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Assessment of Digital Literacy Skills and Exploitation of Electronic Resources by Undergraduate Students in Tertiary Institutions in Akwa Ibom State, Nigeria

Godwin M. Nna-Etuk
University of Uyo Library, Uyo Akwa Ibom State

Rose Ezeibe
University of Uyo Library, Uyo Akwa Ibom State

Columbus Udofot
Dept. of Library and Information Technology, Federal University of Technology, Ikot Abasi, Akwa Ibom State

Uwem J. Akpan
University of Uyo Library, Akwa Ibom State

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Abstract: *The work accessed digital literacy skills and exploitation of electronic resources by Undergraduate Students in tertiary institutions in Akwa Ibom State. The main objective was to evaluate students' digital skills in utilization of electronic resources. The study was conducted in three tertiary institutions in the study area. The population of the study was 1,570 registered undergraduate students for the 2022/2023 academic session, out of which a sample size of 375 were selected through accidental sampling techniques to take part in the study. The instrument for data collection was a questionnaire titled, "Digital Literacy Skills and Exploitation of Electronic Resources by Undergraduate Students in tertiary institutions Questionnaire (DLSEERUEQ). The instrument was validated by two experts in University of Uyo, one of whom is an expert in the education foundation test and measurement from the University of Uyo. The data collected was analyzed using simple regression analysis in answering both research questions and testing of hypotheses at .05 level of significance. The results revealed that there is significant relationship between digital literacy skills and exploitation of electronic resources by Undergraduate Students in tertiary institutions in Akwa Ibom State. The study conclude that the digital skills is an essential skill for effective utilization of electronic resources in today global environment. Hence, recommends among that Departments in tertiary institutions should be collaborate to design course contents on analytical skills in order to help students acquire analytical skills in accessing information as well as data interpretation.*

Keywords: digital skills, exploitation, electronic resources, undergraduate students, Nigeria

INTRODUCTION

Education system in the 21st century is anchored on technology and commitment by individual student to discover latest findings in their field of higher learning. Today all educational activities in higher institutions focus on developing student's capacity for enquiry to become independent learners, innovation and critical discourse, with emphasis on producing graduates that are self-directed and life-long learners. Enquiry-based learning is the direction of teaching and learning with application of information and communication technology because society is driven by technology and information resources, scholarly outputs and knowledge and information overflow in the web. The world today is regarded as knowledge society; everyone is interested in getting what has been discovered in research, how to use the discoveries and solve day to day problems, and how to research, share or communicate the research results for furtherance of knowledge. In the context of education in general, the information society – the era of memorizing information for the sake of passing termly examinations – is rapidly being overtaken by a knowledge kind of society an era of participatory knowledge acquisition, retention and application to life issues. Meanwhile, the development of digital skills is one of the key benefits of enquiry-based education. One of these skills, which stands as the aggregate of others is information literacy, described as the ability to identify, find, evaluate, and use information in an ethical way. Not only do students develop these skills as a result of participating actively in information literacy instructions, computer-based programs and enquiry-based learning. It is necessary for them to become effective information seekers and users in order to successfully negotiate their ways into familiarity and become knowledgeable in the research process. Thus, digital literacy skills are no doubt significant determinants for active and result-driven engagements in research process today. In that direction, Kennedy and Monty (2011) made an admirable goal for post-secondary critical skills that include writing, researching, evaluation and critical as well as analytical skills.

Digital literacy is a critical set of competencies for effectively and efficiently finding, using, managing, and communicating information for specific purposes, especially for educational success, workforce readiness and everyday life. Digital literacy can also be described as the ability to locate, evaluate, manage, and use information from a variety of sources, both print and non-print. Analytical skills empower the students to critically assess the credibility of online sources, checking for factor like authorship, publication date and peer-review status. According to Egghe (2016) this is crucial in academic research to ensure reliable references. Student must be able determine the relevance of electronics to their research topics. Therefore, analytical skills help them to quickly assess whether a resource align with its research objectives and discard irrelevant information (Grant, 2014). Analytical skills allow students to compare and contrast information from different electronic resources. This is particularly important when synthesizing diverse viewpoints for a comprehensive understanding of a topic. These skills are invaluable when students encounter issues with electronic resources, such as access problems. Analytical skills help them troubleshoot effectively, Schuck *et al* (2013).

