform of academic ability has a mild influence on quality of education. The study comprised 120,000 students from 3 states in South Western Nigeria. Saturated sampling was used which enhanced the reliability of the results. The instrument of data collection was documentary records obtained from computer records which were also reliable. The method of data analysis using inferential statistics gave an in-depth results. The study should have used other instruments to support the documentary instrument.

The study investigated influence of entry behaviour on academic achievement in Nigeria. This study will fill the knowledge gap by not only investigating entry behaviour in terms of scores in Kenya Certificate of Primary Education but also on the basis of gender and age at Kenya Certificate of Primary Education and form four which other studies have not done. A study done by Amburo (2011) in Kenya found a coefficient of correlation of 0.452 between Kenya Certificate of Primary Education and Kenya Certificate of Secondary Education at the 0.05 level of confidence. This variation in the performance between Kenya Certificate of Primary Education and the Kenya Certificate of Secondary Education may be due to varying levels of difficulty in the two types of examinations. However a study by Mensch and Llyod (1997) in Kenya found a correlation coefficient between the entry examinations and the final exit examinations of 0.538 for boys and 0.647 for girls when similar resources were used. These findings raise questions as to whether Kenya Certificate of Primary Education is a reliable predictor of Kenya Certificate of Secondary Education results for both boys and girls. This is the knowledge gap that the study in Migori County will try to fill.

Research Objective: The research objective was to determine the influence of entry behaviour of students on quality of secondary school education.

Synthesis of literature on influence of entry behaviour of students on quality secondary school education: Korinek and Punpuing (2012) in a study in Thailand on the effect of household and community on school attainment of Thai youth established that the risk of dropping out is lower among girls than boys in an array of contexts including relatively economically disadvantaged households and in local communities that have diversified beyond agriculture into services and manufacturing reward girls human capital at par with or even beyond the boys. The study was a longitudinal design with a sample population of 3,202 children between ages 11-14 taken in 2001 out of which 2739 (86%) of the 3202 youths enumerated in the data were respondents. The response rate was high and this enhanced the reliability of the outcomes.

A longitudinal research design was a good choice as it gave trend analysis and perspective and clarified relationships between student outcomes and their family and community data collection. Discrete time hazard rate was used. This method is more flexible and robust than the other tools of analysis. The instruments used were observation, interviews, questionnaires and census. The variety of instruments used enriched the information obtained thus enhancing its validity and reliability. Regional and Continental Survey relates to low income countries in Asia, Africa and Latin America. Regional and Continental Survey comprised low income countries with a Gross National Income per capita of less than $976 in 2008 and are severely indebted (World Bank, 2010). The social rate of return on education is 21.3%; 15.7% and 11.2% for primary, secondary and higher education (World Bank, 2002). Low income countries have a development index ranging from Ghana 0.556; Afghanistan 0.358; Democratic Republic of Congo, 0.390, Ethiopia 0.357; Cote devoir 0.420, Haiti 0.493, and Kenya 0.541. The development index as a measuring instrument captures the broad nature of human development and brings out disparities in health and education. Nevertheless the Human Development Index has a weakness as it overstates the amount of schooling in a given country and only looks at enrolment without taking into account dropouts.

Adetunde and Akensina (2008) with a study on entry behaviour in Ghana on factors affecting the standards of female education found out that the daughters' workloads, distance from home to school, the parents level of education and their socio-economic status had an impact on the student's academic achievement in secondary school. A study by Barthes, Nair and Malpede (2000) in Africa which investigated the relationship between girls primary performance in scientific, technical and vocational subjects to their secondary school performance established that primary performance was a predictor of performance in secondary school for both boys and girls but the performance of the girls was inferior to that of

