



## INFLUENCE OF SUSTAINABLE SKILLS- TRAINING ON EDUCATIONAL MANAGEMENT-UNIVERSITY-TEACHERS' TECHNOLOGICAL COMPETENCES IN NIGERIA

**\*Oluchi Queen Onwudinjo<sup>1</sup>, \* Chukwuemeka Joseph Chukwu (Corresponding Author)<sup>2</sup>,  
\*\*Evelyn Ijeoma Ezepue<sup>3</sup>, \*\*Iro Stephen Uwakwe<sup>4</sup>&\*\*Nkemakolam Athanasius Okereke<sup>5</sup>**

<sup>1</sup>Alex Ekwueme Federal University, Ndufu-Alike, P.M.B. 1010, Abakaliki, Ebonyi state Nigeria

<sup>2</sup>Department of Educational Foundations, Faculty of Education, University of Nigeria Nsukka, Enugu

<sup>3</sup>Department of Educational Foundations, Faculty of Education, University of Nigeria Nsukka, Enugu

<sup>4</sup>Department of Educational Foundations, Faculty of Education, University of Nigeria Nsukka, Enugu

<sup>5</sup>Department of Educational Administration, Faculty of Education, Abia State University Uturu

### Abstract

The experimental survey study focused on: (1) To examine the mean difference between the pre-test and post-test scores of the educational management university-teachers exposed to sustainable skills training and those who were not exposed to it in the selected Nigerian Federal universities. (2) To examine the mean difference between the performance scores of educational management teachers exposed to sustainable skills training and those who were not exposed to the training in the selected Nigerian Federal universities. Two research questions and two null hypotheses were asked and formulated as guides. Area was 5 Nigerian first generation-federal universities. Population comprised educational management teachers = 145 Teachers. The entire population was used. A sample of 25 teachers from University of Benin was used. The sample group was divided into two-unequal groups ('A'- Experimental groups and 'B'- Control group). Two research assistants and two trainers (professional teachers) were hired and paid at the end of the study. The trainers focused on sustainable skills with technological competences during the training exercises that lasted for three weeks (one week was for two of the universities studied). Test-retest method was used for group 'A' and 'B'. The performances of each of the groups were uniquely tagged, numbered, collected and collated for analyses with high consciousness to avoid bias and inconsistency. With the help of the research assistants and trainers, all the relevant data were collected and collated for analyses. The data were analyzed using t-tests, One-Way ANOVA and Statistical Package for Social Sciences (SPSS). The results showed positive-significant differences between the two mean scores as  $t=11.0$  and  $t=3.518$  with  $F=.026$  and  $F=1.119$  respectively at an alpha level of  $P < 0.05$ . However, the study results were:  $t=14.595$  and  $t=9.629$  with  $F=.339$  and  $F=11.737$  respectively. The researchers

concluded that the university teachers needed to be trained in sustainable skills which must be supported by the government. Finally, they recommended that the university management should establish a monitoring committee to ensure that the tasks are dully performed for goals actualization.

**Key words:** sustainable skills, sustainable skills training, management, educational management, educational management-university-teachers, technological competences and Nigerian First generation universities.

## Introduction

University education is the highest educational level with which to obtain the highest educational qualification. It is an important level of educational system of a nation, saddled with the responsibility for manpower development, research, teaching and learning, as well as research and community services. Akiti (2020: 21) opined that *"it is in acknowledging the value of education to man that the demand for higher education in Nigeria has become increasingly and unpredictably high"*. University education has high regards in most countries of the world. Obiekezie & Ejimot-Nwadiaro (2016: 16) opined that the *"education entails a process of teaching and learning for societal sustenance economically, developmentally and socially for the empowerment of its citizenries"*. University education is the key for individual and societal sustenance. In ensuring quality education for all at university level, Federal Republic of Nigeria (2014: Section 3, 82) established *"a variety of flexible learning modes including full-time, part-times, regular-Degree programmes for youths and other similar programmes for adults of all categories including distant learning programme, sandwich programme, online university programmes, etc"*. It is worth having but requires funds, commitment and patience, etc. Ajoku and Mohammed (2020: 145) emphasized that, *"university education occupies a prime place in the developmental efforts of nations all over the world"*. It showed its place in scheme of things.

