CIVIL SERVANTS' ICT SELF-EFFICACY, AWARENESS AND READINESS FOR DISTANCE E-LEARNING PROGRAMMES' ENROLMENT IN MINNA, NIGER STATE, NIGERIA

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Abstract

The benefit of distance learning is enormous and knowledge obtained through such platforms would make civil servants more efficient and productive in their offices. However, because it was not clear whether civil servant in Minna have ICT self-efficacy, adequate awareness and readiness to enroll for distance e-learning programmes, this study was carried out. Cross sectional survey research was adopted for the study in which four research questions were raised and answered. The sample of the study consisted of 1,280 participants drawn from 10 Niger state government Ministries, Departments and Agencies (MDAs) located in Minna through simple random sampling procedure. A researchers-designed questionnaire validated by educational technology and computer experts was used in collecting data from the respondents. To determine the internal consistency of the items of the questionnaire, it was administered once in a pilot study on 120 civil servants from three MDAs who did not participate in the main study. Reliability coefficients of 0.76 and 0.81 were respectively obtained for items on ICT self-efficacy and for items on distance e-learning readiness using Cronbach Alpha formula. Data gathered from the administration of the questionnaire on participants were analysed using percentage, mean and standard deviation to provide answers to the research questions. Findings revealed that majority of civil servants (72.19%) are aware of the existence of distance e-learning platforms, only 9.92% of them currently enrolled for distance e-learning programmes, have self-efficacy (mean = 3.69 out of 5) in the use of Information Communication Technology tools for distance e-learning and that they are not ready (mean = 2.34 out of 5) to enroll for distance e-learning programmes. It was therefore recommended among others that civil servants should be encouraged to enroll for relevant distance e-learning programmes through financial assistance, loans and study scholarships in order to make them acquire knowledge that will make them better efficient and more productive in their offices.

Keywords: Civil servants, Distance e-learning, Distance e-Learning Enrolment, E-learning Readiness, ICT Self-efficacy

Introduction

Information and Communication Technology (ICT) refers to a range of technologies that are applied in the process of collecting, storing, editing, retrieving, and transferring information in various forms. In recent years, there has been an exponential growth in the use of ICT tools and this has made great impact both on society and on people's daily lives. It is therefore not surprising to see the increasing interest, attention and investment being put into the use of ICT in education all over the world (Saddam, Gellie & Shelanee, 2012). Notably, ICT has improved the communication between lecturers and students, and the interaction between different educational resources. Oliver (2002) asserted that the use of ICT in higher education enhances student-centered learning.

Ever since universities were founded by the colonialists and nationalists, there has still been need for distance education for learners who could not access regular university programmes because of their employment and family commitments (Omoregie, 2009). These categories of learners are those who could not meet strict regular university programmes' criteria and

continually depend on open distance learning. United Nation Educational, Scientific and Cultural Organizations (UNESCO, 2002) equally stated that distance e-learning represents approaches that focus on opening access to education and training provision, freeing learners from constraints of time and place and offering learning opportunities to individuals and group of learners. (Gesci, 2007) enumerated the features of distance e-learning to include: openness to learners, learner-centred approach, and independent learning media-supported interaction among others. Some of the goals of open and distance education as stated by the Federal Republic of Nigeria in the National Policy on Education (FRN, 2013) are to provide access to quality education and equity in educational opportunities for those who otherwise would have been denied and also to meet special needs of employers by mounting special certificate courses for their employees at their work place. Civil servants fit into these categories of people.

Civil servants are employees who work in government departments and agencies. In Nigeria, they are direct employees of the Federal and State governments, and even other Para-military forces like police, Immigration, customs and armed forces personnel are employees of statutory corporations and board's members (National Open University of Nigeria, 2014). In Minna, the capital of Niger State, civil servants form the bulk of the labour workforce and are primarily engaged by government to improve the socio-economic situation of the state. Knowledge needed to work productively as civil servants is acquired in tertiary institutions and certificate obtained serves as evidence that such knowledge has been acquired. It is generally believed that the higher the academic qualification of an employee, the more knowledgeable he is, and such knowledge is expected to be reflected in his work output, efficiency and productivity. Information Communication Technology self-efficacy enhances workers' productivity and is also crucial in distance e-learning enrolment.

