



Received: 11-06-2023  
Accepted: 21-07-2023

ISSN: 2583-049X

## **Effects of Agricultural Science Teacher's Job Related Factors on Secondary School Student's Academic Performance in Kebbi State, Nigeria**

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### **Abstract**

This study investigated the effects of agricultural science teachers' job-related factors on students' academic performance in senior secondary schools in Kebbi State, Nigeria. Factors considered for study were classified into external (motivation, age, teaching methods, principals' leadership skills, etc.) and internal (teachers' attitude, farm as punishment, job satisfaction, area of specialization, etc.) respectively. Multistage sampling was used to collect the data for the study. Three (3) educational zones were randomly selected from the six existing educational zones in Kebbi State. Twenty (20) schools were randomly selected from each of the zones to obtain a total of sixty (60) schools. Two teachers were randomly selected from each of the selected secondary schools to obtain a total of one hundred and twenty (120) respondents. The principal and vice principal of each schools were also considered in the

selection for data collection. The data for the study were collected using questionnaires developed by the researcher. The data collected were used as proxy for student academic performance against the teacher's job-related factors across the educational zones. Multiple Regression and Spearman Rho Correlation were used to test the relationship between the selected variables and students' performance in SSCE at  $p < 0.01 - 0.09$  interval level. The study found that, students' external factors (age 0.031\*\*, principals' leadership skills 0.042\*\*, number of class taught per day 0.064\*, number of students per class 0.090\* and teachers' monthly salary 0.021\*\*) are significantly influenced students' academic performance more than the internal factors (area of specialization 0.065\* and agricultural science teachers' qualification 0.000\*\*\*).

**Keywords:** Job, Student, Academy Performance, Influence, Agricultural Science, Teacher's Related Factor

### **1. Introduction**

#### **1.1 Background of the Study**

Agriculture is an integral part of an economic system and by means of direct and indirect links, has an important influence on the economic and social development in general, especially in respect of the industrial sector. It is well known that, Nigeria is an agricultural country before and after the discovery of petroleum, as stated by the Food and Agricultural Organization of United Nations (FAO, 1999) <sup>[15]</sup> that agriculture is usually the mainstay of the economy and level of food supply are relatively low, which was also in line with what was written by Inoaya (2004) <sup>[24]</sup> that food supply is generally inadequate in quantity and quality in the Country with significant increase in the country's population. This made Nigeria resorted to importing a lot of her food with her foreign exchange earnings. Because of its essential roles of reversing the falling social and economic status across the globe, Agriculture cannot be neglected.

Agriculture according to Ndem (2013) <sup>[39]</sup>, is the branch of science which deals with growing of crops and rearing of domestic animals for the benefit of man and raw materials for the industries. This scholar further explained that agricultural science deals with the production of crops and rearing of farm animals by man for the purpose of providing food for growing population, raw materials for agro-based industries and shelter as necessity for man. It also involves the science of processing, preservation, storage, marketing and distribution of the agricultural products. Meanwhile, Ngoddy (2000) <sup>[40]</sup> explained that agricultural science is the foundation of all sciences as far as sustenance of live is concerned.

Agricultural science provides food, raw materials, shelter, improve rural development, employment opportunity, foreign exchange to the nation and income to the farmers and his family.

Anyanwu (1982) and Akinsanmi (1988) put forward that agricultural science involves cultivation of land to produce crops and keeping animals for direct value to man, and involves, marketing, and distribution of agricultural commodities.

The National Curriculum of Agriculture (2007) enumerated the following as the specific objectives of introducing agricultural science at the secondary school;

1. To stimulate and sustain students interest in agriculture.
2. To influence students' interest to progressively advance in farming.
3. To advance food production through improvement of agricultural techniques in students.
4. To provide occupational entry level skills in agriculture to the interested students.
5. To prepare students adequately for producing and marketing farm commodities efficiently and profitably.
6. To enable students, acquire basic knowledge and practical skills required for future studies in agricultural field.

These objectives of agricultural science are 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. Apart from the roles of Agriculture enumerated by the FGN (2013). It also contributes about 60% to the export earning of Nigeria and about 90% food need of the people (Thimodu, 2008)<sup>[49]</sup>.

In order to achieve the laudable objectives of agricultural science, the National Curriculum on agriculture for secondary schools (2007) reported that, agricultural science at the secondary schools should be taught theoretically and practically in order to develop the right skills and values of agricultural production in the students, and also proposed that the final examination of the students in agricultural science at the secondary school must be based on both theory and practical examinations. 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 enabled them to further their education or become good farmers for effective food and fiber production.

Agricultural science today is regarded as one of the most important aspects of human life. It has greatly increased man's knowledge of his environment together with basic needs of food, shelter and clothing. Nigeria being a developing country and in a great need to meet the food demand of her population requires effective and purposeful agricultural education in her schools. To this effect, the government of Nigeria attaches so much importance to agriculture and it is encouraged in all secondary schools to improve the teaching and learning of agricultural science (FAO, 1999)<sup>[15]</sup>. The aims of teaching agricultural science in secondary schools is to arouse the interest of students, creates awareness on agriculture and to train the young people in the acquisition of appropriate skills, abilities and competencies both mental and physical in order to equip the individual to live and contribute meaningfully to the development of our society (National Policy of Education, 2004). Moreover, agricultural science is one of the core subjects to be taught in secondary schools and this is reflected in the new National Policy of Education (2004) which prescribed the teaching of agricultural science in Senior Secondary Schools in order to stimulate the interest of the students and for them to choose their life career in agriculture.

Agricultural science needs to be viewed as important greatly than or as other subject in the secondary schools due to several opportunities attached to the subject in the sense

that, the profession serves as the corner stone of the nation that cut across every other sectors. The effectiveness and feasibility of the teaching of the subject must be proper and be coupled with several aspects of the instructional material to foster learning. As its earlier said that Agriculture is usually the mainstay of the economy which prompts the demand and consumption of food to be relatively high in the nation, and due to this, the teaching and learning of Agriculture is very paramount because it educates, stimulate and arouse the interest of the students from tender age, as one of the adage implies that "the education is from the cradle to the grave". It therefore, become pertinent at this juncture to point out various factors that influences the teaching of agricultural science teachers in senior secondary school, how it influences the students' academic performance in Kebbi State.

Teaching, according to Urevbu (1991)<sup>[50]</sup> is the act of giving instructions and developing knowledge, skills, values and attitudes to somebody. Ndem (2013)<sup>[39]</sup> conceptualized teaching as an act, occupation, and an enterprise. The researcher further explained it as an act, because it involves application of styles, strategies and demonstrations to ensure that the learners acquire the knowledge. As an occupation, because it needs procedure for certification, a set of standards of performance and acquisition of the required skills. Then as an enterprise, because it involves lots of activities such as marking registers, setting examinations questions, checking noise in the classroom; keeping record, maintaining disciplines and other jobs assigned by the head of the school from time to time. Akuma and Ogonnaya (2007)<sup>[4]</sup> reported that teaching entails creating opportunities from which learners can gain such experiences that will enable them acquire the knowledge, skills, attitudes and appreciations that will serve as tools in life.

