

Low Utilisation of Online Research Resources by Lecturers: Causes and Remedies

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Abstract

Research findings are vital to a country's progress; hence, conducting research is essential. Numerous online research resources (ORRs) are available to assist with the research process in the twenty-first century. Apps and websites that researchers can utilise to aid their research are known as online research resources. Online research resources have been known to affect the research process positively. Nevertheless, researchers in developing countries seem not to be using them. This paper explored the reasons for not using them and how to correct the errors. The population of this study comprised lecturers in tertiary institutions in three states in Nigeria. The sample consisted of 54 lecturers (48% female and 52% male). The study used a semi-structured interview technique to gather the data, which was analysed using the thematic technique. The findings indicated that the causes of low utilisation of online research resources included an inadequate demonstration of the needed skills, awareness, interest, and willingness to embrace new technologies. Others are that online research resources were not included in tertiary institutions curriculum and poor mentoring process. In addition, poor internet services, poor sensitisation, irregular electricity supply, and few experts in that area were other reasons. The remedies identified by the respondents include workshops, seminars, and training that institutions and academic associations should carry out. Creating more awareness, personal development, and productive mentorship should be addressed by academia. Others were that the online research resources should be included in the curriculum of tertiary institutions and WIFI services should be provided in all tertiary institutions. If these remedies are implemented, there will likely be an increase in the utilisation of online research resources during the research process. This study's findings have implications for Nigeria and other developing countries. Replication of this study in other developing countries will improve the validity of our findings.

Keywords: Research, online research resources, low utilisation of online research resources, tertiary institutions, lecturers.

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1. Introduction

The implementation of research findings is critical to a country's progress. Hence, it is imperative to carry out research. In this 21st century, there are various online research resources to help with the research process. However, researchers in developing nations are not completely utilising these resources. Online research resources are apps and websites that researchers may use to help their studies. Internet resources, electronic resources, e-journals, and online information resources are also included (Lee, 2012). These items need researcher access to a computer via desktop or mobile devices in a library or at home (Osinulu, 2020). Researchers can use online research resources (ORRs) to review literature, instrument preparation, data collecting, and analysis. These ORRs include search engines, reference tools, statistical analysis software, emails, and data gathering websites. The internet plays a significant role in research and has made knowledge development and distribution easier (Apuke and Tunca, 2020).

Electronic resources make it simple to collaborate with other scholars worldwide for intellectual growth and supply reliable and timely information for study advancement (Suleiman and Joshua, 2019; Ukpebor, 2012). Electronic resources, internet resources, electronic information resources, and digital resources are linked to library usage. Students can access their materials, e-books, electronic newspapers, theses, journals, and databases

from home via the e-library. On the other hand, ORRs may be accessed both through the library and directly over the internet without going through the library. Other materials not found in libraries are also included in the ORRs. Such as data collecting and analysis software and reference and editing tools.

Online research resources have dramatically revolutionised the processing and administration of information and data in the Nigerian academic environment (Ani and Edem, 2012). Quick information, easy citations and referencing, and simplicity of uploading, downloading, and updating are all advantages of ORR. Online research resources make editing literature simple and effective. It improves the scientific nature of data gathering, processing, and interpretation. ORRs are also adaptable, saving time, space, and money (Daramola, 2016; Ojo and Akande, 2005; Ugwu and Orsu, 2017). These ORR can improve the quality of academic research (Suleiman and Joshua, 2019).

Several studies have found that online research resources are rarely used (Suleiman and Joshua, 2019; Dukper, Sakibu and Arthur, 2018; Achonna, 2008). The utilisation of electronic resources for research was also observed to be poor in Nigeria (Daramola, 2016), Zimbabwe (Ajibili, 2013), and Bingham (Mawere and Sai, 2018). According to certain studies conducted in Nigeria, electronic information resources are underutilised (Edem and Egbe, 2016; Ojo and Akande, 2015; Ugwu and Orsu, 2017; Urhiewhu, 2015). Previous research has highlighted variables that contribute to the limited use of electronic information resources, which include: poor network connectivity and erratic power supply are two of them (Edem and Egbe, 2016; Gurikar and Gurikar, 2015; Osinulu and Okewale, 2012; Urhiewhu, 2015). Non-availability of online databases, a lack of formal training in internet abilities, sluggish bandwidth and server, and a lack of knowledge were all observed in certain studies (Ajibili, 2013; Daramola, 2016; Edem and Egbe, 2016; Igbo and Imo, 2013; Mawere and Sai, 2018; Oghenetaga, 2014). The difficulty of navigating through electronic resources continues to be a challenge for users (Enakrire and Onyanania, 2007). Some researchers have looked into how people are aware of and use electronic information resources (Osinulu, 2020), E-resources (Ansari, 2020), and internet resources and services (Osinulu, 2020). According to Suleiman and Joshua (2019), these resources were seldom used. Ugwu and Orsu (2017) looked at the difficulties of using online information resources. The study's outcomes revealed that direct and indirect issues caused students' difficulties using online information resources. Urhiewhu (2015) investigated the barriers to utilising digital information resources. Several problems were discovered in the study, including epileptic power supply, slow bandwidth, and a lack of expertise. Grosseck and Bran (2016) investigated how certain digital technologies affected their students' academic studies. They also explained the difficulties students had when using digital technologies. Except for Grosseck and Bran (2016), who worked on digital tools, most of these researches focused on issues linked to library science. Beyond library resources and digital technologies, there is a plethora of online research resources, websites, software, apps, add-ons, and extensions that might help researchers. Furthermore, the majority of the studies used undergraduate students as their sample. There is a need to enlist the help of lecturers to investigate the causes and solutions to the poor use of online research resources. As a result, this study aims to discover the causes and solutions to lecturers' limited use of online research resources at tertiary institutions. The outcomes of this study will enlighten lecturers, tertiary institution administrators, education stakeholders, and the government about why lecturers are not utilising the ORRs and what can be done to encourage them to do so.