In Nigeria, universities have two categories of personnel members: (1) students in their levels and (2) the staff (teaching and non-teaching staff members). A university staff could be defined as a professional of any sex, deemed capable to render specified acceptable and required services in a given university system. The staff was appointed to do so, based on acquired qualifications and experiences. The university teachers were appointed to teach a given group of the university students. University teachers are special group of university-staff-members as well as professionals recognized through their high track-record of academic performances and experiences, even though their commensurate allowances/ payments are not readily available. According to Eze (2019: 389), *"university teachers refer to all the teachers in various departments and faculties/colleges in Nigerian universities ranging from the rank of graduate assistant to professors"*. The teachers are responsible for the implementation of educational policies, curriculum and instructional packages (Tambuwal, Bello, Gausau & Faruk, 2017). They teach in various university programmes. Onwudinjo (2020: 71) defined university programmes as *"nationally approved academic disciplines in which students are admitted into for knowledge and skills acquisition in line with the national philosophy guiding the establishment of such disciplines in character and in learning"*. The programmes of departments and faculties of the universities, included: Anatomy, Agricultural Economics and Extension, Bio-technology, Business Administration, Criminology, Educational Management, Etc. University teachers, as professionals teach in various programmes. Amaechi (2017: 22) posited that *"the lecturers or teachers as professionals must know the art of communication, understanding others and have ability to learn from the experience"*. The university teachers translate theories into programmes and programmes into actions for presentation in classroom activities with reference to

specific disciplines, etc. Variably, members of university-non-teaching staff were appointed to render other services than teaching. They included: administrators, secretaries, library staff, bursary staff, laboratory attendants, technicians and technologists, clerks, drivers, security officers, messengers, and cleaners. etc University staff members render the required services. Udey and Bassey (2017: 208) stated that *“the major recipients of these services are mostly the students, their parents and members of the general public”*. The university students are individuals admitted, organized (as undergraduate /post graduate students in levels) to undergo similar or different programmes of a given university within certain specified period of time. The universities saw the students as raw materials, equipped them, transformed and presented them as finished products through the teachers. The teachers systematically applied effective pedagogies educational methods/ processes/ practices in achieving well articulated goals

In educational management programme, the concerned teachers worked under Faculty of Education and they were meant to teach related courses like: Introduction to educational management, Introduction to educational policies in Nigeria, Statistical method in educational management, problems and issues in planning Nigerian education, etc. They worked to train the concerned students in both pedagogies, educational management practices, teaching practices, research writing, etc towards actualization of educational goals in line with human, materials and societal developments. Ibrahim (2015:152) defined development as *“the gradual transformation of something into stronger, better and improved form”*. Proper development of the university students is very important and required to be supported by the government. Development is essential and critical to growth and sustenance of any country (Lawal & Oluwatoyin, 2011). The students needed to be trained in the relevant skills and courses within the specified programmes and periods for achievement of sustainable development. Sustainable development involved a continuous improvement of one’s life and endeavours. Sustainable development prioritizes attention to continuity and preservation as people explore explicit available resources for the enlargement of their existence (Omotayo & Osman, 2017). All efforts made in university systems were geared towards attaining sustainable development.