Self-efficacy is regarded as knowledge, proficiency and capability associated with high performance on a job (Kirti, Mann & Gupta, 2014). With respect to the use of ICT, civil servants' self-efficacy in using relevant ICT tools needed in distance e-learning can be defined as the proficiency and capability to use computer technology to interact with instructional contents, tutors and fellow students as well as the proficiency to use same technology for examination purposes.

Oye, Lahad, and AbRahim (2012) reported that self-efficacy has been found to influence choices of whether to engage in a task, the efforts expended in performing it, and the persistence shown in accomplishing it. They added further that, the greater people perceived their self-efficacy to be, the more active and longer they persist in their efforts. Findings from a previous study conducted by Saddam, Gellie, and Shelanee. et al (2012) indicated that students have excellent self-efficacy towards ICT while another finding from a study conducted by Oye, et al. (2012) indicated that academic members of staff have moderate self-efficacy towards computer and ICT tools. While self-efficacy on the use of ICT tools is essential in civil servants' enrolment for distance e-learning programme, readiness to undergo such programme is another factor.

Borotis and Poulymenakou (2008) defined readiness as the mental or physical preparedness of an individual for some e-learning experience or action. Schreurs, Ehlers and Sammour (2008) stated that learner's readiness is essential for him to successfully engage in electronic learning. A prospective electronic distance learner needs to be mentally and financially ready to successfully enrol for distance e-learning programme.

A large number of civil servants that joined the workforce with lower qualifications may wish to further their education and acquire additional knowledge that will make them contribute more

meaningfully to the socio-economic growth of their society. Although, the demand for tertiary education in traditional institution of learning remains on the high side, yet, prospective students have limited access to gain admission (Adedipe, 2007 & Moti 2010). However, due to job and family commitments, civil servants may not be able to enrol for conventional face-to-face higher education programmes but can enrol for electronic distance learning courses in accredited institutions if they have self-efficacy in the use of needed ICT tools.

Despite the enormous benefits of distance e-learning, it was not clear whether civil servant in Minna, Niger State Nigeria have ICT self-efficacy, adequate awareness and readiness to update their knowledge through distance e-learning platforms and contribute more meaningfully to the social-economic growth of Minna. This study was therefore carried out to investigate civil servants' ICT self-efficacy, awareness and readiness to enrol for relevant distance e-learning programmes in Minna, Niger State Nigeria.

Purpose of the Study

The main purpose of this study was to determine the ICT self-efficacy of civil servants, their awareness and readiness to enrol for relevant distance e-learning programmes. Specifically, the study sought to investigate the extent to which civil servants in Minna, Niger State Nigeria are:

(i)   Aware of the existence of distance e-learning platforms;
(ii)   Currently undergoing programmes using distance e-learning platforms;
(iii)   Having self-efficacy in the use of relevant information and communication technologies; needed in distance e-learning; and
(iv)   Ready to enrol for relevant distance e-learning programmes.

Research Questions

The following research questions were answered in this study:

(i)   To what extent are civil servants in Minna, Niger State aware of the existence of distance-learning platforms?
(ii)   To what extent are civil servants in Minna, Niger State currently undergoing programmes   using distance e-learning platforms?
(iii)   Do civil servants in Minna, Niger State have self-efficacy in the use of relevant information and communication technologies needed in distance e-learning?
(iv)   To what extent are civil servants in Minna, Niger State ready to enrol for relevant distance e-learning programmes?

Methodology

Cross sectional survey design was adopted for this study. It involves the use of questionnaire to elicit needed responses from civil servants on their ICT self-efficacy, awareness and readiness to enrol and update their knowledge through distance e-learning platforms. A total of 1,280 out of the 3,550 civil servants in Minna, Niger State, Nigeria was used as the participants of the study. Firstly, simple random sampling technique was employed to select 10 out of the 23 Niger State Ministries and Government Agencies (MDAs) located within Minna. Thereafter, simple random sampling procedure was used to select 128 participants from each of the 10 selected MDAs.

