



Influence of Selected Factors on the Choice of Agriculture Subject among Secondary School Students in Kisii and Nyamira Counties

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Authors' contributions

This work was carried out in collaboration among all authors. Author EA designed the study, performed the statistical analysis and wrote the first draft of the manuscript. Authors SM and JN managed the analyses of the study. Author JN managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

The purpose of the study was to determine the influence of selected factors on the choice of agriculture subject among secondary school students in Kisii and Nyamira Counties. With the objective of determining the influence of teachers on the choice of agriculture subject among students, to determine the influence of gender on the choice of agriculture subject among students, to explore the extent to which students attitude influence the choice of agriculture subject and finally to determine whether school finance influence the choice of agriculture subject among students in secondary schools. A survey methodology was employed to collect data from students and teachers with the help of a Questionnaire as the instrument for data collection. The study targeted form four

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agriculture students and agriculture teachers. Simple random sampling method was used to sample 330 agriculture students and 22 agriculture teachers while stratified sampling was used to sample 22 schools. Data from the students and teachers was analysed using qualitative and quantitative methods. Descriptive statistics including frequencies, means, as well as, standard deviation was used while inferential statistics which includes Pearson correlation and t-test was used to test the hypothesis, with levels of significance set at 0.05. Statistical package for social sciences software version 20 was used for data analysis. The findings of this study show that agriculture teachers have got influence on student's choice of agriculture subject. The study revealed further that the gender of the student does not influence the choice of agriculture as a subject neither does the gender of a teacher influence student's choice of agriculture. Additionally, the positive attitude exhibited by the students by studying agriculture often and quest to know more has an influence on choice of agriculture as a subject. Lastly, resources do not influence the choice of agriculture as a subject. The findings of the study might be useful to parents, teachers and the ministry of education. The study recommended that principals of schools to monitor syllabus delivery to ensure that the right content is taught, that career and guidance to be strengthened in schools for this will create awareness on career opportunities in the job market and finally ministry of education through the government to provide enough funds to schools to enable purchase of teaching learning resources.

Keywords: Agriculture; secondary schools; Kisii and Nyamira counties; random sampling.

1. INTRODUCTION

Agriculture is the backbone of the Kenyan nation and contributes a lot to its economic development. The sector contributes about 24 per cent Gross Domestic Product (GDP) and about 19 percent formal wage employment and guarantees food security to the nation. It contributes over 60% of exports and provides 80% of all industrial raw materials [1,2]

In Kenya agriculture was introduced in 1985 into the curriculum [3]. The purpose of offering agriculture to secondary school students was to counter the apparent negative attitude to farming by many students by providing them with knowledge and skills that will enable them secure existing opportunities in agriculture hence change their attitude towards agriculture. In the secondary school curriculum, the subject is grouped with other technical subjects in group four [3]. Subjects in this group including agriculture are not compulsory and students are

given a chance to choose the subject they are comfortable with. On the other hand, students face many challenges in the selection of these elective subjects.

Hence need to have many people enter into agriculture-related careers to increase productivity. Several studies have been done on students' perception, the performance of agriculture subject, gender, and attitude towards agriculture subject on performance. Some of them include that of Muchiri [4] which deduced that boys did not significantly differ from girls in their perception of agriculture as a subject of study. Kivett [5] deduced that poor teaching methods are attributed to poor performance. Another study by Chambers et al. [6] also concluded that gender does not influence academic performance. Pedzisai [7], Martínez-Carrión and Pérez-Castejón [8] also in their study deduced that student's negative attitude towards a particular subject depends on the method of teaching. The Table 1 shows KCSE candidature enrolment over the last eight years.

Table 1. KCSE Candidate's enrolment nationally, 2004-2012

Year	Total KCSE candidature	Agriculture enrolment	Percentage
2004	222676	98760	44
2005	263665	106169	40
2006	243453	107068	44
2007	276239	121193	44
2009	337404	137217	41
2010	357488	140237	39
2011	411783	167709	41
2012	436349	178484	41

Source: KNEC reports, 2004-2012

According to KNEC reports (2004-2012) the number of students taking the subject has increased but at a very low percentage which means that the subject has not yet gained popularity. The literature available is inconclusive on the major factors influencing choice of agriculture as a subject of study. It was therefore upon this background that the study sought to investigate the factors which affect the choice of agriculture as a subject among secondary school students in both Kisii and Nyamira counties with emphasis on teachers, gender, student's attitude and school finance.

