

Students' Attitude at Student Industrial Work Experience Scheme (SIWES) In Rivers State University Farm, Rivers State, Nigeria

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Abstract

The study focused on students' attitudes towards SIWES in Rivers State University farm, Port Harcourt. The objective of the study was to: describe the demographic characteristics of student who participated in the SIWES in the Rivers State University farm. Purposive sampling procedure was used to select the students. A total of 58 respondents were selected. Data were analysed using simple regression analysis. Structured questionnaire was used to elicit data from the respondents. The result revealed that 51.72% of the respondents were male while 48.28% of the respondents were female. Also, 96.55% of the respondents were single; the mean age was 28 years. Furthermore, 20.69% of the respondents carried out their SIWES at level 300 while 79.31% carried out their SIWES at level 400 for a 5years course. The frequency of tools used for SIWES by the students were; grab hoe (mean = 3.13), scissor (mean = 3.13), boot (mean = 3.00), wheelbarrow (mean = 2.98) among others. The benefits of SIWES on the students at the university farm were: lifelong skill acquisition (mean = 3.13), blend theoretical knowledge with practical knowledge (mean = 3.01), students' exploration, initiative and creativity (mean = 3.00), job creation (mean = 2.98). The study recommends that the students should be properly supervised by industry and the University to enhance students work experience and that the duration for SIWES should be increased at reasonably portion such that the students should benefit maximally from SIWES exposure

Keywords: *Students Attitude, Industrial Work, Experience Scheme Rivers State University*

1. Introduction

The concept of attitude is essential on their academic achievement in relating this with the growing public demand and legislative expectations for accountability in the past two decades have made it imperative that higher education administrators and researchers pay attention to the potential impact of student work programmes on skill development, which in turn, impacts directly on National development objectives that if Vocational technical Education is to be meaningful and successful in Nigeria, then relationships are needed between public and private sectors to partner effectively with Vocational Technical Education and Skill acquisition programmes in Nigeria.

Students Industrial Work Experience (SIWES) is a skill development program designed to prepare students of Nigerian tertiary institutions for transition from the College environment to work, (Akerejola, 2008). Work experience is an educational program in which students participate in work activities while attending school all over. This work experience program gives students the opportunity to be part of an actual work situation outside the classroom. The primary objectives of SIWES is to make industries to complement the schools' effort by helping students have good practical experience through the use of their facilities relevant in their areas



of studies which may not be provided by the schools. There are only few industries available for students' industrial attachment. This makes many students not to take this training very serious. Many of them do not even go to their places of industrial attachment at all.

Statement of the Problem

The problem of ill-equipped and lack of workshop/laboratory has led higher institutions to keep spending enormous time on theory, with little or no emphasis on practical. This therefore creates gaps between classroom exposure and what is obtainable in the industrial sector. To bridge these gaps, ITF is charged with the responsibility of SIWES to expose students to industry based skills necessary for a smooth transition from the classroom to the world of work. According to Ugwuanyi & Ezema (2010), they noted that SIWES plays a significant role in human resource development in Nigeria. Furthermore, Aderonke (2012) in her study examined SIWES and the dynamic of sustainable skills acquisition and utilization in Nigeria with a view to determining the viability or otherwise of government continuing investment in the scheme. She concluded that SIWES is a good strategy for sustainable skill development and utilization in Nigeria.

However, it appears that agricultural students do not adequately participate actively during their SIWES programme because of time duration, and as a result of this, do not acquire adequate skills through SIWES programme. This calls for investigation if the duration of SIWES programme improved the students' competency in academic performance. It is on this presupposition that this study seeks to find answers to the following research questions: what are the demographic characteristics of students during SIWES in Rivers State University farm? What were the equipment and tools available in the university farm for the students? What were the benefits derived by the students from the university farm during SIWES? What are the factors influencing the attitude students doing their SIWES at the university farm? What were the constraints students faces during the period of SIWES in Rivers State University Farm?