A researchers-designed questionnaire named Civil Servants Awareness and Readiness Questionnaire (CSARQ) was used to elicit responses from the participants. The questionnaire consists of four sections (Sections A, B, C & D). Section A was designed to collect demographic data from the participants, Section B deals with the distance e-learning awareness and enrolment status of civil servants. Section C consists of   16 items concealed with the self-efficacy of civil servants on the use of ICT tools needed for distance e-learning while Section D consists of 9 items on the readiness of civil servants to enrol for distance e-learning programmes. The questionnaire was validated by two Educational Technology experts and one Computer experts at Federal University of Technology, Minna, Nigeria. Based on experts'

suggestions, four items of the questionnaire were restructured; two new items were added and two items were removed.

To determine the reliability of the questionnaire, a pilot study was conducted on 120 civil servants randomly selected from three Niger State Ministry, Departments and Agencies who were not part of the participants for the main study and reliability coefficients of 0.76 and 0.81 were obtained respectively for items in Section B on ICT self-efficacy and for items in Section C on distance e-learning readiness using Cronbach Alpha formula. Hence, the questionnaire was considered valid and reliable for this study.

A four-point rating scale of Strongly Agreed (SA, = 4 points), Agreed (A, = 3 points), Disagreed (D, = 2 points) and Strongly Disagreed (SD, = 1 point) was used in weighing responses to items in the questionnaire. A mean response of below 2.50 and below was considered "not accepted" while a mean response of 2.50 and above was considered "accepted". Data gathered from the administration of the questionnaire on the participants of this study were analysed using descriptive statistics such as percentage, mean and standard deviation. Research questions one and two were answered using percentages while mean and standard deviation were used in answering research questions three and four. Bar charts were also used to illustrate findings on research questions one and two.

Results
Research Question One: To what extent are civil servants in Minna, Niger State aware of the existence of distance e-learning platforms?

Table 1: Status of civil servants' awareness of distance e-learning platforms

Category	N	%
Those Aware of Distance e-Learning Platforms	924	72.19
Those Unaware of Distance e-Learning Platforms	356	27.81
Total	1,280	100.00

Table 1 shows the status of civil servants' awareness of distance e-learning platforms in Minna, Niger state, Nigeria. Out of 1,280 participants, 924 representing 72.19% are aware of the existence of distance-e-learning platforms while 356 representing 27.81% are unaware. This implies that majority of civil servants in Minna, Niger State are aware of the existence of distance e-learning platforms that can be used to update their knowledge. This is further represented graphically using bar chart as presented in Figure 1.
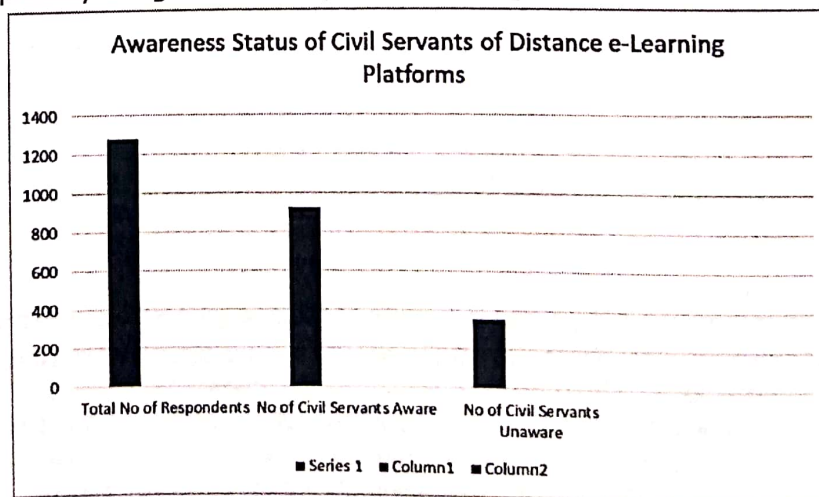

Figure 1: Graphical representation of awareness status of distance e-learning platforms by civil servants in Minna

Figure 1 is the graphical representation of civil servants' awareness status of distance e-learning platforms. The figure reveals that civil servants that are aware of the existence of distance e-learning platforms are greatly more than those that are unaware.

Research Question Two: To what extent are civil servants in Minna, Niger State currently undergoing programmes using distance e-learning platforms?