2. LITERATURE REVIEW

The influence of teachers on students' choice of subject in any institution is paramount since students rely on teachers' advice on subject choice. This means that, teachers should be good role models at all times since students imitate them in all that they do. Education is one of the most effective development investments a country can make since it is recognized globally. It is one of the critical pathways to promote social and economic development WHO [9]. It enables the development of better life and world by raising the economy, reducing fertility rate, infant and maternal mortality, improves livelihood of families, and better education for children Gachukia [10].

According to the Chief Examiner's Report in 2010 on Agriculture Science, it showed that students have ignored the fundamentals of agriculture and knowledge of practical agriculture (West Africa Examination Council [WAEC], 2010) [11]. It further indicated that most students were unable to perform simple experiments.

Shiundu and Omulando [12] revealed that technical and vocational education has been receiving a negative attitude by a large section of the Kenyan community yet JICA 2008 [13] reports that, technical and Vocational Education Training (TVET) is considered as a strong vehicle for social and economic development in most countries. A study by Gross et al. [14] indicated that when teachers have a positive attitude towards an innovation they will spend more time and efforts to ensure that it is fully implemented. The research is useful to this study to determine whether teachers have an influence on the choice of agriculture subject among students.

Onwuka [15] argues that the role of a teacher is very important when it comes to imparting

knowledge and skills to learners. The method of teaching he/she uses to present the subject matter is very vital since it may make the learner like or dislike a subject. Therefore it is very important that a secondary school teacher should be academically knowledgeable in his area of specialization because lack of the skills to impart knowledge may cause students to make wrong subject choices that might lead to failure in their exams.

Despite the importance of agriculture in Kenya's economy, the academic achievement of secondary school students in agriculture is generally poor. According to the Kenya National Examinations Council 2013 [16], the students mean scores in the subject were less than 50 per cent for the years 2007-2012 as shown in Table 2.

Table 2. KCSE Agriculture subject analysis

Year	No of candidates	Mean score (%)
2007	121,193	48.52
2008	134,039	37.27
2009	137,217	43.15
2010	140,237	37.76
2012	167,709	41.29
2013	178,419	38.87

Source: KNEC, 2013

Good teaching methods should provide the learners with information to be used now or in the future as well as guide learners to tackle problems Kivett [5]. Poor performance is attributed to poor teaching methods but this study will determine whether teachers' attitude towards agriculture subject has an influence on the choice of the subject by students.

Gender differences have become on the hotlist of critical issues around the world. Hausmann [17] argue that the issue of equality between men and women in the world still remains a challenge since there is no country in the world that has yet attained it in terms of economic participation or education.

WHO [9] reports that gender issue is still prevalent in all aspects of life and this is seen in textbooks and teachers' attitudes when assigning roles to students whereby boys and girls are assigned different roles according to their ability as perceived by the teachers.

Student's personal characteristics have a big role to play when it comes to subject choice under group four which are technically oriented. This calls in for proper guidance from teachers on

career choice and future career perspective on the subject area.

According to Jegede [18] in his study on student's attitude and how it affects academic performance found out that, there is a positive relationship between students' attitude and their performance in academics. This then clearly indicates that student's attitude towards a certain subject whether positive or negative determines the academic outcome. This study will investigate the extent to which student attitude influence the choice of agriculture subject.

3. METHODOLOGY

3.1 Population of Study

The population of the study consisted of 9380 students. The target population of the study was 1100 form four agriculture students and 74 agriculture teachers.

3.2 Sample and Sampling Procedures

Mugenda and Mugenda [19] assert that a representative sample is one which is between 10% and 30% of the target population for the descriptive survey studies. Hence this study adopted 30% of the target population as a sample size. The sample size was 330 form four students of agriculture and 22 teachers of agriculture. Simple random sampling was used to identify 5 sub-counties out of 9 within Kisii County and 2 out of 5 within Nyamira County. Stratified random sampling was used to identify 4 schools per Sub County in Kisii County that gave a total of 20 schools and 2 schools from 1 Sub County in Nyamira giving a total of 22 schools. Stratified random sampling was again used to

identify students from each category as National, extra-county, county, and sub county schools who were categorized into three groups as, very bright (5) bright, (5) and not very bright (5) making a total of 15 students.