However, over a long period of time, university teachers seemed to have been burdened by lack of technological competences, problem-solving skills, lack of time, etc. These problems had caused delays and obstructions in actualization of educational objective and goals. Recently, the problems aggravated to stress in workplaces. Stress in workplace is a state of psychological and physiological imbalance resulting from the disparity between situational demand and the individual’s ability and motivation to meet those needs (Akrani, 2011). Stress in a workplace is bad. Nsor, Agabi, Ini & Akpan (2017: 72) opined that *“stress in a workplace could result in loss of job satisfaction, loneliness, disappointment, addiction to drugs, memory loss, lateness to work, aggressiveness and poor working relationship in an establishment.”* By implication, it portrayed a mental or physical pressure that adversely affected the body-functions of the university teachers leading to imbalance of mind and body. Work-related stress could affect all categories of people ranging from the superordinates to the subordinates. Chronic stress can strongly contribute to the development of other health problems: heart disease, depression or obesity (American Psychological Association, 2016). Sustainable skills acquisition seemed to be needed

Sustainable skills can be defined as the acquired competences which are capable of enhancing human life and development in any emerging condition. Acquisition of sustainable skills helps in meeting the pressing needs of the people and extending opportunities to satisfy people's aspiration for better life. On this point of view Apkan (2014) asserted that *"for university teachers to become effective and efficient, they need to acquire appreciable level of competence"*. The competences are sustainable skills. Professionally, sustainable skills pave way for immediate life adjustments, job opportunities, acquisition of entrepreneurial skills, technological competences, diversification of one's intellectual domains, maximization of life opportunities, human capital development. Also, time consciousness, effective communication, human relationship, management skills are not left out. Onwudinjo (2017: 37) confirmed that *"the use of technology in the classroom requires time, money and training"*. By implication, huge amount of resources are required in sustainable skills training. Acquired sustainable skills with technological competences would not only continually enhance the teaching and learning processes but also improve development of the university personnel members.

Unfortunately, aspiring for sustainable development without sustainable-skills for the university teachers seemed to appear as a mirage. Most of the university courses have in-built-skills and competences but they are hardly harnessed by many of the teachers and the students. At the end of the course, some of the subsumed skills in the courses remained untapped. The teachers found teaching with technologies and internet-related facilities very difficult to utilize. Recently, some of the teachers moved from one unit/department to another with one technological related problem or the other. It showed lack of those aforementioned skills. Some of them hardly used power-point in classroom-lecture-deliveries and could not upload students' results, etc. They preferred to apply the conventional method of teaching which involved white-boards, markers, dusters, etc which had no sustainable relativity in the contemporary globalized society. Problems such as: high-blood-pressure among the university teachers, stress, hunger, restiveness, crimes, crises, etc could be traceable to lack of sustainable skills. Tentatively, if many of the teachers could not exhibit good teaching with technological practices even after many years of teaching experiences, the consequence remained that, the skills inculcated by such teachers and acquired by the students have little impacts. Ogudo (2020: 19) lamented that *"the rate of graduate unemployment in Nigeria has persistently been on the increase despite the enormous endowment of the country with human and natural resources"*. In concordance, Chiemeka-Unogu (2020:27) added that *"Nigeria is presently burdened with graduate unemployment, poverty and crimes"*. This called for adjustments in the teaching services of the university systems. Onuoha (2016:16) succinctly stated that *"ever-increasing enrollment of students in our institutions of learning does not make for effective impartation of learning by the teacher"*. The pace which the society changes and the strange-resultant effects of human-posed-challenges and natural disasters, coupled with technological advancements and how it has entwined in all spheres of life, are good reasons to embrace technological applications in modern day activities, particularly in teaching and learning (Onwudinjo (2017). On the assertion of Akangbuo (2020: 62) *"the education of the total man involves developing three domains which are cognitive, psychomotor and the effective"*. Education involved training of the mind and body. Participation in training and development enable teachers to develop the knowledge and skills needed to address teachers' work and students' learning challenges (Chiemeka-Unogu, 2018). Training-benefits at universities go beyond the training venues. According to Akiti (2020: 143) *"the need for technological competence in our universities cannot be over emphasized"*. Universities through quality and sustainable education are expected to produce

individuals who are academically and socially competent to meet the educational, social, technological, economical and leadership needs of the nation (Anthony & Okon, 2017). Onwuekweike & Modebelu (2019: 515) added that "*universities are expected to equip members of the society with useful skills to enable them create wealth and contribute to the wellbeing of the entire society*". The sustainable skills with technological competences and education are second-to-none in both capacity building and national development.