Table 2: Enrolment status of civil servants for distance e-learning programmes in Minna

Status	N	%
Those Enrolled for Distance e-Learning Programmes	127	9.92
Those Not Enrolled for Distance e-Learning Programmes	1153	90.08
Total	1,280	100.00

Table 2 shows the status of current distance e-learning enrolment by civil servants in Minna, Niger state, Nigeria. Out of 1,280 participants, only 127 representing 9.92% enrolled for distance e-learning programmes while 1153 representing 90.08% are not enrolled for distance e-learning programmes. This implies that majority of civil servants in Minna, Niger State are not enrolled for distance e-learning programmes. This is further represented graphically using bar chart as presented in Figure 2.
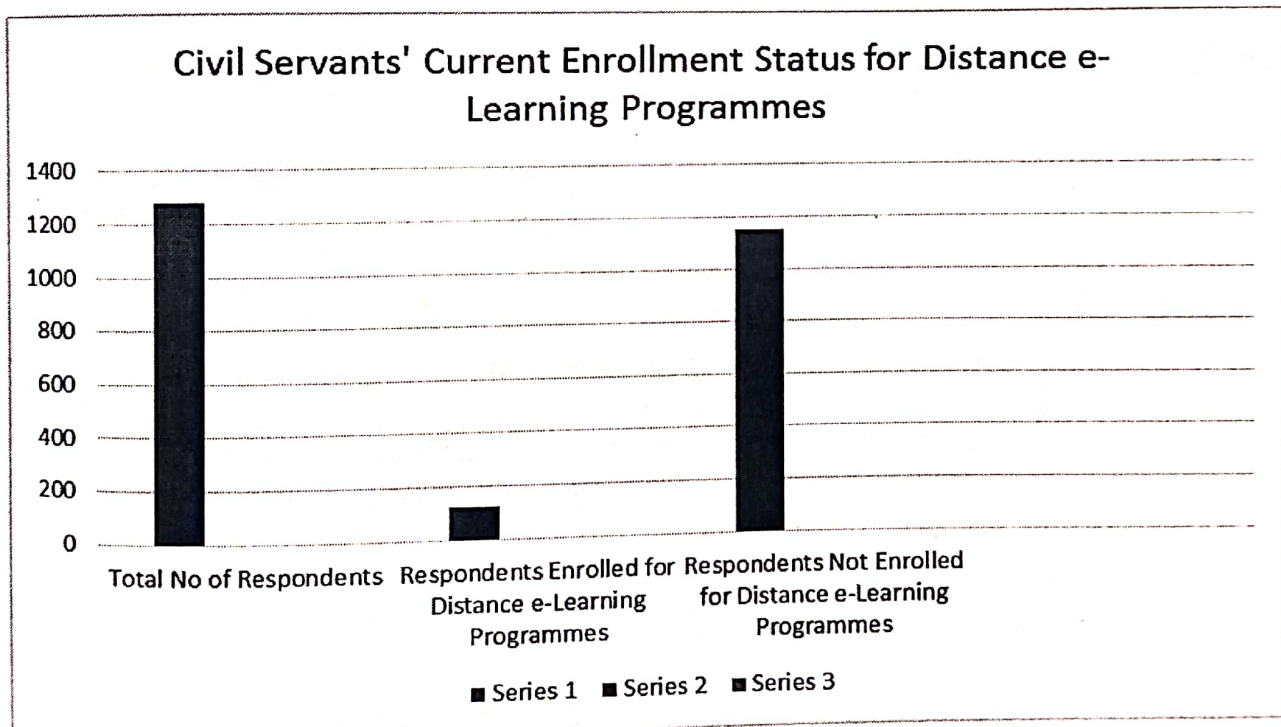

Figure 2: Graphical representation of current enrolment status of civil servants in Minna for distance e-learning programmes

Figure 2 is the graphical representation of civil servants' current enrolment status for distance e-learning programmes. The figure reveals that the number of civil servants that are not enrolled for distance e-learning programmes are greatly more than those that enrolled.

Research Question Three: Do civil servants in Minna, Niger State, Nigeria have self-efficacy in the use of relevant information and communication technologies needed in distance e-learning?