4. RESULTS AND DISCUSSION

4.1 Number of Student Taking Agriculture in Form Four

The study sought to find out a number of students taking agriculture in form four. The results are presented in Table 4.

The study realized that most (44.4%) student taking agriculture is 20-30 in number while 38.7% are above 40 in number. Only 16.7% are 30-40 in number. The findings are as a result of most counties and sub county schools have few numbers of schools enrolled as opposed to national and extra county schools were numbers are relatively high. The findings again are in agreement with KNEC 2004-2012 on low enrolment of students in agriculture subject which can be attributed to negative attitude.

4.2 Influence of Teachers on the Choice of Agriculture Subject among Students in Secondary Schools

Data contained in Table 5 revealed that 72.4% of the students agreed that teachers influenced their choice of agriculture subject, 9.6% were neutral, and 18% disagreed. This is an indication that most students follow what their teachers do in choosing a subject with a mean of 2.22 and standard deviation 1.36.

Table 3. Sample size determination

Nature of school Kisii and Nyamira	No. of students 15 per school	No. of teachers	Total
National 4 schools	60	4	64
Extra county 5 schools	75	5	80
County 6 schools	90	6	96
Sub county 7 schools	105	7	112
Total = 22 schools	330	22	352

Table 4. Students taking agriculture in form four

Number	Frequency	Percentage Response
20-30	8	44.4
30-40	3	16.7
Above 40	7	38.7
Total	18	100

Table 5. Student response on teacher's influence on the choice of agriculture

Attributes	Responses										Mean SD	
	Strongly agree		Agree		Neutral		Disagree		Strongly disagree			
	F	%	f	%	f	%	f	%	F	%		
The teacher influenced my choice of subjects	66	32.6	80	39.8	19	9.6	16	8	20	10	2.22	1.36
Lesson attendance by the teachers influence subject choice	103	51.8	57	28.6	13	6.5	14	7	12	5.9	1.87	1.18
Teachers gender influence subject choice	32	15.8	38	18.7	5	2.5	56	27.6	72	35.5	3.48	1.513
Teacher who teaches well influences subject choice	90	43.49	75	39.9	12	6.4	8	4.3	3	1.6	1.67	1.2

Another influencing factor shown by the data was that regular and timely attendance to lessons by teachers influence choice of the subject shown by (80.4%). This is clearly indicated with a mean of 1.87 that shows strong agreement, a standard deviation 1.18 shows there is little differences in responses from the responses to mean value of the strong agreement. The implication of this is that the majority of the respondents are influenced by regular attendance of lessons by the teacher. The significance of this information for this study is that regular attendance of lessons by a teacher influences students when it comes to decision making on the choice of subjects. A (63.3%) majority of students disagreed that the gender of teachers influenced their choice of subject. This is further adduced by the mean rejection of 3.48 with a standard deviation of 1.5. Only 34.5 agreed that the gender of the teacher influenced their choice of agriculture. A good number of students 83.4% of students agreed that they were influenced to do Agriculture because their agriculture teachers taught well. This was further evidenced by the mean response of 1.6 with a standard deviation of 1.2. 5.95 did not agree with it.

From the Table 6, majority, 88% of the students have a good relationship with their teachers. The good relationship is key to enhancing curriculum delivery and teaching.

From Table 7, most (94.4%) teachers agreed that career guidance influences choice of agriculture as a subject in most secondary schools to a great extent. It opens up students to future opportunities and aspirations that make students be more focused on building their future aspirations and ambitions.

Data captured in Table 8 indicated that (100%) of teachers agreed that those students who do well

in Biology have chosen Agriculture as their technical subject. This was further elaborated by the majority (80%) of teachers who indicated that students whose previous performance in agriculture was good chose the subject. Further, it was established that 93.9% of students chose Agriculture because they were guided well on career choices. Lastly, 82.7% agreed that students with generally good performance have taken agriculture to boost their scores.