The assertion of Akuma and Ogonnaya, implies that teaching is a human activities undertaking with the principle aim of assisting the learner or individuals acquire reasonable skills for a successful living.

As stated by Knobloch (2001)<sup>[29]</sup> Akuma and Ogonnaya (2007)<sup>[4]</sup>, for effective teaching and learning to take place in the school, certain factors external (recognition & motivation of teachers, teaching methods, age, insecurity & workload, number of agric. science teacher per school, principal's leadership skills, number of working hour per week, number of periods per week, number class taught per day, number of students per class, teachers' monthly salary) and internal (teachers' attitude, farm as punishment, absenteeism, job satisfaction, job – family conflict, area of specialization, teachers' level of education, career advancement, teachers' qualification) needed to be put in place.

A study was conducted on the instructional behaviours and practices of teachers which sought to determine the best practices that would foster an increases in student learning, in collaboration with agricultural science curriculum (Stronge, *et al.* 2008)<sup>[47]</sup>. This research centered on identifying characteristics of successful teacher traits over four levels of effectiveness (high to low) within four domains. In the assertion of (Akinsolu, 2010)<sup>[3]</sup>, it was found out that availability of qualified teachers determined the performance of students in schools. Furthermore, lack of properly qualified agricultural teachers resulted to reduced interest and poor performance of students in agriculture, as it's generally accepted that students normally look up to end

up be like one of the best teachers in their various school due to the fact that there's no single day, he or she enters class and will not gain new things.

Researchers have examined the influence of teacher characteristics such as gender, educational qualifications and teaching experience on students' academic achievement with varied findings. Yala and Wanjohi (2011) <sup>[53]</sup> and Adeyemi (2010) <sup>[2]</sup> found that teachers' experience and educational qualifications were the prime predictors of students' academic achievement.

Etsy's (2005) <sup>[12]</sup> study in Ghana found that the teachers' factors significantly contributed to low academic achievement were incidences of lateness to school, absenteeism, and inability to complete the syllabi. Moreover, the nature of teachers earns them the regards as experts who know more than their students. This may involve answering questions, correcting or validating the students' work or what they have said. For the teacher to remain as an expert, there must be a continuous in-service training programme for him and the urge to expand his breadth of understanding.

In a situation where there is little or no in-service training programmes and other opportunities for the teachers to widen their knowledge, it is obvious that they will become incompetent. This is further buttressed by Wilbert (1978) when he said that the teacher's ability to remain well informed on new developments in his ability to make creative and critical judgments concerning the main trends in his field bear directly upon his competence as an expert. In other words, if teachers are behind time and obsolete in their disciplines, their effectiveness in the teaching of agricultural science in their various secondary schools becomes questionable. It therefore, become pertinent at this juncture to state or examine various job related factors that affect the teaching of agricultural science teachers' job related factors in secondary school student's performance here in Kebbi State.

According to Ayandele (2005) <sup>[7]</sup>, non-availability of school equipment, inadequate instructional supervision, socio-economic background of students, etc. hinder the effective performance of students in teaching and learning. Furthermore, Madike (2003) <sup>[31]</sup> pointed out that most of the schools in Nigeria do not teach agricultural science and even in schools where it is taught, there is no serious attempt to provide adequately qualified teachers and necessary facilities as specified by the curriculum. Most of our students, he noted lack both the interest and aptitude for agriculture. The syllabus are not oriented towards the need of the society and the standard of teaching of many agriculture science teachers is nothing to write home about. According to Mbanuju (1998) <sup>[34]</sup>, teachers of agricultural science make the subject boring. They use the farm as punishment ground for offending students, and this make students feel that the school farm is mainly for punishment. This goes a long way to kill interest of the students especially for practical work. As a result of this, students feel very proud to be associated with such subject like Chemistry, Physics, Biology, Mathematics and Additional Mathematics even when they do not have aptitude for such subjects. This makes them disregard subject like Agricultural science which they feel is for them never-dowells. This impression of the youths about agriculture makes it difficult for the teachers to make any meaningful impact on the students both in the classroom and school farm

during practical lessons.

## 1.2 Statement of Research Problem

Many studies were carried out reporting mass failure of students in agricultural science performance (SSCE). The mass failure was attributed to ineffective teaching of agricultural science teachers as internal factors (teachers' attitude, farm as punishment, absenteeism, job satisfaction, job – family conflict, age of the teachers, area of specialization, teachers' level of education, career advancement, teachers' qualification) in senior secondary school. Sutcliff (2011) <sup>[48]</sup>, discovered in his study that, among school-related factors, teachers matter most. i.e. teacher is the single most important resource to a student's learning. However, controversy still exists among scholars as to what contributes singly or jointly to effective performance of student, out of which two central components of the conceptual framework were discovered; personal factors (internal) and environmental factors (external), all interact in the beginning of the teaching career, and affect teacher efficacy (Knobloch, 2001) <sup>[29]</sup>.

Due to all these controversies, the researcher discovered that the previous studies focused more on some of the internal factors that influenced the teaching of agricultural science teachers in secondary schools, and the gaps meant to be filled as a result of this research work is to determine the 'agricultural science teachers' job-related factors (internal and external) and the effects on secondary school students' academic performance in Kebbi State. This is conducted in order to identify the inflicting factors and improve on it for better academic performance of students in the study area.

In a bid to address the problems, the following research questions are relevant.

1. What are the socioeconomic characteristics of the respondents?
2. What are the factors that influence the performance of agricultural science teachers in the study area?

## 1.3 Objectives of the Research

The general objective of this study is to identify teachers' job related factors affecting the academic performance of agricultural science students in Kebbi State Secondary Schools.

## 1.4 Specific Objectives of the Research

The specific objectives of this study were to;

1. Describe socio-economic characteristics of the respondents (teachers and principals).
2. Determine the factors that influence the performance of agricultural science teachers in the study area.

## 2. Research Methodology

The study population comprises of all agricultural science teachers and principals (head teachers) in Kebbi State, while the sample frame constitutes selected agricultural science teachers and head teachers in government secondary schools across the State.

Based on the information gathered from Kebbi State Ministry for Basic and Secondary Education (February 2019) <sup>[26]</sup>, the study area has a total number of 195 Government secondary schools located within the six (6) existing educational zones well distributed across the State. The six (6) educational zones and the secondary school's distributions in the State includes; Argungu has 28

secondary schools, Birnin Kebbi has 35 secondary schools, Bunza has 30 secondary schools, Jega has 25 secondary schools, Zuru zone has 49 secondary schools and lastly Yauri zone with 28 secondary schools. The total distribution of secondary schools' teachers and head teachers across the State is 3,699 and 496.

The sampling technique employed for the selection of the respondents in the study area was Multistage sampling technique.

Stage one, three (3) educational zones (Birnin Kebbi, Argungu, and Zuru) were randomly selected from the six educational zones in Kebbi State. Out of the three (3) selected zones, twenty (20) government secondary schools were randomly selected from each zones to obtain a total of sixty (60) schools. The second stage involved random selection of two teachers from each of the selected secondary schools to obtain a total of one hundred and twenty (120) respondents. The third stage involved the consideration of the principal and vice principal of each of the sixty (60) selected secondary schools to obtain a total of one hundred and twenty (120) respondents. These categories of respondents were used to assess the academic performance of the students on Senior Secondary Certificate Examination (SSCE) for ten years.