Many researchers have worked on related topics some years ago but could not address the issue. Ihechu & Ugwuoji (2019) researched on influence of technology mediated learning on students' academic achievement in college of Education, Imo state. The study had ex-post-factor design. It had two research questions and two null hypotheses. The instrument used for data collection was profoma already in the department with emphases on research method taught in Mathematics education using both lecture method and power-point presentation. The study failed to address the issues under study. It was related but different from the current study. Again, Eze (2019) carried out a research on competency improvement needs of university teachers for effective utilization of ICT in Science Education in South Eastern zone of Nigeria. The instrument for the descriptive survey study was a structured questionnaire which had face and content validity in science education. The research questions were answered using weighted mean and improvement need index. Also, the study failed to address the issue. It was related but different from the issue under study. Onwudinjo (2017) studied 'analysis of technological competences of teachers for actualization of functional Education in Managing universal Basic Education'. It was a survey study meant to find if there was a significant difference between teachers that had technological competence and those who did not have. Three research questions and one null hypothesis were used. A 4-point-self-made-response questionnaire was used. Data collected were analyzed using 2-way ANOVA. The result showed that there was a significant difference in the mean ratings of the teachers who had technological competences at  $P < 0.05$ . The study was related but different from the current study. Moreover, Muzenda (2013) researched on lecturers' competences and students' academic performance. He found that 88% overall variation in students' academic performance was accounted for by lecturers' attendance to lecture and attitude. The study was related but different. Currently, the issue spontaneously coagulated resulting in poor university students' lecture attendances, etc.

At this juncture, it has become important to understand that sustainable skills acquired through training and applied in work stations are first steps achievement priorities. Also, it became clearer that if nothing is urgently done to address this pressing challenge in the university systems, it can escalate with disastrous effects. It was against this background that the researchers were fascinated to choose this experimental survey topic with two specific objectives: (1) To examine the mean difference between the pre-test and post-test scores of the educational management university-teachers exposed to sustainable skills training and those who were not exposed to it in the selected Nigerian Federal universities. (2) To examine the mean difference between the performance scores of educational management teachers exposed to sustainable skills training and those who were not exposed to the training in the selected Nigerian Federal universities.

**Methods**

The study-design was experimental survey. Area of the study was Nigeria with emphases on 5 first generation federal universities. Ajoku & Mohammed (2020: 146) clarified that *“the six universities established between 1960 - 1970 became known as the first generation federal universities”*. The universities included: (1) University of Ibadan -1948 which became a full fledged university in 1962 (2) University of Nigeria Nsukka 1960 (3) University of Ife, now Obafemi Awolowo university- 1962 (4) Ahmadu Below University Zaria -1962 (5) University of Lagos – 1962 and (6) University of Benin - 1970. For the purpose of the study, the First 5 were used. Educational management teachers from the universities were emphasized. The study population = 145 teachers and all was used. A sample of 25 university teachers from University of Benin was used for reliability testing. The sample group was divided into two-unequal groups (‘A’- Experimental groups and ‘B’- Control group). Two research assistants and two trainers were hired and paid at the end of the study. The trainers focused on sustainable skills with technological competences during the training exercises that lasted for three weeks (one week was for two universities studied). The university teachers’ were assessed using test-retest methods. The performances of each of the groups were uniquely tagged, numbered, collected and collated for analyses with high consciousness to avoid bias and inconsistency with the help of the research assistants and trainers. The data were analyzed using t-tests, One-Way ANOVA and Statistical Package for Social Sciences (SPSS). The results showed positive and significant differences between the two mean scores as  $t=11.0$  and  $t= 3.518$  with  $F= .026$  and  $F = 1.119$  respectively at an alpha level of  $P < 0.05$ .