Table 6. Relationship between student and agriculture teacher

Response	Frequency	Percentage response
Very good	106	52.7
Good	71	35.3
Neutral	14	7.0
Satisfactory	4	2.0
Very poor	6	3.0
Total	204	100

Table 7. Teachers response on influence of career guidance on choice of agriculture

Response	Frequency	Percentage response
Very great extent	7	38.9
Great extent	10	55.6
Moderate	1	5.6
Total	18	100

4.3 Teachers Response to Factors That Have Led to Students Choice of Agriculture in Secondary Schools in Nyamira and Kisii Counties

The study sought to establish the teacher's response on the factors that have led to students choice of agriculture subject. Their views were shown in the Table 9.

Table 8. Teachers' response to factors that have led to students taking agriculture in secondary schools in Nyamira and Kisii counties

Statements on student choice	Rating						
		SD	D	N	A	SA	Total
Those good in Biology.	f	0	0	0	9	5	14
	%	0	0	0	64.3	35.7	100
Previous performance in Agriculture is good	f	0	0	3	9	3	15
	%	0	0	20	60	20	100
Those who have been guided on different careers	f	0	0	1	6	7	14
	%	0	0	7.1	43.9	50	100
Those with general good performance.	f	0	0	2	4	9	15
	%	0	0	13.3	26.7	60	100

Key: SD=Strongly Agree, D=Disagree, N=Neutral, A =Agree, SA=Strongly Agree

Table 9. Teachers' response on teacher influence on choice of agriculture

Teaching methods	Rating						Total
		SD	D	N	A	SA	
Lecture	F	4	2	0	6	1	13
	%	30.8	15.4	0	46.2	7.6	100
Field trips	F	1	0	0	10	3	14
	%	7.1	0	0	71.4	21.4	100
Demonstrations	F	0	0	0	7	10	17
	%	0	0	0	41.2	58.8	100
Discussions	F	0	0	0	1	13	14
	%	0	0	0	7.1	92.9	100
Group work	F	0	0	0	5	9	14
	%	0	0	0	35.7	64.3	100
Drilling using past papers	F	6	2	0	6	0	14
	%	42.9	14.4	0	42.9	0	100
Projects	F	0	2	0	8	4	14
	%	0	14.3	0	57.1	28.6	100

Key: SD=Strongly Agree, D=Disagree, N=Neutral, A =Agree, SA=Strongly Agree

Table 9 indicates that the method used by the teachers to teach influences choice of Agriculture subject. It was realized that most teachers use discussions (100%), group work (100%), demonstrations (100%) and field trips (100%) to influence a student to do agriculture. Other methods which are used include lecture (53.2%), projects (85.1%) and drilling of past examinations (42.9%). Most teachers indicated that the friendly teaching methods they employ make students get attracted to choose Agriculture subject for study.

4.4 Influence of Gender on the Choice of Agriculture Subject among Students in Secondary Schools

In this part of analysis gender's influence was measured by several factors and its influence on the choice of Agriculture as a subject. A five point Likert type scale ranging from Strongly Agree = 1

that indicates very high, Agree = 2 that indicates high, Neutral = 3 that indicates moderate, Disagree = 4 that indicates low, and Strongly Disagree = 5 indicates very low. Table 10 depicts the frequency distribution of teachers influence.

Table 10. Influence of gender on choice of subject

Response	Frequency	Percentage response
Yes	64	31.4
No	140	68.6
Total	204	100

Most of the students who were interviewed, 68.6% said taking agriculture as a subject was not influenced by their gender. While 31.4% indicated that their gender influenced them to take agriculture.

Majority of the students interviewed (41.4%) and 27.1 % of males and females respectively indicated they did not choose agriculture because of their gender. Only 15.35% of males and 16.3% of females chose agriculture because of their gender. This is contrary to Kikechi et al. [20] in a study on factors influencing choice of technical subjects among the secondary school graduates in Kenya found out that gender influenced the choice of subject (Table 11).