the boys. The study took a sample of 21 countries in Africa which gave it abroad database. Kenya is among the low income countries with a Gross National income per capita of less than $976 in 2008 and is fairly indebted (World Bank, 2010). The social rate of return for secondary education is 10.0% and the private rate of return for secondary education is 16.0% (World Bank, 2002). These rates of return are higher compared to those of middle and high income countries because of the latent human resource base in low income countries. Moreover, the use of rates of return estimates that are based on samples that include civil servants poses problems because public sector wages usually do not reflect market wages. Kenya has a Human development index of 0.539 compared to other low income countries like Rwanda with a Human Development Index of 0.460 and Malawi of 0.493 (UNDP, 2009). Although the Human Development index takes into account life expectancy, per capita income, school enrolment, infant mortality and disease incidence it does not take into account gender disparities, fertility, reduced social discrimination or fluctuations in extreme poverty.

In a study by Ogalo, Simatwa and Okwach (2013) on socio-economic challenges faced by principals in the provision of quality secondary education in Nyando and Muhoroni districts of Kenya it was found out that parental sickness like HIV and AIDs and related factors not only stressed the students but also hindered their involvement in economic activities to pay for their children's education or monitor their academic performance. The study established that parents with low education did not monitor or encourage their children in academic work. The study used descriptive survey design and simple random sampling was used to choose 631 students, 32 principals, 82 heads of departments, 2 quality assurance officers and 32 Parents Teachers Association members. This sample was adequate and representative. The instruments used in the study comprised questionnaires, interview schedules and focus group discussions. The instruments used were varied and this enhanced the validity and the reliability of the results. Quantitative data was analyzed using descriptive statistics in form of percentages, frequencies and means and qualitative data was analyzed using on-going processes as themes and sub themes emerged from the data. Both qualitative and quantitative data was used. Studies by Afila and Ohitula (2007), Marzano (2003), Dunkar (2010) and Mwita (2010) reinforces the above findings as they established that parents' socio-economic status had an impact on the student's academic performance.

Behar-Horestein, Simon and Akinsolu (2010) on teachers and students academic performance established that although home background contributes to academic performance teachers play a crucial role in promoting academic performance. The above reviewed studies dealt with entry behaviour with focus on family background and the socio-economic factors that affect the quality of secondary education but did not investigate entry behaviour based on the pupils academic ability as determined by Kenya Certificate of Primary Education scores. This is the knowledge gap that the study on Migori County sought to fulfill. A study by Amburo (2011) in Kenya found a coefficient of correlation of 0.452 between Kenya Certificate of Primary Education and Kenya Certificate of Secondary Education at the 0.05 level of confidence. This depicts a weak relationship between the two examinations. This could be due to the varying levels of difficulty between the two examinations. However a study by Mensch and Llyod (1997) in Kenya found a correlation of coefficient between the entry examinations and the final exit examinations of 0.538 for boys and 0.647 for girls when similar resources were used. These findings raise questions as to whether Kenya Certificate of Primary Education is a reliable predictor of Kenya Certificate of Secondary Education results for boys and girls. This is the knowledge gap that the study in Migori County will try to fill. Jagero (2013) on a study on how performance of primary education can predict their performance in Kenya Certificate of Secondary Education in Western Kenya established that there was a correlation of 0.559 between performance in Kenya Certificate of Primary Education and the correlation was significant at 0.05 level of significance. The girls also performed better than the boys though they were admitted with lower marks in Kenya Certificate of Primary Education. The research design used for this study was ex post facto and correlational research design. The use of ex post facto was appropriate as the independent variable had already occurred. Correlation design was appropriate as it assisted in evaluating associations of students' performance in Kenya Certificate of Primary Education and Kenya Certificate of Secondary Education. The study population involved 110 students and it involved a stratification of 82 boys and 28 girls. Saturated sampling was used since the population was small in size.

