WILLINGNESS TO CHOOSE AGRICULTURE AS CAREER AMONGST SECONDARY SCHOOL STUDENTS IN IBADAN NORTH LOCAL GOVERNMENT AREA OF OYO STATE

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ABSTRACT

Students' performances in agricultural science in senior secondary school certificate examination (SSSCE) have been on decline in recent years. This study ascertained the willingness to choose agriculture as career amongst secondary school students in Ibadan North local government area of Oyo State, with the hope of improving students' academic performances in senior secondary school certificate examination as well as improving the nation agricultural development. Multistage sampling technique was used to select 149 students from two secondary schools. A well-structured questionnaire was used to collect data. The sampled students were of different age groups, majority (52.1%) were within the age range of 11 and 15years, 50.3% were females, while 56.3% of the parental occupation was trader. Student's attitude towards studying agriculture was (72.5%) unfavourable. The inability of agricultural science teachers to communicate effectively, a lack of teaching aids, poor parental encouragement, and the use of crude implements were the most frequently ranked challenges to choosing agriculture as a career. About 59.1% of the students were neutral, while 20.1 percent were unwilling to choose agriculture as a career. Majority of the students were unwilling to choose agriculture as career. Attitude of the students affect students' choice of professional careers. Therefore, these variables must be put into consideration when considering programme that will motivate students in learning and choosing agriculture as a career.

INTRODUCTION

Agriculture is a branch of science that deals with the production of crops and the rearing of farm animals by man for the purpose of providing quality and diversity of food, raw materials that drive economic transformation, shelter, employment, foreign exchange to the nation, and income to the poor (High Level Panel of Experts on Food Security and Nutrition (HLPE), 2016; Ndem, 2013; Ndem and Akubue, 2016). It also involves the science of processing, preservation, storage, marketing and distribution of the agricultural products. It is the foundation of all sciences as far as sustenance of life is concerned (Ngoddy, 2014). According to Ndem and Akubue (2016), the primary objective of agricultural science is not only to produce professional and skilled manpower, but also to educate the rural community with the aim of ensuring complete transformation of agricultural production from the subsistence level to mechanized agriculture.

In order to achieve the laudable objective of agricultural science, the National Curriculum on Agriculture for secondary schools by the Federal Government of Nigeria (FGN, 2015) specified that

agricultural science at the secondary schools should be taught theoretically and practically in order to develop the right skills and values in agricultural production in the students. This is to ensure that students at their final years in the secondary school level are exposed to both practical and theoretical aspects of agricultural science which will allow them to continue their education or become good farmers for effective food production. In lieu of this, the Nigerian government has made the teaching of agriculture compulsory in secondary schools with the aim of promoting self-reliance in food production and availability of agro-raw materials. In 2015, the Federal Republic of Nigeria in its attempt to achieve this, outlined the basic objectives of agricultural education at the secondary school level to include stimulating and sustaining students' interest in agriculture; instilling farming skills in students; enabling students to acquire basic knowledge and practical skills in agriculture; and students to integrate knowledge with agricultural skills, prepare students for future agricultural studies and expose students to agricultural occupations and opportunities; as well as produce prospective future farmers(FGN, 2015).

The achievement of the above stated objectives is a function of teachers' mode of instruction and motivation of students in the subject. Even though the government made the study of Agricultural Science in secondary schools compulsory, many teachers have difficulty teaching agricultural concepts due to a lack of teaching materials, resulting in students performing poorly in prescribed examinations such as the West African Examination Council's (WAEC) or Senior Secondary School Certificate Examinations (SSSCE) and National Examination Council's (NECO) (Ibitoye, 2017).

Evidence from WAEC results show that the number of students that passed agricultural science with distinction and credit grade levels in Oyo State between 2012 and 2016 were on the decline while those that had ordinary passes and failure were on the increase (Ibitoye, 2017).

Teaching of Agricultural Science requires appropriate instructional materials. Proper application of instructional materials is essential for facilitating and stimulating learning. The experience of the teacher and his adoption of appropriate methodology in teaching will greatly help in promoting his effectiveness and consequently students' academic performance (Akiri and Ugborugbo, 2009).

The declined performances of students in agricultural science have great implications on agricultural development of the nation therefore indicating the need to improve students' academic performance in agricultural science (Onimisi, 2012; Ibitoye, 2015). This study therefore investigated determinants of learning of agricultural science and willingness of secondary school students to choose agriculture as career in Ibadan North Local Government Area of Oyo State.

The specific objectives were to describe the personal characteristics of the students; determine the attitude of the students towards studying agriculture; identify the challenges affecting effective teaching and learning of agricultural science subject in the study area; and ascertain students' willingness to choose agriculture as a career.

