

**Attitude of Students and Parents towards Practical Agriculture as perceived by Secondary
School Administrators in Federal Capital Territory (FCT)
Nigeria**

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Abstract

This study examined the attitude of students and parents towards practical agriculture as perceived by secondary school administrators in Federal Capital Territory (FCT), Nigeria. Two research questions were developed and a hypothesis was formulated to guide the study. A descriptive survey research design was used for the study, the sample size was twenty six secondary school administrators composed of 14 males and 12 females from twenty six secondary schools. The instrument used for data collection was a modified four point response Likert scale questionnaire that was face validated by three experts. Descriptive statistical techniques (arithmetic mean) were used to analyze the research questions and independent t-test was used to test the null hypothesis at 0.05 level of significance. Findings revealed that students dislike agricultural science, they also prefer to study core science, it is not a major subject for gaining admission into higher institution, while practical agriculture is interesting and fascinating, school farmland is available and parents do not react negatively to their children studying agricultural science. The attitude of students and parents as noted by male and female secondary school administrators do not have any significance difference on their attitudes towards practical agriculture. It is recommended that students should be exposed to modern technology and farm machines, teachers of agricultural science should be creative and innovative in order to attract more students to take the subject; this will help in sustaining student's interest and improve their perception towards the subject.

Keywords: Attitude, Secondary School, Administrator, Practical Agriculture, Students and Parents

Introduction

Nigeria is an agrarian country with a robust agricultural sector at independence both in income and foreign exchange earnings. Despite the strategic importance of the sector, especially since 1970s, the role of the agricultural sector still remains significant to the economy, accounting for 34.47% and 40% growth in the economy in 2011 and 2012 respectively, (National Bureau of Statistics, NBS 2013). It is in view of the strategic contributions of agriculture to the nation's economy vis-à-vis sustainable national development, that there is need to encourage, stimulate the interest and positively affect the attitude of parents' and students' to take agriculture as a career.

Practical agriculture is seen as the fundamental principle of returning man to the farm. It remains a vital component and constituent of the study of agriculture which has always been well argued that, the direct impact of practical agriculture on the subject is un-measurable. Little wonder even the West African Examination Council (WAEC) a major examination body in the West African sub-region and the National Examination Council (NECO) syllabi strictly indicates that, the practical aspect must constitute the basics of teaching the subject. More so, that Agricultural Science is one of the subjects in Junior and Senior Secondary Schools and as a vocational subject, it cannot be taught effectively without actively engaging the students in practical activities.

Learning by doing is emphasized in the curriculum so that the students can produce food and other agricultural products for themselves and their community. A series of activities are suggested in the curriculum to ensure the development of psychomotor skills in agricultural science by the students. Likewise the National Curriculum of Agriculture, (Federal Republic of Nigeria, 2007) enumerated the following as the specific objectives of introducing agricultural science at the secondary school:

- i. To stimulate and sustain students interest in agriculture
- ii. To provide students the interest to progressively advance in farming.

- iii. To advance food production through improvement of agricultural production techniques in students.
- iv. To provide occupational entry level skills in agriculture to the interested students.
- v. To prepare students adequately for producing and marketing farm commodities efficiently and profitably.
- vi. To enable students acquire basic knowledge and practical skills required for future studies in agricultural field.

It is against this backdrop that this study seeks to examine the attitude of parents and students towards practical agriculture as perceived by secondary schools administrators'. Attitude refers to predisposition to classify objects and events, to react to them with evaluative consistency. (Erdemir and Bakirci 2009) described attitude as tendency for individuals who organize thought, emotions and behaviours towards psychological object. (Fasakin 2012) recognized attitude as a major factor in a subject choice. Fasakin, also considered attitude as a mental and natural state of readiness, organized through experiences exerting a directive influence upon the individual's responses to all objects and situation with which it is related.

