

THE IMPACT OF MOBILE TELEPHONY ON ACCESS TO INFORMATION AND LEARNING RESOURCES ON THE IMPROVEMENT OF STUDENTS' SOCIAL COHESION IN SELECTED HIGHER INSTITUTIONS IN NIGERIA

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Abstract

The study investigated the impacts of mobile telephony on access to information and learning resources on the improvement of students' social cohesion in Nigerian higher institutions. The study adopted a descriptive survey using a questionnaire to collect data. The population of the study consisted of 56 lecturers who were randomly picked from some selected higher institutions of learning in Nigeria. A total of 56 questionnaires were distributed only 51 were retrieved. Descriptive statistics, (mean and percentage) were used for analysis. A mean score of 2.5 and above and a percentage score of 50% were considered for decision-making. The study affirmed the impact of mobile telephony on students' learning in Nigerian higher institutions in Nigeria in the following ways: Quality of learning, accessibility, and effectiveness, it improves teaching and enhances academic performance. The study further revealed the following as difficulties for some students to afford mobile telephony in Nigeria's higher institutions of learning financial constraints, inability to know new software bugs, inability to know battery life span, lack of universal standards and security and privacy concerns. The study recommends that higher institution management should organize seminars on the importance of mobile phone usage in learning.

Keywords: impact, mobile telephony, access to information, learning resources, social cohesion, Nigeria

Introduction

Mobile telephony is becoming an integral aspect of education. Although high-tech facilities are used by schools, colleges, and universities, alternative online learning options have emerged to challenge these establishments' hegemony (Selwyn, 2016). According to Sitthiworachart and Joy (2008), mobile learning is the use of mobile devices to distribute educational materials and content. According to Maiti and B. Tripath (2012), mobile technologies used in education include cell phones, smartphones, PDAs, MP3/MP4 players, e-book readers (like Kindles), netbooks, tablets (like the iPad and Galaxy Tab), hybrid tablet/smartphone devices (like the Galaxy

Note), and specialized portable technologies used in science labs. By making educational information and services more easily accessible, the use of mobile telephony in education enhances accessibility, efficacy, and learning quality. Learners' attention spans are further extended by m-learning technologies' capacity to provide multimedia content, including images, videos, and sounds, in addition to text, and the ease with which they may access it on a variety of devices (Okeke and Umor 2012).

Apart from traditional educational settings such as lecture halls, libraries, canteens, and university classrooms, mobile learning can also take place in residential areas, parks,

neighbourhoods, and public transportation. Students can use their mobile devices to view their class notes and homework assignments. It includes connecting mobile devices to university systems, like management information systems (MIS) and virtual learning environments (VLEs), via wireless networks, mobile/smartphone networks, or both, for downloading, uploading, and online work (Hashem et al., 2011). On particular mobile devices, it could also come in the form of installed or pre-loaded instructional mobile apps. Information sharing is a key component of mobile learning since it allows students to communicate and exchange knowledge whenever they choose. Furthermore, social media is particularly crucial for distance learning since it allows students who are geographically separated from one another to connect and encourage one another's academic achievements, according to Madge et al. (2019). For students participating in remote learning, Facebook and WhatsApp are helpful resources for effective communication and learning. It is as a result of these numerous advantages that the impacts of mobile telephony on access to information and learning resources on the improvement of students' social cohesion in Nigerian higher institutions are imperative.

Statement of the problem

The current systems of formal learning, teaching, assessment, and educational administration and management will be improved and supplemented by a successful mobile learning implementation. Despite this, many developing country university students have not yet evaluated how mobile learning will affect the way that instruction is delivered. Thanks to mobile learning, a great deal of people can access communication, information, and training regardless of their location. It also aims to enhance teaching and learning while encouraging collaboration and active learning. The increasing use of mobile

devices like tablets, ebook readers, smartphones (including BlackBerries and Androids), and eBook readers piques the curiosity of education academics. A substantial segment of the global populace habitually uses smartphones to obtain information and educational materials and to enhance the social cohesiveness of students at Nigerian tertiary institutions. Despite the affordability of mobile phones, most students can still not afford them for learning, this has therefore affected their learning process and their access to information, hence the need for this study.