**Results**

**Table 1: showed the result of the Research Question One**

The mean difference between the pre-test and post-test scores of the groups of educational management university teachers exposed to the sustainable skills training with technological competences and those that were not in the selected Nigerian federal universities at  $P < 0.05$ :

Paired Samples Statistics					
Variables	Mean	N	Std. Deviation	Std. Error Mean	
Pair 1 Group A post-test scores	3.5000	72	.58140	.06852	
Group B post-test Scores	2.2500	72	.43605	.05139	

Paired Samples Test								
Variables	Paired Differences				t	Df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Group A post-test scores - Group B post-test Scores	1.25000	.72675	.08565	1.07922	1.42078	14.595	71	.000

Table one above showed a positive mean difference of 1.25,  $t$ -calculated = 14.595,  $df=71$ ,  $t$ -critical = 1.98 at an alpha level of  $P<0.05$ . It implied that the training exposed to group 'A' gave rise to positive mean difference and the result of the  $t$ -calculated.

**Table 2: Showed the result of the Research Question two**

The mean difference between the performance scores of the educational management university teachers exposed to the training and those who were not exposed to the training in the selected federal universities at  $P < 0.05$ .

Paired Samples Statistics					
Variables	Mean	N	Std. Deviation	Std. Error Mean	
Pair 1 All group A performance scores	2.7431	144	.87503	.07292	
All Group B performance scores	2.0903	144	.39068	.03256	

Paired Samples Test								
Variables	Paired Differences				t	df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 All group A performance scores - All Group B performance scores	.65278	.81352	.06779	.51877	.78678	9.629	143	.000

Table two above showed a positive mean difference of .65278,  $t$ -test = 9.629,  $t$ -critical = 1.98 at  $P < 0.05$ . It implied that participation in training was very impactful in teaching and learning processes

**Table 3: Showed the result of the first null hypothesis in the study**

The result showed a significant positive difference between the pre-test and post-test scores

ANOVA					
The mean difference between the pre-tests and post test scores of the study in the universities					
Sources of variation	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.063	3	.021	.339	.797
Within Groups	8.764	141	.062		
Total	8.828	144			

Table three above showed a significant positive difference between the pre-test and the post- test scores of the studied variables with an F-ratio of .339 at  $P < 0.05$ .

**Table 4: Showed the result of the second null hypothesis of the study**

The result showed a significant positive difference between group ‘A’ and ‘B’ variables

ANOVA					
The Mean difference between the group A and group B performance scores in the study					
Sources of variation	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	15.627	2	7.814	11.737	.000
Within Groups	93.866	141	.666		
Total	109.493	143			

Table four above showed the performance scores of the two groups which had an F-ratio of 11.737 at  $P < 0.05$  with other values in the table.

The Biographic information about the respondents are shown in Charts/Figures below: Figure

1: Showed Bar chart of the study sex in the selected Nigerian federal universities