Library as an educational institution plays a crucial role in fostering analytical skills among undergraduate students in tertiary institutions. Analytical skills are paramount for undergraduate students when using electronic resources. Fostering analytical skills within the curriculum enhances the quality students' research. Another skill is evaluative skills, Evaluative skills are essential, particularly in the digital age, and digital environment filled with information of varying quality, evaluative skills help students distinguish between credible and unreliable sources. This is fundamental to ensuring the integrity of research and decision-making (Egghe, 2016). Students must determine the relevance of electronic resources to their specific research topics. Evaluative skills empower them to quickly gauge whether a resource aligns with their research objectives and to sift out irrelevant information. Digital resources can often be influenced by bias or lack transparency. Evaluative skills allow students to critically assess the potential bias and trustworthiness of sources, which is critical for objective research and information consumption (Koltay, 2011).

Therefore, according to Wainer (2011) digital information evolves rapidly and students need to evaluate the currency and reliability of electronic resources. This involves checking for publication dates and considering whether the information is up-to-date. Students should be able to compare multiple electronic resources, analyzing differences in information perspectives and depth of coverage. These skills are crucial for synthesizing diverse viewpoints and understanding a topic comprehensively. Based on the above background, the study was carried out to assess digital literacy skills and exploitation of electronic resources by undergraduate students in tertiary institutions in Akwa Ibom State.

Statement of the Problem

The problem of underutilization of electronic resources in tertiary institutions in Akwa Ibom State is of great concern to librarians. The under-utilization of electronic resources in the tertiary institutions by users sometimes leaves one wondering and pondering on the effort put to established libraries in higher institutions. It is expected that students make maximum use of electronic resources provided by their institutional libraries to excel in their field of study. This is often observed poor use of libraries by students and resultant in poor academic performance as a result of poor literacy skills.

Equally disturbing is the low patronage of other service units of the library such as reprographic, reference and reserve book areas. It is common knowledge in Nigerian tertiary institutions today that there are many students who are almost graduating or may have graduates from higher institutions without using their institution libraries. Libraries are repositories of all forms of information resources print and non-prints relevant to students' academic disciplines. Today, computers and ICT have revolutionized all aspect of library and information services right from acquisition, organization, storage and dissemination. Methods of accessing and using information resources too have changed and are still evolving. To be able to effectively use libraries today, new skills are required. These skills require is not only an understanding of the new technologies in which information is being provided but also the tools, source of information and strategies to evaluate and use information in an ethical manner.

It is not clear whether the apparent non-use or apathy in the use of electronic resources is connected with the lack of digital skills. From the literature, an understanding and competence in searching and locating materials in the web is a factor in the use of library. This work is therefore undertaken to assess the influence of digital literacy skills and exploitation of electronic resources by undergraduates' students in tertiary institutions in Akwa Ibom State.

LITERATURE REVIEW

Concept of Digital Literacy Skills

When we talk about digital skills in library operations, these are communication, gateway skills, creation, device ownership, life – long learning, information skills, online life, privacy and security, workplace and mobile services. Today, library patrons hold different skills and demand the same from the librarians to be answered if they ask any queries. Librarians with low Information Technology (IT) knowledge can only treat them with the same skills for a few reasons: they do not accept change in their libraries and rely on the old traditional set-up. Libraries in developing counties are still evolving with lock shelves while their counterparts in the developed countries have already adopted these new skills to put the patron on the right tract. Information literacy is an essential component of a successful academic career. Students who lack these skills experience delays and frustration when attempting to complete course – related work which requires skills.

