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RESEARCH PAPER

# Influence of business educators' ICT literacy skills based on age on ICT tools utilization in teaching business education courses in Federal Colleges of Education in South-south, Nigeria

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#### **Abstract**

This study examines the influence of business educators' ICT literacy skills based on age on ICT tools utilization in teaching Business education courses in Federal Colleges of Education in South-south, Nigeria. Three specific purposes, two research questions and one hypothesis were posed to guide the study. Descriptive survey research design was adopted for the study to elicit responses from a population of 105 business education lecturers from three Federal Colleges of Education in South-south, Nigeria. The entire population was used for the study as it is a manageable size. Closed ended questionnaire was developed by the researchers for data collection. The questionnaire was face validated by two experts, one of measurement and evaluation and the other of business education from Rivers State University. Cronbach Alpha statistics was used to determine the reliability index of 0.76 and 0.82 for the two sections of the instrument. The average reliability index for all the section is therefore 0.79. Data collected were analysed using descriptive statistics of mean to answer the research questions and simple regression was used to test the hypotheses at 0.05 level of significant. The computations were done using Statistical Package for Social Science (SPSS) version 21.0. The results of the study revealed that business educators within the ages of 25 to 45 years possessed more ICT literacy skills and utilized more ICT tools than those within the ages of 46 to 64 years. The results also show that business educators ICT literacy skills based on their age influence their utilization of ICT tools. Based on the findings, it was recommended among others that: Business educators irrespective of their age group should enhance their ICT literacy skills and incorporate ICTs in teaching and learning business courses. On a higher note, employers should facilitate on job trainings and work on ICT literacy skills and their application in the classroom environment.

Keywords: communication technologies, business education and ICT skills

#### Introduction

The 21<sup>st</sup> century has witnessed an unprecedented integration of Information and Communication

Technologies (ICT) in the business of teaching and learning. This is due to the advantages derivable from their usage such as: fostering individualized instructions, collaborative learning and research, access to online

resources, promoting learners' skill development as well as allowing learners to work at their own pace (Mafikuyomi, Ojewale & Salami, 2016). ICT according to Ezenwafor (2012) view ICT as "umbrella term which describes a range of communication technologies and their application software such as: computer networks, computer hardware, white board, internet, word processing software, database software, video-conferencing applications, spreadsheet application and satellite systems" pg.45. Amiaya (2014) also opined that ICT include: computers, internet and intranet, general system of mobile communication (GSM), worldwide web (www), teleconferencing and videoconferencing devices, social media apps, interactive white board and mobile technologies. Although, most of these ICT tools were designed for job performance purposes, many of them are required also for human capital development since the human beings are needed to utilize them to perform jobs in different aspects of life. Consequently, the preeminence of ICT tools as part of the minimum requirements for human capital development educational programmes in Nigeria cannot overemphasised.

The ICT tools needed for each educational programme offered by Colleges around the world may differ significantly; this is based on the fact that each educational programme is designed to develop human resources unique in their own selves. For the purpose of Business education progamme at the Colleges of Education level in Nigeria, ICT tools such as: computer systems, computer word processor (such as: Microsoft word), spreadsheet application (such as: excel), computer data analysis application (such as statistical package for social sciences (SPSS)), computer networks (such as: internet, local area network (LAN)), video conferencing device, digital photocopier and duplicator, and SAGE application for accounting are specified in the minimum standard for Nigeria Certificate in Education (NCE) by the supervisory body (National Commission for Colleges of Education, NCCE, 2012). These ICT devices are needed in Business education programme in order to produce graduates of accounting, marketing and/or office management options who can serve in today's ICT driven business world whether they can find teaching jobs or not (Ozuruoke & Abdulkarim, 2016). Hence, these ICTs are required to be used in teaching many business education courses such as: e-accounting, computer application, ICT in business education, e-commerce, e-marketing, and modern office technologies (NCCE, 2012).