Objectives of the study

The main objective of the study is to find out the impacts of mobile telephony on access to information and learning resources and the improvement of students' social cohesion in higher institutions in Nigeria. The specific objectives are to find out the impact of mobile telephony on students learning in Nigerian higher institutions in Nigeria and to find out the difficulties for some students not to afford mobile telephony in Nigerian higher institutions in Nigeria.

Literature Review

The use of mobile telephony frequently prompts concerns about whether or not this addiction affects pupils' performance. According to Ezemenaka (2013), the majority of university students, especially undergraduate students, were touched by the development of mobile phone technology, which blossomed with their desire for new information. However, Kinsella (2009) asserts that the advent of cell phones has facilitated communication between lecturers and students in the classroom. According to Kibona and Mgaya (2015), the ubiquity of smartphone addiction is proof that it affects students' academic performance. People struggle to accept that smartphones are now tools for social, professional, and intellectual endeavours in addition to being a method of communication (Cano, 2012). They are no

longer only for making calls and sending texts

Lytle (2012) and Buck, Melnis, and Randolph (2013) report that college students who use StudyBlue Flash Cards think the tool helps them remember important concepts when they are getting ready for an exam. As per the poll, a few students utilize the Evernote Peek app on their iPhones for taking notes in the cloud. This allows them to arrange their notes and transform them into valuable study materials. Furthermore, no matter where people are, the use of mobile learning may facilitate the transmission of training, information, and communication to a large number of people (Attewell & Savill-Smith, 2004). This can focus on enhancing cooperation and active learning as well as teaching and learning. The value of mobile learning is further supported by Cochrane (2006), who discovered in his report that creating a constant mobile learning environment will boost student productivity. Chen and Denoyelles (2013) found in their study that a large number of students had one or more mobile devices, with tablets being the most widely used for learning. The increasing use of mobile devices like tablets, ebook readers, smartphones (including BlackBerries and Androids), and eBook readers piques the curiosity of education academics. Abowd, Iftode, and Mitchell (2005) state that a sizable fraction of people use smartphones regularly. These devices are also thought to be more accessible and affordable than desktop and laptop computers. Students will take advantage of these devices' ability to generate and locate content to enhance their learning style (Chen and Denoyelles, 2013).

In the past five years, there has been a substantial increase in the usage of smartphones and other convergent technology devices by students for social and

academic purposes. Another trend that could impact students' learning is when they use their phones to plan group activities. Some students use technology for communication with friends, entertainment, and information since they are accustomed to it being a part of their daily lives (Wood et al., 2012). Students prefer to facilitate agreements using convergent technologies that offer texting and other non-synchronous communication channels because of their more flexible and dynamic lifestyles. They use the phone's calendar, reminder, and note functions (applications) to stay on top of their to-do list.

The use of smartphones has an impact on study-related activities such as collaborative learning and virtual teams. Through its utilization, educators can capitalize on the dispositions of young students towards experiential learning, enhance collaborative learning, and cultivate a feeling of community across disciplines (Cochrane & Bateman, 2010). It is anticipated that smartphones will continue to become more widely available and versatile as convergent devices for personal coordination. According to Wood et al. (2012), students are more likely to utilize new technology, such as smartphones, because they are prone to following fads, trends, and fashions. Student study habits are developing along with new technology. Smartphones have changed the traditional college experience, and educational institutions need to adapt to these changes by utilizing new learning technologies.

According to Domingo and Garganté (2016), students represent one of the most important markets and the largest consumer group for mobile phone services. This is because the use of cell phones has increased across all age and economic groups, transforming education into an "anytime, anywhere

experience" (Cochrane & Bateman, 2010). Students now frequently use their GSMs for social networking, per the research conducted in 2014 by Harrasi and AlBadi. According to 71% of college students, they prefer chatting with friends on social media over spending time with family and other loved ones, up to 96% of them admit that they use their smartphones for social networking reasons of all types. GSM-capable smartphones have led to a surge in the quantity and intensity of social networking activity.

These days, using a cell phone has a huge impact on learning and education. For example, learning management systems allow students to surf websites, access academic databases, and quickly obtain online material to meet their needs. They can also access their lecture materials on their cell phones. Tella and Olawuyi (2021) looked at how South West Nigerian undergraduate students used their cell phones to access the resources and services of libraries. Undergraduate students were the target population for four research topics that were developed and addressed utilizing a survey approach. The study indicates that Android smartphones are the primary device used by undergraduate students to access library materials and services. Undergraduates mostly use virtual materials, reference materials, databases, maps, and atlases as primary smartphone library resources. Reference services are the easiest for undergraduate students to utilize on their cellphones, followed by the online public access catalogue and circulation services. Using a smartphone to access library materials facilitates quick access to

information, problem-solving, and the timely submission of assignments. Because using a smartphone to access library materials is instantaneous, less stressful, and takes less time than visiting the library, undergraduates prefer this method.