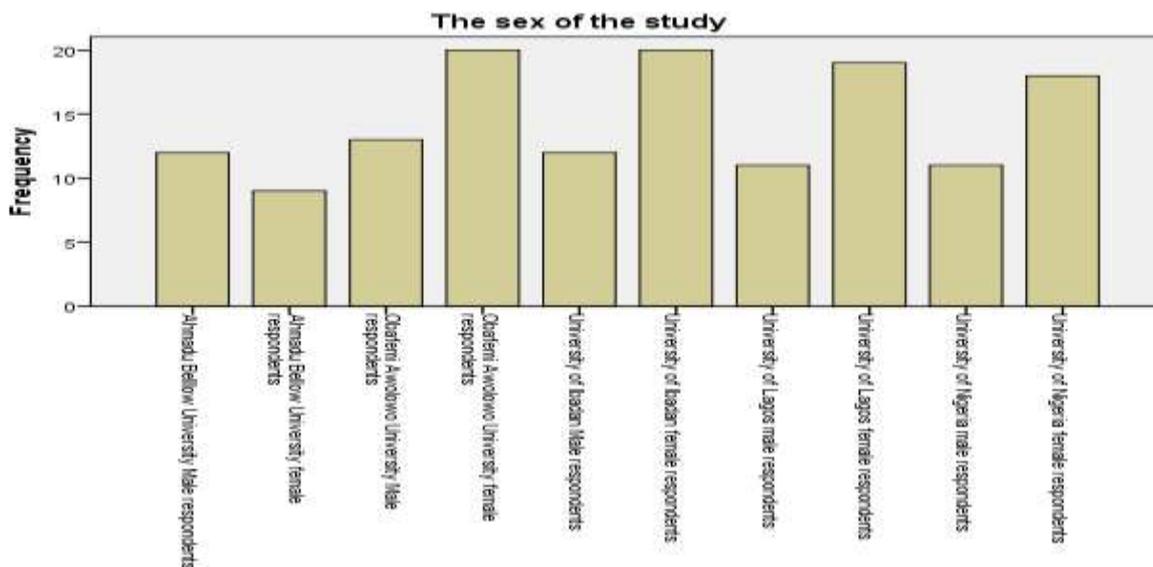


Figure 2: Showed educational qualifications of the respondents in a Pie chart below:

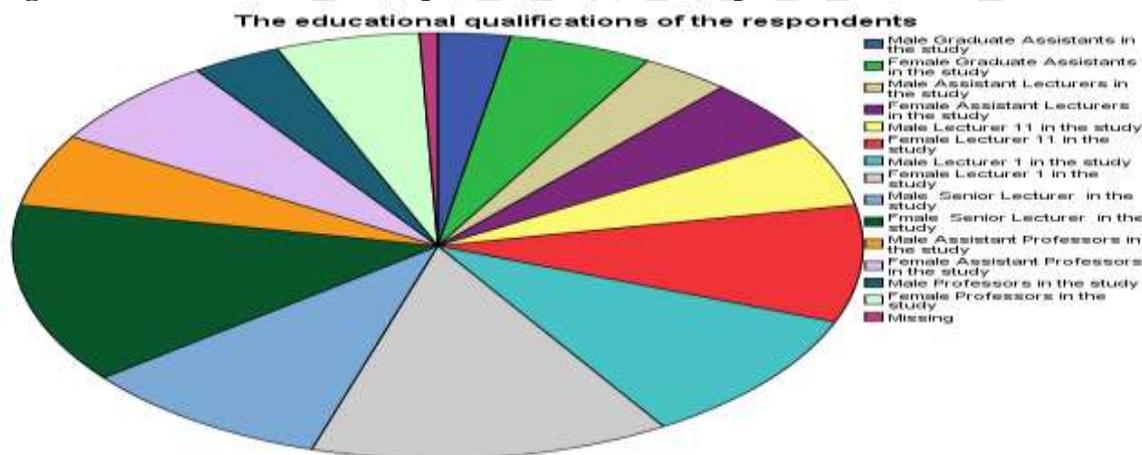
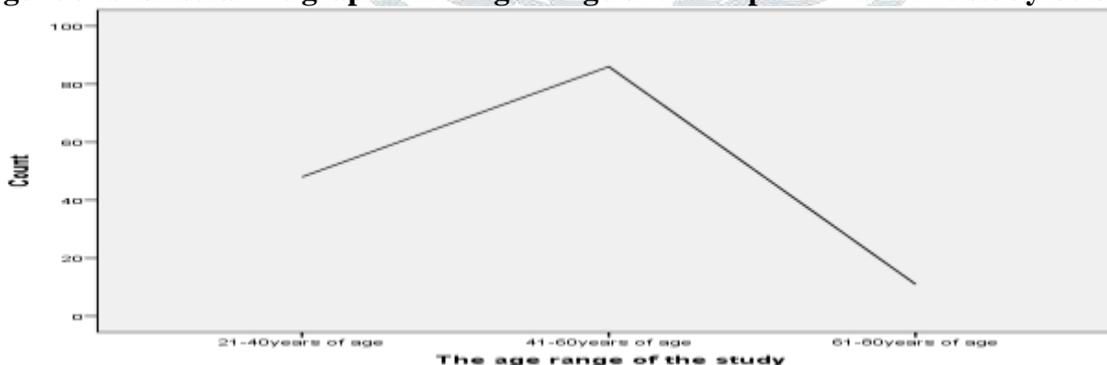


