Assessing Students' Comfort with Using Smartphones to Locate or Access Information Resources

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ABSTRACT

The objective of the present study is to explore the comfort of using smartphones to access information resources at academic libraries. The study looked at whether there is an availability of e-resources that undergraduate students can access using their smartphones. The design of this study was a case study method with quantitative methodology to guide the researcher to thoroughly arrive at conclusions. The population used comprised 947 undergraduate students from the department of library and information science around October 2022, and systematic sampling was used to find the sampling students, which consisted of 383 using Adam's (2020) sample size determination in a quantitative approach and based on a 99% confidence level. The data collected using questionnaires was coded and entered into the SPSS package for analysis. The study has shown that the majority (274, or 73%), of the respondents had smartphones, which they are surely using to access e-resources. The study revealed that most respondents were very excited about the access to library electronic resources via smartphone at Bauchi State University Library, and this accounted for the following responses, i.e., agreed 240 (64.3%) and strongly agreed 85 (22.8%) that they feel at ease utilizing their smartphones to access library electronic resources while they are in the library. This study discovered that the university library has accessible electronic resources available which can be access through smartphones by the users. It is interesting to know that in this study, the majority of the undergraduate students have their own smartphones, and they are comfortably used to accessing resources.

Keywords: students comfort, smartphones, information resources, academic library. **Library and Information Science:** Z678.89-678.892

1. INTRODUCTION

The idea of any type of library is to disseminate information to their patrons without any constraints. This led to libraries being used as information centres, including the creation of websites to meet

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modern users' expectations (Beerappa, 2017). It is with this paramount that the users of libraries feel comfortable using their smartphones for assessing or locating their information needs without difficulties or anxieties. According to Rajashekara and Biradar (2017), the role of librarians in the digital age is to promote and grow the digital environment, but this has become quite challenging. In the opposite direction, smartphone users benefitted themselves with their phones to become digitally oriented individuals. The use of smartphones to locate information resources is increasing day by day due to the current development of computers and information technology (IT). Mohammed and Misau (2023) observed that smartphones are the most useful devices that society accepts globally.

Anh (2016), as cited in Matheus (2021), explained smartphones as mobile phones with computers and internet things that allow search capabilities and storage facilities, which are only different from computers by size. Computers and smartphones are important components of academic settings in the twenty-first century (Matheus, 2021). Students can use smartphones for a variety of purposes, so it's important to evaluate and look into how comfortable they are using smartphones for accessing electronic resources in libraries.

Therefore, there are many studies related to smartphone usage for accessing information resources as well as learning activities. For instance, Shakoor et al. (2021) investigated the impact of smartphone usage, and the study revealed that there is a positive correlation between smartphone usage and academic performance. Thus, this will encourage the researchers to conduct this study among undergraduate students about the use of smartphones to locate or access information resources from academic libraries. Hence, this study is to reveal whether students are comfortable when using smartphones to access information resources in libraries.

1.2 Statement of the Problem

The study observed that smartphone users developed comfort in using them to access information resources. It was discovered that the university library has one of the international databases known as EMERALD Insight, which contains information resources ranging from e-journals, e-books, e-magazines, and many more, and it allows users to have access to these resources in the library. Again, Mohammed (2021) discovered that the BASUG library has a large number of information resources, which required students to access them either physically in the library or via smartphone devices. It is known that library users find it easy and interesting to locate information resources using their smartphones. It is interesting for academic libraries to find out that those information resources are much more accessible to different categories of users. This and many more emancipate the research to investigate the comfortability and usage of smartphones by undergraduate students at Bauchi State University Gadau. It was suggested that the academic libraries in Nigeria should purchase Kindles (e-readers), tablets, and other smartphones that enhance access to electronic resources. According to Matheus (2021) the University of Namibia ought to develop a mobile library application for electronic resources, so that students can access electronic resources

whenever they want via the application. This will facilitate more access to information resources for libraries across the globe.

Additionally, this study will highlight the respondents' level of comfort and usage of smartphones to locate, access, and use information resources in academic libraries.

1.3 Research Objectives

- 1. To determine whether the respondents can access electronic resources through smartphones from the university library.
- 2. To determine whether undergraduate students find it easy to access and use e-resources via smartphones.
- 3. To offer suggestions on how users can improve their ability to access information resources.
- 4. To offer recommendations about how librarians improve smartphones access to information resources.

1.4 Research Questions

- 1. Do the respondents have access to electronic resources through their smartphones at the university library?
- 2. Is there any comfort in accessing and using e-resources using smartphones among undergraduate students?
- 3. What are the relevant suggestions on how users can improve their ability to access information resources?
- 4. What recommendations does the study offer on how librarians can enhance access to information resources using smartphones?

2. RESEARCH METHODOLOGY

The current study adopted and used a case study research design and quantitative method to look into undergraduate students' comfort levels when using or accessing information resources through smartphones. A case study research design is notable among researchers for assisting them learning more about a situation that is little-known or poorly understood, such as the necessity of comprehending the use of smartphones to access e-resources, as well as to highlight the study boundaries that demarcated or defined data collection techniques (Fox & Bayat 2012; Leedy & Ormrod 2010 as cited in Matheus, 2021).