Consequently, it is also worth noting that utilization of any kind of ICT tool to perform task in educational programme requires the possession of skills related to its usage. According to Ayim (2018), an important condition for active utilization of technological product or services in education is the competency and expertise of users. Supporting this, Abah (2019) opined that in assessing the utilization of ICT tools to drive task performance in education, access to and skills remain primordial

conditions to be examined. Ovedipe and Popoola (2019) noted that the ability of personnel to actually utilize ICT in practice requires the possession of some level of ICT skills. It is important to note that while the issue of access to ICT tools and ICT literacy skills of the personnel are being addressed in order to drive utilization of ICT tools in teaching business education courses, the demographic variables of personnel also have been linked to their willingness to use technological tools in teaching courses. Nawaz and Kundi (2010) opined that teachers, students and any other users of ICTs, behave according to their demographic characteristics of age, educational level, cultural background, physical and learning disabilities, experience, personal goals and attitudes. Although, demographic variables encompass age, gender, marital status, educational status, work experience and income, in this study only age would be considered. This is based on the fact that there seems to be clear phobia for the use of technological devices amongst the older personnel (Oyewole & Popoola, 2014). Ejechi (2013) concluded that the reluctance of elderly and experienced Nigerian academics to use information and communication technology applications may posed a barrier to the integration of information and communication technology in teaching courses because they provide academic leadership in virtually all institutions of learning.

Several studies have been conducted to examine the utilization of ICT tools in teaching business education courses as well as the ICT skills of business educators with variation in their outcomes. For instance, Okoro (2013) reported that business educators at the postgraduate level have relevant competency in the ability to use ICT to send e-mail, receive e-mail, skills in producing documents with word processors, create agenda using contra version electronic software, research using internet, edit text on screen, key in Microsoft word, use desktop publishing, use spreadsheet package but do not have competent ability to use video conferencing, fax messages, and create website. Ezeani and Ishaq (2014) reported that ICT tools/facilities for teaching business education courses were not properly utilized in delivering of business education courses. Okolocha and Nwadiani (2015) reported that ICT resources are rarely utilized in the teaching of business education courses.

Earlier studies on the utilization of ICT tools based on the age of the user showed that younger lecturers tend to utilize ICT tools in teaching more than older lecturers. Oyewole and Popoola (2014) reported that when it comes to the use of technology, the older people are not flexible, that is, they resist it at all costs. Ohiwerei and Onimawo (2016) reported that young business education lecturers have high proportion of utilization of ICT equipment more than older Lecturers based on years of experience. Oyedipe and Popoola (2019) noted that the reason why younger professionals are versatile with the use of ICT compared to the older ones is the fact that age affects one's ability to acquire new skills. Dei (2018) reported that

ages and gender of the respondents largely affected their adoption and usage of ICT as young and male teachers had more abilities and interest in the use of ICT tools for teaching and learning.

In the light of the foregoing empirical review, it is obvious to the researchers that several studies have been conducted to assess the ICT skills of business educators. their utilization of ICT tools in teaching business education courses and the variation of ICT tools utilization in teaching among business educators based on age. However, to the best of the researchers' knowledge, no study has considered the influence of ICT literacy skills based on age on business educators' utilization of ICT tools in teaching business education courses. Thus, the need to fill this gap in existing literature cannot be overemphasised especially if business educators are to be fully active now that Nigeria considers electronic learning driven by ICT tools integration in education as alternative to traditional classroom due to the experience of COVID-19. Consequently, this study is conceived to fill this gap by assessing the influence of business educators' ICT literacy skills based on age on ICT tools utilization in teaching Business education courses in Federal Colleges of Education in South-south, Nigeria. Specifically, the study seeks to:

- assess the ICT literacy skills possessed based on age of business educators in Federal Colleges of Education in south-south, Nigeria.
- ascertain ICT tools utilized based on age of business educators in teaching business education courses in Federal Colleges of Education in southsouth, Nigeria
- determine the influence of business educators' ICT literacy skills and age on their utilization of ICT tools in teaching business education courses in Federal Colleges of Education in south-south, Nigeria.

# **Research Questions**

The following research questions were raised to guide the study:

- What are the ICT literacy skills possessed based on ages of business educators in Federal Colleges of Education in south-south, Nigeria?
- What are the ICT tools utilized based on age of business educators in teaching business education courses in Federal Colleges of Education in southsouth, Nigeria?

