

FACILITATORS' COMPETENCY IN UTILIZING ONLINE TECHNOLOGIES OF SOCIAL MEDIA AND LEARNING MANAGEMENT SYSTEM (LMS) FOR FACILITATING ADULT LEARNING IN LITERACY CENTRES IN DELTA STATE

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Abstract

This study investigated facilitators' competency in utilizing online technologies of social media and Learning Management System (LMS) for facilitating adult learning in literacy centres in Delta State. Two research questions were raised and two null hypotheses formulated and tested at 0.05 level of significance. The descriptive survey research design was employed in the study. The population of the study comprised all the 492 facilitators, in the 67 adult literacy centres in Delta State. Sample size for the study consisted of 294 facilitators from 28 literacy centres selected using the multi-stage sampling technique. Data for the study was collected using a self-constructed questionnaire titled Facilitators' Competency in Utilizing Online Technologies of Social Media and Learning Management System Questionnaire (FCUOTSMLMSQ) which contained 21 items and was validated using face and construct validity while the reliability of the instrument was ascertained using the split half reliability approach with an index of 0.73. Data collated were analyzed using mean statistics rated at 2.50 and the standard deviation (SD) to answer the research questions. The t-test was used in testing the hypotheses of the study. Findings of this study revealed among others that the male and female facilitators were incompetent in utilizing both the social media apps and the learning management systems, for facilitating adult learning in literacy centres in Delta State. There was no significant difference between male and female facilitators in their competency in utilizing social media and Learning Management System (LMS) for facilitating adult learning. Based on the findings, it was recommended among others that the centre coordinators should encourage the use of social media apps for facilitating adult learning in literacy centres in Delta State. As such the male and female facilitators should be encouraged through availability of internet facilities and high connectivity, support for data bundle to improve their ICT competency in utilizing social media apps to facilitate adult learning in the literacy centres.

Keywords: Facilitators, competency, social, media, LMS, facilitating, adult, learning

Introduction

Adults all over the world including every society like Nigeria, are very important group that ensure the attainment of socio-economic, cultural, political, environmental and religious development in the human society. Adults contributions towards sustainable development in the country can never be over-emphasized. For this reasons, priority attention should be given towards their learning in the literacy programmes at any given time in the literacy centres. Adult literacy programme is therefore, forms an integral part of the right to education and lifelong learning, and comprises all forms of education and learning that aim to ensure that all adults participate in their societies and the world of work. These programmes equip different categories of adults which include the stark illiterates, neo literate, dropouts and literates with various competences and skills that will enable them to become functional in the society. Therefore, at the literacy programmes and centres, it is the basic responsibility and duty of the facilitators to ensure that facilitation of adult learning is highly promoted through the use of various technologies such as the social media applications (apps) and Learning Management System (LMS) for achievement of the goals and objectives of adult education which has been enlisted by the Federal Republic of Nigeria (FRN, 2014) in the National Policy on Education (NPE). The facilitator according to Nzeneri (2010), is someone who have undergone training and must possess good qualifications, attributes and qualities which also include competency in the use of various types of ICT tools in order to efficiently facilitate adult learning in the literacy centres. The IGI Global Partnerships (2021) gave several definitions of adult learning. To them, adult learning is the practice of teaching and educating adults. It is also the process of gaining knowledge and expertise that is unique to adults; theory and study of how adults learn, and is also known as andragogy. It is equally a specific philosophy about learning and teaching based on the assumption that adults can and want to learn, that they are able and willing to take responsibility for

the learning, and that the learning itself should respond to their needs. Adult learning refers to the education and training of matured learners through the provision of adult literacy programmes (Right to Education Initiative, 2021). Adebola (2014) on the other hand, defined adult literacy as any activity with an educational purpose that is carried out by people engaged in the ordinary business life, with purposeful effort directed towards self and community development. It is, in fact, the fulcrum in which the human index of any nation could be developed. Adults as indicated by different scholars such as Adebola (2014) and Nzeneri (2010) engage in various literacy programmes for several reasons in order to become effective and vibrant in their society. This has made it important to ensure that their learning remains effective for both their personal and society's goals attainment.