Figure 3: showed a line graph of the age-range of the respondents in the study below:



**Discussion of the findings**

The study was successfully carried-out. In Research Question one:, the findings revealed that there was a positive mean difference between the pre-tests and the post-test scores of the educational management-university-teachers selected in the Nigerian federal universities. Lack of sustainable skills among the teachers could have prevented them from attaining certain levels of developments and can continually affect the quality of their service deliveries in the universities.

In research question two, it revealed a positive difference between performance mean score of the teachers exposed to the sustainable skills training with technological competences and those who were not exposed to the training. The teachers' increased performances in technological competences were due to the newly acquired sustainable skills. Also, the skills acquired through trainings were responsible for the performance difference. This findings were In tandem with the findings of Onwudinjo (2017: 74) found that "there was a significant different between teachers that had technological competences and those who did not have in managing universal basic education. This implied that training increases one's knowledge/skills in the learning domains. Also, it improved classroom activities, lecture presentations, result uploading and down loading, research writing and assisting of a fellow teacher where necessary in the institution, without which their academic responsibilities, etc would be challenging.

However, in research hypothesis one, the findings revealed that there was a positive significant difference between the prôt-test score and the post test scores of the variables studied. Also, in research hypothesis two, the findings also revealed that there was a significant positive difference between the teachers exposed to the sustainable skills training and those who were not exposed to the training. By implication, those exposed to it performed better which indicated that training on practical skills was efficacious and helped in achievement of excellence educational practices. Ihechu & Ugwuoji (2019: 373) agreed 'that '2016/2017 academic session taught research method in Mathematics using power point presentation achieved better than 2015/2016 academic session of the similar group taught with lecture method'. Training of teachers for sustenance remained the 'key'. Eze (2019: 391) found in a research study as respondents agreed that all the university teachers needed competences in Information and communication Technology (ICT)". These were parts of the sustainable skills.

## Conclusion

Having found that, sustainable skills training impacts technological competences with other required skills on the university teachers, there is urgent need for adjustment and improvement through sustainable skills training. The researchers concluded that all the university educational management teachers needed to be trained in sustainable skills which must be supported by the government. Finally, the researchers recommended that the university managements should establish a monitoring committee to ensure that the tasks are dully performed for goals actualization.

## References

- Akangbuo, V. (2020). *Influence of school management on the affective competences of secondary schools students in Bayelsa state*. Multidisciplinary Journal of Research Development 29 (1), 61-70
- Akiti, N. (2020). *Improvement strategies for students' enrolment in business education programmes in colleges of education for sustainable development in Delta state*. Multidisciplinary Journal of Research Development 29 (1), 132-142.
- Akpan, C. P. (2014). *ICT competence of lecturers' job efficiency in universities in Cross-River state Nigeria*. International Journal of Humanities and Social Science, 4(10), 259 - 266

Akrani, G. (2011). *What is stress: meaning and causes of stress?* Retrieved from [www.kalyancity.com](http://www.kalyancity.com)