In data analysis descriptive statistics comprising mean and standard deviation was used and inferential statistics that used Pearson correlation and linear regression analysis was used and it gave the magnitude of the relationship. The study reviewed correlated Kenya Certificate of Primary Education and Kenya Certificate of Secondary Education scores in western Kenya but did not explore the influence of entry behaviour and age on the student's academic achievement in Kenya Certificate of Secondary Education . The study was done in primary schools but this study will be done in secondary school. The study will also explore if age has an effect on performance in Kenya Certificate of Secondary Education. These findings concur with those of Ondima, Nyamasege, Mogvambo and Ochoti (2013) on regression analysis of Kenya Certificate of Primary Education and final performance in Kenya Certificate of Secondary Education in Nyamira sub County of Nyamira County which established a significant positive linear relation between Kenya Certificate of Primary Education and Kenya Certificate of Secondary Education of 0.6614. This was an insightful study as it established that entry behaviour has an effect on Kenya Certificate of Secondary Education performance for both boys and girls and this can help stakeholders to improve quality secondary school education by improving performance. The study used a sample of 16 schools out of 48 schools and sampled 572 students while the Migori study will use a larger sample of 148 schools and 384 students which will enhance the reliability of the study.

Ondima et al (2013) study used simple random sampling but there is a likelihood that schools were not of the same size thus raising questions of misrepresentation of some schools. The research in Migori County will use stratified random sampling to ensure fair representation. The purpose of the Nyamira study was to evaluate regression analysis of Kenya Certificate of Primary Education entry scores and final performance in Kenya Certificate of Secondary Education scores in Nyamira sub county while the purpose of the study in Migori county will be to establish the influence of institutional inputs on quality of secondary education. Ondima's study used a survey research design.

The study of Migori County will use both descriptive and correlational research design to provide greater insights into the study. The Nyamira study only used regression method in data analysis. The current study will use both qualitative and quantitative analysis. The Nyamira study only regressed Kenya Certificate of Primary Education results on Kenya Certificate of Secondary Education scores and had limited variables but the Kuria study will be robust with many variables as it will regress entry behaviour, physical resources, learning and teaching resources, teachers' characteristics and level of financing quality secondary education. This will help establish the extent to which each of the variables influences quality secondary school education.

Ondima et al (2013) study used only document search as an instrument of data collection, the Migori County will use questionnaire, interview, observation, focus group discussion and document analysis search to capture information. The Ondima study did not effectively tackle the influence of entry behaviour on quality of secondary school education hence the need for this study. Molochi (2008) in a study on survey of education in Kuria West established that most parents could not pay fees for their children and many of the parents forced their young girls out of school into early marriages and parents also had a negative attitude towards education and child labour was also rampant. The study population comprised 89 primary schools with a population of 38,048 pupils and 21 secondary schools with a population of 5487 students. This provided a large base from which to get adequate respondents. The instruments of data collection comprised interviews and observation. The use of more than one instrument enhances the reliability and the validity of the data collected. Descriptive statistics using means, percentages and frequencies were used. However inferential statistics using regression analysis would have assisted to give the magnitude of the relationship between entry behaviour and student's academic achievement in secondary school. The studies strength lay in the use of a large sample and at least two instruments were used in data collection. The weaknesses of the study lay in the use of only descriptive statistics. The study investigated the socio-economic background of the students and its relationship with performance. The study in Migori County will focus on the influence of institutional inputs on quality of secondary school education.

Theoretical Framework: This study on the influence of entry behaviour of students on quality of secondary school education was informed by the Production Function Model. The model postulates that educational outcomes are a function of entry behaviour of students (Psacharopoulos & Woodhall, 1985). The formula of production function model is:

A = f (T, B, E.....)