1.1 Research Questions

1. What are the participants' perceptions on the causes of lecturers' low utilisation of online research resources for research activities?
2. What are the participants' perceptions on the remedies to lecturers' low utilisation of online research resources for research activities?

2. Methods

This study is a qualitative study that employed an in-depth examination of the subject through qualitative data collection. The study research design is Grounded theory because the study intends to develop theoretical explanations on the causes and remedies to the low utilisation of online research resources for research derived from the practical experiences of the research participants (Falaye, 2018). The researchers used lecturers in universities and Colleges of Education in Delta, Lagos, and Anambra states in Nigeria for the study. Through the stratified purposive sampling technique (Falaye, 2018), we sampled 54 lecturers (university lecturers = 32 and college of education lecturers = 24). The sample comprised 26(48%) females and 28(52%) males. Also, 6(11%), 25(46%), and 23(43%) of the participants had bachelor's, master's, and PhD degrees as their highest qualifications. Their average years of experience and number of published articles were 12 years and ten research articles, respectively.

The semi-structured interview technique was used. An interview guide consisted of two sections such that the first section captured the respondents' demographic information. It includes gender, type of institution, years of experience, and the number of publications. The second section consists of two sub-sections formed using

open-ended and closed-ended questions. It was needed to elicit the participants' perceptions on the causes of low utilisation of online research resources for research purposes (sub-section 1) and participants' perceptions of the remedies to researchers' low utilisation of online research resources for research (sub-section 2). The researchers and four professional research assistants conducted the semi-structured interview. Before the interview took place, the consent of the participants was sought and obtained. The respondents' demographic information was summarised with frequency, percentage, and mean. The second section of the questionnaire was analysed by employing the thematic technique. The researchers read the qualitative materials repeatedly, and words and sentences were coded while considering existing literature and the research questions. The subsection on the causes of low utilisation of online research resources for research was arranged under three themes: lecturers' factor, institutions factor, and government factor. The researchers presented the findings using the tabular form by incorporating quantitative data recommended by APA 7th edition.

3. Results

3.1 *Participants' perceptions on the causes of lecturers' low utilisation of online research resources for research activities*

3.1.1 Lecturers factors

Respondents repeatedly mentioned a lack of awareness of the availability of the online research resources, lack of skills and experience in using the online research resources, and their lack of interest in utilising them. Other causes were poor computer literacy, lack of training, poor personal study culture, and love for the conventional method presently used for research. They also claimed that many do not know what these online research resources are used for. (see table 1).

3.1.2 Tertiary institution factor

The general views were that these online research resources are not part of the curriculum. Young researchers have poor mentoring, and most tertiary institutions do not have institution email. Also, some lecturers who already know how to use these online research resources are not ready to share the knowledge with others. (See table 2).

3.1.3 Government factor

It was mentioned that poor network services and the cost of subscribing to them had limited many lecturers. Poor electricity supply and the general neglect of the education sector is yet another problem. (as presented in Table 3)

3.2 *Participants' perceptions of the remedies to lecturers' low utilisation of online research resources for research activities*

The participants suggested that institutions provide WIFI for students' and lecturers' usage. Training, workshop, seminar, and conference should be organised for the lecturers to assess and use the online research resources during the research process. They advocated that the online research resources should be included in the tertiary institution curriculum. They recommended that the government improve the present state of the country's electricity supply and network service. Also, the institution should have a working e-library that students and lecturers can access at anytime and anywhere. Also, their institution should improve the lecturer's computer and internet efficiency level. More practical oriented training should be carried out for the lecturers. (See table 4)

4. Discussion

This study aimed to find out what academic staff at tertiary institutions thought about the causes and solutions to the poor utilisation of online research resources. The study indicated that the causes stated by the lecturers might be grouped into three factors. The factors were lecturers, tertiary institutions, and government.