METHODOLOGY
The study was carried out in Ibadan North Local Government Area of Oyo state. Its

headquarters are in Agodi, Ibadan, and it is located between latitude 7.3º and 7.4ºN and longitude 3.8º and 3.8ºE. It covers an area of 27 km2 and has a population of 856,988 people (NPC, 2016). Ibadan North LGA is bounded to the north by Akinyele LGA and to the east by Lagelu LGA, while it is bounded to the west by Ido, Ibadan South-West, and Ibadan South-East LGAs. The presence of the University of Ibadan and the Polytechnic of Ibadan generates a flurry of academic and economic activity, making the area a lively place to live.

Multistage sampling technique was used to select sample for the study. There were 18 secondary schools in Ibadan North Local Government Area of Oyo state and they all offered agricultural science as a subject. Ten percent of the schools were randomly selected giving two secondary schools, namely: Community Grammar School, Ijokodo and Islamic High School, Bashorun. There were 740 and 750 agricultural students in each school respectively. There are 210 students in Junior Secondary School Year 2 (JSS2), 320 students in Junior Secondary School Year 3, 350 students in Senior Secondary School Year 1 (SS1), 340 students in Senior Secondary School Year 2 (SS 2), and 270 students in Senior Secondary School Year 3 (SS 3). Ten percent of registered students from each school were also randomly selected. In all, 149 respondents were sampled.

Data were described using frequency counts, percentages, means and standard deviation while inferential statistical tools such as probit regression analysis was used to test the hypothesis.

The dependent variable of the study is students' willingness to choose agriculture as career. This was obtained on a 3-point rated scale of Willing, Not sure, Not-willing and, scores of 2,1, and 0 were assigned respectively. Attitude of students towards studying agricultural science was measured by providing the respondents with a set of attitudinal statements measured on a 4-point scale of strongly agree, agree, disagree and strongly disagree, scoring 4, 3, 2,1 respectively while challenges affecting effective teaching and learning were measured as High (3), Moderate (2), Low (1) and No effect (0).

RESULTS AND DISCUSSION
Personal characteristics of respondents
Table 1 shows that 53.1% of the respondents were not more than 15 years of age while 46.9% of the respondents were between 16 and 19 years of age. The mean age of the students is 15.5 years. This is expected since respondents are still in secondary school. More so, the decision to choose a career should be made when individuals are still young. This finding is supported by Maxwell and Okwulehie (2018) who said students were willing to make a choice of their life career when they are teenagers. Furthermore 49.7% of the respondents were male while 50.3% were female. The finding reveals that both male and female students were studying agricultural science. This is in line with study of Bernhard and Florian (2019) who found that the gender of the students had no influence on their choice of subjects or academic performances.

Table 1 further depicts that 22.8% of the respondents were in S.S.S 2 while 23.5% were in S.S.S 1. Some (21.5%) were in J.S.S 3. This shows that Agricultural Science subject is being taught at all levels in Oyo State secondary schools. Majority (56.3%) of the students' parents were traders, few (25.5%) were self-employed

and 9.4% were civil servants. This shows that respondents' parents were involved in different occupations. This is supported by Saleem and Hanan (2016) who discovered that parents' profession, knowledge and exposure acquire may affect the career selection of their children.

Table 1: Personal characteristics of respondents (n=149)

Variables	Frequency	Percentage	Mean
Age			
11 – 15	79	53.1	
16 – 20	70	46.9	
			15.5
Sex			
Male	74	49.7	
Female	75	50.3	
Educational Qualification			
J.S.S 2	21	14.1	
J.S.S 3	32	21.5	
S.S.S 1	35	23.5	
S.S.S 2	34	22.8	
S.S.S 3	27	18.1	
Parents Occupation			
Trading	84	56.3	
Clergy	5	3.4	
Self employed	38	25.5	
Civil servant	14	9.4	
Parents' Education			
No formal education	6	4.0	
Primary school	6	4.0	
Secondary school	60	46.1	
Tertiary	58	38.9	

J.S.S= Junior Secondary School; S.S.S= Senior Secondary School.