Attitude does not only include the negative such as prejudices, biases and dislikes, but also positive attitudes are sometimes called sentiment, which include our attachment and loyalties to person, objects and ideas, (George 2000). Attitude thus seems like a system of ideas with an emotional core or content. Human beings are not born with attitudes, they learn afterwards. Some attitudes are based on the peoples own experience, knowledge and skills and some are gained from other sources. However, the attitude does not stay the same. It changes in the couple of time and gradually, (Olasheinde and Olatoye 2014).

A person who shows a certain attitude towards something is reacting to his conception of that thing rather than to its actual state. Attitude are formed by people as a result of some kinds of learning experience if the experience is favourable a positive attitude is found and vice versa, (Orunaboka, 2011). The attitude people hold can frequently influence the way they act in person and larger situation. For this reason, administrators, psychologists and sociologists are concerned with attitude development, how they affect behaviour and how they can be changed.

Some parents are aware of the employment value in vocational education but they are still prepared to accept the superiority of socially prestigious professions like Law, Medicine and Accountancy over technical oriented jobs, (Okocha, 2009). Parents have the most central and enduring influence on their children's lives, in general as well as in relation to the development of emotional and behavioural attitudes (Krause and Dailey, 2009). The emotional bonds between children and their parents allow parents to enhance their child's motivation to comply with rules and requests, which are in turn, associated with positive long term outcomes such as higher interest in their academic achievement (Granot and Mayseless, 2001).

Certain factors influence the attitude of students towards choosing a particular subject. (Ferry 2006) identified parental guidance as one of the socioeconomic factors affecting the choice of a subject. Early intervention in a child's career plays an important role in the choice of a subject like agricultural science. In some parts of the world, youths in rural areas with limited access to higher education may simply choose to inherit the family farm, and continue to raise cattle, manage poultry or tend to the corn crops (Wilson, 2008). The influence of peer groups is also an important factor in choosing a professional subject/career like agriculture (Azubuike 2011).

Agricultural science as a subject has been offered in Nigerian schools for decades. However, there is a recent drop in the number of students that choose agricultural science among their list of subjects in senior secondary schools. Students are faced with the problem of indecision when they are about to choose a subject. With good background, students still need to develop themselves on the subject areas they are keenly interested in and particularly where they have potentials. Most students have been found choosing subjects for senior school certificate examination not taking into consideration the aspect they can perform best or as directed by the school counselor.

Learning style as indicated by (Mark, 2008) influences students' preference for a particular teaching strategies and learning environments. Classroom learning environment includes elements of teacher's interpersonal style of interaction communication, (Deci and Ryan, 2002).

High school students' perceptions of classroom learning environment strongly predict disciplines, specific perceptions of competence and instrumentality of the content, as well as goal orientation and they can compensate for negative social and ability comparisons. The quality of the classroom environment in schools is a significant determinant of student learning.

Learners' characteristics are those things which every learner has, but which may not be common to all learners. Gender, age, experience and ethnicity are examples of learners' characteristics, (Mark 2008). Secondary school learners are qualitatively different from younger learners. Using the right instructional strategies to maximize the learning advantages and addresses the learning challenges of high school learners can make all the difference in their success.

Students characteristics are influenced by past and present achievement, feedback from teachers, peers and features of the current learning environment (Linnenbrink and Pintrich, 2002a). The motivations that students develop in school environment influence their future goals, expectations and intentions (Pintrich, 2003). Some of these motivations and future outcomes are generalized to school overall outputs, while others are specific to certain subject areas like practical agriculture and other class activities (Linnenbrink and Pintrich, 2002b). Students with more positives motivational profiles in a particular subject area (high perceived ability, instrumentality, learning goals and success expectations) are more likely to take courses in that area and will choose related college majors and career paths (Bleeker and Jacobs, 2004); (Deci and Ryan, 2002); (Hidi and Harackiewicz 2000).