Sambo, Lawal, and Helen (2021) conducted a related study to find out how undergraduate students at a specialized institution in Nigeria utilized their cell phones to look for information. A descriptive survey design was selected. Five research questions and five objectives were created to guide the investigation. Using a stratified random sample approach, 1,403 respondents from the two universities were selected for the study, and 84% of them were retrieved. The collected data was analyzed using descriptive statistical techniques like frequency, percentage, and means. The results of the study demonstrated that undergraduate students favoured Apple iOS over other smartphone operating systems while looking up information. Google Android, Blackberry, open WebOS, MeeGo, Windows Phone, Symbian, and other platforms were ranked second and third, respectively.

Methodology

The study adopted a descriptive survey using a questionnaire to collect data. The population of the study consisted of 56 lecturers who were randomly picked from some selected higher institutions of learning in Nigeria. A total of 56 questionnaires were distributed only 51 were retrieved. Descriptive statistics, (mean and percentage) were used for analysis. A mean score of 2.5 and above and a percentage score of 50% were considered for decision-making.

Population of the study

Table 1

S/N	Higher Education in Nigeria	Lecturers
1	Nnamdi Azikiwe University Awka	16
2	Delta state University of science and technology Ozoro	15
3	University of Sokoto, Sokoto state	11
4	University of Benin, Edo State	9
	Total	51

Table 1 shows fifty-one (51) lecturers who were randomly picked as the population of the study in the following order: Nnamdi Azikiwe University Awka (16), Delta State University of Science and Technology Ozoro (15), University of Sokoto, Sokoto State and University of Benin, Edo State (9) respectively.

Table 2: The impact of mobile telephony on students learning in Nigerian higher institutions in Nigeria

S/N	Items Statement	A	SA	D	SD	X	Remarks
1	Quality of Learning	22	23	5	1	3.2	Accepted
2	Accessibility	13	17	12	9	2.6	Accepted
3	Effectiveness	16	21	8	6	2.9	Accepted
4	It improves teaching	15	17	8	11	2.7	Accepted
5	Enhances academic performance	22	19	5	5	3.1	Accepted

Table 2 affirmed the impact of mobile telephony on students learning in Nigerian higher institutions in Nigeria in the following ways: Quality of Learning (3.2), Accessibility (2.6), Effectiveness (2.9), It improves teaching (2.7) and Enhances academic performance (3.1) respectively.

Table 3: Difficulties for some students to afford mobile telephony in Nigerian higher institutions in Nigeria

S/N	Items Statement	A	SA	D	SD	X	X
1	Financial constraints	16	17	11	7	2.8	Accepted
2	Inability to know new software bugs	19	16	13	3	3.0	Accepted
3	Inability to know the battery life span	21	29	1	0	3.3	Accepted
4	Lack of universal standard	22	15	12	2	3.1	Accepted
5	Security and privacy concerns	23	11	14	3	3.0	Accepted

Table 3 depicts the following as difficulties for some students to afford mobile telephony in Nigeria's higher institutions of learning Financial constraints (2.8), Inability to know new software bugs (3.0), Inability to know battery life span (3.3), Lack of universal standard (3.1) and Security and privacy concerns (3.1) respectively.

Conclusion

The way that students acquire information is changing thanks to smartphones, which are reshaping the educational process. However, redefining this educational experience poses new difficulties for both teachers and students as they must choose the best combinations of technology and pedagogy. Mobile learning is increasingly seen as a knowledge-centric catalyst in support of individualized and collaborative learning in higher education as a result of the pervasive revolution of borderless education. It is critical to understand the function and perspectives of the professors and students who make up the higher education community and are in charge of using mobile devices. Modern mobile technology deployment alone would not be sufficient without taking into account the opinions, demands, and desires of the end users or stakeholders.

Recommendations

The study recommends thus:

1. Higher institution management in Nigeria should ensure all students acquire mobile phones at the time of their admission
2. Higher institution management should organize seminars on the importance of mobile phone usage in learning

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059

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