
Correlation of Awareness and Usage of Mobile Devices among Facilitators and Students of
Distance Education in Nigeria

By

Kabir, F. S.

ICT Directorate,
Kaduna State University,
Tafawa Balewa Way Kaduna, Nigeria

ABSTRACT

The study investigated the relationship between awareness and usage of mobile devices among facilitators and students in distance education in tertiary institutions in Nigeria. In line with the objectives of the study and two null hypotheses were formulated. Descriptive survey design method was adopted for the study. The researchers targeted 235 facilitators and 940 final year students in six distance learning institutions in the country using stratified sampling technique. The instrument used for data collection was four rating scale structured questionnaire titled Awareness and Use of Mobile Phones in Distance Education in Nigeria (AUMPDEN). The instrument was validated by four experts in Kaduna state University and Ahmadu Bello University, Zaria. Their corrections were incorporated into the final copy of the instrument. A pilot study was conducted using forty part-time students and 20 lecturers in Danfodio University Sokoto. Data collected from pilot study were coded and the Cronbach Alpha coefficient was used to determine the reliability of the instrument. The result gave reliability coefficient of 0.789 was obtained. Face to face method was adopted in the administration of the questionnaire. In doing this, the researchers were assisted by twelve trained research assistants. Data collected from the study were analyzed using Pearson Product Moment Correlation was used to test the null hypotheses at 0.05 level of significance. The study revealed that no significant relation exist between awareness and usage of mobile devices among Distance Education facilitators and students in Tertiary institutions in Nigeria. One of the recommendations postulated was that government and stakeholders in distance education should create awareness programmes and sensitization campaigns that will enable students and facilitators to acknowledge the importance of mobile phone technology in distance education institutions in Nigeria.

INTRODUCTION

Access to education is a global issue as education itself has become an important agent of globalization. The role of education in the society has made international agencies like UNESCO, UNICEF and World Bank; and governments all over the world to commit itself by making education more accessible. To achieve the goal, a lot of attention and priority has been given to the

Open and Distance Learning programmes. It is hope that Open and Distance Learning which was accepted within mainstream education and training would help to make education accessible and provide equal educational opportunities to all citizens at different levels. As a result, Open and Distance Education (O.D.E) which is a rapidly growing field of education and training in Nigeria has today become

indispensable part of educational mainstream in the country. The rapid growth of O.D.E is stimulated largely by the use of, internet-based Information and Communication Technologies (I.C.T), so as to reinforce traditional ways of organizing education with innovative methods in order to realize the fundamental right of all people to lifelong learning (L.L.L).

ICTs, of which mobile technologies are a part, have the capacity to empower teachers and learners by facilitating communication and interaction, offering new modes of delivery, and transforming teaching and learning processes. Mobile technologies, which include hand held computers, Personal Digital Assistants, mobile phones, laptops, and i-Phones, are all part of the emerging information revolution taking place worldwide. People need not work with large computers on desktops or made to carry laptops searching for internet connection. According to Wright (2010), knowledge and learning is now literally at a person's fingertips via the mobile phone. This is evident with the emergence of distance education, asynchronous education and open or virtual learning as a way to continually educate students especially at tertiary level. Webwise (2012) posited that of the many different forms of ICTs, mobile phones have been particularly suitable for advancing education in developing regions. Tukur (2013) further supports this view especially in terms of accessibility and affordability of new learning technologies when he posited that technology – based instruction has the potential to improve quality of instruction, to make learning more motivating for students, to extend access to hard-to-reach learners, and to lower unit cost of instruction. Wright, Dhanarajan, and

Reju (2009) and Kabir and Abdullahi (2017) stated the potentials of mobile devices as devices that are used not only for communication, conducting financial affairs, and performing administrative tasks, but also for in-depth learning and assessment. This explained why Venkatesh, Morris, Davis and Davis (2003) posited that Educators and Planners are now discovering that the anticipated benefits of ICTs are not automatic or assured and that the move towards greater use of technology in distance learning instruction has often bred frustration and waste. Considering the role of Mobile devices in education, the researchers wish to find out the relationship between awareness and usage of mobile devices among facilitators and students in distance education in tertiary institutions in Nigeria.