Objective of the Study

To examine Students' attitude at student Industrial Work Experience Scheme (SIWES) in Rivers State University Farm, Rivers State, Nigeria

2. Literature Review

Theoretical Review

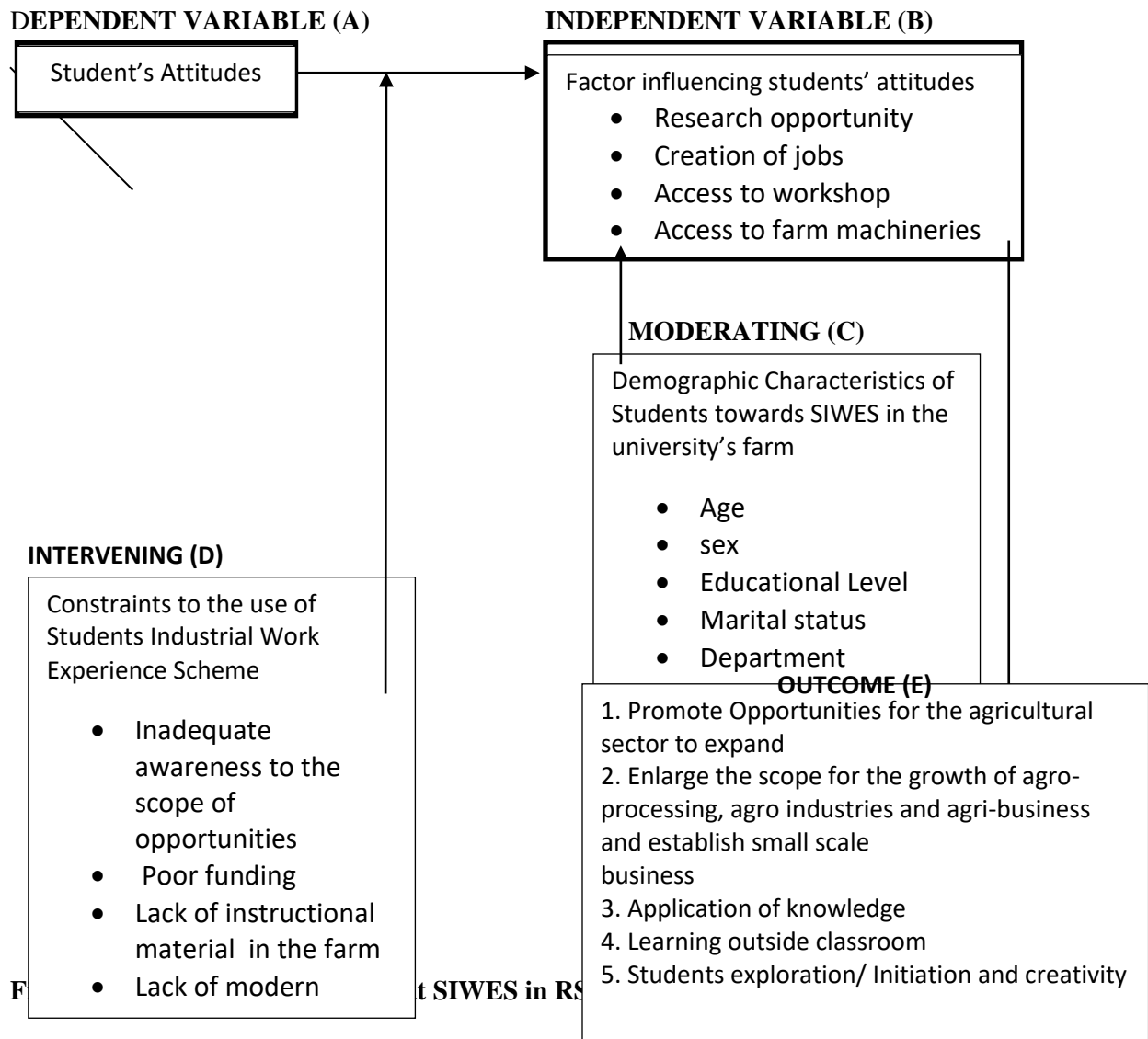
This study is anchored on the theory of attitude formation. The theory helps us understand how a person's attitude takes shape and why a person might have a particular attitude or how that attitude came to exist. Attitude formation is of particular interest to psychology because attitudes often direct behavior. There is no single dominant theory on attitude formation. Rather, there are



three theories that are used most often to describe attitude formation: functionalism, learning, and cognitive dissonance theories. Attitude formation theories suggest that perhaps we do what benefits us (functionalist theory), or maybe our past experiences have taught us how to act (learning theory), or it might just be an attempt to restore harmony to two opposing truths that are held (cognitive dissonance theory). All attempt to answer the question of where attitudes come from.

Conceptual Framework on Attitude

The conceptual framework in fig 1 below shows that block A contains the dependent variable “attitude of students” depending on the usefulness of SIWES (block B), there was a moderating variable (block C), block D contains the intervening variable and block E contained the outcome.