Fraillon, Schulz and Ainley (2013) note that digital literacy is – an individual's ability to use computers to investigate, create, and communicate in order to participate effectively at home, at school, in the workplace, and in society. They further expatiated thus:

- Knowing about and understanding computer use
- Accessing and evaluating information (the processes that enable a person to find, retrieve, and make judgments about the relevance, integrity, and usefulness of computer-based information.
- Managing information - the capacity of individuals to adopt and adapt classification and organization schemes to arrange and store information efficiently.

According to Philip (2019) the thrust of the discourse on digital literacy has been on computer applications, being regarded as an important element of Information and Communication Technology (ICT). In this regard, digital literacy is regarded in terms of proficiency with computers and software learning tools, networking systems and protocols, hand-held digital devices, and other technologies that enable users to access, create, and communicate information and engage in creative expression (Fraillon, *et al.* 2013). It also includes construction, exchange of ideas and solutions, information research, investigation of problems, acknowledgement of ideas and information, and selection and use of digital tools (Institute of Education Sciences, National Center for Education Statistics, 2012). Put simply, digital/literacy in the context of this paper, is an individual's familiarity of the application of computer technology in information retrieving process.

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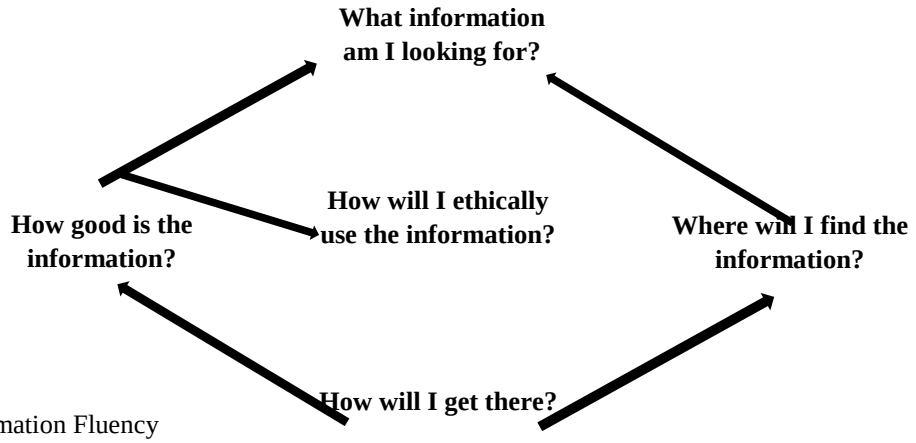
The contemporary society has shifted from written to visual texts with more demand being placed on instructors to learn how to adopt these shifts (Leu, Forzani, Rhoads, *et al*, 2015). Equally the constantly changing technology at present, has in turn prompted the changing nature of literacy which cannot be overlooked, resulting in a global virtual world of digital citizens (Isman & Canan-Gungoren, 2014). For the fact that information resources are available beyond a physical library domain (on-site) presupposes those appropriate skills are required to ensure access to mass of digital information. A study by Adeleke and Emeahara (2016), found a significant relationship between information literacy skills and use of electronic information resources. At present, it is evident that the upturn of people who are able to use technology effectively, underscores the cogent need for library users to have computer literacy to web-search skills facilitated by the library. Students therefore must be taught skills and how to use technology effectively (Leu *et al.,* 2015), including evaluating and critically analysing information from digital viewpoint.

The constant access to information on the internet and the need of keeping up to date in a changing environment has led to informal e-earning behaviour. Kruger (2012) infers to this as microlearning which denotes a shift of interest from formal, hierarchically organized ways in which people acquire knowledge in everyday life. Consequently, the responsibility for keeping up-to-date is shifted more and more towards the learner, while the pedagogical aspect from institutions decreases. It goes forth that a person encounters a problem, search for short and fast solutions or topic to address same by learning directly within an e-platform, rather than attending lessons. It follows that the interval between information needs and actualization might become shorter based on the individual's personal intent.