Where;

"A" is the dependent variable and TBE ……..independent variables

when applied to education and in this study "Y" = f (X_1+ X_2+ X_3+ X_4 + X_5 +X_6 + X_7 + X_8 +X_9 +X_{10}+X_{11}+ X_{12})

where Y = quality of secondary school education and X_1 to X_{12} = Entry behaviour
X_1= Mean score 1
X_2= Mean score 2
X_3= Mean score 3
X_4= Mean score 4
X_5 = Mean score 5
X_6 = Mean score 6
X_7 = Mean score 7
X_8 = Mean score 8
X_9 = Mean score 9
X_{10} = Mean score 10
X_{11} = Mean score 11
X_2 = Mean score 12

Bergman and Feser (1996) give further insights into the Education Production Function model as they identify four elements of educational performance as being input performance which refers to the influence of entry behaviour, physical infrastructure, learning/teaching and level of financing resources, process quality which refers to the quality of teaching and learning; output process which refers to the effect of education inform of graduated product measured by rates of return to education. Other scholars have given specific insights into the quality of education like (Jung, Zuze & Ross, 2011) on resource inputs; (Paris & Hamilton, 2009) on resource processing process, (Satz, 2012) on output quality and (Lyenza & Bajaj, 2010) on product quality. This study investigated the influence of entry behaviour of students on quality of secondary school education.

MATERIALS AND METHODS

This study is anchored on Psacharopolous production function model in education which relates inputs in education like learning resources to outputs in form of achievement measured by performances. The study adopted use descriptive and correlational research designs. The study population was 59,691 comprising of 245 principals, 2,439 teachers, 57,000 students and 7 Quality Assurance and Standards Officers. Fisher's formula was used to select 384 students, 331 teachers and 148 principals. Saturated sampling was used to select 7 Quality Assurance and Standards Officers resulting in total respondents of 870. The data was collected using questionnaires, interview schedule, observation guide, focus group discussion and document analysis. Face and content validity of the instruments were ascertained by experts in Educational administration who evaluated the appropriateness of items in the instruments. Their input was therefore included in the final instruments. Reliability of the instruments was ascertained by piloting in 7 schools whereby a coefficient of 0.7 and above at a set p-value of 0.05 was considered reliable. Inferential statistics was used to determine the influence of teacher characteristics on the quality of secondary school education. The mean scores were regressed against entry behaviour to establish the magnitude of the influence at the 0.05 level of significance.

RESULTS

Research Objective: The research objective was to determine the influence of entry behaviour on quality of secondary school education. To achieve this objective a null hypothesis "Entry behaviour of students does not significantly influence the quality of secondary school education." was generated. The study then sought to establish first the entry behaviour of students in terms of mean scores at Kenya Certificate of Primary Education level of the 2012 (class VIII) cohort and the

performance of the same students who transited to secondary school and sat their Kenya Certificate of Secondary Education in 2016 as Form IV cohort (Table 1). According to findings presented in Table 1, it is evident that 143(63.3%) boys and 74(46.8%) girls scored less than 6.45-77.44 points, which was below a C+ in Kenya Certificate of Primary Education examination. Students who scored more than grade C+ (6.45-7.44 points) and above in Kenya Certificate of Primary Education for boys were 83 out of 226 while girls were 84 (53.8%). At Kenya Certificate of Secondary Education level, 164(72.6%) of 226 boys and 73(46.2%) out of 158 girls scored less than 6.45-7.45 points, which was below the standards required for quality education in secondary schools. Students who scored grade C+ and above for the boys' category were 83(36.7%) out of 226 while in the girls' category were 85(53.8%) out of 158.

To determine the influence of entry behaviour of students on quality of secondary school education the data in Tables 1 and 2 were used in the computation. (Tables 2 to 10). From Table 2 it can be observed that entry behaviour of students had a strong influence on the quality of secondary school education. The influence was positive and significant (r =.764, N =331, p<.05). Therefore the null hypothesis "entry behaviour of students do not significantly influence quality of secondary school education" was rejected and the alternative hypothesis "entry behaviour of students significantly influenced quality of secondary school education was accepted." Entry behaviour of students accounted for 54.1% of the variance in quality secondary school education as denoted by Adjusted R square coefficient .541. The other 45.9% was due to other factors that were not subject of this study. This means that entry behaviour of students explained 54.1% of quality secondary school education. Entry behaviour of students is key to quality education because it is the ability of students that is a precursor of effective learning that culminates in performance. Other factors' effectiveness depend on the entry behaviour. From Table 3 it can be observed that entry behaviour of students was a significant predictor of quality secondary school education [F (1,382) = 4.576, p<0.05]. This means that entry behaviour of students real influences quality secondary school education. It is not by chance and as such can be relied upon with regard to enhancement of quality secondary school education.