The teaching and learning of practical agriculture in developing country like Nigeria has been posed with numerous shortfalls which can be attributed to poor perception, lack of interest in the subject on the part of the students, parental influence and social stigma among others. (Camilus 2011). Moreover, (Marsh 2004) affirmed that students' self-perception will affect their academic performance in school. The "perceived self" influences an individual's perception of the world and his or her behaviour which in turn influences his or her academic achievement (Onyejiaku, 2001). An in-depth look at the secondary schools agricultural science programs revealed that

there is the need for improving all phases of agricultural science especially to positively influence the attitude of both students and parents towards practical agriculture.

There is also the need to dispel the apparent negative students' and parents' attitude towards practical agriculture and to further expose students to the knowledge and skills that they would require in agricultural production, develop the spirit of self-reliance, demonstrate that agriculture is a dignified and profitable occupation in enhancing skills needed in carrying out agricultural practices for economic and national prosperity (Vandenbosch, 2006). It is against this background that this paper examined the attitude of students and parents towards practical agriculture as perceived by secondary school administrators in Federal Capital Territory (FCT), Nigeria.

Research Objectives

This study investigated the attitude of students and parents towards practical agriculture as perceived by secondary school administrators in Federal Capital Territory (FCT), Nigeria. Specifically, the study:

1. determined the areas of interest in practical agriculture among secondary school students as noted by the administrators in FCT schools;
2. determined the factors that influence students' and parents' attitude towards practical agriculture as noted by the administrators in FCT schools.

Research Questions

1. What are the areas of interest in practical agriculture among secondary school students as noted by the administrators in FCT schools?
2. What are the factors that influence students' and parents' attitude towards practical agriculture as noted by the administrators in FCT schools?

Hypothesis

Ho: There is no significant difference in the mean responses of male and female secondary school administrators on the attitude of students and parents towards practical agriculture in FCT secondary schools?

Design and Methodology

The study adopted a descriptive survey research design. In the views of Olaitan, Ali, Eyoh and Sowande (2000), survey research design is the plan, structure and strategy that the investigator wants to adopt in order to obtain solution to research problems and test hypothesis formulated for the study. They further stated that it guides the investigator in the process of collecting, analyzing and interpreting observations. The design 'was therefore, appropriate for the study since it obtained data from male and female school principals through the use of structured questionnaire on the attitude of students and parents towards practical agriculture as perceived by Secondary School Administrators in FCT, Nigeria.

The Federal Capital Territory (FCT) is located in the geographical center of Nigeria. It has a land area of 8,000 square kilometers. It is bounded on the north by Kaduna State, the west by Niger State, the east and southeast by Nasarawa State and the southwest by Kogi State. It falls within latitudes 70 20' North of the Equator and longitudes 60 45' and 70 39'. The FCT's natural endowments such as; its rolling hills, isolated highlands and other endearing features make it a delight. The savannah grassland of the North and the Middle Belt, the richness of the tropical rain forests of the south and an equable climate all combined to make the FCT a soil-rich agricultural haven.

The population for the study was made up of all the six (6) Area Councils in FCT which comprised of one hundred and sixty-three (163) junior secondary schools principals (Federal Capital Territory Universal Basic Education Board, FCTUBEB, Abuja, 2017) and fifty- seven (57) senior secondary schools principals (Federal Capital Territory Secondary Education Board, FCTSEB, Abuja, 2017). The entire population in the six (6) Area Councils in FCT was used for the study to get a better representation of the opinion of the respondents.

The study uses simple random sampling by ballot was applied to give every area council a chance of being selected. This was in line with the recommendation of (Maicibi 2000) that 30% of total population can be used as a sample for a study, so as to have a fair representation of the entire population. The researcher randomly selected and studied two (2) area councils which

were Kwali and Bwari area councils out of six (6) area councils in the Federal Capital Territory namely; Abaji, Abuja Municipal, Bwari, Gwagwalada, Kuje and Kwali. Based on this, the researcher involved twenty-six (26) junior and senior secondary school administrators representing each secondary school for this study. A total of thirteen (13) secondary schools were selected from each of the two area councils for the study. In all, twenty-six (26) secondary schools were selected for the study out of fifty-two (52) secondary schools in the both councils.