## **Hypothesis**

The following null hypothesis was test at 0.05 level of significance:

 Business educators' ICT literacy skills possessed based on age has no significant influence on their utilization of ICT tools based on age in teaching business education courses in Federal Colleges of Education in south-south, Nigeria.

# **Conceptual Review**

#### ICTs and Business Education

Business education as an aspect of vocational education is designed to prepare recipients for and about business as well as to equip them with the technique of teaching business courses. Abdulkarim, Agburuga & Ordu-Pac (2015) gave a clear distinction of education for and about business by describing "education about business" as that which concentrates on content knowledge development such as the understanding of business concepts, principles and theories, while "education for business" as that which concentrates on practical skill acquisition through business education programme. Udo (2015) opined that business education is a comprehensive activity-based occupational education programme that is concerned with skills acquisition, the development of abilities, understandings, attitudes, work habits and competencies that are required for success in any chosen business occupation.

According to Ubulom (2012), Business education is that aspect of education and training that individual receives in order to understand and take up career in the business world either as: as an administrator or manager or teacher, wherever he may find himself in the business world. According to Val-Ossai and Akpomi (2017), Business education is a programme of instruction that prepares students for entry into and advancing in jobs within the business world and in education. Ozuruoke and Abdulkarim (2016) also defined Business education as the type of education that is designed to equipped recipients with knowledge and skills for proper understanding of the economies around them and how to take advantage of the opportunities they provide to render services in an organized manner as producers of goods and services, as well as rational and intelligent consumers of the products or services of others.

Globally, the realization of role of business education in empowering recipients with vocational knowledge and skills have led to the advocates for centres that run business education programme for the purpose of imparting its vocational knowledge and skills in general business operation to future generations. To achieve this, the production of conscientious business teachers remains paramount. It is for this reason that business education programme are being offered at the Colleges of Education level under the supervisory roles of the National Commission for Colleges of Education (NCCE).

In this era of technological driven business world, the National Commission for Colleges of Education (NCCE) in her (2012) minimum standard implementation guidelines for NCE Business education emphasised the need for every business educator to use ICTs to facilitate learning of business education courses. This notwithstanding, it is obvious that the present era of ICT driven business world, required a shift from conventional methods of teaching and learning to teaching methods that requires the integration of ICT tools in the processes, especially at the colleges of education where business courses teachers are being trained. This is due to the fact that Business education at the colleges of education level is designed to provide the required human resources needed to effectively and efficiently teach business courses at the secondary school level and/or manage today's electronic business world (Ozuruoke & Abdulkarim, 2016). Hence, the need to ensure teachers utilization of ICT tools during teaching and learning processes. However, as earlier noted Business educators who want to utilize ICT in teaching and learning needs to be proficient in ICT literacy skills, therefore investigating their ICT literacy skills from time to time as prerequisite for ICT tools utilization in teaching business education courses cannot be overemphasized.

# ICT literacy skills

ICT literacy skills are abilities required for effective and efficient utilization of ICT tools. According to Ugwuanyi (2011), ICT literacy skills are essentially new literacy required for effective utilization of ICT tools to accomplish tasks in the 21<sup>st</sup> digital world. Iyanda, Opele and Akintunde (2016) opined that ICT literacy skill refers to the ability to use digital technology communication tools and networks appropriately for researching, organizing, evaluating and communicating information.

According to Andrea (2011), ICT literacy skills are enabling skills that allows individual to actively participate in a society where service and cultural offerings are driven by the use of computer and distributed through the internet. Ibelegbu (2013) opined that ICT literacy Skill for instructional delivery is the ability required by teachers for effective instruction using digital tools. The Department of Public Instruction in Michika and Manabete (2019) outlined eight basic ICT literacy skills needed by serving and preservice teachers to include: 1) Computer operation skills: 2) Set-up skills: 3) Maintenance and trouble shooting skills: 4) Word processing/introductory desktop publishing; 5) Spreadsheet/graphics; 6) Database; 7) Networking; and 8) Telecommunications/media communication (including images and audio processing), and multimedia integration skills.