From Table 4 it can be noted that entry behaviour of students when disaggregated reveal that each characteristic has different power of influence and therefore fit well in prediction model. The regression equation is $Y = 3.763 + 0.593X_1$.This means that for every one unit increase in entry behaviour of students there was improvement in quality secondary school education by .593 units. That is, for every one unit increase entry behaviour of students (Kenya Certificate of Primary Education mean scores) quality secondary school education improved by .593 units, This model can be used in predicting influence of entry behaviour of students on quality of secondary school education. From Table 5 it can be observed that entry behaviour of boy- student had a strong influence on the quality of secondary school education. The influence was positive and significant (r =.733, N =331, p<.05). Therefore the null hypothesis "entry behaviour of boy-student do not significantly influence quality of secondary school education" was rejected and the alternative hypothesis "entry behaviour of boy-student significantly influenced quality of secondary school education was accepted." Entry behaviour of boy-student accounted for 51% of the variance in quality secondary school education as denoted by Adjusted R square coefficient .510. The other 49% was due to other factors that were not subject of this study. This means that entry behaviour of boy-student explained 51% of quality secondary school education. Entry behaviour of boy-student is key to quality education because it is the ability of students that is a precursor of effective learning that culminates in performance. Other factors' effectiveness depend on the entry behaviour. From Table 6 it can be observed that entry behaviour of students was a significant predictor of quality secondary education [F (1,380) = 2.612, p<0.05]. This means that entry behaviour of students real influences quality secondary school education. It is not by chance and as such can be relied upon with regard to enhancement of quality secondary education.

From Table 7 it can be noted that entry behaviour of boy-student when disaggregated reveals that each characteristic has different power of influence and therefore fit well in prediction model. The regression equation is $Y = 2.915 + 0.459X_1$.This means that for every one unit increase in entry behaviour of students there was improvement in quality secondary school education by .459 units. That is, for every one unit increase entry behaviour of boy-student (Kenya Certificate of Primary Education mean scores) quality of secondary school education improved by .459 units, This model can be used in predicting influence of entry behaviour of boy-student on quality of secondary school education. From Table 8 it can be observed that entry behaviour of girl- student had a strong influence on the quality of secondary school education. The influence was positive and significant (r =.760, N =331, p<.05). Therefore the null hypothesis "entry behaviour of girl- student does not significantly influence quality of secondary school education" was rejected and the alternative hypothesis "entry behaviour of girl- student significantly influenced quality of secondary school education was accepted." Entry behaviour of girl-student accounted for 52.9% of the variance in quality secondary school education as denoted by Adjusted R square coefficient .529.

The other 47.1% was due to other factors that were not subject of this study. This means that entry behaviour of girl- student explained 52.9% of quality secondary school education. Entry behaviour of girl- student is key to quality education because it is the ability of girl- student that is a precursor of effective learning that culminates in performance. Other factors' effectiveness depend on the entry behaviour. From Table 9 it can be observed that entry behaviour of students was a significant predictor of quality secondary education [F (1,382) = 4.224, p<0.05]. This means that entry behaviour of students real influences quality secondary school education. It is not by chance and as such can be relied upon with regard to enhancement of quality secondary education. From Table 10 it can be noted that entry behaviour of girl-student when disaggregated reveal that each characteristic has different power of influence and therefore fit well in prediction model. The regression equation is $Y = 1.686 + 0.519X_1$.This means that for every one unit increase in entry behaviour of girl-student there was improvement in quality secondary school education by .519 units. That is, for every one unit increase entry behaviour of girl-student (Kenya Certificate of Primary Education) quality secondary school education improved by .519 units, This model can be used in predicting influence of entry behaviour of students on quality of secondary school education.