Adults as observed by the Right to Education Initiative (2021) engage in learning for quite a number of reasons which include to: replace missed or neglected primary and/or secondary education; develop basic education skills, such as literacy and numeracy; develop new vocational skills and expertise to adapt to changing labour market conditions or to change career, or for continued professional development; continue learning for personal development and leisure; and participate fully in social life and in democratic processes. The benefits of adult learning however, as deduced from the above statements, involves: helping an individual to become instrumental in the enjoyment of other human rights, for instance, the rights to work, health, and to take part in cultural life and in the conduct of public affairs; empowering economically and socially marginalized adults to understand, question and transform through critical awareness the sources of their marginalization, including lifting themselves out of poverty; building the skills and knowledge necessary to participate in society; and facilitating active citizenship (Right to Education Initiative, 2021). From the foregoing, it becomes crucial to ensure that quality education is highly enhanced to facilitate adult learning in the literacy centres through the use of online technologies such as the social media applications (apps) and Learning Management System (LMS) for facilitating adult learning in literacy centres in Delta State. Dighe (2010) observed that rapid transformations have taken place in the world in the past few years due to the introduction of ICT. Many nations including Nigeria, in the 21st century are increasingly becoming part of a globalized village through the use of various ICTs or modern and emerging technological tools, devices, applications and operations which is affecting all aspects of their lives – education, social, economic, cultural and political. The incorporation and use of ICT have brought about enormous changes in education which have continued to affect human lives and activities. Thus, high-and middle-class families in developing countries in the present times have better access to information and news than ever before. The use of technologies is often associated with high-tech devices such as computers, hardware devices and software applications. Today the information and communication technology has gone beyond hardware and software devices, other online emerging technologies, networking connectivity, social media applications and Learning Management Systems (LMS) which connect people together can also be utilized in achieving educational goals and objectives. Information and Communication Technology (ICT) therefore, are technologies used for communication in order to create, manage and distribute information. They further include the social media apps and LMS technologies (Ali, Haolader & Muhammad, 2013).

Technologies can further be viewed as an electronic means of capturing, processing, storing, and communicating information. The online technologies such as the social media apps and Learning Management Systems (LMS) are seen to also incorporate a wider range of tools, applications, communications, and technologies which aid information recovery and research communications and administration. These embrace online database, library services and online services. Furthermore, online technologies like digital and online video, audio, software simulation, synchronous and asynchronous chats and interactive software, among others, brings vitality in describing a method or

reporting result. Service oriented technologies accentuates the provision of information services including bulletin board services, online search engines, and radio broadcast services machine (Tomie, 2013). Thus, the use of online technologies such as the social media apps and LMS are vital in promoting and facilitating adult learning, education and facilitation in the literacy centres all over the country including Delta State. Yeung-fang (2014) indicated that the use of online technologies is the application of scientific knowledge to learning. According to Hudson (2020), the social media is among the recent and emerging ICT tools currently been used in education; and which can be viewed as apps such as websites and applications that are designed to allow people to share content quickly, efficiently, and in real-time. While many people access social media through their smartphone apps, this communication tool started with computers (Hudson, 2020).

Social media can be referred to as any internet communication tool that allows users to broadly share content and engage with the public. The ability to share photos, opinions, and events in real-time has transformed the way we live and the way we do business. Social media is any digital tool that allows users to quickly create and share content with the public. Social media apps are applications which can either be downloaded and stored on your phone, laptop, desktop or tablet, or streamed through the internet browser. Social media apps generally involve messaging, photo-sharing and interactive content. There are multiple categories that social media apps can fall into. Social media encompasses a wide range of websites and apps which include: telegram, Facebook, Tik Tok, twitter, Instagram, YouTube, Web Chat, Skype, messenger, zoom, teleconferencing, google meet for meetings, WhatsApp and others. Some, like Twitter, specialize in sharing links and short written messages. Others, like Instagram and Tik Tok, are built to optimize the sharing of photos and videos. What makes social media unique is that it is both broad and relatively uncensored (Hopkins, 2019; Hudson, 2020). By using social media, facilitators in the literacy centres can improve the involvement of their students in studies and education, improve their technological ability, provide a great sense of collaboration in the classroom and make good communication skills. The use of social media apps is however beginning to gain more popularity in the Nigerian education sector coupled with the fact that when the country was facing a big challenge of the COVID 19 pandemic, the social media apps was mainly utilized to facilitate and promote educational activities (Hudson, 2020). Hopkins (2019) posited that the social media has some advantages which include; increased student collaboration, increased student participation, team projects are easier to review, rich e-learning media available, and video conferencing abilities. Explaining further, Hopkins (2019) asserted that the social media can increase student collaboration. Students become friends with their classmates on social media and are more likely to collaborate on projects. This can lead to higher retention rates as students become more connected to the institution and their peers. Faculty can use social media as a way to get students to participate. Many students are naturally shy in person, and many may not speak up in a classroom, but that may not be the case on social media. Today's students grew up on social media, and for many, it is the natural way to interact.

Social media apps according to (Hopkins, 2019), can provide a richer experience for resources. Videos, resource websites, and tutorials can be shared very quickly with the entire classroom at the click of the button. This eliminates the need for students to copy website links from a handout and have the risk of mistyping. It is much easier to click a link than to type it. Video conferencing in the classroom is also a significant benefit. Using social networking sites such as Google Plus will allow the use of Google Hangouts. These sorts of resources can be used to set up class sessions where everyone can collaborate through video in real-time. Google Hangouts can also be saved for future reference, in case one of the students has a conflict and cannot make the meeting (Hopkins, 2019). In the same vein, Willbold (2019) opined that utilizing these social media apps affectively is a veritable way and means in which learning can be improved in any education system. Empirical studies like those of Akpan (2014), Ikemba (2015), Kpolovie and Awusaku (2016), among others, discovered