According to Emesini (2015) basic ICT skills include: data processing skills using computer; typing skills and editing skills. Oyedipe and Popoola (2019) opined that ICT literacy skills can be classified into four groups namely: computing skills, internet navigation skills, computer management skills and computing application skills. Ibelegbu (2013) outlined ICT skills that are very essential

for a business teacher at the secondary school level for effective instruction to include: computer appreciation skill, word processing skills, internet skills and data processing skills.

There is no doubt that the 21<sup>st</sup> century teachers irrespective of the level of education with which they are engaged need to develop basic ICT literacy skills in order to function effectively in digital service world. Michika and Manabete (2019) opined that teachers at every level of the education system are required to have basic skills of computer operations such as running a word, connection of a computer and its peripherals, moving files between drives, using application software such as: Microsoft office suit, filtering files, updating data in database, and other ICT tools for teaching and assessment. Okoye (2017) noted that in this era of technological driven business world, business educators need to acquire basic ICT skills in order to help their students in ICT usage for skills development.

In the light of the foregoing discourse, it would be realized that ICT literacy skills are very important to the job performance of the 21<sup>st</sup> century business teacher. It would also be realized that ICT literacy skills needed for effective instructional delivery differ based on the objectives of every educational programme. Therefore for Business education programme as noted by Omotayo and Umor (2015), ICT skills needed include: word processing skills, spreadsheets utilization skill, database management skills, electronic presentation skills, e-mail management skills, digital cameras utilization skills, file management and windows explorer skills, video conferencing skills, skill for installing computer software, scanner utilization skill, and computer related storage devices skills. Consequently, in this study, ICT literacy skills of Business educators to be assessed are grouped as: internet navigation skills, computer management skills, computer application skills, and multimedia skills. These skills are deemed essential to every Business educator as they are related to the curriculum content of Business education programme especially the NCE level which the focus area of the present study.

# Method

The study adopted descriptive survey research design. The research design is deemed appropriate since it attempts to elicit the opinions of respondents in order to actualize the specific purposes of the study. Ezekiel, Oguzor, Onyeukwu, Onwuchekwa and China (2017) indicated that descriptive survey research is the most appropriate when it comes to assessing opinion of respondents on the characteristics of certain phenomena in order to draw certain conclusions. The population for this study is made up of 105 lecturers from the three Federal Colleges of Education in south-south, Nigeria as shown in the table below:

**Table 1:** Population distribution table based on age of business educators

Name of Institutions	25 - 45years	46 - 64 years	Grand total
Federal College of Education, Obudu	09	18	27
Federal College of Education (Tech.), Asaba	16	30	57
Federal College of Education (Tech.), Omoku	17	15	32
Total	42	63	105

Source: Nominal Roll of Academic Staff from the institutions 2019/2020 Academic Session.

The entire population of the study was used as sample size of the study. Therefore, the sample is made up of 105 Business educators. The entire population was used because it is a manageable size. A researchers' developed instrument titled "Business Educators' ICT literacy Skills Based on Age and ICT Tools Utilization in Teaching Business Education Courses in Federal Colleges of Education Questionnaire (BEICTSBAUTBECFEDCOLQ)". The instrument contains 35 items. The instrument was structured into two sections, the first section was to determine the age of business educators and ICT literacy skills possessed by business educators, and the second section was to assess the utilization of ICT tools in teaching Business education courses. The responses option were based on 4 points rating scale of: Highly Possessed/Highly Utilized (HP/HU - 4marks), Moderately Possessed/Moderately Utilized (MP/MU - 3marks), Fairly Possessed/Fairly Utilized (FP/FU - 2marks) and Do Not Possess/Do not Utilize (DnP/DnU – 1mark). The instrument was subjected to face-validation by two experts, one expert of Educational Measurement and Evaluation, and one expert of Business Education all from Rivers State University, Port-Harcourt. The corrections of the validations were used to modify the instrument, to ensure that it measures the intended characteristics to be assessed. Cronbach Alpha statistics was used to determine the reliability of the instrument. The reliability was computed using the responses from 20 Business education lecturers from Niger-Delta Unversity, Bayelsa

State who were not part of the study. The computation gave a reliability index of 0.76 and 0.82 for the two sections of the instrument. The average reliability index for all the section is therefore 0.79.