Table 1: Self-efficacy of civil servants in the use of relevant ICTs needed in distance e-learning

S/N	Item	₦	Mean	SD	Decision
1	Switch on a computer.	1,280	3.62	1.12	Agree
2	Search for files in Computer	1,280	3.38	0.88	Agree
3	Access internet via its website address.	1,280	3.03	0.53	Agree
4	Have an E-mail address.	1,280	3.21	0.71	Agree
5	Send and receive E-mail messages.	1,280	3.03	0.53	Agree
6	Attach files to outgoing e-mails.	1,280	3.02	0.50	Agree
7	Download files from incoming e-mails.	1,280	2.07	0.52	Disagree
8	Create a folder, copy, move and paste files in another folder.	1,280	3.01	0.51	Agree
9	Open a previously saved file from any drive directly.	1,280	3.46	0.96	Agree
10	Print a document.	1,280	3.01	0.51	Agree
11	Use world proces sing packages e.g.MS World.	1,280	3.56	1.06	Agree
12	Begin a new document.	1,280	3.23	0.73	Agree
13	Use browser such as Mozilla, Opera, or Chrome to explore navigates the Worldwide Web.	1,280	2.92	0.42	Agree
14	I have the basic skills for using the internet (e.g. using search engines to research for materials).	1,280	3.04	0.54	Agree
15	All night browsing.	1,280	2.98	0.48	Agree
16	I am computer Literate	1,280	3.02	0.52	Agree
	Cumulative Mean		**3.09**		

Table 1 shows the self-efficacy level of civil servants in the use of relevant ICTs needed in distance e-learning. The table reveals that the respondents agreed to 15 out of the 16 items. With a cumulative mean of 3.09 which is greater than the decision mean of 2.50, this implies that civil servants in Minna, Niger State have high self-efficacy in the use of relevant information and communication technologies needed in distance e-learning.

Research Question Four: To what extent are civil servants in Minna, Niger State ready to enrol for relevant distance e-learning programmes?

Table 2: Civil servants' readiness to enrol for relevant distance e-learning programmes

S/N	Item	N	Mean	SD	Decision
1	Setting set goals and deadlines for myself	1,280	3.05	0.55	Agree
2	Learn best by figuring things out for myself	1,280	3.02	0.52	Agree
3	Can ignore distractions around me when I study	1,280	2.98	0.48	Agree
4	When I need information, do not hesitate to get it	1,280	2.87	0.37	Agree
5	Prepared to enrol for a program through E-Learning platforms	1,280	1.92	0.58	Disagree
6	Ensure i always have access to internet	1,280	2.07	0.52	Disagree
7	Family commitment and employment does not discourage me from learning something new	1,280	3.03	0.53	Agree

8	I am comfortable studying as an open/Distance electronic Education student	1,280	2.57	0.07	Agree
9	Can combine work with distance e-learning	1,280	3.01	0.51	Agree
10	Can take care of financial responsibilities involved in distance e-learning	1,280	1.92	0.58	Disagree
	Cumulative Mean		2.34		

Table 2 shows the responses of civil servants' readiness to enrol for relevant distance e-learning programmes. The Table reveals that the respondents agreed to seven of the 10 items but disagreed to three items. With a cumulative mean of 2.34 which is less than the decision mean of 2.50, the Table implies that civil servants in Minna, Niger State are not ready to enrol for relevant distance e-learning programmes.

Discussion

Finding that emanated from the data gathered for answering research question one indicates that civil servants (72.19%) in Minna are aware of the existence of distance e-learning platforms. This awareness was probably as a result of series of advertisements made by distance learning institutions via broadcast media, social media, print media and electronic media.

Also, finding of this study that emanated from data gathered for answering research question two reveals that civil servants (9.92%) in Minna, Niger state are not currently enrolled for distance e-learning programmes. This could be as a result of financial implications of undergoing such programme as majority of them in their responses indicated that the financial burden of distance education is a great hindrance to enrolment for such programmes. In agreement with the findings Yusuf, and Balogun, (2011) observed that one of the most important challenges in e-government and e-learning area which governments face is the low number of the initiatives initiated in this area. Another one is the failure (complete or partial) of these few initiatives. It is reported that the main reason for these challenges is the lack of e-readiness for e-government development facilities like free internet services in the various institutions and organizations premises.