that male and female teachers' utilization of various social media apps in education can be very effective and beneficial in the classroom. The Learning Management Systems (LMS) on the other hand, as observed by Trust Radius (2013) involves a software application and platform that is used in many institutions all over the world, which helps instructors manage and organize educational materials online and conduct online courses. Empirical studies like those of Ahmad, Kamba and Usman (2012), Archibong, Ogbiji and Anijaobi-Idem (2010), Cottle (2021), Onasanya, Shehu, Ogunlade and Adefuye (2011), Vázquez-Cano, Meneses and García-Garzón (2017), among others, indicated that the LMS has several benefits and advantages which can be used in facilitating adult learning in the literacy centres. Learning management system help streamline the learning process by providing a central location for accessing materials online and developing contents. With LMS software, administrators, teachers, and students. Students and teachers can access and upload course materials such as calendars, syllabi, assignments, and grades. LMS provide a centralized platform for educators and administrators to manage and organize educational materials and track students' progress. They are also used for designing content and courses and facilitating online learning. LMS can include a range of features, but the most common are content management and sharing, student progress tracking, grading and feedback tools, collaboration tools, and assessment creation and management (Trust Radius, 2013). This software also helps minimize the use of paper materials and supports remote learning. Ellis (2009) noted that LMS is a software application for the administration, documentation, tracking, reporting, automation and delivery of educational courses, training programmes, or learning and development programmes. The learning management system concept emerged directly from e-Learning and designed to identify training and learning gaps, utilizing analytical data and reporting. LMS are focused on online learning delivery but support a range of uses, acting as a platform for online content, including courses, both asynchronous based and synchronous based. Examples of some of these learning management systems teaching software known globally includes: Google classroom, Microsoft teams, TalentLMS, iTunesU, Thinkific, Schoology, Absorb, Looop, LearningPool, LearnAmp, Canvas, Axis LMS, DigitalChalk Corporate LMS Review, Moodle, a PowerSchool Unified Classroom product and Blackboard Learn (Entrepreneur, 2018; Fenton, 2018; Trust Radius, 2013). Learning Management System enables the faculties to upload academic calendar, session plan, online and e-content that is required for teaching learning. The students may refer to the prerequisite materials for example before attending the class and be better prepared to participate in the discussion. It is easier to implement a student-centric two-way learning mechanism using LMS and other technologies. And Learning beyond the classroom is an important aspect for modern teaching-learning methodologies. With LMS, students may refer to the course content outside the classroom and prepare in a much better way (Entrepreneur, 2018).

From all the above discussions, online technologies such as the social media apps and LSM helps to build learners' interest and promotes both teaching and learning. Okoye (2019) added that, numerous educators and stakeholders have realized that the use of ICT can help them improve what they were currently doing in the classroom. Importantly, many of these online technologies such as the social media apps and Learning Management Systems (LMS) tools are yet to be effectively utilized by many male and female adult education facilitators in the literacy centres in Delta State and beyond, therefore, affecting effective quality service delivery. In the adult literacy centres in Delta State, online technologies such as the social media apps and Learning Management Systems (LMS) are being utilized by a few facilitators, especially those in the post literacy programmes and advanced classes. Facilitators who make use of the hardware mobile technologies especially in the post literacy programmes at the centres in Delta State use them in delivering instructions and conducting adult learners' assessment, among others. Besides, it has also been observed that many literacy centres in Delta State suffer a high rate of dropouts from the centres and as a result of which many of the centres, if facilitators are not using these online technologies such as the social media apps and Learning Management Systems (LMS) to keep up with quality facilitation of adult learning, will

close down. If male and female facilitators are not using ICT at the centres, does it mean that, they do not possess enough competencies for effective application in facilitating learning or they have been influenced by the forces of gender and their sexes? For some gender studies, male and female sexes towards the application of ICT differs, while for most studies there seem not any difference between gender. In view of this, the thrust of this present study is to assess male and female facilitators competency in the application of online technologies such as the social media apps and Learning Management Systems (LMS) in facilitating adult learning in the literacy centres in the State. Most essentially, for facilitators to be able to promote adult learning in the literacy centres in Delta State, using various online technological tools, they have to first possess the knowledge and competency for using these modern technologies devices and tools. Facilitators' competency in ICT is in fact, for them to possess and have technological or ICT skills to become able to create clarity of instruction that can promote adult learning. Again, in the world today various information and communication technologies (ICTs) are making significant impact in different sector of the economy including the adult and non-formal education sector; this warrants facilitators' competency in utilizing the online technologies such as the social media apps and Learning Management Systems (LMS) in order to boost adult learning. Facilitators' technology competency as defined by Ali, Haolader and Muhammad (2013) and Kpolovie and Wusaku (2011) refers to the ability of a teacher to possess certain ICT skills in order to make use of the various ICT tools such as e-mail, the Internet, World Wide Web, intranets, extranets, online database and other networking technologies in teaching and research. It involves the skill of being able to handle a wide range of varying computer applications for various purposes.