According to Chi-square (Table 12), gender did not influence the choice of agriculture subject. Pearson chi-square=0.109, continuity correction =0.147, likelihood ratio=0.110 and linear-by-linear association=0.110, these values are greater than 0.05 indicating clearly that gender did not influence agriculture choice among students in Kisii and Nyamira counties.

Most students who objected gender influenced their choice of agriculture indicated that agriculture is the best alternative in the career world and is meant for all students.

4.5 The Influence of Students Attitude towards the Choice of Agriculture Subject in Secondary Schools

The third research question was to investigate whether a student's attitude influenced the choice of agriculture subject in secondary schools in Nyamira and Kisii Counties. Table 13 summarizes the responses of students on factors that influenced their choice of agriculture.

Agriculture students who were interviewed (63.4%) indicated that career goals that require agriculture made them choose the subject, (22%) indicated that agriculture is an interesting subject, 7.3% said the good previous performance made them choose agriculture, 4.9% indicated their agriculture teachers were inspiring inform one and two prior to subject selection in form three. Lastly, 1.5% chose agriculture because their friends had decided to do agriculture. This clearly shows that career opportunities require relevant skills for one to be able to compete favorably in the job market today.

Table 11. Gender* influence of gender on the choice of subjects cross tabulation

		Did your gender influence choice of subjects		Total
		Yes	No	
Gender Male	Count	31	84	115
	% within Gender	27.0%	73.0%	100.0%
	% within Did your gender influence choice of subjects	48.4%	60.4%	56.7%
	% of Total	15.3%	41.4%	56.7%
Female	Count	33	55	88
	% within Gender	37.5%	62.5%	100.0%
	% within Did your gender influence choice of subjects	51.6%	39.6%	43.3%
	% of Total	16.3%	27.1%	43.3%
Total	Count	64	139	203
	% within Gender	31.5%	68.5%	100.0%
	% within Did your gender influence choice of subjects	100.0%	100.0%	100.0%
	% of Total	31.5%	68.5%	100.0%

Table 12. Chi-square tests

	Value	df	P value	Exact sig. (2-sided)	Exact sig. (1-sided)
Pearson Chi-Square	2.567 ^a	1	0.109		
Continuity Correction ^b	2.102	1	0.147		
Likelihood Ratio	2.556	1	0.110		
Fisher's Exact Test				0.128	0.074
Linear-by-Linear Association	2.554	1	0.110		
N of Valid Cases	203				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 27.74; b. Computed only for a 2x2 table

Table 13. Factors that influenced the choice of agriculture

Item	Frequency	Percentage response
The subject is interesting	45	22
Good previous performance	15	7.3
Career goals require agriculture	130	63.4
My friend chose agriculture	3	1.5
My agriculture teacher was inspiring in form 1 and 2	10	4.9
Total	204	100

The students were asked to indicate why they did not enjoy agriculture subject in the school. Table 14 shows the responses.

Most students indicated that they do not enjoy agriculture because the agriculture teacher does not explain agriculture concepts well (50%). This concurs with Egbule [21] in his study that, every agriculture teacher must be effective in teaching, be professional, focused, innovative, and be concern about the student's welfare. This will make learners like the subject and choose it for study.

Teacher dictates agriculture notes very fast (40%), the teacher is very harsh (5%) and the teacher is very slow (5%). This could also lead to poor academic performance of the subject.

Most students who were interviewed, 65.2% indicated that the language used in teaching agriculture is simple for one to comprehend the content delivered by the teacher in class. This agrees with Curran and Rosen [22] that students prefer subjects that are taught by teachers who are enthusiastic, well spoken, knowledgeable, caring, and helpful as opposed to instructors who are dry, inflexible, and unclear for they do not encourage students to take the subject for study.

Sixty-six out of 204 or 32.4% of the students said the language is moderate and 2.5% said it is difficult and confusing (Table 15). Agriculture is one of the technical subjects taught in secondary schools, hence the simple language used by teachers makes it easier for the students to comprehend and understand the subject and pass.