Another finding that emanated from data gathered for answering research question three reveals that civil servants in Minna, Niger state have self-efficacy (Mean = 3.09 out of 5) in the use of relevant information and communication technologies needed in distance e-learning. This is because the same ICT tools (computer and its accessories) that are being used in their offices to execute their job activities are the same tools needed in distance e-learning. This finding is in agreement with the earlier finding of Oye, et al (2012) who found that academic members of staff have moderate self-efficacy on the use of computer and ICT tools and Saddam, et al. (2012) who found that students' self-efficacy on the use of ICT tools was considered excellent and good majorly. The self-efficacy of civil servants on the use of ICT tools is probably as a result of their frequent and regular usage of the same tools in the discharge of their daily activities in their offices.

Also, finding revealed that civil servants in Minna, Niger State are not ready (Mean = 2.34 out of 5) to enroll for relevant distance e-learning programmes. This lack of readiness could be as a result of financial implications of such enrolment.

Conclusion

Based on the findings that emanated from this study, it can be concluded that civil servants in

Minna are aware of the existence of distance e-learning platforms and they also have self-efficacy in the use of ICT tools in distance learning. However, despite the enormous benefits of distance learning to civil servants, their current low enrolment status and lack of readiness to enroll for such programmes as a result of financial implications are serious issues that must be addressed.

Recommendations

(i) Civil servants should be encouraged by government, employers and non-governmental organizations to enroll for relevant distance e-learning programmes. This encouragement could be in terms of financial assistance, access to loans and study scholarships.

(ii) Distance learning institutions and administrators should reduce the cost of enrolment for distance learning programmes and also give option of installment payment. This could help to ease the financial burden of enrolment on civil servants.

(iii) Government should make provision of internet service and other relevant ICT tools that can be simultaneously used for office tasks as well as studies by civil servants. This will prevent them on spending on the purchase of such items thereby reducing cost of enrolment for distance learning programmes.

References

Adedipe, N. (2007). *University quality assurance: Finding strategy and task allocation.* Paper Presented at the Workshop on Tertiary Education Financing, University of Lagos, Nigeria, 14 (2), 34-35.

Borotis, S., & Poulymenakou, A. (2008). *Critical success factors for e-Learning adoption: Handbook of research on instructional systems and technology.* Greece: IGI Global. 2ndEdition. 131-134.

Federal Republic of Nigeria (2013). *National policy on education.* Lagos: Federal Government Press.

Gesci, O. (2007). *Global e-schools and communities' initiatives: Infrastructure and connectivity.* Publication of Africa Department of Adult Education. University of Ibadan, Ibadan, Nigeria.

Moti, U. (2010). The challenges of access to university education in Nigeria. *DSM Business Review,* 2(2), 27-56.

NOUN, (2014). Course Title: *Nigerian administrative system. School of Management Sciences. National Open University of Nigeria.* Lagos: NOUN.

Oliver. R (2002). *The role of ICT in higher education for 21st century:* ICT as a change agent for education. Perth. Edith Cowan University. 21-35

Omoregie C. O. (2009). *Utilization of media technologies for distance and lifelong education in FMF careers".* Federal Ministry of Finance, Nigeria.

Oye, N. D. A., Lahad, N., & AbRahim, N. (2012). Computer self-efficacy, anxiety and attitudes towards use of technology among university academicians: A case study of University of Port Harcourt—Nigeria. *International Journal of Computer Science and Technology,* 3 (1),213-219.

Saddam, C. B., Gellie, F. P., & Shelanee, T. P. R. (2012). Status of students' perceptions and self-efficacy on the use of ICT. *2012 International Conference on Education and Management Innovation IPEDR*, 30, 145-149.

Schreurs J., Ehlers, U. D., & Sammour, G. E. (2008). E-learning readiness analysis (ERA): A health case study of e-learning readiness. *International Journal. Knowledge and Learning*, 4(5), 14-23.

UNESCO (2002). *Teacher education guidelines: Using open and distance learning–technology, curriculum, cost, evaluation.* Paris: UNESCO.

Yusuf, K., & Balogun, H. L. (2011). *Contemporary educational technology,* 2(1), 18-36.