Nature and Scope of Students Industrial Work Experience Scheme (SIWES)

No society can achieve meaningful progress without encouraging its youth to acquire necessary practical skills. Such skills enable them to harness available resources to meet the needs of society. Practical knowledge relates to doing. SIWES is a skill development program designed to prepare students of universities, polytechnics/mono-techniques, and colleges of education for transition from the college environment to work environment (Akerejola, 2008). The Student Industrial Work-Experience Scheme (SIWES) is a planned and supervised training intervention based on stated and specific learning and career objectives, and geared towards developing the occupational competencies of the participants/students. It is a programme required to be undertaken by all students of tertiary institutions in Nigeria pursuing courses in “specialized engineering, technical, business, applied sciences and applied arts” (ITF, 2004). Eze (2008) pointed out that government has recognized the importance of SIWES through the establishment of the Industrial Training Fund (ITF). The ITF was established in 1971 and was charged with human resources development and training. Following the establishment of ITF, SIWES commenced in 1974 with the aim of making education more relevant and to bridge the yawning gap between the theory and practice of vocational, engineering, science and technology disciplines in tertiary institutions in Nigeria.

Empirical Literature

Aderonke, (2012) examined the incidence of occupational misfit among Nigerian graduates has taken a centre stage on the debate of the relevant and quality of high education to national development. It is on this basis that studies tend to assess the trends in work-base study programmes with reference to skill acquisition and utilization. This study therefore examined the SIWES scheme and the incidence of occupational misfit in Nigeria. The ex-post factor research design was used for the study. The population was at 2,242 comprised of students from four polytechnics (849), four mono-techniques (550) and (542) industrial training officials of SIWES in science, technology and agriculture related courses selected through the purposive and stratify random sampling techniques. Data were collected using an expert validated questionnaire: “Students Industrial Work Experience Scheme Skills Development and Utilization (SIWESSDUS) $r = 0.89$ complemented with relevant primary data from the industrial training fund office. Three hypotheses were tested using chi-square (X^2) and multiple regression analysis at 0.05 alpha. Findings indicated that 61.9% male and 38.1% female participated in the study with a mean age of 33 years. SIWES has contributed to skill acquisition significant (78%) and skills utilization in industrial development (68%). SIWES significantly influenced the certification and accreditation of courses in the mono-technique and polytechnics institutions ($X^2=301.317$; $df = 12$, $P < 0.05$); and SIWES had also enhanced the extent to funding skills acquisition programmes by the federal government ($X^2=128.692$), $df = 12$ $P < 0.05$). Meanwhile, SIWES also improved positively the level of skills utilization by employers of labour ($X^2 = 324, 429$, $df = 15$, $P < 0.05$). It is recommended that government should devote sufficient financial resources to all levels and aspect of education to sustain skill acquisition programme such as in SIWES.



Adeleke, Afolabi and Foloninoho (2018) combined the impact of SIWES on Academic performance of business education students. The final year students of Business Education of UNILAG and LASU were used for the study. One hundred and twenty-four (124) business education students were sampled through simple random sampling technique. Item questionnaire was designed and validation of the instrument was assessed by experts. The data collected were analysed using percentage, mean score and standard deviation. The finding of the study showed that SIWES influenced students' academic performance. The result showed that SIWES enhances competency of students in their academic activities, prepares them for future job challenges and creates employment opportunities. It was recommended that SIWES should be properly organised to achieve its set objective. It was recommended that SIWES should be properly organised so that students can be appropriately placed in organisation that are related to their course of study, students should be properly and regularly supervised by both the industry-based and school supervisors during SIWES and the duration for SIWES should be increased at reasonable portion such that students will benefit maximally from SIWES exposure. It was concluded that SIWES exposure enabled business education to have more competency on their academic because the strategy of handling academic is enhanced after the exposure to SIWES. The findings also explained that if the duration of the SIWES is increased reasonably the performance of the student will be better. SIWES also exposed business education students to the proper and personal quality skills required to promote their academic activity and prepare them for the future employment. In the same vein exposed them to job opportunities. The study further explained that there is a great improvement in the academic activities of business education students after SIWES exposure and also has a positive impact on their academic performance because there is progression in their academic's performance after exposure to SIWES.

Waayii (2017) revealed the need for good attitudes towards technology in business education programme is necessary in business education programmes in Nigeria and other developing countries as one of the ways of ensuring efficient resource allocation. This objective can only be realised with the instrument of the various professionals in the world of tech. It is in realization of this fact that led to the study of students' attitude towards technology in business education programmes. Consequently, the design of the study was a quasi-experimental design. A factorial analysis was conducted on the pre-test data.