The role of Distance Education (D.E) on providing educational opportunities in Nigeria cannot be overemphasized. In Nigeria, offers unique access for educational opportunities. In developed countries the awareness and adoption of mobile devices in education has helped in bulldozing the communication barrier in Distance Learning programme. It is not out of place to say the technology integration of modern technology in education sector has paved way for greater access, higher quality and lower cost in educational information among students and teachers globally. This might explain why Mac Callum (2010) and Mac Callum *et al* (2014) reported that mobile devices of have the potential to have the greatest influence in the education.

Despite the role of mobile devices in the adoption of technology among students and facilitators of distance education, this acceptance is facing setback of

conservativeness as a result of yawning technological skills. This current and factual information from scholars revealed both students and facilitators in Distance Learning in Nigeria were either reluctant or not ready to accept the global changes in educational delivery to students (Shehu 2015). The launching of distance education institutions in Nigeria has generated a lot of hope and anxiety on the use of mobile devices in teaching and learning. The questions in the mind of the scholars are that: - Are Distance Education students and facilitators in Nigeria aware of the enormous potentials of the use of mobile devices especially mobile phones in distance education? These questions promoted the researcher to carry out the research work.

Objectives of the Study

The study attempt to:-

1. determine the relationship between awareness and usage of mobile devices among Distance Education facilitators in Tertiary institutions in Nigeria
2. ascertain the relationship between awareness and usage of mobile devices among Distance Education students in Tertiary institutions in Nigeria

Research Hypotheses

The following research hypotheses were formulated and tested using Pearson Product Moment Correlation

1. There is no significant relationship between awareness and usage of mobile devices among Distance Education facilitators in Tertiary institutions in Nigeria.

2. There is no significant relationship between awareness and usage of mobile devices among Distance Education students in Tertiary institutions in Nigeria.

METHODOLOGY

A descriptive research seeks to provide an accurate description of observations of a phenomenon. The survey design was used for this study because of its reliability as an educational research tool. According to Frankfort-Nachmias and Nachmias(2009), survey method is one of the most important data collection methods which is used extensively to collect data on the subjects of the research. The survey design is considered most appropriate for this study as it involves a large sized population and it also relies on the use of questionnaires to elicit responses from respondents.

The researchers targeted 235 facilitators and 940 final year students in six distance learning institutions in the country. Stratified sampling technique was employed to ensure that different subgroups (or strata) of the students, which are homogenous, are adequately represented in the sample so as to increase the level of accuracy. The institutions used for the study were University of Ibadan Distance Learning Centre, Obafemi Awolowo University Distance Learning Centre; University of Lagos Distance Learning Institute; Centre for Distance Learning and Continuing Education, University of Abuja; the National Open University (NOUN), North West zone, and National Teachers' Institute (NTI), South-South zone. The National Open University and National Teachers' Institute are single mode distance learning

institutions while the four universities mentioned are dual mode distance learning institutions.

The instrument used for data collection was structured questionnaire titled Awareness and Use of Mobile Phones in Distance Education in Nigeria (AUMPDEN). The instrument was structured using a four-point rating scale of Strongly Agree (4 points), Agree (3points), Disagree (2 points) and Strongly Disagree (1point). The instrument was validated by four experts in Kaduna state University and Ahmadu Bello University, Zaria. Their corrections were incorporated into the final copy of the instrument. A pilot study was conducted using forty students of National Teachers’ Institute and 20 facilitators. Data

collected from pilot study were coded and the Cronbach Alpha coefficient was used to determine the reliability of the instrument. The result gave reliability coefficient of 0.789 was obtained. Face to face method was adopted in the administration of the questionnaire. In doing this, the researchers were assisted by twelve trained research assistants. Data collected from the study were analyzed using Pearson Product Moment Correlation at 0.05 level of significance.