Therefore, the study primarily investigated and assessed the comfort of using smartphones to locate and access information resources and collected data by using survey questionnaires. Conclusively, a case approach typically entails gathering information from several sources using a variety of quantitative methods, e.g., questionnaires (Crowe et al. 2011). Furthermore, the total population comprised 947

undergraduate students from the department of library and information science around October 2022, and systematic sampling was used. The sampling of the students consisted of 383 using Adam's (2020) sample size determination in a quantitative approach and based on a 99% confidence level. The data collected using questionnaires was coded and entered into SPSS for analysis.

3. RESULTS AND DISCUSSION

Out of three hundred and eighty-three (383) sample sizes, 373 accurately completed and submitted the questionnaire for further analysis.

3.1 Demographic information



The following data presents the respondents' information in terms of gender:

Figure 1: Respondents Gender

Figure 1 above shows that there were 200 male participants in this study (54%) as opposed to 173 female participants (46%).



Figure 2. Respondents' Year of Study

Figure 2 above shows that third-year respondents accounted for 214 (57%) higher based on their responses in the present study, followed by 93 (25%) second-year respondents, and the lowest among them were 66 (18%) participants. This result shows that third-year participants are much better in terms of participation in this study.





Figure 3 above shows that the majority (274, 73%) of the respondents had smartphones, which were expected to be used to access e-resources; only a few of them (99 = 27%) indicated that they lacked smartphones usage. The current study went one step further and investigated whether participants had access to e-resources on other people's smartphones. The information in Figure 4 below will show whether or not the respondents had access to other people's smartphones.



Figure 4. The respondents' ability to use another person's smartphone

Figure 4 shows that the majority of the respondents, 272 (73%), owned smartphones; this result shows that they do not have access to someone's smartphones when compared to 101 (27%) of the participants who either have access to someone else's smartphone or do not have smartphones at all.



Figure 5. Awareness of library electronic resources available at the library

Figure 5 shows that the majority, 243 (65%) of participants were aware of library e-resources compared 130 (35%) participants who unaware of the library's online resources. It can be inferred from this study that students were aware of the library's electronic resources, either through lectures, orientations, the school website, or library staff.



Figure 6. Knowledge about electronic resources available at libraries

Figure 6 above illustrates that out of the 373 respondents, the majority of the participants (147 = 40%) knew about library e-resources through the school website, followed by 91 (24%) of the respondents who aware of library electronic resources through lectures. Subsequently, 70 (19%) of the participants got to know about them through library employees, 65 (17%) of the participants got to know through freshers orientation exercise. The study discovered that the respondents knew much about libraries and library resources since it was the only place they could visit to satisfy their information needs.

3.2 Respondents' perceptions of the comfort of accessing and using e-resources via smartphones

This section provides the respondents' perceptions of the comfort in accessing and using library eresources via smartphone at Bauchi State University Library.

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Items	Strongly Agree	Agree	Disagree	Strongly Agree
	(SD)	(A)	(D)	(SA)
I feel comfortable when I am using my	85	240	43	5
smartphones to access e-resources.	(22.8%)	(64.3%)	(11.5%)	(1.3%)
I tend to use a smartphone to access the	93	232	46	2
library's electronic resources.	(24.9%)	(62.2%)	(12.3%)	(0.5%)

Table 1: Respondents' perceptions of the comfort of accessing and using e-resources via smartphones

The library does not need to promote e-	89	236	47	1
resources in any way.	(23.9%)	(63.3%)	(12.6%)	(0.3%)
I find using a smartphone to access e-	96	225	49	3
resources to be convenient.	(25.7%)	(60.3%)	(13.1%)	(0.8%)

The results of the participants who feel comfortable when using a smartphone to access library electronic resources show that the majority of the participants, 240 (64.3%) agreed, while 85 (22.8%) strongly agreed that they feel comfortable using smartphones to access electronic resources. On the other hand, very few of the participants—43 (11.5%) chose to disagree, while 5 (1.3%) strongly agreed on using smartphones to access library electronic resources. In the second item, most of the participants, 232 (62.2%), chose to agree, and 93 respondents (24.9%) indicated strongly agreed that using a smartphone to access e-resources is more common than using computer terminals in libraries to do so, while 46 (12.3%) of the participants disagreed and 2 (0.5%) chose strongly disagreed on this statement. This is somehow consistent with the outcomes of item 3. Again, there is no requirement for a library to raise awareness of the e-resources available in the university library, according to the majority of respondents (236, or 63.3%) and 89, or 23.9%, while a few of the participants (47 = 12.6%) chose to disagree and the remaining 2 (0.5%) strongly agreed on the statement that they need a library to provide more awareness about library e-resources.