The instrument used for collecting data for the research was a structured questionnaire. Twenty – six (26) copies of the questionnaire were personally administered to the respondents (Secondary School Principals) from the two (2) area councils of the study in the Federal Capital Territory, (FCT). The Secondary Schools selected were visited and respondents were given a copy of the questionnaire containing the instruction. The questionnaire copies were later retrieved for analysis.

Any item with a mean of 2.5 and above was regarded as required or agreed, while any item with a mean score below 2.5 was regarded as not required or disagreed. The upper limit of 2.5 was chosen because it discriminated better.

In calculating the personal characteristics for the 26 respondents, descriptive statistical techniques and simple percentages were used and t-test at 0.05 level of significance was used to test the hypotheses. For each research questions, the responses relating to it were totaled, the total weighted frequencies were used to determine the mean and standard deviation score for each items.

In this part of the survey instrument the participants were asked to indicate their level of satisfaction with each of the 10 items using the modified four Likert Scale ranging from strongly agree to strongly disagree as follows: 4=Strongly Agree, 3=Agree, 2= Disagree, 1= Strongly disagree. In the following sections, the researcher presents the participant responses to those items in relation to the two key research questions.

Results and discussion

Table 1: Distribution of respondents by students areas of interest in practical agriculture (n=26)

S/N	Areas of interest in practical agriculture	\bar{X}	SD	Remarks
1.	Students enjoys keeping and feeding farm animals	2.88	1.32	Agree
2.	Students enjoys clearing bushes and tilling the soil manually	2.27	1.1	Disagree
3.	Students love sowing seeds of crops	2.69	1.10	Agree
4.	Students are willing to harvesting their own crops.	2.78	1.28	Agree
5.	Students are eager to sell their produce and make income	2.93	1.33	Agree

Cut-off point: 2.5 and above = Agreed, less than 2.5= Disagreed

Source: Field survey, 2017.

The results in table 1 above shows that secondary schools administrators disagreed with item 2 with a mean of 2.27. This implies that students dislike manual clearing of bushes and tilling of soil for growing crops. While the secondary school administrators agreed with item 1 with a mean of 2.88, item 3 with a mean of 2.69, item 4 with a mean of 2.78 and item 5 with a mean of 2.93. This implies that students enjoys keeping and feeding farm animals, sowing seeds of crops, harvesting of crops and selling of their farm produce for income. This is in line with (Bleeker and Jacobs, 2004); (Deci and Ryan, 2002); (Hidi and Harackiewicz 2000) that opined that students with more positives motivational profiles in a particular subject area (high perceived ability, instrumentality, learning goals and success expectations) are more likely to take courses in that area and will choose related college majors and career paths.

Table 2 Factors that influence students' and parents' attitude (n=26)

S/N	Influences on student and parent attitude	\bar{X}	SD	Remarks
1.	Parents see Agricultural Science as the subject for	2.11	1.03	Disagree

	children from poor economic background			
2.	Parents react negatively to their children studying Agricultural Science	2.31	1.11	Disagree
3.	Student practical's in Agriculture Science are interesting and fascinating	2.61	1.23	Agree
4.	The School farmland is available for practical agriculture	2.58	1.22	Agree
5.	Few students take Agricultural Science as a subject	3.20	1.42	Agree

Cut-off point: 2.5 and above = Agreed, less than 2.5= Disagreed

Source: Field survey, 2017.