RESULTS OF THE STUDY

Hypothesis One: There is no significant relationship between awareness and usage of mobile devices among Distance Education facilitators in Tertiary institutions in Nigeria.

Table 1: Correlation between relationship between awareness and usage of mobile devices among Distance Education facilitators in Tertiary institutions in Nigeria

	Awareness mobile devices	Usage mobile devices
Awareness mobile devices	Pearson Correlation	1
	Sig. (2-tailed)	-.095
	N	10
Usage mobile devices	Pearson Correlation	-.095
	Sig. (2-tailed)	.795
	N	10

The result of analysis used to test null hypothesis one shows the p-value greater than the significant level (0.795>0.05). From the analysis, it was concluded that there was no significant relationship between awareness and usage of mobile devices among Distance Education facilitators in Tertiary institutions in Nigeria. The hypothesis was retained.

Hypothesis Two: There is no significant relationship between awareness and usage of mobile devices among Distance Education students in Tertiary institutions in Nigeria.

Table 2: Correlation between relationship between awareness and usage of mobile devices among Distance Education students in Tertiary institutions in Nigeria

	Awareness mobile devices	Usage mobile devices
Awareness mobile devices	Pearson Correlation	.280
	Sig. (2-tailed)	.433
	N	10
Usage mobile devices	Pearson Correlation	.280
	Sig. (2-tailed)	.433
	N	10

The Pearson Product Moment Correlation used to determine null hypothesis two revealed the p-value of .433 which was greater than the 0.05 level of significant. The result therefore shows that no significant relationship exist between awareness and usage of mobile devices among Distance Education students in Tertiary institutions in Nigeria. The null hypothesis was retained.

DISCUSSIONS OF THE FINDINGS

The result of Research Question one which was further buttressed with the test of corresponding null hypothesis revealed that no significant relationship exists between the awareness and usage of mobile devices among Distance Education facilitators in tertiary institutions in Nigeria. The finding agreed with that of Reed (2010) who opined that there is serious doubt about the awareness and usage of mobile learning in distance education in Colleges of Education in Nigeria. Similarly, the study of Suki and Suki(2009) were of a contrary view. They reported that, some lecturers agreed level of awareness of mobile technology in their classes has nothing to do with its utilization. This finding is contrary to what is obtainable

in developed countries. For instance study of Velmurugan and Velmurugan (2014) in India revealed that the usage of mobile phones was determined by their awareness. Similarly, the finding concurred with that of Wright (2010), which indicated that both academics and students are now aware that mobile learning promotes flexibility in learning where students can learn anywhere and at any time according to their convenience. This further motivates them to learn.

The finding of Research Question Two which was further affirmed by test of corresponding null hypothesis shows that no significant relationship exists between awareness and utilization of mobile devices among students in distance education in Nigeria. The findings agreed with that of Ismail, Azizan and Azman (2013) who observed that lack of awareness on technological classroom tools have deterred students from adopting and using mobile devices in education. Corroborating this, Suki and Suki (2009) reported that those students with adequate knowledge and awareness to use certain technology in the educational environment are not ready to use the m-learning instructional strategy. Ismailet *al* (2013) reported that teachers and

students who are more aware of the importance of mobile devices in education find it difficult to use it in their learning. However studies from scholars outside Nigeria, such as Malaysia by Sahin (2006) and Tsinakos (2013) shows that the use of technology in education is perceived positively among teachers since they were aware of ICT benefits to their classes.