Digital Information Fluency Model



c 2011 Information Fluency
Cited from (Philip, 2019)

The above model, encapsulates earlier submission that for an individual to exercise digital information search skill fluently, the basics of conventional information literacy (IL) also apply. In other words, having digital know-how might not necessarily guarantee one being information literate, except he/she is capable of understanding extent of knowledge required and how good, able to evaluate content appropriately, can determine authentic/authoritative source, and able to locate and retrieve information required. The foregoing calls for a blend of IL framework in the context of both digital and non-digital environment. On the other hand, Spires and Estes (2002) posit that the digital context can be challenging due to the ubiquitous nature of the web and the demand of the reader making sound judgment and decisions about how to locate information as well as how to discern the reliability and credibility of same information.

Analytical skills and exploitation of electronic resources

Analytical skills play a pivotal role in the effective exploitation of electronic resources by undergraduate students. These skills are crucial for critically assessing the quality, relevance, and credibility of digital information sources. Analytical skills involve the ability to dissect and evaluate information, and they are integral to digital literacy in the context of electronic resources, these skills are paramount for several reasons Quality Control: Analytical skills enable students to discern between high-quality and low-quality digital resources. This is essential for maintaining the academic rigor of their research and avoiding the use of unreliable information. This is the skills to enable students have the ability to critically analyze digital sources allow students to efficiently locate the most relevant information for their research, saving time and improving the overall equality of their work.

Besides, Ishiwu (2024) noted that analytical skills are vital for differentiating between credible and unreliable sources. Also, for objective decision – making, analytical skills foster an objective and evidence-based approach to decision-making This is especially crucial in library, and information science, where students need to make informed choices regarding the selection and utilization of electronic resources. Analytical skills are paramount for library and information science students when using electronic resources. They are central to source evaluation, relevance determination, data analysis, and decision – making. Fostering these skills within the curriculum not only enhances the equality of students' research but also equips them for their future roles as information professionals (Egghe, 2016).

Evaluative skills and exploitation of electronic resources.

Misleading information has been an important subject for many researchers. Information may mislead accidentally through error or ignorance, or by intent to deceive. Structural and content features need to be assessed for the credibility evaluation of web information. According to Weingarten and Fred (2018), credibility assessment of information resources is very important because of the impact on people's individual and social lives.

Moreover, Flanagin and Matzger (2018) sated that evaluation skills vary among different users regarding of their needs, context and abilities. For example, youth often consider the authority of

information instead of its structure while searching for information. The lack of evaluation skills is a consequence of variables such as experience, age, tasks and so on. How the information is made available also influences the assessment of credibility. For example, researchers found out that fee-based information tends to be perceived as more credible; a situation to which limited number of people have access. Increase in the number of resources due to information technology both on the web and print have made it a necessity for students to develop information resources evaluation skill (Flanagin and Metzger 2018).

Hong (2016) stressed that it is imperative for students to evaluate the content of information and an extensive body of literature in order to consider content credibility as the primary indicator of equality information. In fact, many users lack prior knowledge about the structure of print and electronic information and in its absence, evaluation of content alone predicts credibility. Assessment of content could be characterized when people are asked to evaluate information. According to Tate (2019) a variety of criteria of information resources evaluation has been put forward regarding the information environment, of which the following five criteria are foremost: authority, accuracy, objectivity, currency, coverage or scope.

Synthesis skills and exploitation of electronic resources

Most essential and certainly one of the most complex information literacy skills is the ability for students to assimilate information they find into coherent meaningful form. Lundstorm *et al* (2017) define information synthesis as the process of analyzing and evaluating information from various sources, making connection between the information found and combining the recently acquired information with prior knowledge to create something new. Effective information synthesis is also vital in developing writing and communication skills to share new knowledge. Coherent information synthesis is therefore required to productively participate in and contribute to our information rich society, yet College student have difficulty analyzing different pieces of information (Hargittai, 2018). According to Bungarner (2018) synthesizing is the process whereby a student merges new information with prior knowledge to orm a new idea, perspective, or opinion or to generate insight. Synthesizing is a process of ordering, recalling, retelling, and recreating information into a coherent whole. Moreillon (2017) stated that synthesizing requires that students read, evaluate, and use ideas and information. Synthesizing requires longer-term, in depth learning.