The results in table 2 above shows that secondary schools administrators disagreed with item 1 with a mean of 2.11 and item 2 with a mean of 2.31. This implies that parents do not see agricultural science as a subject for children from poor economic background neither do they react negatively to their children studying agricultural science as a subject. While the secondary school administrators agreed with item 3 with a mean of 2.61, item 4 with a mean of 2.58 and item 5 with a mean of 3.20 which indicates that student's practical agriculture is interesting and fascinating, school farmland is available for practical agriculture and few students take agricultural science as a subject. This finding is in line to a study by (Mark 2008) who posited that secondary school learners are qualitatively different from younger learners, using the right instructional strategies to maximize the learning advantages and addresses the learning challenges of high school learners can make all the difference in their success. This also agreed (Krause and Dailey, 2009) that parents have the most central and enduring influence on their children's lives, in general as well as in relation to the development of emotional and behavioural attitudes. (Vandenbosch 2006) observed that there is also the need to dispel the apparent negative students' and parents' attitude towards agriculture and to further expose students to the knowledge and skills that they would require in agricultural production, develop the spirit of self-reliance, demonstrate that agriculture is a dignified and profitable occupation in enhancing skills needed in carrying out agricultural practices for economic and national prosperity.

Research Hypothesis

Difference between availability of resources by male and female secondary school administrators

The null hypothesis for the variables on table 3 was tested at 0.05 level of significance and 24 degree of freedom. The t- calculated for the two variables i.e. male and female secondary school administrators were less than the critical value and this indicated that there is no significant difference in the mean rating of the two variables. Therefore, the null hypothesis was accepted. This suggests that the administrators' sex do not influence the attitudes of students and parents towards practical agriculture.

Table 3: Mean rating of the responses of secondary schools administrators on the attitudes of students and parents towards practical agriculture.

Sex	Frequency	Mean of Sec. Sch.Administrator \bar{X}	S.D	t-critical	t-cal	Decision
Male	14	0.54	2.69	1.692	0.03	Accept Ho
Female	12	0.46	2.31			

t- cal = 0.03 < t critical = 1.692, p value = 0.05, df = 24

Source: Field survey, 2017.

Conclusion

Based on the findings from the study, this conclusion was drawn:

Students dislike agricultural science due to manual clearing of bushes and tilling of soil. But they rather enjoys keeping and feeding farm animals, sowing of seeds of crops, harvesting and marketing of their farm produce. Parents do not see agricultural science as a subject for children from poor economic background neither do they react negatively to their children studying agricultural science. While student's practical agriculture is interesting and fascinating, school farmland is available for practical agriculture but few students take agricultural science as a subject in secondary schools in FCT.

Recommendations

Based on the results of the analysis, the following recommendations were made:

1. Secondary school students should be exposed to modern technology and farm machines in order to motivate them towards acquiring requisite skills needed in practical agriculture, likewise they should take agriculture as a subject and for further studies in higher institution which will make the self-reliant, producing food for national development.
2. Teachers of agricultural science should be creative and innovative in order to attract more students to take the subject; this will help to sustain student's interest and improve their perception towards the subject.
3. One of the policies of government should be geared towards making agricultural science a compulsory vocational subject for gaining admission into higher institution.

References

- Azubuike, O.C. (2011). Influential factors affecting the attitude of students towards vocational / technical subjects in secondary schools in south-eastern Nigeria. *Journal of Educational and Social Research*. 1(2):49-56
- Bleeker, M. and Jacobs, J.E (2004). Achievement in math and science: Do mothers' beliefs matter 12 years later? *Journal of Educational Psychology*, 96 (1), 97-109
- Camilus, B.B (2011). Students' Personality Characteristics and their Academic Performance in Agricultural Science in Secondary Schools in Uyo Municipality, Akwa Ibom State. Nigeria. *Journal of Education and Leadership Development*. 2011;(3):36-53
- Deci, E.L, and Ryan, R. M. (2002). The Paradox of Achievement. the Harder you Push, The Worse it Gets. In J. Aronson (Ed) *Improving Academic Achievement; Contributions of Social Psychology* (pp 59 – 85) New York; Academic Press.