3. Research Methodology

Area of the Study

Rivers State University (RVSU or RSU), formerly Rivers State University of Science and Technology (UST or RSUST), is a University located in the Dioubu (Mile III) area of Port Harcourt, Rivers State, Nigeria. The Rivers State University of Science and Technology was established in 1972 as the College of Science and Technology. It was granted independent university status in 1980 and was renamed from College of Science and Technology to Rivers State University of Science and Technology. It is the only university in Nigeria that is accredited to offer degree programs in marine Engineering. The school has about 10 faculties which included; Faculty of Sciences, Faculty of Engineering, Faculty of Law, Faculty of Management Sciences, Faculty of Environmental Sciences, Faculty of Agriculture, Faculty of Education, Faculty of Humanities, College of Social Sciences, and College of Medical Sciences



Population of the Study

According to Avwokeni (2002), every study has a population. Asika (1991) defined population as a census of all the elements or subjects of interest and may be finite or infinite. The population of the study was limited to departments whose student carry out their SIWES at the Rivers State University Farm, which include; Agricultural Extension, Agricultural Economics, Animal Science, Forestry, Crop/Soil Science, Agricultural Education, Agricultural engineering, Chemistry and Biochemistry, total number of 68 students.

Sampling Procedure and Sample Size

In the course of this study, purposive sampling procedure was used because all the students were on the university farm for same purposes. Students were purposively selected bringing to a total number of 58 students. A total number of 58 respondents were used.

Method of Data Collection

Data were collected using structured questionnaire. The questionnaires were structured into sections to obtain information to the stated objective. Section A covered the demographic characteristics of the students.

Validity of Data Instrument

Data validity (structured questionnaire) was subjected to face and content validity by the lecturers of the department and the project supervisor.

Method of Data Analysis

The statistical tools used in the presentation and analysis of the data collected include; frequency table, percentages and mean which were used to present objective. the objectives was analysed using four-point rating scale with options: Strongly Agree (SA) = 4, Agree (3), Disagree (2), Strongly Disagree (SD) = 1. The values were added to give 10 and further divided by 4 to get 2.50. This served as a decision rule. Any variable above and equal to 2.50 was accepted and regarded as effective while any variable below 2.50 was seen as less effective.

Simple regression analysis was used to test the stated hypotheses.



4. Result and Discussion

Demographic Characteristics of Students

Table 1: Distribution of Students according to Demographic Characteristics

Characteristics	Frequencies (n= 40)	Percentage %	Mean
Age			
18-22	12	20.69	28 years
23-27	44	75.86	
28-32	2	3.45	
Sex			
Male	30	51.72	
Female	28	48.28	
Marital Status			
Single	56	96.55	
Married	2	3.45	
Level			
300	12	20.69	
400	46	79.31	
Department			
Agricultural Extension	10	17.24	
Agricultural Economics	6	10.35	
Agricultural Education	5	8.62	
Agricultural Engineering	4	6.90	
Animal Science	6	10.35	
Forestry	4	6.90	
Crop/Soil Science	15	25.86	
Chemistry	4	6.90	
Biochemistry	4	6.90	

Source: *Field Survey, 2023.*

Age: The result in Table 1, 12 respondents representing 20.69% of the respondents are within age group of 18-22 years, 44 respondents representing 75.86% of the respondents are within the age group of 23-27 years while the remaining 2 respondents representing 3.45% of the total respondents are within the age group of 28-32 years. None was in the bracket 33-3 years. The mean age of the respondents was 28 years. This indicates that the students were still very vibrant and active male and female who could carry out SIWES activities more efficient as it is believed that it could be seen as a season of accountability.

Sex: The result also reviewed that 51.72% of the respondents were males while 48.28% were females which implies that the academic field in Rivers state university farm were gender equality compliant as there was only 5% difference between male and female students.

Marital status: From table 1, it was revealed that majority (96.55%) of the respondents were single while (3.45%) were married. None was recorded to be divorced and widow implying that the students are



dependent on their family and friends to provide their basic needs and support them which may affect attitude positively considering the fact that no pressing responsibility.

Level: It was revealed that, 12 respondents representing 20.69% of the total respondents did their SIWES at 300 levels, while the remaining 46 respondents representing 79.31% of the total respondents did their SIWES at their 400 level. None was in 500 level. This result negates the findings of Oyedele (1990) according to Nigerian Universities Commission (NUC) who disclosed that the training is undertaken in the 3rd year of a fourth year degree programme and in the 4th year of a fifth year.