Table 1. Migori County Kenya Certificate of Primary Education and Kenya Certificate of Secondary Education examinations mean scores for the 2012 class VIII cohort and 2016 form IV cohort

	Kenya Certificate of Primary Education mean score in schools						Kenya Certificate of Secondary Education mean score in schools					
Mean scores	Boys		Girls		Total		Boys		Girls		Total	
	F	%	F	%	F	%	F	%	F	%	F	%
5.00-5.44	88	23.0	34	8.8	122	31.8	91	23.8	34	8.8	125	32.4
5.45-6.44	55	14.2	44	11.5	99	25.6	73	18.9	39	10.1	112	29.1
6.45 -7.44	21	5.4	26	6.7	47	12.2	29	7.4	23	6.1	52	13.5
7.45- 8.44	25	6.8	24	6.1	49	12.8	18	4.7	18	4.7	36	9.5
8.45-9.44	21	5.4	18	4.7	39	10.1	10	2.7	18	4.7	28	7.4
9.45-10.44	8	2.0	5	1.3	13	3.4	5	1.4	13	3.4	18	4.7
10.45-11.44	5	1.4	5	1.3	10	2.7	0	0.0	8	2.0	8	2.0
11.45-12.00	3	0.7	2	0.7	5	1.4	0	0.0	5	1.3	5	1.3
Total	226	58.9	158	41.1	384	100.0	226	58.9	158	41.1	384	100.0

Table 2. Regression analysis of student entry behavior (boys and girls) and quality of secondary school education

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.764[a]	.584	.541	1.439	.584	4.576	1	382	.003

Predictors: (Constant), Entry behavior of students

Table 3. Analysis of variance of students' entry behavior in secondary schools and quality of secondary education

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.508	1	4.508	4.576	.003[b]
	Residual	376.302	382	.985		
	Total	380.810	383			

a.Predictors: (Constant), Entry behaviour of students
b.Dependent Variable: Quality of secondary education

Table 4. Simple Linear regression between students' entry behavior in secondary schools and quality of secondary education

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.763	.482		8.802	.000
	Kenya Certificate of Primary Education mean score for entry	.593	.139	.764	3.132	.003

Dependent Variable: Quality of secondary school education

Regression Equation $Y= \beta_0 + \beta_1 X_1$

Table 5. Regression analysis between entry behavior of boys and quality of secondary school education

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.733[b]	.538	.510	.138	.538	2.612	3	380	.001[b]

a. Predictors: (Constant), Entry behaviour of boy-students

Table 6. Analysis of variance between entry behavior of boys and quality of Secondary School Education

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.263	3	2.088	2.612	.001
	Residual	303.695	380	.799		
	Total	309.958	383			

a.Predictors: (Constant), Entry behaviour for boy-students
b.Dependent Variable: Quality of secondary school education

Table 7. Simple Linear Regression model for entry behavior for boys and quality of secondary school education

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.915	.203		10.886	.000
	KCPE mean score for boys	.459	.071	.733	3.680	.001

Dependent Variable: Quality Secondary school education

Regression Equation: $Y = \beta_0 + \beta_1 X_1$

Table 8. Regression analysis between entry behavior of girls and quality of secondary education

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.760[a]	.578	.529	.128	.578	13.497	1	382	.000

a.Predictors: (Constant), Entry behavior of girl-students

Table 9. Analysis of variance between entry behavior for girls and quality of secondary school education

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57.185	1	6.354	4.224	.000[a]
	Residual	562.604	382	1.504		
	Total	619.789	383			

a. Predictors: (Constant),Entry behaviour of girl-student
b. Dependent Variable: Quality of Secondary school Education

Table 10. Simple Linear regression between entry behavior for girls and quality of secondary school education