A survey was conducted using structured questionnaire through personal interviews by the researcher. The questionnaire was developed through the consultation of relevant literature to identify the variables to include in the survey. In general, questionnaire was preferred due to its suitability in obtaining appropriate data required to meet specific objectives of the study.

The variables measured include job related factors influencing teaching of agricultural science in secondary school using open and close ended questions. The close and open-ended questions were designed and ordered on five-point Likert format ranging from strongly agree (SA = 5) to strongly disagree (SD = 1). These values were to get the mean weight, average weight calculated, items with scores equal to the mean and above was considered as bench mark for the study.

$$\text{Average score} = \frac{\text{Total sum of score}}{\text{Total number of respondents}}$$

For the clear description of the responses, the scale was further trichotomised as agree, undecided and disagree. Structured and unstructured question was prepared for the teachers and principals each to be administer respectively. The pilot study was conducted to test the questionnaire in terms of the accuracy of the questions to measure the desired objects. The study used two instruments to collect data, which were questionnaire and interview schedule. The purpose of interview schedule created the right environment or atmosphere for the collection of reliable and truthful information (data) without any influence of fear or pressure. The questionnaire was used to generate information from agricultural science teachers while interview schedule was used to collect succinct information (data) from principals.

Questionnaire also enable the researcher to collect data consistently across the population over a short time as well as able to explore various variables under investigation within the study hence to cut down the cost and time, while the interview schedule enabled the researcher to get accurate data as well as get in depth information regarding variables

under investigation.

The interview schedule was used for the principals in other to collect detailed or robust data. The questionnaire contained three sections A to C. Section A was used to collect information pertaining to the demography of both teachers and principal, section B was used to gather gathered information about teacher's job satisfaction, job satisfaction, teaching methods adopted, family-job conflict, teachers' workload, motivation, leadership skills of the head teacher (principal), recognition, teachers training, Job insecurity and farm as punishment for offending students. Section C provided information about teacher's attitude, access to participate in in-service training program, absenteeism of the teachers, monitoring and leadership role of principals with it's on teacher's job performance and finally, previous performance of the students in West Africa Examination Council (WAEC) and Nigeria Examination Council (NECO) for senior secondary school students.

The data were compiled, organized and analyzed through the Statistical Package for Social Sciences (SPSS 22) which is ideal for accuracy and speed processing respectively. The analytical procedures used for achieving the objectives of the study are descriptive and inferential statistics respectively. The first research question of the study focus on the socio-economic and demographic of the respondents was attended to, described and explained using descriptive statistics. Descriptive statistics are used to describe the basic feature of the data in a study. The socio-economic or demographic of the respondents consist of variables such as age, sex, marital status, family size, level of education, number of children, etc. Objective two (2) required the application or uses of multiple regression as tool of analysis because regression analysis is a powerful statistical method that allows the researchers to examine the relationship between two or more variables of interest.

Data was subjected to spearman's correlation analysis in other to establish relationships between teacher's attitude, teachers' qualification, and teacher's remuneration on student's academic performance.

**Inferential Statistics**  
**Multiple Regression Model**

$$Y = F(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8, X_9) \text{ implicit form} \tag{1}$$

$$Y = a_0 + a_1x_1 + a_2x_2 + a_3x_3 + a_4x_4 + a_5x_5 + a_6x_6 + a_7x_7 + \dots \dots \dots ax_n \tag{2}$$

- Where:
- Y: Student's academic performance
  - X<sub>1</sub>: Teacher's attitude
  - X<sub>2</sub>: Career advancement
  - X<sub>3</sub>: Leadership skills
  - X<sub>4</sub>: Teaching methods
  - X<sub>5</sub>: Farm as punishment
  - X<sub>6</sub>: Absenteeism & insecurity
  - X<sub>7</sub>: Recognition & motivation
  - X<sub>8</sub>: Job satisfaction & workload
  - X<sub>9</sub>: Job – family conflict
  - X<sub>10</sub>: Age
  - X<sub>11</sub>: Level of education
  - X<sub>12</sub>: Area of specialization
  - X<sub>13</sub>: No of agric. Sci. teachers
  - X<sub>14</sub>: No of working hour/week

- X<sub>15</sub>: Number of periods/week
- X<sub>16</sub>: Number class taught/day
- X<sub>17</sub>: Number of students/class
- X<sub>18</sub>: Teachers monthly salary
- β<sub>0</sub>: Constant
- a<sub>0</sub> + a<sub>18</sub>: Multiple coefficient

**4. Results and Discussion**

**4.1 Socio-Economic Characteristics of the Respondents**

This section presents results of the socio-economic characteristics of the respondents in the study area. These are personal features with direct or indirect influence on secondary school student academic performance in Kebbi State, Nigeria. The major demography characteristics that are considered in this study include age, sex, marital status, religion, ethnic group, household size, nature of work, education qualification, years of teaching experience, years of formal education, area of specialization, number of classes taught per week, number of students per class and teacher’s remuneration.

**4.1.1 Age of Respondents**

The result of analysis presented in Table 4.1 shows the distribution of respondents based on age. This feature was taken into consideration to know the effect of teacher’s age distribution on student’s academic performance in Kebbi

State. Thirty percent (30.8%) of the teachers were within the age range of 36-45 years, another (11.2%) were within the age range of ≤25 years. For the principals, many (41.7%) were within the age range of 46-55 years while only 19.2% were above 56-65 years of age. The mean age of the respondents for the two categories were 42 and 51 years. This implies that a large proportion of the teachers out of the entire population in State were middle age teachers who were in their active age and are expected to deliver effectively in class. In addition, the principals too were also in their prime and active age to supervise, coordinate and manage the administrative arm of the school. A study conducted by (Martin and Smith, 1990) [32] supported that middle age teachers were more effective in communication, classroom organization, and competence. Furthermore, (Alufohai & Ibhafidon, 2015) [5] conducted a study in Edo State Nigeria, using proportionate sampling technique on selected public senior secondary schools showed middle-aged teachers of between the ages of 36 to 48 years old were more effective to produce higher students’ score than younger and older teachers. Study conducted by Zafer and Aslihan (2012) [54] found and concluded that older teachers of age 41 years old and above are more effective in teaching and good in classroom management skills than younger teachers in secondary school.