Therefore, information synthesis is the process of analyzing and evaluating information from various sources, making connections between the information found, and combining the recently acquired information with prior knowledge to create something new as stated earlier. Without information synthesis strategies, we cannot derive new knowledge from these large amounts of data. Effective information synthesis is also vital in developing effective writing and communication skills to share new knowledge. Information synthesis is a key skill for participants in our knowledge society and requires complex processing (Fitzgerald, 2017). Yet information literacy instruction and practice tend to favor easily-defined skills that often only emphasize the search component of the research process, leaving out higher order processes like information synthesis.

RESEARCH METHOD

The survey research design was adopted for the study. The study was carried out in three tertiary institutions & libraries, which are University of Uyo, Federal University of Technology, Ikot Abasi and Akwa Ibom State Polytechnic Ikot Osurua, Ikot Ekpene within the South-South Zone of Nigeria. The population for the study comprised 1,570 registered undergraduate students for the 2022/2023 academic session, out of which a sample size of 375 were selected through accidental sampling techniques to take part in the study. The instrument for data collection was a questionnaire titled, "Digital Literacy Skills and Exploitation of Electronic Resources by Undergraduate Students in tertiary institutions Questionnaire (DLSEERUEQ). The instrument was validated by two experts in University of Uyo, one of whom is an expert in the Education Foundation Test and measurement from the University of Uyo. The data collected was analyzed using simple regression analysis in answering both research questions and testing of hypotheses at .05 level of significance.

Objectives of the Study

1. To assess the influence of analytical skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State?
2. To assess the influence of evaluation skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State?
3. To assess the influence of synthesis skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State?

Research questions

1. What is the influence of analytical skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State?
2. What is the influence of evaluation skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State?
3. What is the influence of synthesis skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State?

Hypotheses

1. There is no significant influence of analytical skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State?
2. There is no significant influence of evaluation skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State?
3. There is no significant influence of synthesis skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State?

DATA ANALYSIS AND RESULTS

Results

Research Question 1
What is the influence of analytical skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State?

Table 1: Result of R and R^2- values of influence of analytical skills on undergraduate students exploitation of electronic resources in tertiary institutions in Akwa Ibom State (n= 375)

Variables	R	R^2	Adjusted R^2
Analytical skills			
	.734	.539	.537
Electronic resources			

The result presented in Table 1 revealed the R-value of .734 as the strength of the influence of analytical skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State. The R^2 – value of .539 also shown in Table 1 indicates that only 53.9 percent variation in undergraduate students' exploitation of electronic resources in tertiary institutions is explained or predicted by their analytical skills. This result implies that there is influence of analytical skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State.

Research Question 2
What is the influence of evaluation skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State?

Table 2: Result of R and R^2- values of influence of evaluation skills on undergraduate student's exploitation of electronic resources in tertiary institutions in Akwa Ibom State (n= 375)

Variables	R	R^2	Adjusted R^2
Evaluation skills			
	.756	.572	.571
Electronic resources			

The result presented in Table 2 revealed the R-value of .756 as the strength of the influence of evaluation skills on undergraduate students exploitation of electronic resources in tertiary institutions in Akwa Ibom State. The R^2 – value of .572 also shown in Table 2 indicates that only 57.2 percent variation in undergraduate students' exploitation of electronic resources in tertiary institutions is explained or predicted by their evaluation skills. This result implies that there is influence of evaluation skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State.

Research Question Three

What is the influence of synthesis skills on undergraduate students exploitation of electronic resources in tertiary institutions in Akwa Ibom State?