Respondents' attitude towards studying Agricultural science

Table 2 below shows that most ($\bar{x} = 3.6$) of the respondents agreed that they like studying Agricultural Science because it improves food production, large proportion ($\bar{x} = 1.5$) of the respondents disagreed that teachers of Agricultural Science does not make the subject interesting. More also, majority ($\bar{x} = 1.3$) disagreed that Agricultural Science is usually boring when it is being taught. More than half ($\bar{x} = 1.9$) of the respondents disagreed that their parents do not want them to study Agricultural Science as a subject. Majority ($\bar{x} = 3.2$) of the respondents agreed that the teacher always uses relevant instructional materials for teaching. Most ($\bar{x}=2.8$) of the respondents agreed that their school farm has adequate facilities for agricultural science practical. Since the majority of the students agreed that teachers were using relevant instructional materials for teaching, this implies that students will learn faster and better as Effiong and Charles (2015) posits that proper presentation of good instructional materials and the methodology employed by the teacher will enhance good understanding of the subject matter.

Table 2: Attitude towards studying Agricultural science among respondents

S/N	Statements	Strongly Disagree		Disagree		Agree		Strongly Agree		mean	Rank
		F	%	F	%	F	%	F	%		
1.	I like studying agricultural science because it improves food production.	3	2.0	2	1.3	51	34.2	93	62.5	3.6	1st
2.	Agricultural science teachers do not make the subject interesting.	79	53.0	42	28.2	15	10.1	13	8.7	1.5	7th
3.	Agricultural science subject is usually boring whenever it is being taught.	73	49.0	58	38.9	13	8.7	5	3.4	1.3	8th
4.	My parents do not want me to study Agricultural science as a subject.	66	44.3	61	40.9	9	6.0	13	8.7	1.8	6th
5.	The school farm has adequate facilities for Agricultural science practical.	22	14.8	31	20.8	52	34.9	43	28.9	2.8	3rd
6.	The teacher always uses relevant instructional materials for teaching.	10	6.7	16	10.7	64	43.0	59	39.6	3.2	2nd
7.	The teacher gives too much note to write during the lesson.	36	24.2	51	34.2	38	25.5	22	14.8	2.3	5th
8.	The time allotted for the subject on the time-table is too short.	47	31.5	52	34.9	25	16.8	25	16.8	2.8	3rd

F= frequency

Table 3 reveals further that 72.5% of the respondents had unfavourable attitude towards studying agricultural science, 12.8% had neutral attitude while 14.8% had favourable attitude. The reason for this unfavourable attitude by the students might be as a result of the rigour involve in the practical aspect of the subject. This is supported by Otekunrin and Oni (2017) who affirms that some students dislike agricultural science due to the rigorous practical works which are carried out on the farm. This unfavourable attitude towards studying agriculture may pose danger to the future of Nigeria agricultural production.

Table 3: Categorisation of respondents based on attitude towards studying Agricultural science

Attitude	Frequency	Percentage	Mean
Unfavourable	108	72.5	19.2
Neutral	19	12.8	
Favourable	22	14.8	

Description of respondents according to challenges affecting teaching and learning of Agricultural science

Table 4 depicts the challenges in teaching and learning agricultural science. Poor teaching skill by teachers, inability of agricultural science teacher to communicate effectively, lack of teaching aids, instructional aids, and technical aids, and a lack of parental encouragement are the most ranked challenges. This implies that parents' encouragement plays important role in study of choice of career. The use of crude implements also affects the interest of the students in choosing Agriculture as a career. The use of crude implements such as hoe and cutlass could reduce the interest of young peoples' involvement in agricultural production.

Table 4: **Distribution of respondents based on challenges affecting effective teaching and learning of Agricultural science.**

Challenges	No effect		Low		Moderate		High		Mean	Rank
	Freq	%	Freq	%	Freq	%	Freq	%		
Agricultural science teachers' ability to communicate effectively.	32	21.5	3	2.0	43	28.9	71	47.7	2.0	2nd
Teaching skills and proficiency of agricultural science teachers	17	11.4	13	8.7	63	42.3	56	37.6	2.1	1st
Availability of teaching aids, instructional aids and technical aids.	19	12.8	26	17.4	63	42.3	41	27.5	1.8	4th
Poor learning environment affect the assimilation of the students in Agricultural science	34	22.8	38	25.5	29	19.5	48	32.2	1.6	7th
Student's perception of relevance of the subject to the society.	22	14.9	29	19.6	65	43.2	33	22.3	1.7	5th
Agricultural production is meant for low status of people in the society.	44	29.5	24	16.1	48	32.2	33	22.1	1.5	8th
Parent's encouragement facilitates learning of the subject.	25	16.8	18	12.1	56	37.6	50	33.6	1.9	3rd
Achievements of my parents spur my interest in studying Agricultural science.	37	24.8	25	16.8	36	24.2	51	34.2	1.7	5th
Government policy does not encourage the learning of agriculture among students.	44	29.5	29	19.5	44	29.5	32	21.5	1.4	11th
Inadequate facilities hinder my interest in studying agricultural science.	37	24.8	35	23.5	36	24.2	41	27.5	1.5	9th
The use of crude implements hinder students from studying agricultural science.	42	28.2	27	18.1	36	24.2	44	29.5	1.6	7th