Department: It was revealed that, 10 respondents representing 17.24% of the total respondents are of the Agricultural extension department, 6 respondents representing 10.35% of the respondents are of the Agricultural economics; 6 respondents representing 10.35% of the respondents are of the Animal Science; 4 respondents representing 6.90% of the respondents are of the Forestry; 15 respondents representing 25.86% of the respondents are of the Crop/Soil Science; 5 respondents representing 8.62% of the respondents are of the Agricultural Education Department; 4 respondents representing 6.90% of the respondents are of the Agricultural Engineering Department; 4 respondents representing 6.90% of the respondents are of Chemistry Department while the remaining. 4 respondents representing 6.90% of the respondents are of Biochemistry Department. The result negates the findings of Ahmed (2011) who agreed that the idea of introducing SIWES was to fill the gap between theory and practice for students of Allied Course.

Table 2: Equipment and tools available in the school farm for SIWES

Equipment and Tools available in the school farm	Strongly Agree	Agree	Dis-agree	Strongly Disagree	Total Mean Score	Mean	Remark	Rank
Sprayer	5	39	13	1	164	2.82	Effective	6 th
Wheel barrow	8	41	9	0	173	2.98	Effective	4 th
Rake	3	38	15	2	158	2.72	Effective	8 th
Tractor	9	22	19	8	148	2.55	Effective	10 th
Shovel	5	28	22	3	151	2.60	Effective	9 th
Grab hoe	13	41	3	1	182	3.13	Effective	1 st
Pick-mattock	15	23	20	0	169	2.91	Effective	5 th
Knife	7	33	17	1	162	2.79	Effective	7 th
Spading fork	10	40	7	1	175	3.01	Effective	2 nd
Pruning shears	2	53	3	0	173	2.98	Effective	4 th
Boot	18	24	14	2	174	3.00	Effective	3 rd
Coverall	9	22	19	8	148	2.55	Effective	10 th
Trowel	5	28	22	3	151	2.60	Effective	9 th
Scissors	13	41	3	1	182	3.13	Effective	1 st
Woody Basket	15	23	20	0	169	2.91	Effective	5 th
Grand Mean						2.85	Effective	

Source: Field Survey, 2023.

Effective ≤ 2.50

Less effective ≥ 2.50

Equipment and Tools available in the Farm for the students

Table 1 shows the mean distribution of tools frequently used by students for SIWES using a mean score 2.50 as the decision rule. The following were accepted as the most used tool for SIWES in the farm. They were grab hoe ($\bar{x} = 3.13$) and scissors ($\bar{x} = 3.13$). This may be due to the fact that grab hoe and scissors are the easiest tools used in the farm. However, they were also considered to be the best assessed



tool as they could be easy to handle. The result also revealed the other tools listed such as spading fork, ($\bar{x} = 3.01$), boot ($\bar{x} = 3.00$), wheelbarrow ($\bar{x} = 2.98$), pruning shears ($\bar{x} = 2.98$), pick mattock ($\bar{x} = 2.91$), woody basket ($\bar{x} = 2.91$), sprayer ($\bar{x} = 2.82$), knife ($\bar{x} = 2.79$), rake ($\bar{x} = 2.72$), shovel ($\bar{x} = 2.60$), trowel ($\bar{x} = 2.60$), tractor ($\bar{x} = 2.55$), coverall ($\bar{x} = 2.55$) were frequently used by the students. The grand mean for frequency was 2.85 indicating the above mentioned tools were used by the students. This may be as a result of carrying out the practical attached to the course of study. The result is in line with Adebayo (2005) and NCCE (2008) who observed that through the SIWES programme students are exposed actual work experience to handle tools and machines which would have not been possible for them in the classroom.

5. Conclusion

The study has been able to establish the fact that the major type of tools used for SIWES by the students in Rivers State University farm were grab hoe, scissors, spading fork, boot, coverall and that the tools were frequently used. The students agreed that tools provides the student with the necessary practice and experience on field work and provide student easy access to farm machineries, awareness of job opportunity among others. It uses equally seen that the students was plague with several constraint such as failure to recognize SIWES as a course, poor supervision of students, lack of modern facilities among others. The age and department of the students influenced the frequency of the students' attitude towards SIWES tools and that there was no significant difference in the type of tools used for SIWES among the students.

6. Recommendations

Students should be properly and regularly supervised by both the industry-based and school supervisors during SIWES.

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