Table 3: Result of R and R^2- values of influence of synthesis skills on undergraduate students exploitation of electronic resources in tertiary institutions in Akwa Ibom State (n= 375)

Variables	R	R^2	Adjusted R^2
Synthesis skills			
	.506	.256	.254
Electronic resources			

The result presented in Table 3 revealed the R-value of .506 as the strength of the influence of synthesis skills on undergraduate student's exploitation of electronic resources in tertiary institutions in Akwa Ibom State. The R^2 – value of .256 also shown in Table 3 indicates that only 25.6 percent variation in undergraduate students' exploitation of electronic resources in tertiary institutions is explained or predicted by theirsynthesis skills. This result implies that there is influence of synthesis skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State.

Hypothesis One

There is no significant influence of analytical skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State

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Table 4: Summary of Simple Linear Regression Analysis of the influence of analytical skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State (n= 375)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3936.22	1	3936.22	73.82	.00[b]
	Residual	19888.98	373	53.32		
	Total	23825.20	374			

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.84	1.81		7.10	.00
	Analytical skills	2.14	.11	.73	19.24	.00

The result in Table 4 shows the F-ratio of 73.82 with the corresponding probability level of significance of .00 alphas at 1 and 373 degrees of freedom. This level of significance is less than .05 in which the decision is based. With this result, the null hypothesis was rejected. The result in Table 4 also shows an unstandardized coefficient (B) of 2.14 which indicates that for every unit rise in analytical skills, undergraduate students' exploitation of electronic resources increases by 2.14. Furthermore, the result in Table 4 shows the t-value of 19.24, with its corresponding probability level of significance of .00 alpha. This level of significance is less than .05 in which the decision is based. With this result, the null hypothesis was rejected. This result implies that there is significant influence of analytical skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State.

Hypothesis Two

There is no significant influence of evaluation skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State

Table 5: Summary of Simple Linear Regression Analysis of the influence of evaluation skills on undergraduate student's exploitation of electronic resources in tertiary institutions in Akwa Ibom State (n= 375)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4326.84	1	4326.84	82.78	.00[b]
	Residual	19498.36	373	52.27		
	Total	23825.20	374			

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.52	1.38		14.20	.00
	Evaluation skills	1.89	.09	.76	20.58	.00

The result in Table 5 shows the F-ratio of 82.78 with the corresponding probability level of significance of .00 alpha at 1 and 373 degrees of freedom. This level of significance is less than .05 in which the decision is based. With this result, the null hypothesis was rejected. The result in Table 5 also shows an unstandardized coefficient (B) of 1.89 which indicates that for every unit rise in evaluation skills, undergraduate students exploitation of electronic resources increases by 1.89. Furthermore, the result in Table 5 shows the t-value of 20.58, with its corresponding probability level of significance of .00 alpha. This level of significance is less than .05 in which the decision is based. With this result, the null hypothesis was rejected. This result implies that there is significant influence of evaluation skills on undergraduate students exploitation of electronic resources in tertiary institutions in Akwa Ibom State.

Hypothesis Three

There is no significant influence of synthesis skills on undergraduate students exploitation of electronic resources in tertiary institutions in Akwa Ibom State.

Table 6: Summary of Simple Linear Regression Analysis of the influence of synthesis skills on undergraduate students exploitation of electronic resources in tertiary institutions in Akwa Ibom State (n= 375)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3604.93	1	3604.93	66.50	.00[b]
	Residual	20220.27	373	54.21		
	Total	23825.20	374			

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	24.08	2.24		10.76	.00
	Synthetic skills	1.49	.14	.51	10.45	.00

The result in Table 6 shows the F-ratio of 66.50 with the corresponding probability level of significance of .00 alpha at 1 and 373 degrees of freedom. This level of significance is less than .05 in which the decision is based. With this result, the null hypothesis was rejected. The result in Table 6 also shows an unstandardized coefficient (B) of 1.49 which indicates that for every unit rise in synthetic skills, undergraduate students exploitation of electronic resources increases by 1.89. Furthermore, the result in Table 6 shows the t-value of 20.58, with its corresponding probability level of significance of .00 alpha. This level of significance is less than .05 in which the decision is based. With this result, the null hypothesis was rejected. This result implies that there is significant influence of synthetic skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State.