According to the study, lecturers' factors include a lack of awareness of the ORR's availability and a lack of interest and skills in using the ORR. These findings are comparable to Osinulu's (2020) and Ansari's (2020) findings. They observed a lack of awareness and knowledge of internet resources. Urhiewhu (2015) discovered in his research that the participants lacked the necessary skills to utilise digital information resources properly. Poor computer literacy, lack of training, poor personal study culture, laziness, and a preference for the current research approach were some of the other reasons cited by lecturers. It backed up the findings of Edem and Egbe (2016), Mawere and Sai (2018), and Oghenetaga (2014). They concluded that a lack of formal computer and internet training constituted a barrier to using digital resources.

The tertiary institution factor identified here is that the curriculum did not capture some ORR, young researchers were not well mentored, and few specialists in these areas. Collaboration is a good way to mentor and promote it (Alordiah, Owamah, Ogbinaka, and Alordiah, 2020; Carillo, Papagni, and Sapio, 2013). Our curriculum placed far too much focus on theory rather than the actual application of knowledge and skill gain (Achor, Agogo, and Dodo, 2020; Ukoje, 2010). Similarly, the participants stated that some lecturers who are already familiar with these ORR are hesitant to share their expertise with others, that most tertiary institutions lack institutional-based email for their lecturers, and that their e-library is inadequate. Some websites will not let

lecturers access their sites unless they have an institutional email address, despite having a personal email address. The status of the e-library in Nigerian higher institutions has hampered access to top-rated materials and the quality of papers produced by Nigerian scholars (Alordiah et al., 2020).

Insufficient network services, subscription costs, poor electricity supply, and overall neglect of the education sector were key obstacles linked to the government/association. The previous study has found that unpredictable power supply and poor network connectivity are two reasons for ORR's low adoption for research (Edem and Egbe, 2016; Gurikar and Gurikar, 2015; Mawere and Sai, 2018; Urhiewhu, 2015). The lecturers also recommended that instructors receive frequent training on how to utilise these ORR and that greater awareness be raised. They also proposed that online research resources be incorporated into the curriculum. Lecturers should make a genuine effort to learn how to utilise these ORR, and those who already know something about them should be encouraged to share what they know with others. They also believed that the supply of power should be enhanced. Similarly, Suleiman and Joshua (1019) stated that academic staff at tertiary institutions should be encouraged to utilise these online resources. Management should endeavour to expose their staff and students' current 21st century ICT skills. It will aid in the resolution of skill acquisition issues (Urhiewhu, 2015).

It is clear from the responses gathered in this study that earlier studies did not identify some of the causes our study uncovered, such as bad personal study habits, laziness, and a preference for the current research approach. Other unique reasons discovered in this study were a curriculum that did not cover the majority of the ORR and a scarcity of experts in this field. The study's limitation is that instead of conducting in-depth interviews, we employed a semi-structured interview because of the size of the sample and the geographical diversity of the participants. However, because several of our research findings were consistent with prior findings from other African nations, the outcomes of our study can still be extrapolated to developing countries with comparable characteristics.

4.1 Conclusion

In this study, the academic staff of tertiary institutions in the three states used for the study identified the causes of the low utilisation of online research resources for research activities linked to the lecturers, tertiary institutions, and government. The remedies they identified include more training, personal development and productive mentorship. Some of the findings are in line with findings from other developing countries. Hence, this study's findings have implications for Nigeria and other developing countries. Replication of this study in other developing countries will improve the validity of our findings. The researchers recommended that tertiary institutions, curriculum planners, stakeholders in research, and government implement these suggested remedies and provide an enabling environment that will encourage the ease of using these online research resources.

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Table1. Causes of lecturers' low utilisation of online research resources for research activities (N=54)

Causes	Example Quote	Frequency n (%)
Lack of awareness	"Lecturers are not aware that such resources exist probably due to their background in research, their exposure, and the environment they found themselves." (university lecturer)	44(81%)
Lack of skills and experience	"Some of us are aware of these online research resources for research, but there are some skills needed to be able to use them effectively. A number of us do not have these skills." (Male lecturer)	34(63%)
No of interest	"Many researchers are satisfied with the few ones they know. Lack of interest has led to a lack of readiness and willingness to explore and embrace modern tread in technology. We are not familiar with online research resources, yet we are not ready to learn more about them." (University lecturer)	32(59%)
Lack knowledge on what they are	"Many of us have not seen the need to use these online research resources because in the first place we do not know what they are used for. What	31(57%)

