ATTITUDINAL FACTORS TOWARDS STUDENTS' INDUSTRIAL WORKS EXPERIENCE SCHEME: A CLARION CALL FOR NATIONAL DEVELOPMENT

S. A. Buhari, Garuba Ismaila Ayinde, Idris Abubakar Alhaji, and Abdullahi Musa

Abstract

Attitude is a mindset or a tendency to act in a particular way due to both an individual experience and temperament. Students Industrial Works Experience Scheme (SIWES) is a program designed to bridge the gap between theory and practice in such disciplines as engineering technology and allied disciplines in higher institutions of learning such as agricultural science. In view of the recent government effort to inculcate entrepreneurial culture among students, it is relevant to ascertain whether in the near future the goal of curbing unemployment among graduates is achievable or not given the attitude agric students have towards SIWES. The major purpose of the study is to find out, the attitudes of Agric education students in College of Education technical Lafiagi towards SIWES. Specifically, the researchers intend to find out the attitude of students towards SIWES on the basis of gender. A sample of students from vocational school particularly agric department was considered. A researcher-designed questionnaire was the only instrument used for data collection and the statistical tools, used in analyzing the data were frequency, percentages, mean score and t-test. The analyses revealed the attitude of students in Agric education department towards SIWES program in the college to include: being present in the place of exercise always among others. The hypothesis formulated was tested and accepted. It was however recommended among others that students on SIWES program should be motivated to encourage and ensure the realization of the objective of the program.

Keywords: SIWES, Attitude, Agric Science, Experience

INTRODUCTION

Attitude is regarded as a mental or natural state of readiness, organized through someone experience, exerting a direct or dynamic influence on the individual's response to all objects and situations to which it is related (Tesser & Schwarz, 2001). Typically, when we refer to a person's attitudes, we are trying to explain his or her behavior. Attitude is a mindset or a tendency to act in a particular way due to both an individual experience and temperament. Typically, when we refer to a person's attitudes, we are trying to explain his or her behavior. Attitudes are complex combination of things such as personality, beliefs, values, behaviors, and motivations. Attitude helps us to define how we see situations as well as how we behave towards the situation (Pickens, 2005). Basically, an attitude includes three components: an affect (a feeling), cognition (a thought or belief), and behavior (an action). It provides us with internal cognitions or beliefs and thoughts about people and objects. Although the feeling and belief components of attitudes are internal to a person, it can be viewed through individual resulting behavior.

In the broadest sense of functionality, attitudes facilitate adaptation to the environment (Ajzen, 2002). Among the functions recognized by most theorists are the value-expressive function of attitudes- the value individual students have for agriculture; the knowledge function- the individual students' knowledge of different branches of agriculture; the ego-defensive function, the socio-adjustment function- societal outlook and social stigma; and the utilitarian function (Murray, 1996). The operations of some of these functions have been investigated in recent studies. Students may have different attitudes and can react differently on the expected self-employment behavior especially as a farmer. Perhaps they can exhibit positive or negative attitude toward self-employment depending on their background, other traits and the societal outlook. If the students have positive attitudes toward self-employment, it is likely that upon

graduation they will start their own business. Conversely, if they form negative attitudes it is unlikely that they will become self-employed.

Students Industrial Works Experience Scheme (SIWES) is a program designed to bridge the gap between theory and practice in such disciplines as engineering technology and allied disciplines in higher institutions of learning (Naktiyok, Karabey & Gullace 2009). Industrial work experience scheme is important in any practical based academic training such as agricultural science education (ITF, 2005). According to Ogbonnaya (2003), it is aimed at harmonizing the theoretical knowledge obtained in the classroom with practical experience on the field. This enables any nation to build a strong technological base. The giant and prosperous nations attained greatness through strong science and technological base. Indeed, without proper application of theoretical knowledge, no nation can boast of been a strong science and technological base. The importance of industrial training in Nigeria led to the enactment of Decree 47 of 1971. The Decree established the Industrial Training Fund (ITF, 2004). ITF became the first Nigerian federal government parastatal established and charged with the responsibility of developing highly skilled manpower for the nation. As the Fund pursued the policy guidelines through its operations in the industry, it discovered a serious lack of practical skills of the indigenously trained engineers and technologists. It discovered that there is a big gap between theory and practice of practically inclined courses. Hence, in 1973, the Industrial Training Fund initiated the Students Industrial Work Experience Scheme (SIWES). SIWES was initiated to help bridge the gap between theory and practice. It was designed to complement the efforts of the higher institutions in producing graduates that are theoretically sound, technologically balanced and practically oriented (Aroh, 2000).

Following the discontinuation of the system of sponsorship of students by employers at the Yaba Technical Institute and the emergence of other higher institutions offering science, engineering and technology programs, there was no organized industrial training in Nigeria. Only those students who engaged in holiday jobs in areas relevant to their courses of study could be said to have had some form of work-

experience or industrial training while others did not.