- Erdemir, N. and Barkirci, L. (2009). The change and development of attitude of Science teacher candidates towards branches of science. *Kastamonu Education Journal*. 17(1)161-170.
- Fasakin, P.J. (2012). Effects of Everyday Phenomena on Students' Achievement, Attitude and Practical Skills in Physics. A Masters Dissertation submitted to the Department of Teacher Education, University of Ibadan, Ibadan, Nigeria.
- FCTSEB, (2017). Federal Capital Territory Secondary Education Board. Abuja: FCTSEB Press.
- FCTUBEB, (2017). Federal Capital Territory Universal Basic Education Board. Abuja: FCTUBEB Press.
- Federal Republic of Nigeria, (2007). National curriculum for Agricultural science for secondary schools. Lagos: NERDC Press.
- Ferry, M.N (2006). Factors influencing career choices of adolescents and young adults in rural Pennsylvania. *J. Exten.* 44:3. <http://www.joe.org/joe/2006june/index.php>.
- George, R. (2000). Measuring change in students' attitudes toward science over time: An application of latent variable growth modeling. *Journal of Science Education and Technology*. 9(3):213–215.
- Granot, D. and Mayseless, O. (2001). Attachment security and adjustment to school in middle childhood. *International Journal of Behavioral Development*, 25, 530-541.
- Hidi, S. and Harackiewicz, J.M (2000). Motivating the academically unmotivated: A critical issue for the 21st century. *Review of Educational Research*, 70, 151-179.
- Krause, P.H. and Dailey, T.M. (2009). Hand book on parenting: styles, stresses and strategies. New York: Nova Science publisher.

- Linnenbrink, E. A. and Pintrich, P. R. (2002a). Motivation as an enabler for academic success. *School Psychology Review*, 31(3), 313-327.
- Linnenbrink, E. A. and Pintrich, P. R. (2002b). Achievement goal theory and affect: An asymmetrical bidirectional model. *Educational Psychologist*, 37(2), 69-78.
- Maicibi, N. A. (2000). Pertinent issues in employees management. Kampala: M.P.K. Graphics (U) Ltd.
- Mark, P. (2008). Characteristics of High School Learners. *Educational Journal* vol. 1(4):112-117
- Marsh, H.W. (2004). A multi-dimensional hierarchical self-concept: Theoretical and Empirical Justification. *Educational Psychology Review*. 2 (2): 77-82
- National Bureau of Statistics NBS (2013). Annual Abstract of Statistics, 2013. Federal Republic of Nigeria. pp 1-20
- Okocha, M. (2009). Parental attitudes towards vocational education: Implications for counselling. *Edo Journal of Counselling* 2(1): 81-89.
- Olaitan, S. O., Ali, A., Eyoh, E. O. and Sowande, K. C. (2000). *Research Skills in Education and Social Sciences*. Onitsha: Cape publishers International Limited.
- Olasheinde, K. J. and Olatoye, R. A. (2014). Scientific Attitude, Attitude to Science and Science Achievement of Senior Secondary School Students in Katsina State, Nigeria. *Journal of Educational and Social Research*. 4(1): 445-452
- Onyejiaku, F.O. (2001). Psychology of Adolescents. Calabar : Rapid Publisher
- Orunaboka, T. T. (2011). Attitude of Nigeria Secondary School Students towards Physical Education as a Predictor of Achievement in the Subject. *Journal of Education and Practice*. 2(6):1-8

- Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology*, 95(4), 667-686
- Vandenbosch, T. (2006). Post-primary Agricultural Education and Training in sub-Saharan Africa: Adapting Supply to Changing Demand. *Unpublished Manuscript*. Nairobi:World Agroforestry Centre.
- Wilson, O. C. (2008). Perceptions of agriculture and natural resource careers among minority students in a national organization. DOI: 10.5897/JAERD2013.0508
www.treesearch.fs.fed.us/pubs/4063