Table 14. Reason for not enjoying agriculture lessons

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Teacher does not explain well	10	4.9	50.0	50.0
	Teacher is too slow	1	.5	5.0	55.0
	Teacher dictates very fast	8	3.9	40.0	95.0
	Teacher is harsh	1	.5	5.0	100.0
	Total	20	9.8	100.0	

Table 15. Level of language used during agriculture lessons

Response	Frequency	Percentage response
Very Simple	49	24
Simple	84	41.2
Moderate	66	32.4
Difficult	1	0.5
Confusing	4	2
Total	204	100

Table 16. Level of attitude used during agriculture lessons

		Frequency	Percent	Cumulative percent
Valid	Very great extent	10	55.6	55.6
	a great extent	8	44.4	100.0
	Total	18	100.0	

Most teachers agreed that student attitude influences choice of Agriculture as a subject. 55.6% of the teachers agreed that attitude affects choice of agriculture to a very great extent while 44.4% indicated it is to a great extent (Table 16). This agrees with Azubuike [23] and Orodho et al. [24] concluded that student attitude towards the subject affects academic performance. The significance of this information for this study is that student's attitude plays a major role in the learning process more especially when it is positive the results are good compared to the negative attitude that leads to poor results. Hence should be positive always.

Majority of the students who were interviewed, 66.7% perceives agriculture as an easy subject hence chose it for study while only 33.3% take it as a moderate subject (Table 17). This concurs with Esther [25] in a study on factors influencing choice of agriculture subject by students in Kajiado County that students chose the subject because they have a positive attitude towards it. Agriculture is considered as an easy subject because much of the content involves practical work that enables students to comprehend concepts faster and excel in examinations.

Most students have taken agriculture because of previous academic achievement (100%), their interest is catered in agriculture (100%), This indicates that students have a positive attitude towards the subject and chose it for study which concurs with Jegede [18] in his study on

student's attitude and how it affects academic performance and concluded that, there is a positive relationship between students' attitude and their performance in academics. This then clearly indicates that student's attitude towards a certain subject whether positive or negative determines the academic outcome (Table 18). Career prospects (89%), peer group influence (28%), study habits (37%), most students dedicate most of their time studying agriculture (58%) while most teachers disagreed that most students study only during examinations (68%).

Table 17. Teachers perception on how students perceive agriculture

Response	Frequency	Percentage response
Very ease	4	26.7
Ease	6	40.0
Moderate	5	33.3
Total	15	100

4.6 Influence of School Finance on the Choice of Agriculture Subject among Students in Secondary Schools

The fourth research question was to investigate whether School finance influenced the choice of agriculture subject among students in secondary schools in Nyamira and Kisii County. Table 19 show the responses of students on school finance on the influence of their choice of agriculture subject.

Table 18. Teachers' response on the reasons why most students are doing agriculture in secondary schools in Nyamira and Kisii counties

Statements on taking agriculture		Rating					Total
		SD	D	N	A	SA	
Previous academic achievement.	f	0	0	0	5	4	9
	%	0	0	0	55.6	44.4	100
Student individual interest.	f	0	0	0	6	5	11
	%	0	0	0	54.5	45.6	100
Career prospects.	f	0	0	1	6	2	9
	%	0	0	11	66.7	22.2	100
Peer group influence.	f	91	70	26	44	29	260
	%	35	27	10	17	11	100
Study habits.	f	19	38	57	29	67	260
	%	7	15	22	11	26	100
Dedicate most time in studying Agriculture.	f	36	31	42	65	86	260
	%	14	12	16	25	33	100
Lack concentration.	f	31	26	36	75	91	260
	%	12	10	14	29	35	100
Student only study during examinations.	f	86	91	31	18	34	260
	%	33	35	12	7	13	100

55.8% of the students agreed that the resources allocated to purchase of teaching-learning materials were fairly inadequate. This is an implication that topics that require demonstrations become abstract to students during teaching. This is in line with Waliki and Usman [26] in his study on factors that affect performance among students and concluded that inadequate physical facilities affect performance. This clearly shows that resources are not adequate to purchase learning materials. 12.6% remained neutral and 31.7% disagreed.