DISCUSSION OF FINDINGS

It was found that the digital literacy skills predicted the undergraduate student's exploitation of electronic resources in tertiary institutions in Akwa Ibom State. The result of data analysis on hypothesis one reveals that there is significant influence of analytical skills on the undergraduate students' exploitation of electronic resources in tertiary institution in Akwa Ibom State, hence the null hypothesis is rejected. This implies, the more knowledge of analytical skills student's possessed, the more the students can utilize the electronic resources in the tertiary institution. This finding is supported the work of Egghe (2016) who noted that analytical skills are paramount for library and information science students when using electronic resources. These are central to sources of information, evaluation of information, relevance, determination, data analysis, and decision-making. These skills also fostering quality research as well as enhancing academic achievement.

The result of data analysis on hypothesis two also reveals that there is significant influence of evaluation skills on undergraduate students' exploitation of electronic resources in tertiary institutions in Akwa Ibom State. With this result, thus, the null hypothesis was rejected. The findings are in line with the works of Koltay (2011) and Haleem (2022) who noted that students must determine the relevance of electronic resources to their specific topics. That evaluation skills empower them to quickly gauge whether a resource aligns with their research objectives and to sift out irrelevant information. These skills also allow students to determine the authority, ensuring the quality, relevance and credibility of the digital information they used for academic.

Moreso, the data analysed on hypothesis three revealed that there is a significant influence of synthesis skills on undergraduate students exploitation of electronic resources in tertiary institutions in Akwa Ibom State. This means, the students must possess the synthetic skills in order to exploit or utilize the electronic resources in tertiary institutions. This finding is supported by Hargittai (2018) and Bungarner (2018), who noted that synthesizing is the process of ordering, recalling, retelling and recreating information into a coherent whole, while Moreillon (2017) state that synthesizing requires that students' read, evaluate and use ideas and information before finally utilized.

CONCLUSION AND RECOMMENDATIONS

The study assessed the digital literacy skills of undergraduate students in tertiary institutions and exploitation of electronic resources which focuses on analytical skills, evaluation skills and synthetic skills. From the findings of this study, it can be concluded that the under-utilization or exploitation of electronic resources in tertiary institutions in Akwa Ibom State can be traced to level of their digital competencies in the use of digital information. It can be further concluded that analytical skills, evaluation skills and synthesis skills have significant influence on the exploitation of electronic resources in the tertiary institutions. These factors revolve around the knowledge in the use of information and communication technology in the use of e-resources in e-environment. Therefore, it is clear from the findings that poor exploitation of digital contents in tertiary

institutions is as a result of poor digital skills among the undergraduate students. Hence the following recommendations;

1. Departments in tertiary institutions should be collaborate to design course contents on analytical skills in order to help students acquire analytical skills in accessing information as well as data interpretation.
2. Undergraduate students should scale up their interest in this aspect of digital literacy in order to take advantage of its potential in today global environment.
3. Undergraduate students should be taught the basic criteria to information evaluation particularly the electronic resources.
4. Undergraduate students in tertiary institutions should consciously develop themselves to properly synthesis and comprehend contents of information before use of such contents.

REFERENCES

Adeleke, D.S & Emeahara, E. N. (2016). Relationship between Information Literacy and use of Electronic Information Resources by postgraduate students of the university of Ibadan. Library philosophy and practice (e. journal). Paper 1381. Retrieved from http:// digital commons.un/.edu libphi/prac/138/

Bungarner, D. (2018). The effect of information literacy on the utilization of electronic information resources in selected academic and research institutions in uganda. The Electronic library, 25(2), 328-341.