The situation led to a spate of criticisms of Science Engineering and Technology (SET) graduates from Nigerian institutions as lacking practical skills in general and, in particular, the relevant production skills needed by industry. Consequently, some higher institutions introduced the Student Work-Experience Program (SWEP) to enrich the curricula of engineering courses (Uvah, 2004). SWEP was designed to enable students understand the practical applications of the basic principles underlying the traditional engineering programs (Civil, Electrical and Mechanical Engineering).

SWEP was conducted during the long vacation in the institutional workshops under simulated industrial conditions for 200 Level students of universities who have just been introduced to engineering and technology courses. Students were allowed to use machines and tools available in the workshops in the production of simple jobs and were introduced to some basic practices which they were likely to encounter during industrial training. However, SWEP was not a substitute for real industrial training.

In recognition of the shortcomings and weaknesses in the formation of SET graduates, particularly with respect to acquisition of relevant production skills (RPSs), the Industrial Training Fund established the Students' Industrial Work-Experience Scheme (SIWES) in 1973. The scheme was designed to expose students to the industrial environment and enable them develop occupational competencies so that they can readily contribute their quota to national economic and technological development after graduation. Consequently, SIWES is a planned and structured program based on stated and specific career objectives which are geared toward developing the occupational competencies of participants.

The Industrial Training Fund's Policy Document No. 1 of 1973 (ITF, 2004) which established SIWES outlined the objectives of the scheme. The objectives are to:

- Provide an avenue for students in institutions of higher learning to acquire industrial skills and experience during their courses of study;
- Prepare students for industrial work situations that they are likely to meet after graduation;

- Expose students to work methods and techniques in handling equipment and machinery that may not be available in their institutions;
- Make the transition from school to the world of work easier and enhance students' contacts for later job placements;
- Provide students with the opportunities to apply their educational knowledge in real work situations, thereby bridging the gap between theory and practice;
- Enlist and strengthen employers' involvement in the entire educational process through SIWES.

Indeed, the program has been designed to satisfy a need. But what need does the student see the program to satisfy. The program may never succeed until the students have a right perception of what need it has been designed to satisfy. Every establishment that is organized has some rules and regulations that govern its existence and management (Mafe, 2005). An industry with no defined set of guiding principles for her members is one that is poised to agonize. Principles and ideals make up code of ethics. The issue of ethics in every organization cannot be over-emphasized. Indeed, there will be chaos in the absence of work ethics, and no meaningful development can occur in an atmosphere of chaos. Nevertheless, it is rather unfortunate that many industrial trainees do not observe some basic work ethics. Every industrial trainee ought to be familiar with and consistently apply the ethics in the particular profession he/she is practicing or is about to practice. Success in one's assignment is not only determined by brilliance and intelligence, one's attitude to the observance of the code of ethics of the industry is cordially integral in one's competence assessment test. Success in any career, more than incontrovertible proofs of competence and proficiency, requires simple observance of the all important yet much abused work attitudes.

Statement of the problem

The major contemporary challenge of most of the developing countries is unemployment particularly among the youths. Over the years, there have been declines in the general standard of living in Nigeria largely due to poverty and unemployment

among its citizens. In the opinion of Mafe (2010), success in one's assignment is not only determined by brilliance and intelligence, one's attitude to the observance of the code of ethics of the industry is cordially integral in one's competence assessment test. Numerous measures were taken by the government to create jobs for the teeming graduates coming out from the Nigerian tertiary institutions as a way of reducing youth unemployment in the country. But these are to no avail as the number of graduates far outweighs the vacancies created yearly by both government and private sectors.

However many students from this area have taken the time of SIWES as a holiday period according to Anosike, as quoted in Aroh (2000), emphasized that SIWES is neither a holiday resort nor a vocational job. It is not a time to sleep away time. It forms part of the academic training of the students. Furthermore, Ogbonnaya (2003) observed that improper orientation has also made some students see the program as money making venture. Hence all that interests such students is how much money (cash) they can get from such an industry rather than how much of relevant experience can be acquired.

It is pertinent to find out if changing the orientation of students through (SIWES) toward self-employment could be efficacious in reversing the trend of youth unemployment in the country. In view of the recent government effort to inculcate entrepreneurial culture among students, it is relevant to ascertain whether in the near future the goal of curbing unemployment among graduates especially in the field of agriculture is achievable or not given the kind of attitude students have towards SIWES and agricultural practices.

Purpose of the Study

The major purpose of the study is to find out, the attitudes of Agricultural Education students in the college of Education (Technical) Lafiagi towards SIWES. Specifically the researchers intend to find out the attitude of male and female agric education students towards SIWES.