The data collected were analysed using descriptive statistics of mean to answer the research questions. Simple regression was used to test the hypotheses at 0.05 level of significant. The computations were done with the help of Statistical Package for Social Science (SPSS) version 21.0. For decision making, the following were used as guide:

- a) Mean above 3 points and above are regarded as 'Highly Possessed/Highly Utilized', 2.5 2.99points are regarded as 'Moderately Possessed/Moderately Utilized', 1.5 to 2.49points are regarded as 'Fairly Possessed/Fairly Utilized' and below 1.5 point are regarded as 'Do not Possess/Do not Utilize'.
- b) In testing the null hypotheses, the decision rule of multiple regression computed using SPSS was used to draw conclusion about the results.

# Results

**Research Question 1:** What are the ICT literacy skills possessed based on ages of business educators in Federal Colleges of Education in south-south, Nigeria?

**Table 2:** Summary of Mean Value on ICT Literacy Skills Possessed Based on Age of Business Educators in Federal Colleges of Education. n = 105

S/N	Availability Items	25 – 45 y	/ears (n = 42)	45 – 64	45 - 64 years (n = 63)	
	Internet navigation skills	X	Decision	X	Decision	
1	Ability to create and manage websites	1.16	DnP	1.42	DnP	
2	Ability to browse and navigate the internet	3.52	HP	3.76	HP	
3	Ability to use different search engines	1.48	DnP	3.69	HP	
4	Ability to create and manage blogs/online journals	1.25	DnP	1.43	DnP	
5.	Ability to deliver learning materials online using web 2.0	1.24	DnP	1.48	DnP	
	Computer application skills					
6	Ability to use Microsoft word to teach word processing	3.59	HP	3.88	HP	
7	Ability to use Microsoft excel to teaching spreadsheet application	1.44	DnP	3.79	HP	
8	Ability to use computer in assessing students' works	1.21	DnP	3.71	HP	
9	Ability to use computer filing system to teach record filing	1.29	DnP	3.62	HP	
10	Ability to use computer database application	1.10	DnP	3.74	HP	
	Computer management skills					
11	Ability to trouble shoot computer system in case of problem	1.30	DnP	3.52	HP	
12	Ability to install new computer software	1.24	DnP	3.52	HP	
13	Ability to manage computer resources during utilization	1.32	DnP	3.79	HP	
14	Ability to optimise computer storage space	1.16	DnP	3.69	HP	
15	Ability to optimise computer working space while working	1.13	DnP	3.86	HP	
	Multimedia skills					
16	Ability to design multimedia instruction	3.51	HP	3.79	HP	
17	Ability to use multimedia video conferencing	1.21	DnP	1.43	DnP	
18	Ability to design instructional videos	1.22	DnP	3.86	HP	
19	Ability to setup multimedia devices for presentation	3.56	HP	3.86	HP	
20	Ability to design and present multimedia power points presentations	3.68	HP	3.90	HP	

Source: Field Survey, 2020

Table 2 shows that the respondents from both age groups agreed that they possessed the ability to browse and navigate the internet, to use Microsoft word to teach word processing, to design multimedia instruction, to setup multimedia devices for presentation and to design and present multimedia power points presentations with mean scores of above 3points respectively. The both age groups also disagreed that they possessed the ability to create and manage blogs/online journals, to create and manage websites, to deliver learning materials online using web 2.0 and to use multimedia video conferencing with mean scores of below 1.5 respectively. The respondents within the age bracket of 25 to 45 years old also agreed that they

possess the ability to use different search engines, to use Microsoft excel to teaching spreadsheet application, to use computer in assessing students' works, to use computer database application, to trouble shoot computer system in case of problem, to install new computer software, to manage computer resources during utilization, to optimise computer storage space, to optimise computer working space while working, and to design instructional videos with mean scores of above 3points respectively; while respondents within the age bracket of 46 to 64 years disagreed to possessed same abilities with mean scores of below 1.5 respectively. It is worth noting that when the responses of the two age brackets are compared, it can be

concluded that the respondents within the ages of 25 to 45 possessed more specific ICT literacy skills than their older

colleagues.