Successful incorporation of online technologies such as the social media apps and Learning Management Systems (LMS) in the education system relies heavily on the competence and the attitude of teachers towards the role and use of modern technologies in teaching and learning. Thus, experienced facilitators at the literacy centres, newly qualified, and student-teachers need to be confident in using ICT effectively in their teaching. Simply having ICT in the literacy centres without facilitators' competencies will not guarantee their effective use. Despite the quantity and quality of technology placed in classrooms, the key on how those tools are used in facilitating adult learning is the facilitator. Therefore, both male and female facilitators must have the competence, skills and the right attitude towards utilizing online technologies such as the social media apps and Learning Management Systems (LMS). The present study sought to find out if there are differences in male and female facilitators competency in utilizing online technologies of the social media apps and Learning Management Systems (LMS). Most empirical studies seemed to have identified that role of gender in ICT competency of male and female sexes. Some of these studies seem to have been supportive that there are differences between male and female gender online technology competency in utilizing social media apps and Learning Management Systems (LMS) competency, while some of these empirical studies indicated that there is no difference between competency of male and female on the use of the social media apps and Learning Management Systems (LMS). However, gender as defined by UNESCO (2020) and World Health Organization (WHO, 2021) refers to the roles and responsibilities of men and women that are created in families, societies and cultures. The concept of gender also includes the expectations held about the characteristics, aptitudes and likely behaviours of both women and men (femininity and masculinity). The concept of gender is vital because, applied to social analysis, it reveals how women's subordination (or men's domination) is socially constructed. As such, the subordination can be changed or ended. Based on the above explanations, it becomes imperative to study gender and how it influences male and female facilitators' competency and application in utilizing the social media apps and Learning Management Systems (LMS) in the literacy centres in Delta State. From the foregoing, it has become imperative to assess the male and female facilitators' competency with particular reference to their skills and abilities to utilize social media apps and learning management systems for facilitating

adult learning in literacy centres. It is against this background that the researcher sought to investigate and find out facilitators' competency in utilizing online technologies of the social media apps and Learning Management Systems (LMS), for facilitating adult learning in literacy centres in Delta State.

Statement of the Problem

The adoption and integration of online technologies such as the social media and Learning Management System (LMS) has continued to have remarkable and positive influence on both teachers and facilitators teaching methodologies in the teaching-learning process. The social media and Learning Management System (LMS), when effectively utilized, impacts positively on instructional which also improves adult learning. In this present twenty-first century, facilitation of adult learning cannot be effectively actualized without efficient utilization of online technologies such as social media apps and LMS. This is so because these online technologies together with adequate connectivity and the Internet can get to adult learners wherever they may be at any point in time. Utilizing these emerging online technologies does not really mean and warrant that the adult learner must be physically present in the classroom. The benefits of using online technologies especially the social media apps and LMS are all encompassing and extensive. Notwithstanding, the rapid growth and development in which the social media apps and Learning Management Systems (LMS) has brought into different education systems in many parts of the world, however, there seems not to have been any remarkable evidence of the use of these online technologies especially in facilitating adult learning in the literacy centres in Nigeria and Delta State inclusive. The efficient and constant use of these online technologies are found wanting in many of the educational institutions within Nigeria including in the adult literacy programmes and centres in Delta State. The seems to be evident in the poor quality of facilitators' instructional and service delivery which has been observed in many literacy centres in Delta State. Besides, it has also been equally observed that many literacy centres in Delta State and beyond have closed down because of the high rate of dropouts from these centres; which could have also been responsible or connected to the issue of poor facilitation of adult learning and instructional delivery or facilitators competencies of the use of online technology-related issues. Given this present poor and devastating state, the researcher in this present study, begins to wonder what would have been responsible for the ugly situation; since the male and female facilitators are not efficiently using the social media apps and Learning Management System (LMS) at the centres. Does it mean that the male and female facilitators at the present 21st century, do not possess enough competencies and skills for effective application of the social media apps and LMS in facilitating adult learning in the literacy centres or they could have been influenced by the forces of gender and their sexes? For some gender studies, male and female sexes towards utilization and incorporation of online technologies differs, while for most studies there seem not any difference between gender. To answer all these questions, the present poor situation affecting facilitators effectiveness in facilitation of adult learning, has necessitated the present study to fill all the necessary gap. In the bid to fill all theoretical and knowledge gaps concerning facilitators' competency in utilizing online technologies, the problem in which the present study sought to address is to investigate facilitators' competency in utilizing online technologies of social media apps and Learning Management Systems (LMS) for facilitating adult learning in literacy centres in Delta State.

Purpose of the Study

The purpose of this study was to examine facilitators' competency in utilizing online technologies of social media and Learning Management System (LMS) for facilitating adult learning in literacy centres in Delta State. Specifically, the study aimed at:

1. examining male and female facilitators' competency in utilizing social media apps for facilitating adult learning in literacy centres in Delta State.
2. ascertaining male and female facilitators' competency in utilizing Learning Management System (LMS) for facilitating adult learning in literacy centres in Delta State.

Research Questions

The following two research questions guided the study:

1. What is the male and female facilitators' competencies in utilizing social media apps for facilitating adult learning in literacy centres in Delta State?
2. What is the male and female facilitators' competencies in utilizing the learning management system for facilitating adult learning in literacy centres in Delta State?

Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance in the study:

- H₀₁: There is no significant difference between the mean rating of male and female facilitators in their competency in utilizing social media apps for facilitating adult learning in literacy centres in Delta State.
- H₀₂: There is no significant difference between the mean rating of male and female facilitators in their competency in utilizing the learning management system for facilitating adult learning in Delta State.

Method

The descriptive survey research design was employed in the study. This research design was considered suitable for the study because it enabled the researcher to use a research instrument, that is, the questionnaire, to collect data from a representative sample of the targeted population of facilitators in the literacy centres in Delta State. Besides, the design enabled the researcher collect data to describe them in a systematic manner based on the characteristics and features or facts about target population and generalization drawn based on the findings. The population of the study comprised all the 492 facilitators, in the 67 adult literacy centres in Delta State. Out of this population, 290 were male facilitators and 202 were female facilitators (Planning, Research and Statistics Department, Delta State Agency for Adult and Non-Formal Education, 2021). This was the number of male and female facilitators in 67 Literacy Centres within 25 LGAs in Delta State as at July, 2021). Sample size for the study consisted of 294 facilitators from 28 literacy centres selected using the multi-stage sampling technique. In the first stage, simple random sampling technique was used to select 13 LGAs out of the 25 LGAs in Delta State. In this case, the researcher wrote out the names of each of the 25 LGAs in Delta State on a piece of paper, put them into a container and reshuffled them. After reshuffling them, a research assistant was asked to pick 13 LGAs out of the 25 LGAs placed into the container. At every selection made, before the next selection by the research assistants was made, the remaining papers were reshuffled which is sampling by replacement. In the second stage, purposive sampling was used to select 28 functional literacy centres within 13 LGAs in Delta State. In the third stage, simple random sampling was used to select a total of 294 facilitators from 28 literacy centres within the 13 LGAs in Delta State. A breakdown shows that 177 male and 117 female facilitators were used for the study. This constitutes 80% of the total number of facilitators in 28 literacy centres within the 13 LGAs in Delta State. This is in line with the Nworgu (2015) assertion that any sample which ranged from 10% to 80% is representable and enough in situations where there is a large population in a study. As regard, the sample used in the present study is sizeable enough to conduct the study.

Data for the study was collected using a self-constructed questionnaire titled Facilitators' Competency in Utilizing Online Technologies of Social Media and Learning Management System

Questionnaire (FCUOTSMLMSQ), which contained 21 items. The response options on the questionnaire was structured on a 4-point modified Likert-type scale of Highly Competent (HC) – 4, Competent (C) – 3, Fairly Competent (FC) – 2 and Incompetent (IC) – 1 in order to answer all the research questions. The questionnaire was validated by three experts from the Department of Adult and Non-Formal Education, Faculty of Education, University of Benin, Edo State including a Measurement and Evaluation expert in the same Faculty. Few corrections were made on the questionnaire by the experts based on double-barrel items, content coverage and sentence/language construction. The corrections made in the instrument by the experts after the validity were incorporated into the instrument before the final print out and administration on the respondents. Reliability of the instrument was determined using the split half reliability approach. In this case, the instrument was administered once to a sample of 25 male and female facilitators (15 males & 10 females) from 5 literacy centres in Delta State, which were not part of the study. After that, their responses were separated into two equal parts with odd number responses on one side and even number responses on the other side. Data obtained were computed using the Cronbach Alpha statistics which gave internal consistency reliability coefficients of 0.73. A direct hand delivery, face-to-face and on-the-spot method was employed for distribution of the questionnaire with the help of some research assistants. This process enabled the researcher and the five research assistants to meet the respondents, that is, individuals who met the facilitators in their respective literacy centres to wait and collect the necessary information from them. Efforts were made to retrieve the research instrument. The five research assistants selected within the 3 Senatorial Districts in Delta State were instructed on how to collect the necessary information from the facilitators using the questionnaire. At first, both the researcher and research assistants took permission from the centre coordinators before administering the questionnaire to the facilitators. Distributing the questionnaire to the respondents was carried out within an interval of two weeks. The rate of return of the total number of the copies of the questionnaire distributed and retrieved from the 216 facilitators was calculated at a 100% rate of return before applying the appropriate statistical instrument for data analysis. Data collated were analyzed using mean statistics rated at 2.50, the standard deviation (SD). The mean score and SD were used in answering the research questions in order to discover male and female facilitators' competencies in utilizing the online technologies of social media and Learning Management System (LMS) for facilitating adult learning in literacy centres within the 25 LGAs in Delta State. The decision rule for taking decisions on the items on the questionnaire was that, any mean score which rated at 2.50 and above, was regarded to be in support of the statement and therefore, considered as competent. Meanwhile, any mean score that rated below 2.50, was regarded as not in support of the statement and therefore, termed as incompetent. The t-test was used in testing the hypotheses of the study. In essence, data collated to answer the research questions on facilitators' competency in utilizing online technologies of social media and Learning Management System (LMS) for facilitating adult learning in literacy centres in Delta State were hypothesized. However, the t-test statistics was used to test all the hypotheses at an alpha level of 0.05 level of significance. Hypotheses 1-2 were tested using the t-test statistical tool of 0.05 level of significance. The justification for using the t-test statistics was to determine the significant difference between the mean ratings of the male and female facilitators in the literacy centres within 25 LGAs of Delta State. The decision rule was based on the premise that the null hypothesis was accepted only if the *P*-value is greater than alpha, while it is not accepted where *P*-value is less than alpha. More so, data collated were coded into the SPSS (Statistical Software Package for Social Sciences), version 23 batch system for computer analysis.