**Table 4.1:** Distribution of Teachers According to Socio-economic Characteristics

Variable	Teachers		Principals	
	Freq.	Percent	Freq.	Percent (n = 120)
<b>Age</b>				
≤25	14	11.2	-	-
26-35	24	20.0	-	-
36-45	37	30.8	47	39.2
46-55	29	24.1	50	41.7
56-65	18	15.0	23	19.2
<b>Sex</b>				
Male	84	70.0	89	74.2
Female	36	30.0	31	25.8
<b>Marital Status</b>				
Single	24	20.0	6	4.9
Married	78	65.0	105	87.2
Divorced	11	9.2	5	4.2
Widowed	7	5.8	4	3.3
<b>Religion</b>				
Christian	47	39.2	17	14.2
Muslim	73	60.8	103	85.8
<b>Ethnic group</b>				
Hausa	67	55.8	113	94.2
Igbo	16	13.4	-	-
Yoruba	37	30.8	7	5.8
<b>Household Size</b>				
≥ 5	52	43.3	27	22.5
6-10	41	34.2	79	65.8
≥ 11	27	22.5	14	11.7
<b>Nature of work</b>				
Full time	109	90.8	100	100
Per time	11	9.2	-	-
<b>Highest Qualification</b>				
NCE	30	25.0	-	-
OND	21	17.5	-	-
HND	28	23.3	27	22.5
B.Sc.	34	28.3	65	54.2
M.Sc., M.Phil., PhD	7	5.8	28	23.3

Source: Field Survey, 2020

Figures in parenthesis (\*) are mean and mean deviation

**Table 4.1 continued:** Distribution of Teachers According to Socio-economic Characteristics

Variable	Teachers		Principals	
	Freq.	Percent	Freq.	Percent (n= 120)
<b>Years of Teaching Exp.</b>				
≥5 years	48	40.0	-	-
6-10 years	39	32.5	-	-
11-15 years	14	11.7	-	-
16-20 years	19	15.8	94	78.3
< 20 years	-	-	26	21.7
<b>Years of Formal Education</b>				
≥ 15 years	51	42.5	-	-
16 years	57	47.5	76	63.3
18 years	12	10	30	25.0
≤ 20 years	-	-	14	11.7
<b>Area of Specialization</b>				
Agric. Related field	109	90.8		
Non-Agric. Related field	11	9.2		
<b>No of class taught/week</b>				
≥ 2 class	18	15.0		
3-4 classes	63	52.5		
5-6 classes	25	20.8		
≤ 7 classes	14	11.7		
<b>No of student/class</b>				
≥ 23	7	5.8		
24-48	38	32.5		
49-73	62	51.7		
≤ 74	13	10.8		
<b>Teacher's Salary</b>				
# 40,000	9	7.5		
#40,001 – #50000	20	16.7		
#50,001 – #60000	67	56.2		
#60,001 – #70000	18	15.2		
#70,000	13	10.9		

Source: Field Survey, 2020

#### 4.1.2 Sex of the Respondents

Sex of the respondents is considered of importance in this study to know the distribution of teachers in the study area based on sex and the resultant effect on student's academic performance. The result of analysis on sex presented in Table 4.1 shows that majority (70.0%) of the respondent were males with (30.0%) of females, engaged in teaching of agricultural science in study area. Similar results re-occurred for principals, as majority (74.2%) were male, while minority (25.8%) of the respondents were female respectively. From the result displayed below, it was accepted that males were more into teaching professions compared to females in the study area. But Feldman (1993)<sup>[14]</sup>, pointed out in his study that students are little biased to female teachers, which may be related to variety of factors like empathic listening, better understanding and view of concern showed by female teachers compared to the male. Another study shown that teacher's gender has its own effectiveness according to Norlander – Case, Regan and Case (1999) that women tend to be better in teaching than the male counterpart. Mwamweda and Mwamweda (2002) summarized that female teachers perform better than the student taught by male teachers. The implication of this findings is that we have more of male teachers in the study area who are involved in the teaching of agricultural science more than females in the study area, so due to this reverse might be the effect on student academic performance based on previous research findings of the scholars.

#### 4.1.3 Marital Status of the Respondents

Marital status of the respondent is captured in this study to know the number of teachers saddled with family responsibilities and how job-family roles conflict each other with effect on student academic performance in the study area. Result of analysis in Table 4.1 shows that majority (65.0%) of the teachers were married, while minority (20.0%) were single, the remaining 15.0% in the study area were either divorcee, widow or widower. Majority (87.2%) of the principals were married with very few (4.9%) single. This implies that majority of the respondents in the study area were parent and were yoked with family responsibility. Naturally, about 15.0% of the respondent (divorcee, widow or widower) were passing through one emotional or psychological trauma as a result of broken home, loss of loved ones or relationship, this can go a long way to influence or affect teacher's job delivery system both pre-class preparation due divided concentration and attention (divorcee).

For the married, they were saddled with several family roles and responsibilities and this makes it more difficult to give full concentration or attention to their job, due to the fact that they're more often distracted with family needs such as; provision of food, payment of children school fees, shelter, family health's needs, clothes, parental cares etc. all these distracted the attention and concentration of the married respondents. Previous research work of some scholars put forward by Singh, Baily & Hopkins (2000) corroborate that

interaction of work and family is an area of stress particularly for married in management and professions. In the lives of married, family life is usually the most important aspect before job. Yet married teachers often feel conflicted combining these two giant roles i.e., teaching profession and family roles uninterrupted. Since married have stronger personal, social and society pressure to attends first to the roles focusing on family and household tasks before job, this made the singles or the unmarried less free from family responsibilities, and marital distractions that may debar their concentration on the teaching of agricultural science in senior secondary schools.

#### 4.1.4 Ethnic Group of the Respondents

The result of the analysis shows respondent's ethnic distribution as illustrated in Table 4.1. This was captured in this study to know the level of attachment and sense of belongingness between students and teachers who share the same racial identity and its effects on student academic performance in the study area. Majority (55.8%) of the respondents were Northerners, with least (13.3%) from the Eastern part of the country. Majority (94.2%) of the principals were Hausa, while the remaining 5.8% were Yoruba in the study area. It was discovered that there is a sense of belongingness or attachment between students and teachers belonging to the same tribe as the findings of Finn & Voelkl, 1993; Johnson *et al.*, (2001) <sup>[25]</sup> corroborated that teachers' race or ethnicity can be of higher importance in forging strong affective ties with children because students' feelings of attachment and sense of belongingness to teachers who share the same racial identity with students. In addition, it's well corroborated by scholars that the quality of the relationship that students share with their teachers has long-term effect in their future achievement, engagement and behavioral pattern. (Howes, Hamilton, and Matheson, 1994 <sup>[22]</sup>; Meehan, Hughes, and Cavell, 2003; Pianta, Steinberg, and Rollins, 1995; Finn & Rock, 1997; Johnson *et al.*, 2001 <sup>[25]</sup>; Lee & Smith, 1995; Roscigno & Ainsworth-Darnell, 1999; Steinberg, Lamborn, Dornbusch, & Darling, 1992).

Some researchers demonstrated that academic performance and achievement is higher among students who are attached with teachers and most especially students belonging to the same ethnic group with the subject teachers (Hanushek, Kain, & Rivkin, 2004; Oates, 2003) <sup>[21, 41]</sup>. So, by the virtue of result gotten from this research work in collaboration with several other findings, proved that when students were with their teachers irrespective of the ethnic origin, encourages better academic performance in the study area, as majority of the teachers in the study area were sons and daughters of the soil.