**Research Question 2:** What are the ICT tools utilized based on age of business educators in teaching business education courses in Federal Colleges of Education in south-south, Nigeria?

**Table 3:** Summary of Mean Value on ICT Tools Utilized Based on Age of Business Educators in Teaching in Federal Colleges of Education. n = 105

S/N		25 – 45 y	ears (n = 42)	45 – 64	45 - 64 years (n = 63)	
	Availability Items	X	Decision	X	Decision	
1	Internet	3.60	HU	3.74	HU	
2	Computer system	3.68	HU	3.90	HU	
3	Microsoft word	3.63	HU	3.69	HU	
4	Microsoft Excel	1.44	DnU	3.76	HU	
5.	Web 2.0	1.38	DnU	1.45	DnU	
6	Microsoft database	1.43	DnU	3.83	HU	
7	Blog/online journal	1.33	DnU	3.67	HU	
8	Video conferencing	1.17	DnU	1.29	DnU	
9	Videos	1.21	DnU	1.45	DnU	
10	PowerPoint Presentation	1.41	DnU	3.86	HU	
11	Computer based test	1.08	DnU	3.36	HU	
12	Search engines	1.49	DnU	3.83	HU	
13	Websites referral	1.43	DnU	3.86	HU	
14	Scanners	1.27	DnU	1.45	DnU	
15	DVD/CD	1.29	DnU	1.40	DnU	

Source: Field Survey, 2020

Table 3 shows that respondents from both age groups agreed that they utilize internet, computer system, and Microsoft word in teaching business education courses with mean scores of above 3points respectively. The both groups of respondents also disagreed that they utilize Web 2.0, video conferencing, videos, computer based test, scanners and DVD/CD in teaching business education courses with mean scores below 1.5points respectively. However, respondents within the age bracket of 25 to 45 years agreed that they utilize Microsoft Excel, Microsoft database, blog/online journal, PowerPoint Presentation, search engines and websites referral when teaching business education courses with mean scores of above 3points respectively; while their older colleagues disagreed

they use same ICT tool when teaching business education courses. A critical examination of the responses from both age groups shows that the younger business educators within the ages of 25 to 45 years use more ICT tools when teaching business education courses that their older colleagues.

# **Hypothesis 1:**

**Ho**<sub>1</sub>: Business educators' ICT literacy skills possessed based on age has no significant influence on their utilization of ICT tools in teaching business education courses in Federal Colleges of Education in South-south, Nigeria.

**Table 4:** Summary of Simple Regression Analysis on the Influence of Business educators' ICT literacy skills possessed based on age on utilization of ICT tools based in teaching business education courses in Federal Colleges of Education

Model	R	R Square	Adjusted	RStd. Error ofChange Statistics					
			Square	the R SquareF Change df1			df2	Sig. F Change	
				Estimate Change					
1	.87 <sup>a</sup>	.76	.76	2.08	.76	330.09	1	103	.000
a. Predictors: (Constant), Business educators' ICT literacy skills based on age									

Table 4 shows simple regression of (R) of 0.87, regression square of ( $R^2$ ) of 0.76, adjusted  $R^2$  of 0.76, the standard error estimate is 2.08. The change statistics show  $R^2$  0.76 which means that the predictor that contributed significantly to the prediction, accounts for 76% of the variance in the utilization of ICT tools in teaching business education courses. Therefore, since the p value of 0.0001 is less than the assumed p value of 0.05, using SPSS, the null hypothesis was rejected and alternative hypothesis accepted. This means that business educators ICT literacy skills possessed based on age influence their utilization of ICT tools in teaching business education courses.