Causes	Example Quote	Frequency n (%)
used for	aspect of the research can we make use of them?" (College lecturer)	
Poor computer literacy	"Several researchers are not conversant with modern technology. We have the certificate to show we are computer literate, but when it comes to operating the computer or working online, we are far behind." (Female researcher)	24 (44%)
Lack of interest in training	"Researchers do not attend training and workshop most especially if they need to pay for it with their money." (university lecturer)	21(39%)
Preference for the convectional method	"Researchers still believe in the current method they use in conducting their research. They are not willing to live their comfort zone to learn newer methods." (Female researcher)	18 (33%)
Laziness	"It is not everything you will be taught in school. If we put in a little effort, we will discover some online research resources to aid our research activities. Laziness and lack of time have prevented us from searching our resources online." (College lecturer)	

Table 2. Causes of low utilisation of online research resources for research- Tertiary institution factor (N=54)

Causes	Example Quote	Frequency n(54)
The curriculum did not capture the online research resources	"The knowledge and skills needed to operate these online research resources are not taught in school. We were told to go online to get material and software to aid our research, but we were not told where. Most institutions still teach their postgraduate students to carry out data analysis manually." (University lecturer)	28(52%)
Poor mentoring of the young researcher	"No proper connection between young researchers and experienced researchers. It is either the experienced researchers are not ready to mentor the younger ones, or they equally lack knowledge on how to use these online research resources needed to ease the research process." (Female lecturer)	22 (41%)
No institutional-based email for lecturers	"Some of these online research resources website/software requires the lecturer to use his institutional-based email before they can gain access to them. Most tertiary institutions do not institutional-based email for their staff." (College lecturer)	35 (65%)
Poor e-library	"Online research resources tools are lacking in our library. Most schools do not have a working e-library. Their services are limited." (Male lecturer)	19 (35%)
Refusal to share knowledge	"Some lecturers who already know how to make use of these online research resources are not willing to share it with other lecturers in their faculty." (university lecturer)	26 (48%)
Lack of experts	"There are few experts in this area. Only a handful of our lecturers can boost of been knowledgeable in this area." (Male lecturer)	17 (31%)

Table 3. Causes of low utilisation of online research resources for research- Government factor (N=54)

Causes	Example Quote	Frequency n (%)
Poor internet service	"For me, I do not know much about these online research resources needed for research because network service in my environment and institution is always poor. It is not very encouraging. Sometimes for a page to open when browsing, it may take up to 15 minutes." (College lecturer)	30 (56%)
High cost of internet service	"The cost of internet service has discouraged many people from accessing the internet regularly. One can spend up to 10000 naira monthly. Considering the meagre salary paid to lecturers, it is too high." (University lecturer)	27 (50%)
Poor electricity supply	"Network is stronger at night, but there may be no electricity to power your gadgets. This can be very discouraging." (Male lecturer)	16 (30%)

Table 4. Remedies to the low utilisation of online research resources for research (N=54)

Remedies	Example Quote	Frequency n (%)
Provide training	<p>“Researchers should undergo a more practical based computer training and administrators of tertiary institutions should provide opportunities that will encourage them always to put what they have learnt into practice” (College lecturer)</p> <p>“I will be happy if academic associations, tertiary institutions, and agencies will organise workshops, seminars, and conferences on these online research resources. I want to know the various online research resources and what I can use them for. There should be continuous training on how to use them. One training is not enough.” (University lecturer)</p>	41 (76%)
Create awareness	<p>“Awareness on these online research resources should be created in all association WhatsApp platform, website, and conferences.” (Female researcher)</p> <p>“If only my university will encourage us by creating awareness on these resources on the university website. The links that we need to access them should also be posted.” (Male researcher)</p>	15 (28%)
Personal effort	<p>“Information on these online research resources is available online. With a little hard work and determination, we can learn how to make use of them ourselves.” (Female lecturer)</p>	12 (22%)
Online research resources should be included in the curriculum	<p>“Online research resources should be part of the content areas of research related courses. Also, the skills needed for their operation should be taught to postgraduate students.” (university lecturer)</p>	29 (54%)
Willingness to share knowledge and mentor others	<p>“Those who know how to use them should mentor others on how to have access and use them. This can be done through research collaboration.” (College lecturer)</p>	17 (31%)
Free WIFI	<p>“There should be free WIFI for students and lecturers anytime and anywhere on campus, or the institution should subsidise what they send on subscription and purchase of laptops. (University lecturer)</p>	35 (65%)
Improve electricity supply	<p>I imagine the day we will have a continuous supply of electricity for one week. It will greatly improve my activities online.” (College lecturer)</p>	29 (54%)