Results

Research Question 1: What is the male and female facilitators' competencies in utilizing social media apps for facilitating adult learning in literacy centres in Delta State?

Table 1: Mean and Standard Deviation Scores of Male and Female Facilitators' Competencies in Utilizing Social Media Apps for Facilitating Adult Learning in Literacy Centres in Delta State

S/N	Items	Male		Remark	Female		Remark
		$\bar{x}$	SD		$\bar{x}$	SD	
1.	Using the Telegram media to distribute educational learning materials to adult learners	1.96	0.94	Incompetent	2.00	0.99	Incompetent
2.	Ability to use the Facebook to disseminate and share information subject matter	1.85	0.95	Incompetent	1.81	0.96	Incompetent
3.	Using Twitter to build effective learners and experts collaboration in discussions concerning a particular subject matter	1.97	1.01	Incompetent	2.11	1.00	Incompetent
4.	Using Tik Tok to create short educational videos on a specific topic for learners	1.82	0.88	Incompetent	2.00	1.05	Incompetent
5.	Ability to use Instagram to post project reminders on any assignment given to adult learners in a particular subject matter	1.89	1.01	Incompetent	2.05	1.07	Incompetent
6.	Being able to utilize the Messenger to pass out relevant information to adult learners as regards to their learning	1.77	0.81	Incompetent	1.94	1.03	Incompetent
7.	Ability to use the YouTube to research on tutorial videos on a topic	1.94	0.98	Incompetent	1.86	0.96	Incompetent
8.	Using web chat to encourage group discussions on a subject matter among adult learners	1.93	0.97	Incompetent	2.09	0.96	Incompetent
9.	Using Skype to connect educational meetings and shares experiences with the learners	1.75	0.89	Incompetent	1.95	0.95	Incompetent
10.	Ability utilize Zoom to connect with the learners for effective group discussions on a subject matter	2.02	0.91	Incompetent	2.00	0.99	Incompetent
11.	Using teleconferencing such as video conferencing, audio conferencing to reach out to a wide range of learners wherever they may be	1.98	0.89	Incompetent	1.97	0.99	Incompetent
12.	Creating Google meet link as a point of contact for a particular group discussion in a subject area with the adult learners	1.98	0.92	Incompetent	1.99	0.98	Incompetent
13.	Using WhatsApp to share educational videos and documents	1.95	1.01	Incompetent	2.01	1.04	Incompetent
14.	Reaching out to adult learners, supervising or sending important documents through the email to adult learners	1.87	0.96	Incompetent	2.09	1.03	Incompetent
Grand Mean/SD		1.91	0.94	Incompetent	1.99	1.00	Incompetent

Male = 177, Female = 117

Result of Table 1 reveals male and female facilitators' competencies in utilizing social media apps for facilitating adult learning in literacy centres in Delta State. Male and female facilitators rated all items below a mean score of 2.50 which indicates that male and female facilitators are incompetent in utilizing social media apps for facilitating adult learning in literacy centres in Delta State. However, female facilitators appear to be better than their male counterparts in utilizing social media apps for facilitating adult learning in literacy centres in Delta State This evidence in a grand mean scores of 1.97 and 1.99 for male and female facilitators respectively. The grand standard deviation scores of 0.94 reveal that male and female facilitators had same opinion as regards to their competencies in utilizing social media apps for facilitating adult learning in literacy centres in Delta State.

Research Question 2: What is the male and female facilitators' competencies in utilizing learning management systems for facilitating adult learning in literacy centres in Delta State?

Table 2: Mean and Standard Deviation Scores of Male and Female Facilitators' Competencies in Utilizing Learning Management Systems for Facilitating Adult Learning in Literacy Centres in Delta State

S/N	Items	Male		Remark	Female		Remark
		$\bar{x}$	SD		$\bar{x}$	SD	
15.	Ability to create Google classroom so as to facilitate learning	2.02	0.94	Incompetent	2.02	1.00	Incompetent
16.	Using Microsoft teams to engage the adult learner to team up and integrate content and tools of various educational materials	1.98	0.97	Incompetent	2.15	1.05	Incompetent
17.	Using Schoology to encourage collaborations among adult learning towards creating, managing and sharing academic contents of different subjects	1.89	0.99	Incompetent	1.89	0.94	Incompetent
18.	Connecting adult learners using Looop in order to get feedback on any educational task, research or assignment given to them	1.80	0.87	Incompetent	1.92	0.97	Incompetent
19.	Ability to use LearningPool to share online learning content in a particular subject area to the adult learners	1.92	1.00	Incompetent	1.94	0.99	Incompetent
20.	Using Canvas to post learners academic scores and grades so as to enable them to easily determine their academic performances in order to improve learning	1.99	0.98	Incompetent	2.01	1.04	Incompetent
21.	Ability to use Axis LMS to create learning materials and courses for adult learners on a specific subject matter	1.97	1.01	Incompetent	2.16	1.01	Incompetent
Grand Mean/SD		1.94	0.97	Incompetent	2.01	1.00	Incompetent