## **Discussion**

The results of this study show that business educators within the ages of 25 to 45 possessed more specific ICT literacy skills than their older colleagues in Federal Colleges of Education in south-south, Nigeria. This finding is based on the fact that the younger business educators highly possessed more of the ICT literacy skills measured in the study than the older business educators. This situation is associated with the technological savvy of the younger generation than the older generations. This finding is supported by the view of Oyedipe and Popoola (2019) when they noted that the reason why younger professionals are versatile with the use of ICT compared to the older ones is the fact that age affects one's ability to acquire new skills. Although it is worth noting that age becomes a limiting factor in the acquisition of technological related skills when the older generation of business educators feel they are comfortable with their old pattern of instructions and need not to disturb themselves to enhance their ICT literacy skills. The finding is also in line with the finding of Dei (2018) who reported that young teachers had more abilities and interest in the use of ICT tools for teaching and learning.

The results of the study also show that the younger business educators within the ages of 25 to 45 years use more ICT tools when teaching business education courses that their older colleagues in Federal Colleges of Education in south-south, Nigeria. This result emanated from the fact that older business educators within the ages of 45 – 64 years do not utilized most of the ICT tools assessed in this study which are being used by their younger colleagues. The findings is supported by the findings of Ohiwerei and Onimawo (2016) when they reported that young business education lecturers have high proportion of utilization of ICT equipment more than older Lecturers based on years of experience.

The result of test of hypothesis shows that business educators' ICT literacy skills possessed based on age influence their utilization of ICT tools in teaching business education courses in Federal Colleges of Education in south-south, Nigeria. This finding is based on the fact that business educators within the age bracket of 25 to 45

years who possessed more of the specific ICT literacy skills assessed in this study also utilized more ICT tools in teaching business education courses when compared to their older colleagues within the ages of 46 to 64 years who possessed few ICT literacy skills and utilized few ICT tools in teaching business education courses. The findings is supported by the findings of Dei (2018) who reported that ages of the respondents largely affected their adoption and usage of ICT as young teachers had more abilities and interest in the use of ICT tools for teaching and learning than older ones.

#### **Conclusions**

Based on the findings of this study, it can be concluded that younger business educators especially within the ages of 25 to 45 years have high propensity of utilizing ICT tools in teaching business education courses. This is because they tend to be more technological savvy than their older colleagues. It is worth noting that as young adults, age is still on their side for exploring new skills that would enhance their productivity at work and in general life endeavour. However, it is sad to note that even the younger business educators in Federal Colleges of Education in south-south, Nigeria do not possess skills to create and manage websites, to create and manage blogs/online journals, to deliver learning materials online using web 2.0 and to use multimedia video conferencing for teaching business courses. This is based on the fact that the skills in these specific ICT areas are key to empowering lecturers to promote electronic learning and course delivery to dispersed students in unpredictable times like the one brought by the COVID-19 pandemic. Consequently, it would be difficult for this class of business educators to utilize ICT tools related to the ICT literacy skills they do not posses since skills are crucial to the performance of tasks. Therefore, if this category of business educators and others must promote learning of business education courses using ICT tools, the need to address their skills deficiencies in ICT tools utilization cannot be underestimated.

#### Recommendations

Based on the findings of this study and the conclusions drawn, the following recommendations are put forward for implementation:

- Business educators irrespective of their age group should enhance their ICT literacy skills and incorporate ICTs in teaching and learning business courses.
- Business educators irrespective of their ages should be train on how to develop and deliver econtent using web 2.0, blogs/journaling and video conferencing tools.

- Business education administrators at Colleges of Education level in south-south, Nigeria should enact policy that supports course delivery using ICT tools such as web 2.0, blogs/on journaling, and video in order to ensure the continuation of learning during crises period as one brought by COVID-19.
- Employers of business educators should facilitate on job trainings and workshop on ICT literacy skills and their application in the classroom environment.
- 5. Incentives such as allowances and opportunity for more training on ICT utilization in teaching for business educators teaching with ICT tools should be encouraged in order to influence others to develop their skills and key into ICT integration for teaching and learning business education courses in Federal Colleges of Education in south-south, Nigeria.

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