CONCLUSION

The study confirmed that no significant relationship exists between awareness and use of mobile devices among students and facilitators of distance education in Nigeria. The implication of the result is that students and facilitators in distance education are not at par with the global trends on the use of new technologies that are very critical in distance education. As a result of this, they may find it difficult to have access to current educational resources. There is an overwhelming amount of resources online: Massive Open Online Courses (MOOCs), Open Educational Resources (OERs), thousands of Educational Databases, Online courses, (both free and paying) such as Coursera, Future Learn, Open Learn, e.t.c. All these could easily be accessed via mobile devices even when students and facilitators are on the move, or at the comfort of their homes or workplace.

RECOMMENDATIONS

1. Government and stakeholders in distance education should create awareness programmer that will enable students and facilitators to acknowledge of the important of mobile phone technology in distance education institutions in Nigeria.
2. Nigerian government provides an enabling environment by massively investing in ICT infrastructure such as broadband Internet that will encourage the use of new technologies within the educational sector.

REFERENCES

- Ismail, I., Azizan, S. N., & Azman, N. (2013). Mobile Phone as Pedagogical Tools: Are Teachers Ready? *Journal of International Education Studies*, 6(3).
- Kabir, F. S. and Abdullahi, T. K. (2017). ICTS and educational development: the utilization of mobile phones in distance education in Nigeria. *Turkish Online Journal of Distance Education*, 18 (1). 63-76. from <https://files.eric.ed.gov/fulltext/EJ1124958.pdf>
- Mac Callum, K., Jeffrey, L., & Kinshuk. (2014). Factors Impacting Teachers' Adoption of Mobile Learning. *Journal of Information Technology Education*, 13.
- Reed, B. I. (2010). *University of Ibadan Educational Advancement Center Starts African Mobile Learning Initiative*. Retrieved February 5, 2014, from [http://www.personneltoday.com/hr/nigerian-university-of-ibadan-educational-advancement-center-and-exact-learning-solutions-start-african-mobile-learning-initiative/](http://www.personneltoday.com: http://www.personneltoday.com/hr/nigerian-university-of-ibadan-educational-advancement-center-and-exact-learning-solutions-start-african-mobile-learning-initiative/)
- Sahin, I. (2006, April). Detailed Review of Rogers' Diffusion And Innovations Theory And Educational Technology Related Studies Based on Rogers' Theory. *Turkish Journal of Distance Education*, 5(2).

- Shehu, S. (2015). *Lecturers' Perception On The Use Of Mobile Technologies For Instruction In Universities*. Usman dan Fodio University, Department of Instructional Technology. Ilorin: University of Ilorin.
- Mac Callum, K. (2010). Attitudes of educators to the introduction of mobile technology. *paper presented the 1st annual conference of Computing and Information Technology Research and Education New Zealand*. Dunedin, New Zealand: CITRE NZ2010.
- Suki, N. M., & Suki, N. M. (2009). Are lecturers' ready for usage of mobile technology for teaching? *World Academy of Science, Engineering and Technology*.
- Tsinakos, A. (2013). *Global Mobile Learning Implementation and Trends*. Beijing: China Central Radio & TV University Press.
- Velmurugan, M. S., & Velmurugan, M. S. (2014, 01). Consumers' Awareness, Perceived Ease of Use toward Information Technology Adoption in 3G Mobile Phones' Usages in India. *Asian Journal of Marketing*, 8, 1-23.
- Venkatesh, V., Morris M. G., Davis, G. B., & Davis. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 425-478.
- Webwise. (2012). *Guide to Mobile Applications*. Retrieved June 18, 2014, from [www.bbc.co.uk: http://www.bbc.co.uk/webwise/guides/mobile-applications](http://www.bbc.co.uk/webwise/guides/mobile-applications)
- Wright, C. R., Dhanarajan, G., & Reju, S. A. (2009, feb). Recurring Issues Encountered by Distance Educators in Developing and Emerging Nations,. *International Review of Research on Open and Distance Learning*, 10(1).
- Wright, N. (2010). Twittering in teacher education: reflecting on practicum experiences. *The Journal of Open, Distance and E-Learning*, 25(3), 259-265.