The participants' statements on whether they are convenient when accessing e-resources through their smartphones. According to the findings, the majority of respondents (60.3%) agreed and 96 (25.7%) strongly agreed that using a smartphone to access library electronic resources is always much more convenient. Only a few of the participants (49 = 13.1%) and (3 = 0.8%) have a contrary opinion that it is much more convenient to use other means and access library e-resources. Table 1 shows the respondents' opinions on the comfort of accessing and using e-resources using smartphones

4. **RECOMMENDATIONS**

Most of the recommendations in this study are purely based on how the library would make the students maintain the usage of smartphones in accessing information resources for their academic activities. The following are recommendations offered from this study:

- 1. The library should purchase Kindle e-readers that will be used in the serial section for accessing both online and offline information resources.
- 2. Most of the undergraduate students cherished smartphones but complained that an accompanying data plan was not cheap to always subscribe to, and even the school or library wireless were not freely accessible to them. Thus, this study advises the school authority to make the wireless freely accessible to the users, just like other institutions in Nigeria and abroad.
- 3. Students were excited to hear about the softcopy format and have access to information at the point of need within the library. They were also happy to visit the library and download e-

resources that can be used later on in their hostels or at home. Importantly, students were able to easily find and access library resources within the library. Thus, this study recommends that such a database extend its access outside the library for the benefit of students.

- 4. The researcher observed that the level of students' engagement towards the use of a smartphone to access online resources was consistently high, and this shows that the majority of undergraduate students will neglect to use hard-copy resources in the future. As a result, the library will lose a lot of users who can access hardcopy resources. This study advised the library management to subscribe and install the Online Public Access Catalogue (OPAC), which can attract more users to locate the available hardcopy resources that are available in the library using their smartphones.
- 5. University management should encourage students to use smartphones for library resources and services by providing mobile devices and developing new tools and mobile apps for providing library services via mobile devices. This will boost the usage of library resources and promote reading habits among students.

5. CONCLUSIONS

The current study consists of an article evaluating how comfortable students are using smartphones to find information resources in libraries. This unique study found that 274 respondents, or 73 percent, owned smartphones and utilized them to access online resources in the library. This shows that the library users felt comfortable and convenient when using smartphones to access or locate information resources. The study found that the university library has e-resources available, and the students access the information resources via their smartphones. This research will add to the body of knowledge, considering the methodology and instruments used in the study.

According to the study, most participants felt at ease utilizing their smartphones to access library information resources. It is interesting to know that in this research, the undergraduate students have their smartphones to access information resources. Appropriate recommendations were made for the library to look out for ways to improve the usage of information resources via smartphones. Most importantly, the study will assist the BASUG library in a way that they can help their students' access e-resources using their smartphones with free wireless (WIFI) and also to know how to plan the future uses of library resources. Fortunately, the entire population of respondents perceived comfort and accessibility when using smartphones to access or locate information resources in the library. The future study will focus on undergraduates' perceptions, usefulness, accessibility, and satisfaction as determinants of smartphone adoption in academic libraries.

6. REFERENCES

Adam, A.M., 2020, Sample Size Determination in Survey Research. *Journal of Scientific Research and Reports*, **26**(5), 90-97. <u>https://doi.org/10.9734/jsrr/2020/v26i530263</u>

Beerappa, 2017, Library Web-Hosting Technology: Using Open Source Content Management System. *International Journal of Engineering and Future Technology*, **14**(1), 60-69.

Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., Sheikh, A., 2011, The case study approach. *BMC Medical Research Methodology*, **11**(1), 1-9.

Farhat, K., Aslam, W., Arif, I., Ahmed, Z., 2022, Does the dark side of personality traits explain compulsive smartphone use of higher education students? The interaction effect of dark side of personality with desirability and feasibility of smartphone use. *IIM Kozhikode Society & Management Review*, **11**(1), 62-74.

Hartley, K., Andújar, A., 2022, Smartphones and Learning: An Extension of M-Learning or a Distinct Area of Inquiry. *Education Sciences*, **12**(1), 50.

Matheus, E., 2021, An investigation into the use of smartphones in accessing electronic resources at the University of Namibia PhD Thesis and Dissertation, University of Namibia.

Mohammed, A., 2021, From Birth to Five: Students' Perceptions toward Library Participation and Patronage of the Academic Library. *International Journal of Library Science*, **19(**1), 59-68.

Mohammed, A., Misau, A.Y., 2023, Undergraduates' Perceptions of the Usefulness of Smartphones in Accessing Electronic Resources in Academic Libraries. *Communicate: Journal of Library and Information Science*, **25**(1), 116-123.

Rajashekara G.R., Biradar B. S., 2017, A study of media, software technology and r and d libraries for training and development trends in Indian special libraries, *International Journal of Engineering and Future Technology*, **14**(1), 70-79.

Şad, S. N., Özer, N., Yakar, Ü., Öztürk, F., 2022, Mobile or hostile? Using smartphones in learning English as a foreign language1. *Computer Assisted Language Learning*, **35**(5-6), 1031-1057.

Shakoor, F., Fakhar, A., Abbas, J., 2021, Impact of smartphones usage on the learning behaviour and academic performance of students: empirical evidence from Pakistan. *Int. J. Acad. Res. Bus. Soc. Sci*, **11**, 862-881.

Tan, C. N. L., Fauzi, M. A., Ojo, A.O., 2022, Predictors of the dependence on smartphones: the neglect of studies among Muslim students. *Global Knowledge, Memory and Communication*.