Male = 177, Female = 117

Analysis on Table 2 reveals mean and standard deviation scores of male and female facilitators' competencies in utilizing learning management systems for facilitating adult learning in literacy centres in Delta State. The analysis further shows that all items were rated below a mean score of 2.50 which shows that male and female facilitators are incompetent in utilizing learning management systems for facilitating adult learning in literacy centres in Delta State. However, female facilitators appear to be better than their male counterparts in utilizing learning management systems for facilitating adult learning in literacy centres in Delta State. Furthermore, grand mean scores of 1.94 and 2.10 are evident that both male and female facilitators are utilizing the learning management systems for facilitating adult learning in literacy centres in Delta State. Grand standard deviation scores of 0.97 and 1.00 indicates that male and female facilitators were homogenous in their response on facilitators' competencies in utilizing learning management systems for facilitating adult learning in literacy centres in Delta State.

Test of Hypotheses

Hypothesis 1: There is no significant difference between the mean rating of male and female facilitators in their competency in utilizing social media apps for facilitating adult learning in literacy centres in Delta State.

Table 3: t-test of Difference in the Mean Rating Scores of Male and Female Facilitators on their Competency in Utilizing Social Media Apps for Facilitation

Gender	N	X	SD	df	t	Sig	Decision
Male	177	43.8	7.9	292	-.371	.711	Not significant
Female	117	44.1	8.6				

$p > 0.05$

Analysis on Table 3 revealed that t-test was run to test the difference in the mean rating scores of male and female facilitators on their competency in utilizing social media apps for facilitating adult learning in literacy centres in Delta State. The result shows no significant difference given that t-value = -0.371 and $p > 0.05$ ($0.711 > 0.05$), the null hypothesis was accepted, therefore, there is no significant difference in mean rating scores of male and female facilitators on their competency in utilizing social media apps for facilitating adult learning in literacy centres in Delta State.

Hypothesis 2: There is no significant difference between the mean rating of male and female facilitators in their competency in utilizing the learning management system for facilitating adult learning in Delta State.

Table 4: t-test of Difference in the Mean Rating Scores of Male and Female Facilitators on their Competency in Utilizing Learning Management System for Facilitation

Gender	N	X	SD	Df	t	Sig	Decision
Male	177	43.3	7.9	292	-1.132	.258	Not significant
Female	117	44.4	8.6				

$P > 0.05$

Table 4 showed that t-test was run to test the difference in the mean rating scores of male and female facilitators on their competency in utilizing learning management systems for facilitating adult learning in Delta State. The analysis revealed no significant difference given that $t = -1.132$, and $p > 0.05$ ($0.258 > 0.05$), hence, the null hypothesis is accepted that there is no significant difference in the mean rating scores of male and female facilitators on their competency in utilizing learning management system for facilitating adult learning in Delta State.

Discussion of Findings

The findings of this study has been very instructive and interesting. They were thus discussed in different subheadings in the following manner:

Male and Female Facilitators on their Competency in Utilizing Social Media Apps for Facilitating Adult Learning in Literacy Centres in Delta State

It was further revealed through this finding that the male and female facilitators were incompetent in utilizing social media apps for facilitating adult learning in literacy centres in Delta State. The hypothesis test of this finding revealed that the difference in the mean rating scores of male and female facilitators on their competency in utilizing social media apps for facilitating adult learning in literacy centres in Delta State is not significant. This means that both the male and female facilitators did not differ in their ICT competency in utilizing the various social media apps. Both were at the same level. This finding further implies that the male and female facilitators were incompetent in using the Telegram media to distribute educational learning materials to adult learners. They lack the ability to use the Facebook to disseminate and share information subject matter. They also lack the competency in using Twitter to build effective learners and experts collaboration in discussions concerning a particular subject matter. They were incompetent in using Tik Tok to create short educational videos on a specific topic for learners. They lack the ability to use Instagram to post project reminders on any assignment given to adult learners in a particular subject matter. The male and female facilitators were further incompetent in being able to utilize the Messenger to pass out relevant information to adult learners as regards to their learning. They also lack the ability to use the YouTube to research on tutorial videos on a topic. They were neither competent in using web chat to encourage group discussions on a subject matter among adult learners, nor in using Skype to connect educational meetings and share experiences with the learners. They also lack the ability to utilize Zoom to connect with the learners for effective group discussions on a subject matter. They were incompetent in using teleconferencing such as video conferencing and audio conferencing to reach out to a wide range of learners wherever they may be. They were incompetent in creating Google