- Ajoku, L. I. & Mohammed, J. I. (2020). *E-learning and University education in Nigeria: Challenges and prospects*. Multidisciplinary Journal of Research Development 29 (1), 143-146.
- American Psychological Association (2016). Stress by generation. Retrieved from <http://www.apa.org/news//press/releases/stress/2012/generations.Aspx>
- Amaechi, A. A. (2017). *Students' perception on lecturers' attitude and students academic performance in tertiary institutions in Nigeria*, International Journal of Educational Administration Planning and Research, 9 (2), 21- 38.
- Anthony, E. C. & Okon, M, O. (2017). *Family structure and cohesion on social anxiety of university freshmen in Cross-River state Nigeria*. International Journal of Educational Administration Planning and Research (IJEAPR), 9(2), 113-124.
- Chiemeka-Unogu, C. M, (2020). Entrepreneurship education in Nigeria universities: programmes and goals for sustainable national development Multidisciplinary Journal of Research Development, 29 (1), 27.33.
- Chiemeka-Unogu, C. M, (2018). *Principals' participation in staff development programmes for effective performances in public secondary schools in Rivers state*. International journal of scientific research in Education, 11 (2), 204-219.
- Eze, G. N. (2019). Competency improvement needs of university teachers for effective utilization of ICTs in science education. AE-FUNAI Journal of Education, 1 (2), 387- 394.
- Ibrahim, M. (2015). *Agricultural education and development in Nigeria Beyond 2020, National Association of the Advancement of Knowledge*, A Multidisciplinary Journal of Knowledge Review, 33(3), 151-155.
- Lawal, T. & Oluwatoyin, A. (2011). *National Development in Nigeria: Issues, Challenges and Prospects*. Journal of Public Administration and Policy Research, 3(9),237-241.
- Muzenda, A. (2013). *Lecturers' competences and students academic performance*. International Journal of Humanities and Social Science Invention, 3(1), 6-13.
- Nsor, J. M., Agabi, F.O., Ini, F. J. & Akpan E.E. (2017). Stress management and secondary school teachers' job effectiveness in Calabar Municipality of Cross-River state, International Journal of Educational Administration Planning and Research, 9(2), 72-78.
- Obiekezie, E. O. & Ejemot-Nwadiaro, R. I. (2016). *Quality assessment in higher education in Nigeria: Input, process and output approaches LWATI: A Journal of Contemporary Research in Humanities and Social Sciences*, 13(3), 16-30.
- Ogudo, P. A. (2020). *Impact of entrepreneurship education on entrepreneurial intentions of undergraduate of colleges of education in Asaba*, Multidisciplinary Journal of Research Development 29 (1), 19 - 26.
- Omotayo, B. A. & Osman, N. N. ( 2017). *Revitalizing entrepreneurial education for sustainable development in Nigeria*, International Journal of Topical Educational Issues, 1 (2), 117-128.
- Onuoha, C.. (2016). Effective teaching of Mathematics in Nigerian School s: Challenges and the way

forward. In U.M.O. Ivoni (Ed.), *Teacher Education in Nigeria: A book of reading of Prof. Mrs Victoria Adaobi Obasi* (pp. 193-208), Lagos: Foremost Educational Services Ltd.

Onwuekweikpe, B. C & Modebelu, M. N. (2019). *21<sup>st</sup> century technology mediated learning for effective entrepreneurship education for wealth creation in Universities in Imo state*, AE-FUNAI Journal of Education, 1(2), 513-522.

Onwudinjo, Q. O. (2020). *Educational management students' disruptive attitudes and excellent practices for sustainable national development in selected federal universities in South Eastern Nigeria*, Multidisciplinary Journal of Research Development, 29 (1),71-80.

Onwudinjo, Q. O. (2017). *Analyses of technological competences of teachers for actualization of functional education in managing universal basic education*, International Journal of educational administration planning and research, 9(2), 30-38.

Tambuwal, N. T., Bello, S., Gausau, A. H. & Faruk, R. U. (2017). *Environmental education and society: The role of Biology teachers through the curriculum*. 60<sup>th</sup> Anniversary Conference Proceeding of Science Teachers Association of Nigeria 2(2), 324 – 332.

Udey, F. U. & Bassey, M. O. (2017). *Service delivery and indiscipline behavior among students in universities in Cross-River state*, International Journal of Education Administration Planning and Research, 9(2), 206-213.