#### 4.1.5 Household Size of the Respondents

Respondent's household size in context of this study refers to the total number of children in respondent's family in addition to him or herself and the spouse(s). The result of the analysis shows the household size of the respondents as presented in Table 4.1. Many (43.3%) had household size of  $\geq 5$ , some (22.5%) had household size of 6 - 11 and for the principals, majority (65.8%) with household size of 6 - 10, a few (11.7%) having 6-11 family members. Large numbered families whether rich nor poor are difficult to maintain. From this study, the respondents are characterized with large family members, which can automatically debar or hinder

teachers the ample opportunity personal study and skill development due several family engagements from every angle. Also, lack of proper time management and insufficient resource to cater for family needs can cause parallel shift of teacher's attention and concentration to pre-class preparation for effective classroom delivery.

Eristwhistle (1986) <sup>[11]</sup> put forward a study by pointing out the challenges faced in managing large household size, such as feeding, clothing, finances, accommodation, monitoring and health, which causes the attention of the parent (teachers) to be divided while in place of work. In this study, we have appreciable number (majority) of respondents of about 56.7% taking care of about (six) 6 to over (eleven) 11 family members as this generate lots of distraction due to care or anxiety for individual members of the family. All these took place at the expense of effective teaching to improve student's academic performance due to parallel shift of teacher's attention concentration to family needs as a result of high family size.

#### 4.1.6 Nature of Work

Information presented in Table 4.1 below shows the nature of respondent's work. Nature of work is of necessity to this study to know the extent of teacher's involvement and availability in the place of work. The result of analysis indicated that majority (90.8%) and (100.0%) of teachers and principals were full timer, meaning that they were highly available, involved and fully participating in teaching profession while the minority 9.2% were per timers. This implies that high proportion of agricultural science teachers in the study area were working to capacity and were highly available. The availability of teachers or head teachers enabled him/her full concentrate to teaching, supervision with other administrative roles on student, teaching and non-teaching staff of the school. Further findings from researchers corroborated the study that employees may remain in the organisation and exhibit passive withdrawal behaviours such as putting forth less effort (*neglect*) due to per time nature job (Farrell, 2000; Muguongo *et al.* 2015; Wambugu & Busienei, 2015) <sup>[13, 35, 51]</sup>. However, for this study, larger percentage of the respondents were full timer and did not exhibit passive withdrawal behaviour in place of work.

#### 4.1.7 Education Qualification

According to (Goldhaber & Brewer, 2000) <sup>[19]</sup>, who put forward a study about various academic degrees a teacher can possess to qualify him or her to teach agricultural science in senior secondary schools, this include; Bachelor's, Master's, Doctorate degrees, other certificates, and diplomas inclusive. However, only degree holders are qualified to teach in senior secondary schools. The scholar believed that higher degrees obtained by the teachers showed positive correlation with students' academic achievement and improve competence level of the teachers in the class.

The result of analysis as presented in Table 4.1 below shows the majority (51.6%) of the respondents (teachers) in the study area possess National Youth Service Corps certificate holder while the least (5.80%) of teachers were M.Sc. holders P.gd, M.Sc., M.Phil., PhD holders respectively. The explanation above implies that half of the respondents in the study area had benchmark requirement for teaching agricultural science in senior secondary school according to

(Goldhaber & Brewer, 2000) <sup>[19]</sup>. While the remaining half of the teachers operates or teaches with certificate below the requirement. A study inferred that for there to be an improvement in student academics performance, there must be availability of enough qualified teachers in the study area. In this study, there are qualified teachers in the study area but not enough to teach the subject. There were about 42.5% of the respondents not qualified to teach agricultural science in secondary classes. This finding corroborated that of Huang & Moon (2009) <sup>[23]</sup> who documented that teacher qualification accounted for approximately 40 to 60 percent of the variance in average of students' academic achievement.

Richardson (2008) reveals that students in urban areas performed better than students in rural areas due to availability of enough qualified teachers. However, some scholars put forward that for some student in the rural areas to perform better than their urban counterpart, qualified teachers must have to be deployed to rural schools. (Owoeye & Yara, 2011) <sup>[44]</sup>. The good performance of student was attributed to excellent instructions given by qualified teachers in addition to other inputs, as teacher formal education is imperative.

#### 4.1.8 Years of Teaching Experience

As presented in Table 4.1. The result of respondents' years of teaching experience shows that majority (40.0%) have reasonably low years of teaching experience of  $\geq 5$  years, minority (11.7%) years of teaching experience that ranges from 11 – 15 years, while majority (78.3%) of principals had 11 - 15 years but, the least of the respondents (21.7%) had teaching experience of above 20 years. This implies that majority of agricultural science teachers in the study area were newly recruited due to their low years of teaching experience. Previous research work of some scholars put forward by Odumbe, *et al.*, 2015 <sup>[42]</sup> supported that high level of teacher's experience is one of the factors that enhance performance in secondary schools. Ong'ele (2007) <sup>[43]</sup> also established that teachers with more teaching experience performed better in actual classroom teaching than those with less teaching experience. Another scholar put forward a study on the effect of teacher experience on student learning have found a positive relationship between teacher effectiveness and their years of experience, (Kitgaard & Hall, 1974; Murnane & Phillips, 1981) <sup>[28, 36]</sup>. The evidence currently available in the study area suggests there's mass availability of inexperienced teachers in the study area and has influenced the student academic performance compare to teachers with longer year of teaching experience. Inexperienced teachers are less effective more in teaching than the experienced teachers, because the benefits of years of teaching experience in an inexperienced teachers appear to level off after years of involvement in teaching professions (Rivkin, Hanushek, & Kain, 2000).

#### 4.1.9 Year of Formal Education

Result in Table 4.1 signifies that majority (47.5%) and (63.3%) of the respondents in the study area have reasonably high years of formal education from various certificate awarding institution found in Nigeria. These ranges from  $\geq 16$  years, with minority (10.0%) of the respondents spent 18 years, these went for further study to attain master degree in their various profession of interest.

11.7% of the respondents spent the highest number years ( $\leq 20$ ) studying for doctorate degree programs. The result or outcome of the study implies that less than average of the respondents in the study area possessed less than minimum number of years to qualify them to teach senior secondary student in the study area.

The minimum requirements in term of years of experience for Bachelor's holder is 16 years, Master's 18 years, Doctorate degrees 22 years, and other certificates respectively. However, only degree holders are qualified to teach in senior secondary schools (Goldhaber & Brewer, 2000) <sup>[19]</sup>. Year of formal education of the target audience requested to know the level or extent of training in term of formal education and technical skills respondents.

#### 4.1.10 Area of Specialization

Respondent's area of specialization as presented in Table 4.1 shows the result of various respondent's field of study. Teacher's field of study were so numerous, so to simplify the study for better understanding of the readers, it was streamlined to two major categories by the researcher, which are; agricultural science related field of study and non - agricultural science related field of study. Result of analysis based on the area of specialization reveals that, majority (90.8%) of the respondents study agricultural related courses, while (9.2%) were from another field of study not related to agricultural science but teaching the subject in the study area. The implication of this is to know the competence level of the agricultural science teacher in the study area. A study put forward by ISBE (2002) that a competent teacher is qualified in a given field of study and can demonstrates knowledge in the content area. He further states that such a teacher understands the central concepts, methods of inquiry and structure of the discipline. In addition, this enables the teacher to teach the content he needs in an advanced level of knowledge. Area of specialization enables the teacher to adequately address detailed higher order questions in the field of study thereby enabling the teacher to demonstrate a clear conceptual and systematic understanding of the course content. As the saying implies that, "no nation can rise above the quality of its teachers." Meaning that quality teacher is very germane to the academic success of the study (Fed. Min. of Edu. 2000).