F=frequency

Categorisation of respondents based on challenges affecting learning of Agricultural science

Table 5 reveals that 53.7% of the respondents indicated that the rate at which the challenges were affecting teaching and learning of agricultural science was high while 46.3% of the respondents indicated that it was low. The challenges identified agree with the work of Otekunrin and Oni (2017) who identifies poor funding and inadequate teaching methods as major challenges facing agricultural science teachers. These challenges portend danger for effective teaching and learning of agricultural science. The provision of solutions to the aforementioned challenges will pique the interest of students in studying agriculture.

Table 5: Categorisation of respondents based on challenges affecting teaching and learning of agricultural science

Category	Frequency	Percentage	Mean
Low	69	46.3	
High	80	53.7	18.9

Willingness to choose agriculture as a career

Table 6 shows that most ($\bar{x} =1.6$) of the respondents are willing to invest in agricultural business in future, and are willing to take agriculture as a career.

Furthermore, more than half ($\bar{x} =1.6$) of the respondents are willing to encourage people to go into agriculture as a career, and are willing to gain practical knowledge that will make them invest in agricultural business.

Table 6: Distribution of respondents according to their willingness to choose agriculture as a career

S/N	Items	Not Sure F	Not Sure %	Not Willing F	Not Willing %	Willing F	Willing %	Mean	Rank
	Are you willing to invest in agricultural business when you finish your academic?	47	31.5	32	21.5	70	47.0	1.3	3rd
	Are you willing to take agriculture as a career?	52	34.9	46	30.9	51	34.2	1.0	5th
	If Agriculture is not too demanding, will you take it as a career?	53	35.6	34	22.8	62	41.6	1.2	4th
	Agriculture is stressful, are you willing to take it as a career?	50	33.6	51	34.2	47	31.5	1.0	5th
	Are you willing to encourage people to go into Agriculture as a career?	28	18.8	15	10.1	106	71.1	1.6	1st
	Are you willing to have practical knowledge that will make you invest in agricultural business?	39	26.2	14	9.4	96	64.4	1.6	1st

Categorisation of the respondents based on their level of willingness to choose agriculture as a career

Table 7 shows that 59.1% of the respondents were neutral to choose agriculture as a career, 20.1% were not willing while 20.8% of the respondents were willing. The reason for the unwillingness of students to choose agriculture as a career may be because it is not as lucrative as compare to other professions. This is supported by Ojebiyi *et al*. (2015) who affirmed that majority of students preferred other professions to agriculture as careers.

Table 7: Categorisation of respondents based on their level of willingness to choose agriculture as a career

Level of willingness	Frequency	Percentage	Mean
Neutral	88	59.1	
Low	30	20.1	7.1
High	31	20.8	

Result of probit regression of factors influencing the choice of students' career in agricultural science

Table 8 shows the relationship between independent variable such as age, educational qualification of the respondents, parental level of education, attitude, challenges to studying agriculture and the dependent variable. Among the independent variables attitude of the students was a key factor significantly influencing students' learning and willingness to choose agriculture as a career. This implies that a positive attitude will encourage more graduates to participate in the farming business. As a result, agricultural science teachers must engender a positive attitude in their students in order for them to be interested in the agricultural business.

Table 8: Regression Analysis of Factors Influencing the Choice of Students' Career in Agricultural Science

Variables		Coefficient Estimate	Std. Error	Z	Sig.	Decision
Age		-0.09	0.07	-1.36	0.17	NS
Educational qualification		-0.01	0.09	-0.07	0.94	NS
Attitude		0.02	0.03	0.87	0.05	S
Parental level of education		0.06	0.10	0.60	0.09	S
Challenges		-0.02	0.02	-0.95	0.34	NS
Intercept[b]	Not willing	1.99	1.06	1.88	0.06	
	Willing	1.41	1.08	1.31	0.19	
Chi-square		92.6				

Log likelihood 139.1   S=significant,   NS= not significant

CONCLUSION AND RECOMMENDATION

The study revealed that the determinant of learning of Agricultural Science among secondary school students in the study area was attitude of the student toward studying agriculture. Most of the secondary school students were unwilling to choose agriculture as career because of the constraints faced. As attitude affect students' choice of professional careers, this variable must be put into consideration when considering programme that will motivate students learning and choosing agriculture as a career. Facilities such as constant power supply and well-equipped laboratories may encourage both teachers and students in the teaching and learning of agricultural science in secondary schools.

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