Table 19. Students response whether enough or lack of school finance to purchase learning materials influence subject choice

Response	Frequency	Percentage response
Strongly Agree	42	21.1
Agree	69	34.7
Neutral	25	12.6
Disagree	41	20.6
Strongly Disagree	22	11.1
Total	204	100

Table 20. Student response on whether enough classrooms in school influence choice of Agriculture as a subject

Response	Frequency	Percentage response
Strongly Agree	15	7.5
Agree	35	17.5
Neutral	13	6.5
Disagree	77	38.5
Strongly Disagree	59	29.5
Total	204	100

Most of the students with 68% disagreed that they chose agriculture because there were not enough classrooms in schools to cater for all students. This agrees with Waliki and Usman [26] in his study on factors that affect performance among students concluded that inadequate physical facilities, lack of instructional materials, and resources affected performance. This is again contrary to Olutola [27] that availability of enough infrastructures in schools contributes to good academic performance as they enhance effective teaching-learning activities. A total of 6.5% were neutral while 25% agreed that the classrooms are adequate to cater for their learning. Classrooms are important since

they facilitate teaching and learning in schools (Table 20). This means that students are encouraged to learn when there are enough rooms for use.

Table 21. Student response on the extent to which enough support staff in school influenced their choice of agriculture as a subject

Response	Frequency	Percentage response
To a very great extent	43	40.2
Great extent	33	30.8
Moderate Extent	24	22.4
Little extent	2	2.0
No extent	5	4.6
Total	107	100

Out of one hundred and seven respondents, 71% indicated that the subordinate staff to a great extent influenced their choice of agriculture subject, 22.4% were moderately influenced while 2% were little influenced and 4% were not influenced (Table 21). Subordinate staff like laboratory technician who assists by providing them with learning materials when needed. The clerk and store keeper also assist students on their day-to-day operations at the school hence their influence on the choice of agriculture subject.

Most of the teachers who were interviewed 90% indicated that there are insufficient funds to purchase agricultural equipment which affects choice of Agriculture by students (Table 22). This concurs with Kiadese [28] on the performance of agriculture found out that problems such as poor school infrastructure, lack of qualified teachers, poorly equipped workshops and laboratories as well as parents' attitudes affect the teaching of prevocational subjects like Agriculture. Those who said that school farm influence choice of the subject was (75%). This agrees with Kabugi [29] that school farm influence the choice of the subject. Further, most teachers disagreed that agricultural laboratory influences choice of Agriculture by students hence did not have any effect on the choice of subject. This is due to the fact that most schools do not have agricultural laboratories where students carry out practical lessons. Hence does not influence their choice of subject.

Table 22. Teacher level of Agreement on the influence of financial resources on the choice of agriculture by students in secondary schools in Kisii and Nyamira counties

Statements on financial resources		Rating					Total
		SD	D	N	A	SA	
Agricultural laboratory.	F	2	2	0	4	3	11
	%	18.1	18.1	0	36.4	27.4	100
School Farm.	F	1	2	0	6	3	12
	%	8.3	16.7	0	50	25	100
Insufficient fund to purchase agricultural equipment	F	0	1	0	7	2	10
	%	0	10	0	70	20	100

5. CONCLUSIONS

Teachers influence on the choice of agriculture subject, the study concluded that teachers have a great influence on student's choice of agriculture as a subject in schools. This is through regular and timely attendance to lessons by teachers which influence the choice of subject. On the other hand, teachers' detailed explanation of the content makes learners grasp concepts faster and this influence subject choice. On the other hand, teachers who are friendly in guiding them on career opportunities available also influence students on subject choice. Further, the study revealed that students perceive agriculture as an easy subject and appealing to most students and this influence them to choose the subject for study.

Based on the findings of objective two on gender influence on the choice of agriculture it was concluded that gender of the student does not influence the choice of agriculture as a subject. Neither does the gender of a teacher influence students' choice of agriculture. This was clear in the study that students do not choose agriculture because of their gender or that of the teacher. But they had a positive attitude towards the subject.

Based on the findings of objective three, on students' attitude on the choice of agriculture, the study concluded that individual interest of students towards the subject was positive and this was exhibited by regular studies that students do and quest to know more has an influence to the choice of agriculture as a subject.

Lastly based on the findings of objective four on the influence of school resources on the choice of agriculture subject, the study revealed that resources do not influence the choice of agriculture as a subject as most schools do not have adequate financial resources that support agriculture.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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