#### 4.1.11 Number of Classes Taught per Day

In respect to the information gathered from (Kebbi State Ministry for Basic and Secondary Education, 2019) <sup>[26]</sup>, the number of classes taught per day is determined by the student, population, school size and arms of classes found in the schools. In addition, this serves as the predetermining factor to the number of subject teacher deployed to the school. The result of the analysis on number classes taught per day shows the majority (52.5%) of the respondent taught about 3-4 classes per day, minority (11.7%) taught about  $> 5$  classes per day. Teachers, have six hours to spend in school and some of the teachers use the whole time to teach entering from one class to another. Some of them have no breathing space to relaxes and prepare for the next class. Teachers in this category are always exhausted after the day's work, this signifies that, respondents in the study area are under the duress of great workload and this goes a long way to influence student's academic performance in the study area, because it's somehow difficult for an exhausted



teacher cannot deliver effectively in class. This corroborate the study put forward by Stickler (2000) that workload is the sum of all activities that takes over the time of an employee. Workload can either be heavy (overload) or light (under load). Debra (1995) [10] described in his study that, overload is a situation in which employees feel they are being asked to do much more than time or ability permits. He further stated that working under time pressure can be stressful because people are anxious when they have a lot to do before some deadline.

**4.1.12 Number of Student per Class**

Table 4.1 shows the distribution of student per class in the study area, the result of this study affirm that the majority (51.7%) of student’s population in a class are about 49 – 73, minority (7.0%) consist of 23 students per class. This uncomfortable student’s population per class influences academic performance negatively and contributes to teachers worn out or burn out due to class congestion. Several schools were up to 73 per class and this class size is much more than any teacher’s control.

Selingo’s observation confirms the status quo (current situation) in the Nigerian schools where there is the case of overpopulation and overcrowding and the effect on academic performance. Based on the information gathered by the researcher on field, it was discovered that the least range of student per class was between 49 and 73. Whereas, the National Policy statement on Education, revised version (2004) section 101 (a) (ii) states that, *the Federal Government shall prescribe the minimum standards of education at all levels... in primary and secondary schools, there shall not be more than 40 pupils to a class.* The class size in the study area is over populated and congested, almost doubled the recommended or stipulated prescription given by the National Policy statement on Education in 2004. This has greatly contributed to poor academic performance of the student in the students in so many areas.

**4.1.13 Teachers Salary**

The result of the displayed in Table 4.1 below shows the teacher’s remuneration (salary) earned at the end of month. Majority (45.4%) of the respondent earned about #50001 - #60000 at the end of the month, minority (10.9%) earned #70000 monthly. This result when compare with the household size of the respondents, it was discovered that, household size of the respondents in the study area is on the high side and the monthly earning collected by the teachers are too small to cater for family needs, which may prone teachers to other means of getting money to cater for the large family size of the respondents in the study area.

Majority (63.3 %) of the teachers were into other business to boast or argument the low salary been paid as remuneration at the end of the month.

Furthermore, (Businge, 2011) [8]’s findings supported the study that it is widely held belief in Nigeria that there is generally low teacher satisfaction and low morale amongst Nigerian school teachers (Daily Trust, 2010; Kayode, 2012). Furthermore, most Nigerians believe that teacher satisfaction is related to salary and reward system. In other words, the belief is that one of the factor that contributes to teacher job satisfaction is the quality of teachers’ take-home papa.

**4.2 Influence of Job Related Factors on Student’s Academic Performance**

Multiple regression analysis was used to ascertain job related variables that influence the student’s academic performance (dependent variable) as presented in Table 4.3. Collective R<sup>2</sup> value of 0.2030 was relatively low but this does not indicate that the model is bad or unreliable because, according to Granger and Newbold (1976) [21], Achen (1982) [1] and Gujarati (2004), a high R<sup>2</sup> value is not necessarily evidence in favor of a model and low R<sup>2</sup> is not evidence against it. Judge *et al.* (1991) equally noted that it is common to get high R<sup>2</sup> value yet find that some of the regression coefficients are either statistically insignificant or have signs that are contrary to reasonable a priori expectation. In addition, Goldhaber (2000) [19] stated that the most important point to be considered in regression analysis is to obtain the estimate of true population regression coefficients and draw statistical inference about them.

Table 4.30 below shows, age (p = 0.031), leadership skill (p = 0.042), level of education of the teacher (p = 0.000), area of specialization (p = 0.065), number of class taught per day (p = 0.064), number of student per class (p = 0.090) and teacher’s monthly salary (p = 0.021), were individually significant and thus influence the academic performance of senior secondary student in the study area. Age of the respondents in the study area becomes the major determinant to excellence in academic performance of the students as it shows strong statistical relationship between the student’s academic performances with p-value greater than 0.001 (p > 0.001). Descriptive result in Table 4.1, ascertained that a proportion (30.8%) of the entire population (teachers) in the State were middle age teachers who were strong, agile and in their active age are expected to deliver effectively in class as supported by Martin and Smith (1990) [32] that middle age teachers were more effective in communication, classroom organization, and competence.

**Table 4.2:** Influence of Job Related Factors on Student’s Academic Performance

Dependent Variable	Independent Variable	Unstandardized Coefficient		t-value	Sig.
		B	SE		
Student performance	(Constant)	58.445	14.370	4.067	0.000
	Teacher’s attitude	-1.266	1.423	-0.890	0.376
	Career advancement	1.372	1.450	0.946	0.346
	Leadership skills	-3.776	1.831	-2.062	0.042**
	Teaching methods	-12.473	17.445	-0.715	0.476
	Farm as punishment	-0.734	2.612	-0.281	0.779
	Absenteeism & Job satisfaction	0.960	1.645	0.584	0.561
	Recognition & motivation	-0.630	1.845	-0.342	0.733
	Insecurity & workload	1.383	2.195	0.630	0.530
	Job – family conflict	-1.624	1.100	-0.091	0.928

	Age	-0.100	0.123	1.522	0.031**
	Teacher's qualification	0.187	0.989	3.609	0.000***
	Area of specialization	3.569	2.367	1.868	0.065*
	No of agric. Sci. teachers	4.423	0.687	0.153	0.879
	No of working hour/week	0.105	0.061	0.637	0.526
	Number of periods/week	0.039	0.143	-0.621	0.536
	Number class taught/day	- 0.089	0.633	-1.871	0.064*
	Number of students/class	- 1.185	0.053	-1.708	0.090*
	Teachers monthly salary	0.000	0.000	1.288	0.021**

Source: Field Survey, 2020

$R^2 = .203$

P value < 0.05; this Indicates significance at 95% level interval.