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.686	.199		8.618	.000
	KCPE entry mean score for girls	.519	.062	.760	2.642	.000

a. Dependent Variable: Quality Secondary school Education

Regression Equation: $Y = \beta_0 + \beta_1 X_1$

DISCUSSION

Entry behaviour is defined as the prerequisite knowledge , attitudes and skills which the student already possesses that are relevant to the learning task that is required by students to demonstrate before beginning a new cycle of education, in this study secondary school education. This includes previous education and experience in this study primary school education, that the student brings to the new learning context. The ultimate objective being to advance the student from where he/she is (entry behaviour) to where the society would like him/her to be. (having mastered the desired knowledge, skills and attitudes) in this respect, this study generated new knowledge over and above what the literature had. In Migori County, the students who transited from primary school education to secondary school education had a minimum entry behaviour of 5.00-5.44 mean scores in Kenya certificate of primary school examination.

These mean scores were good enough to enable learners to cope with secondary school curriculum and perform much better. It has however surprising to note that whereas value addition was expected the opposite was true. thus whereas the 2012 (class (viii) cohort entry was good with 122(31.8%) having a minimum of 5.00-5.44 mean scores when they transited to secondary school education, 125(32.4%) exited with mean scores of 5.00-5.44. This means that value added progress was not achieved, instated there was a decline. Descriptively it can be argued that entry behaviour of students did not have positive influence on quality of secondary school education.

This is as far as group statistics can reveal. When these findings were rigorously subjected to regression analysis, it was found that entry behaviour of students had a strong influence on quality secondary school education and accounted for 54.1% of the variance in the quality of secondary school education. This justifies the fact that the Ministry of Education encourages only pupils who score above 5.00 points to transit to secondary school education. Those who score below 5.00 points are advised to join competence based courses in the Technical and Vocational Training Institutions thus they cannot cope with secondary school education which is highly academic. When analysis of variance was computed, it was realized that entry behaviour of students is a significant predictor of the quality of secondary school education. When the entry behaviour of boy-student was disaggregated from girl-student, the rigorous analysis through regression analysis revealed that the entry behaviour of boys did not influence the quality of secondary school education as much as that of girls. These findings concurred with those of Ambro (2011) who conducted a study to establish the influence of Kenya Certificate of Primary Education and found that it had a moderate influence with a coefficient of 0.452 at 0.05 level of significance. They also concurred with those of Jagero (2013) who established that Kenya Certificate of Primary Education had a strong influence on Kenya Certificate of Secondary Education with a coefficient of 0.773 at 0.05 level of significance and that it was a significant predictor of performance in Kenya Certificate of Secondary Education. The findings of this study however, differed with those of Barthes, Nair and Malpede (2000) on scientific technical and vocational

education of girls in Africa found that girls performance was inferior to that of boys. Ondima, Nyamasege, Mogvambo and Ochoti on a study on influence of Kenya Certificate of Primary Education on Kenya Certificate of Secondary Education found that the influence was strong with a coefficient of 0.6614. This findings are in agreement with those of this study. Whereas these studies the reviewed ones did not generate prediction models, this study generated prediction models.

Conclusion

Entry behaviour of students had a significant influence on the quality of secondary school education. It is also a significant predictor of quality secondary school education. The entry behaviour of girl student account for a bigger variance in quality of secondary school education than that of boy student.

Recommendations

- Entry behaviour of students should be improved upon so as to promote the quality of secondary school education.
- The misconception that emphasis on quality secondary school education be placed at secondary school level should be corrected. This is because it is not yielding good results. Instead the emphasis should be at primary school level, which forms the foundation the quality of education that is subsequently achieved.
- The fact that value added progress is minimal, initiatives should be taken to ensure that value added progress is achieved in schools.
- Career guidance should be initiated at primary school level, so that learners can identify their weaknesses and strengths so as to focus on realistic paths. This approach can enhance quality of secondary school education.

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