meet link as a point of contact for a particular group discussion in a subject area with the adult learners. They were incompetent in using WhatsApp to share educational videos and documents. They were incompetent in reaching out to adult learners, supervising or sending important documents through the email to adult learners. This finding agrees and does not deviate from the findings of Ikemba's (2015) study on ICT Competencies and Teacher Education Programme in Colleges of Education (A case study of FCT college of education, Zuba) which discovered that the ICT competency level of the teachers were low and needs to be improved upon and sustained in order to enhance teaching and learning. Both students and teachers in this study require a high level of internet surfing competency in order to make success of their chosen careers. They need high competency for them to effectively keep records of data and information, likewise, they require a great deal of competence in word processing software. Kpolovie and Awusaku (2016) on ICT Adoption Attitude of Lecturers in Teaching and Research in Federal and State-owned Universities in Nigeria confirmed that lecturers' ICT competency was at moderate level. The hypothesis test of this previous study revealed that gender and area of specialization have no significant difference in the attitude of lecturers towards ICT adoption in teaching and research. Akpan's (2014) study on ICT Competence and Lecturers' Job Efficacy in Universities in Cross River State, Nigeria found out that male and female lecturers did not differ significantly in their level of ICT competence. Lecturers with high ICT competence were found to be more efficacious in classroom instruction, research/publication, communication and record-keeping than those with moderate and low ICT competence. The findings of this study revealed that the level of ICT competence of lecturers significantly enhances their job efficacy. This makes the present study share similarity with the past studies Akpan (2014) and Kpolovie and Awusaku (2016) on their hypotheses. Therefore, when facilitators' ICT competency in utilizing social media apps for facilitating adult learning in literacy centres in Delta State is highly encouraged, this will enable them accomplish their instructional goals and objectives likewise enable them to effectively communicate with the adult learners both with and outside the classroom at any point in time.

Male and Female Facilitators on their Competency in Utilizing Learning Management Systems for Facilitating Adult Learning in Literacy Centres in Delta State

It was discovered through this finding that the male and female facilitators were incompetent in utilizing learning management systems for facilitating adult learning in literacy centres in Delta State. The hypothesis test of this finding showed that the difference in the mean rating scores of male and female facilitators on their competency in utilizing learning management systems for facilitating adult learning in Delta State is not significant. This means that both the male and female facilitators did not differ in their ICT competency in utilizing the Learning Management Systems (LMS). Both were at the same level. This finding further implies that the male and female facilitators were incompetent in their ability to create Google classroom so as to facilitate learning. They were incompetent in using Microsoft teams to engage the adult learner to team up and integrate content and tools of various educational materials. They were incompetent in using Schoology to encourage collaborations among adult learners which was important for creating, managing and sharing academic contents of different subjects. They were incompetent in connecting adult learners using Loop in order to get feedback on any educational task, research or assignment given to them. They also showcased their incompetency in their inability to use Learning Pool to share online learning content in a particular subject area to the adult learners. They were incompetent in using Canvas to post learners academic scores and grades so as to enable them to easily determine their academic performances in order to improve learning. The male and female facilitators did not have the ability to use Axis LMS to create learning materials and courses for adult learners on a specific subject matter. Thus, this finding is in line with Ahmad, Kamba and Usman (2012) study on Technophobia versus ICT Acceptance and Use in Teaching and Learning among Academic Staff of Universities in Northern Nigeria which discovered that the personal ICT competencies of lecturers need to be

developed, and it also indicated moderate level of ICT tools usage among the academic staff. The present study's finding also corroborates with the studies of Archibong, Ogbiji and Anijaobi-Idem (2010), Onasanya, Shehu, Ogunlade and Adefuye (2011) and Vázquez-Cano, Meneses and García-Garzón (2017) which discovered that majority of the academic staff rate their ICT competence as low. More so, their level of ICT competency significantly differs which deviates from the present study. However, when facilitators ICT competency in utilizing learning management systems for facilitating adult learning is encouraged, this will promote quality educational delivery in literacy centres and quality education will be sustained.

Conclusion

The present study generally concludes that the male and female facilitators were incompetent in utilizing both the social media apps and the learning management systems, for facilitating adult learning in literacy centres in Delta State. However, facilitators' incompetency showcased in their lack of utilizing various social media apps and the learning management system, for facilitating adult learning in literacy centres in Delta State. Also, the male and female facilitators did not differ on their competency in utilizing social media apps and the learning management systems, for facilitating adult learning in literacy centres in Delta State. The present study therefore submits that, the male and female facilitators were incompetent in utilizing various ICTs in the literacy centres in Delta State. This poor situation makes it difficult for quality education coupled with effective adult learning delivery to triumph and be sustained in the literacy centres in Delta State. Thus, the recommendations made below.

Recommendations

Based on the findings of this present study, the following recommendations were proffered:

1. Centre coordinators should encourage the use of social media apps for facilitating adult learning in literacy centres in Delta State. As such the male and female facilitators should be encouraged through availability of internet facilities and high connectivity, support for data bundle to improve their ICT competency in utilizing social media apps to facilitate adult learning in the literacy centres.
2. Constant training and retraining programmes should be provided by the Delta State Agency for Mass Literacy, Adult and Non-Formal Education together with the private sector to boost the male and female facilitators competency in utilizing the learning management systems such as Google classroom, among others, for facilitating adult learning in literacy centres in Delta State.

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