\*\*\* 1% ----0.00

\*\* 5% ----0.049

\* 10%----0.09

In addition, Alufohai and Ibhafidon (2015) <sup>[5]</sup> conducted a study in Edo State Nigeria, using proportionate sampling technique on selected public senior secondary schools showed middle-aged teachers of between the ages of 36 to 48 years old were more effective to produce high students' score than younger and older teachers. Their findings also found that the younger teachers between the ages of 21 and 34 years old were more effective in teaching, produced higher student scores than the older ones of between the ages of 49 years and above, connotes that teacher's age is very germane to academic performance.

Regression analysis result from Table 4.3 below shows how the independent variables reliably predict the dependent variable, with p-value ( $p < 0.001$ ) meaning that, there is statistically significant relationship between the student academic performance and teacher's qualification. However, this is supported by the researcher's findings in socio-economic characteristics, showing the distribution (51.6%) of teachers in the study area were teaching with first-degree certificate (teacher's qualification). Meaning that, only half of the respondents in the study area were qualified and meet up with the requirement given by (Goldhaber & Brewer, 2000) <sup>[19]</sup>, that the academic degrees possessed by teachers to fully qualify him or her to teach agricultural science in senior secondary schools and these includes; Bachelor's, Master's, Doctorate degrees, other certificates, and diplomas inclusive. This implies that for there to be an improvement in student's academic performance in the study area, teachers must meet up with the set standard and go beyond the first degree in qualification. Huang & Moon (2009) <sup>[23]</sup> that teacher's qualification accounted for approximately 40 to 60 percent of the variance in average of students' academic achievement. i.e., teachers contribute 40 to 60 percent of student's academic performance. Meaning that, teachers are one of the major determinant of student academic excellence.

Result of analysis based on the area of specialization gathered from descriptive study reveals that, majority (90.8%) of the respondents study agricultural related course, while just (9.2%) were from another field of study not related to agricultural science yet teaching the subject in the study area. The regression result shows that there is a statistically significantly relationship between the student academic performance and area of specialization with p-value ( $p > 0.005$ ). This implies that teachers from related field of study flows or teaches with high level of competence compared to the teachers from non-related field who will have to study text book to teach student. This

finding lend support to ISBE, (2002) & Koledoy, (2011) <sup>[32]</sup> who found that area of specialization enables the teacher to adequately address harder or technical questions in the field of study or profession, thereby enabling the teacher to demonstrate high level of competence in term of skills and systematic understanding of the course content. In addition, a competent teacher is qualified in a given field of study and such a teacher demonstrates high knowledge level of professionalism in the field of study. He further states that such a teacher understands the central concepts, methods of inquiry and structure of the discipline. Moreover, this enables the teacher to teach the content he needs in an advanced level of knowledge.

The previous result of the analysis on number of classes taught per day shows how majority (52.5%) of the respondent covered about 5-6 classes per day, minority (11.7%) taught about > 7 classes per day. Teachers, have at least six hours to spend in school and some of them due to the outcome of this research will have no breathing space to relaxes and prepare for the next class. Teachers in this category were always exhausted after the day's work. This study is supported by information gotten from (Kebbi State Ministry for Basic and Secondary Education, 2019) <sup>[26]</sup>, that most of the government secondary schools with about 3 - 5 arms per class and are expected to have not less than 5 - 6 agricultural science teachers, each taking at least 3 to 4 periods per week to give a total number of 10 - 15 periods per week. Teacher's high workload goes a long way to influence student's academic performance in the study area, because it's quite difficult for an exhausted teacher to deliver effectively in class.

Result from Table 4.3 corroborated the previous findings from Table 4.1 as there was significant and statistical relationship between the student academic performance and the number of classes taught per day in the study area with p-value ( $p > 0.005$ ). Sichambo (2011) <sup>[47]</sup> recommended that for teachers' workload to be reduced, there must be employment of more personnel. He advised that secondary school teachers, apart from the classroom teaching, had other responsibilities and numbers of remedial lessons, large classes to handle, a lot of paper work which were causing moderate burnout thus performance had moderately slowed down. He further recommended that secondary schools need to find ways of completing the syllabus to avoid remedial lessons which increase teachers' workload. Ways to reduce burnout such as reducing the holidays and weekend remedial lessons, regular transfers and time for relaxation were recommended. This view agrees with that of Calvo *et*

al (2000) who established that reducing class size and providing more opportunities for teachers' professional development may improve students' learning experience. Mayeku (2009) [35] on the other hand, established that inadequate staffing leads to heavy burdening on the staff and this has a great impact on the quality of the services they offer as a result affecting the quality of the programmes. Similarly, Watitwa (2010) [54] advised that more teachers be employed to reduce the workload in order to allow teachers ample time to prepare practical lessons. In addition, teacher shortage was identified by Mobegi (2007) as one of the challenges experienced by head teachers in an attempt to provide quality education whereas Odumbe, *et al.*, (2015) [42] concluded that low teacher-pupil ratio was one of the factors that enhanced performance in day secondary schools. Table 4.1 shows the distribution of student per class in the study area, narrated the majority (51.7%) of student in the study area, were about 49 - 73 per class, these uncomfortable students are in a single class learning in an uncondusive classroom environment. As it's clearly seen in Table 4.1 how teachers cover about 5 - 6 different classes per day of densely or highly populated without public addressing system with no spread out classroom arrangement. Minority (7.0%) which consist of 23 student learning in a single class as well.

Another excellent factor influencing the academic performance of the students in the study area was found to be teacher's remuneration (salary) earned at the end of every month. This shows the many (45.4%) of the respondent earned about 50001 - 60000 at the end of the month, while some (10.9%) earned 70000 monthly. The result on teacher's remuneration was compared the household size of the respondents and it was discovered that, the household size was on high side. For the respondents to live successfully on their monthly salary there is need for better salary scale compared to what each respondent is earning as at present. Another descriptive study established that 79.2% (95 out of 120) of the respondent indicated non satisfaction on their current or present salary scale, due to this 63% of the respondents were involved other business to argument the low salary scheme. Also, the regression result shows there's significant and statistical relationship between the student's academic performance in the study area and teacher's monthly remuneration (salary) with p-value ( $p < 0.005$ ). Businge, (2011) [8] findings supported the study that it is a widely held belief in Nigeria that there is generally low teacher satisfaction and low morale amongst Nigerian school teachers (Daily Trust, 2010; Kayode, 2012). Furthermore, most Nigerians believe that teacher satisfaction is related to salary and reward system. In other words, i.e. the belief is that one of the factor that contributes to teacher job satisfaction is the quality of teachers' take-home pay. To rapt off the objective on job related factors and the influence on student's academic performance in senior secondary school there must be efficient increase or improvement on the factors that influence the student's academic performance in other to the desirable results.