Scope of the Study

The scope of this study is limited to students in College of Education (Technical)

Lafiagi. Sample of students from vocational and technical schools were considered. A researcher-designed questionnaire was the only instrument used for data collection and the only statistical tools, used in analyzing the data were frequency, percentages, mean score and t-test.

Research Question

The following research questions were raised in the cause of the study:

1. What are the attitude of students in college of education technical Lafiagi towards SIWES?
2. Is there difference in students' attitude towards SIWES on the basis of gender?

Research Hypothesis

$H0_1$. There is no significant difference in students' attitude towards SIWES on the basis of gender?

Significance of the Study

The research on the attitude of student in college of education technical Lafiagi cannot be overestimated. The findings from the study would immensely benefit the students, the department of agric education, the ITF, the industries, the community and the government.

The students apart from the fact that this study enhances their understanding of what SIWES is all about and their attitude towards the scheme will positively change. Hence, maximize benefits from partaking in the program and develop entrepreneurial skill and be self employed.

The industrial Training fund ITF that establishes the program meant good for the nation and it has its aim of establishing it, every effort made by individual or cooperate body towards the realization of its aim and objective is a marginal approach. The study has I implication on very stakeholder such the students, the society, corporate organizations, industries, schools and the government of the country. So the study is towards realizing the aim and objectives of ITF.

The industries are not left out as parts of the beneficiary of the study students

that are concern are sent to the industries for practical exercises, as the students learn, they as well contribute to the growth of the industries with little cost hence helping the industries in cost minimization and maximizing profit.

One of the issues that serve as national threat in the country is unemployment one of the objectives of SIWES is to make the students develop entrepreneurial skill and be self employed. Success of which tends towards helping solve unemployment problems and increasing per capital income of the country.

Methodology

The descriptive survey approach was considered appropriate for this study since the researchers are interested in collecting information from a representative sample of students from Agricultural Education department in College of Education (Technical) Lafigi. Information required was gathered through the use of questionnaire, while inferences were drawn from result analyzed.

The population for the study constitutes all Agricultural Education students in Kwara State, the target population however comprised all Agricultural Education students in College of Education (Technical) Lafiagi. There were 300 students in school of vocational education with a little less than 100 in Agricultural Education department for the current academic session. Samples of student were selected from the department using systematic sampling technique. 60 students from among those going on SIWES were selected to be involved in the study.

The main instrument for this study was a researcher designed questionnaire titled Attitude of Students towards SIWES Questionnaire (ASTSQ). The instrument gives a reliability coefficient of 0.76, thus adjourned the instrument reliable enough for use.

The data for the study was collected through the administration of the questionnaire. The questionnaires were administered to the respondents when they return from the SIWES exercise in the department and were collected immediately by the researchers after the respondents have completely responded to all items there in. The section A of the instrument was analyzed using frequency, percentages and mean score. While section B was analyzed using the t-test. All hypotheses were tested at 0.05

alpha levels of significance.

The first section of the instrument containing the demographic data was counted and statistically analyzed using frequency and simple percentage with no point assigned. Section "B" has ten (15) items on attitudes towards SIWES among students of college of education technical Lafiagi.

This section was grouped into a four point Likert type scale which are as follows; Strongly Agree (SA) = 4 points; Agree (A) = 3 points; Disagree (D) = 2 points; Strongly Disagree (SD) = 1 points.

The data obtained were analyzed using frequency counts and mean score for the demographic data section. t-test was used to compare the mean score of the respondents. Adana (1996), considered the t-test procedure appropriate because it is a parametric test often used by researcher to compare the means of two groups.

Results

The data gathered for this study were analyzed using descriptive and inferential statistics. Results of the demographic data of respondents were analyzed using frequency counts and mean score. To test the hypothesis, t-test and analysis of variance were used. This section therefore presents the data analyses and summary of findings.

Demographic Data of Respondents

The demographic data of respondents are hereby presented in frequency counts and mean score.

The students interviewed based on their attitude towards SIWES program in the college were sixty (60) in number.

Table 1: ***Demographic Representation of the Respondents on the basis of gender***

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Male	31	51.7	51.7	51.0

Valid	Frequency	Percent	Valid Percent	Cumulative Percent
Female	29	48.3	49.3	100.0
Total	60	100.0	100.0	

Table 1 shows the responses of the respondents which shows that 31 (51.7%) of the respondents were male and 29 (48.3%) were female.

From the opinion of the students through the instrument used, the following were gathered as shown in table 3. Each item on the questionnaires was analyzed on the basis of which the research questions were answered and hypothesis tested.