## 5. Summary, Conclusion and Recommendations

### 5.1 Summary

Due to mass failure of students reported by scholars in agricultural science examination performance in senior secondary schools, this study assessed the effects of agricultural science teachers' job related factors on senior

secondary school students' academic performance in Kebbi State, Nigeria. Specifically, the study described the socio-economic characteristics of the respondents in the study area, identified teacher's attitude towards the teaching of agricultural science subject in the study area, identified the job related factors that influence student's academic performance of agricultural science teachers in the study area, pointed out teachers that are qualify to teach agricultural science in senior secondary schools according to the set standard by the scholars and finally determined the training needs of agricultural science teachers in the study area.

To attain these, a multistage sampling procedure was used to select 120 respondents used for the study. The first stage involved random selection of three (3) zones out of six (6) existing educational zones in Kebbi State and the selected zones include Birnin Kebbi, Argungu and Zuru respectively. The second stage involved random selection of twenty (20) secondary schools from each zones, out of which five (2) agricultural science teachers and head teachers were randomly selected from the population to obtain a total of one hundred and twenty (120) respondents.

Primary data was the main source of instrument used for the study. The data collected were analyzed using frequency Counts, mean, percentages, regression and Spearman's Rho statistical tools. The result of the socio-economic characteristics shows that most (70.0%) and (30%) of the respondents were male. The mean age of the respondents was 42 - 51 years respectively. The average household size of the rural households was 6 - 10 persons. Majority of the respondents had low educational status as 42.5% of the respondents possess NCE & OND respectively, 51.6% has qualification with discharge certificate and 5.8% possess certificate above discharge level. The income of the respondents was low with a mean of N 5433.33. Strict attitude of the teachers was rank 1<sup>st</sup> (78%) as he/her to gain full control of the class. Teacher's attitude was accessed to know the effect on the student academic performance under the following heading. Approachability of the teachers is key attitudinal and behavioral trait that made student to feel free, walk up to their subject teacher either for question, clarification or counseling. (93.3 %) of the respondent are approachable with highest average weight value of 2.88 & t-value of 34.80\*\*\*. Late coming of the respondent (71.7%) was disagreed with despite the distance and location with average weight value of 1.35 & 11.36\*\*\*. Strict principles of the agricultural science teachers (78.3%) made him/her to take full control of the class with average weight value of 2.63 & t-value of 21.03\*\*\*.

Also, out of eighteen job related factor only seven (7) showed significant relationship with student academic performance and they are as follows; {leadership skills ( $p = 0.042^{**}$ ), teacher's qualification ( $p < .01$ ), area of specialization ( $p = 0.065^{*}$ ), age ( $p = 0.031^{**}$ ), number class taught per day ( $p = 0.064^{*}$ ), number of students per class ( $p = 0.091^{*}$ ) and leadership skills 0.042\*\*}

Also, proportion of qualify agricultural science teachers in the study area was carried out to know if there are qualify teachers in the study area to teach the subject and of appropriate proportion as findings pointed it out that majority 62 (51.6%) of the respondents were qualify to teach the subjects based on years of formal education training and certificate possessed. As previously discovered in socio-economic characteristic of the respondents that

majority (51.6%) were HND or B.Sc. holder, (92.8%) also studied agricultural related course in their various tertiary institution, thereby, there were qualified teachers to teach the subject in the study area but extremely low in proportion. So, in the study area, there were qualified teachers but inadequate in proportion to teach the subject. As this answered research question four (4).

## 5.2 Conclusion

Due to low interest and performance of students in agricultural science which is contrary to the National Curriculum of Agriculture (2007) with the following specific objectives of introducing agricultural science at the secondary school namely:

To stimulate and sustain students interest in agriculture.

To influence students' interest to progressively advance in farming.

The study investigated the effects of agricultural science teachers' job related factors on secondary school students' academic performance in Kebbi State, Nigeria. Based on the findings of this research work it was therefore discovered and concluded that: For there to be an improvement in agricultural science students' performance in Kebbi State, the following teacher's job-related factor must be attended to, and they include: head teacher leadership skills, teachers level of education, teacher's area of specialization, number class taught per day, teacher's monthly salary, teacher's age and number of students per class).

These teachers job related factor were further classified into internal and external factors influencing student's academic performance in the study area. Hence from the findings, it can be deduced and concluded that external factors are more significant and related aspect of teacher's job related factors that influence student academic performance in the study area when compared with the internal factors.

## 5.3 Recommendations

Based on the findings of this study, the following were recommended:

1. More awareness and sensitizing programs about agricultural science in secondary education should be carried out regularly in the study areas to enlighten and stimulate the interest of the students.
2. Internal and external agricultural science sensitization programs should be organized for the teachers concerning various teachers' job-related factors that could lead to poor academic performance of the student in the study area.
3. Government should enforce more leadership skill alongside with monitoring team in term of supervision and constant checking on secondary school teachers.
4. Government should encourage secondary school agricultural science teachers' training need in order to improve their teaching skills and better delivery the class.
5. Government should try and improve the salary scale of the secondary school teachers in order to encourage and motivate them to give their best into teaching of the subject in secondary school.
6. Government should deploy or recruit more qualify teachers that study agricultural related course in order to improve better staff delivery and reduce the teacher burnout and unfriendly accelerated workload.

## 5.4 Area for Further Research

However due to limited resources and time, the study was unable to cover the entire State but sub-set and the result was used to generalized the entire State. Also, the study didn't investigate other factors that influence secondary school's academic performance in the study area due to the fact that they're very numerous number.

The uncovered aspect of the research or study should be carried out and pursued to reasonable conclusion in order to fill up these identified gaps.

## 6. Acknowledgement

My acknowledgement goes to the Lord God Almighty for the successful completion of this Masters of Science in Agricultural Extension from Kebbi State University of Science and Technology, Aliero, Kebbi State, Nigeria. My gratitude also goes to my major and co-supervisor, Prof. Umar Sa'adu Birnin Yauri and Prof. M.A. Maikasawa who despite their tight schedules, made time available to supervise, correct and painstakingly improve the quality of this research work, Sir (s), all your efforts are well appreciated. Also, my deepest gratitude goes to Mr. & Mrs. G.A. Adeboyejo for all their effort over my education since primary level till this present time, you've been a pillar of support and had never cease been there for me may God bless you beyond measure and preserve you for us in Jesus mighty name. I wish to express my sincere gratitude to my family, particularly my beautiful wife (Adeboyejo Tolulope) and my wonderful kids (Adeboyejo Oluwatimilehin and Adeboyejo Oloruntobiloba) for their physical, spiritual and financial support all the time. I sincerely appreciate them for their enduring spirit during this challenging moment, may God keep and protect you for me in Jesus mighty name. I wish to acknowledge the support and contribution of all the member of staffs from the Department of Agricultural Extension and Economics, Kebbi State University of Science and Technology, Aliero, Kebbi State, Nigeria as follows; Prof. M.A. Maikasawa, Prof. Umar Sa'adu Birnin Yauri, Prof. I.O. Oladosu, Prof. B.Z. Abubakar, Prof. A. A. Gindi, Dr. A. Gona, Prof. Abdulsalam Adamu, Prof. S. Kaka, Dr. Sani Ibrahim Sanchi, Dr. Jega and all the remaining teaching, non-teaching staffs and 2018 set, who at one time or the other contributed immensely in other to improve the quality of this research work, may almighty God bless you and prosper your ways.

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