Table 3: ***mean score and Rank order of the responses of the respondents on each item.***

Attitude towards Students Industrial Works Experience Scheme

S/No	SIWES students always:	Mean	Rank Order
1	Present in the place of exercise	3.27	2
2	Love to participate in every activities	3.40	1
3	Punctual to place of exercise	3.25	3
4	Stay throughout at the place of exercise	3.13	6
5	Wanted the period to be extended than it is	2.72	11
6	Love to participate in SIWES for the experience in it	3.15	4
7	Update the logbook every week	3.15	4
8	Write the report by themselves	3.03	7
9	Go to place of exercise only when supervisor is around	2.45	13
10	Fill the logbook at the end of the exercise	2.55	12
11	Love to participate in SIWES for the financial benefit	2.17	15
12	Think SIWES is a waste of time	2.77	9
13	Have few hours to spend in the place of exercise	2.42	14

14	Think there is nothing serious about SIWES	2.58	12
15	Think SIWES period I too long than expected	2.76	10

Table 3 shows the mean score and the rank order of each items, all items revealed that the students have positive attitude towards SIWES, since most of the items have their means above the average (2.5) with items 2, 1 and 3 ranked 1st, 2nd and 3rd respectively. Thus the students have positive attitude towards SIWES program. All items raised in the instrument are said to be major attitude of students towards SIWES except for items 9, 11 and 13 whose mean fall below the average. Thus going to place of exercise only when the supervisor is around; loving to participate in SIWES only for the financial benefit in it and having few hours to spend in the place of exercise are all negative attitudes of students in the department towards SIWES program.

Test of Hypothesis

Hypothesis 1

HO_1 *There is no significant difference in the students' attitude towards SIWES based on gender.*

In order to test this hypothesis, responses of students on attitude towards SIWES based on gender were collated on statistical coding sheets. The set of data were then subjected to t-test statistical analysis and the out-put is as show below.

Table 4: ***t-test analysis showing attitude towards SIWES among students in college of education (T) Lafiagi based on Gender.***

Gender	N	Mean	SD	DF	Cal.t-value	Cri.t-value	Decision
Female	31	22.313	5.801	58	0. 356	0.928	Ho_1
Male	29	23.306	5.831		0.354	0.354	Not rejected

*Significant P<0.05

Table 4 shows that the calculated t-value (0.356) is less than the critical table value (0.928) with 98 standard degrees of freedom and 0.05 alpha levels of significance. Since the calculated t-value is less than the critical t-value, the null hypothesis is therefore NOT REJECTED which implies that there is no significant difference in students' attitude towards SIWES program in College education (T) Lafiagi based on gender.

Summary

The data for the study was analyzed and presented with brief explanations. Information presented includes: frequency count, rank order, mean, degree of freedom, calculated t-value and critical t-value. The analyses revealed the attitude of agric education students towards SIWES program in the college to include: being present in the place of exercise always among others.

The hypothesis formulated was tested and was accepted. Hence there is no significant difference in the attitude towards SIWES program among agric education students in college of education (T) Lafiagi based on gender.

Discussions

The findings of this study revealed that agric education students have positive attitude towards SIWES, as most of the items have their means above the average (2.5) with items 2, 1 and 3 ranking 1st, 2nd and 3rd respectively thus; agric education students love to participate in every activities during the exercise, they are always present in the place of exercise and are always punctual to place of exercise. All items raised in the instrument are said to be major attitude of students towards SIWES except for items 9, 11 and 13 whose mean fall below the average. Thus going to place of exercise only when the supervisor is around; loving to participate in SIWES only for the financial benefit in it and having few hours to spend in the place of exercise are all negative attitudes of students of the college towards SIWES program. The findings here supported Anosike (2000) that SIWES is not a holiday resort neither is it a vocational job. It is not a time to sleep away time. It forms part of the academic training of the students; and negate the observation of Ogbonnaya (2003) that improper orientation has also made some students see the program as money making venture. Hence all that interests such students is how much money (cash) they can get from such an industry rather than how much of relevant experience that can be acquired.

The hypothesis of the study states that there is no significant difference in the attitude of agric education students towards SIWES program based on gender. The hypothesis was accepted and it implies that there is no significant difference in the

attitude towards SIWES program among both male and female students in college education (T) Lafiagi.

Conclusion

It can be concluded from the study that agric education students in the college have positive attitude towards SIWES program; the attitude of students towards SIWES program in the college include being present in the place of exercise always among others, and that their participation in the SIWES program has a lot to do with the financial benefit there in.

Recommendations

The study recommends that:

There should be more effort on the part of necessary agencies and authorities including stakeholders in education and industries, in enlighten youths especially the agric education students on the benefit of SIWES and its multiplying effect on their socio-economic development; Agric education students on SIWES program should be motivated to encourage them and ensure the realization of the objective of the program; There should be an incentive and award for active participation and outstanding performance; Candidate with outstanding performance should be encouraged through financial aid and scholarships to develop further or carryout project that might be of great implications on national integrations and development.

If all these are looked into, areas where students especially those in agric education department show negative attitude, will be taken cared of; and areas where they expressed positive attitude will be consolidated and sustained.

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