Egghe, L. (2016). Theory and practice of g-index. Scientometrics, 69(1): 131 - 152.

Fitzgerald, M.A. (2017). Making the leap from high school to college: Three new studies about information literacy skills of first-year college students. Knowledge Quest, 32(4).

Flanagin, A. J., & Metzger, M. (2018). Digital Media and Youth: Unparalleled Opportunity and Unprecedented responsibility. Digital Media, Youth and Credibility Edited by William J. Metzger & Andrew J. Flanagin. The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning – Cambridge, MA: The MIT Press, 5-28.

Fraillon, J., Schulz, W., & Ainley, J. (2013). International Computer and Information literacy study Assessment Framework. Amsterdam: International Association for the Evaluation of Educational Achievement (I.E.A)

Grant, R. (2014). EWCA Crim 143. The journal of criminal law, 78(3), 214-219. https://doi.org/10.1350/1740-5580-78.3.214

Hargittai, S. (2018). A survey of information literacy education in library schools in Africa, Library Review 60(3), 202-217.

Heleem, A., David, M., Qalri, M. & Suman, R.(2022). Understanding the role of digital technology in education. A review, sustainable operations and computers, 3(4): 275-285

Hong, T. (2016). The Influence of Structural and Message Features on Website credibility. Journal of American Society for information science and technology. 57(1). 114-127.

Institute of Education Sciences, National Center for Education Statistics (2012). US, Retrieved from https://nces.ed.gov.

Ishiwu, O. U (2024) Media literacy skills and use of electronic resources by Library and

Print ISSN: 2517-276X
Online ISSN: 2517-2778
https://bjmas.org/index.php/bjmas/index

Information Science students in the University of Uyo Library. Unpublished Research Work, University of Uyo, Uyo.

Isman, A. & Canan – Gungoren, O. (2014). Digital citizenship. TOJET: The Turkish, online Journal of Education Technology 13(1), 23-77.

Kennedy, R. & Monty, V. (2011). Faculty-librarian collaboration and the development of critical thinking skills through dynamic purposeful learning. Libri, 61, 116-124.

Koltay, T. (2011). The media and the literacies: media literacy, information literacy, digital literacy. Media, culture & society, 33(2), 2011-221.

Kruger, N. (2012). Micro e-learning in information literacy. Paper presented at 78th IFLA World Library and Information Congress, Hetsinki. Retrieve from http://conference, Ifla.org/Ifla 78.

Leu, D, Forzani, E., Rhoada, C., Maykel, C., Kennedy, C. & Timbrell, N. (2015). The new literacies of online research and comprehension: Rethinking the reading achievement gap. Reading Research Quarterly, 50(1), 37-59.

Lundstorm, K. Diekema, A.R., Leary, H., Haderlie, S., & Holiday, W. (2017). Teaching and learning information synthesis; An intervention and rubric based assessment. Communications in information literacy, 9(1), 60-82.

Moreillon, J. (2017). Collaborative strategy for teaching, reading comprehension. United states of America. American library Association. Doi: https /WWW. 10.4236/ojml.2017.72006

Philip, J. P. (2019). Perspectives on digital information literacy. Integrating "text and tech" knowledge in library user pedagogies. In Ieboro E. Umoren & Uduak U. Enang (2019) (ed). Trending technologies in Library and Information Science. NLA: Akwa Ibom State Chapter 89-117.

Schucks, S., Aubussion, P. & Burke, P. (2023). Teacher retention and attrition views of early career teachers. Australian Journal of Teachers Education, 38(3): 124-141

Spires, H., & Estes, T. (2022). Reading in web-based learning environments. In Block, C. York: Guilford Press, 115-125.

Tate, M. A. (2019). Web-wisdom: How to evaluate and create information quality on the web. (2nd ed.) Eribaum.

Wainer, H. (2011). Adjusting for differential base rates: Lord's Paradox again. Psychological Buletin 109(1):149.

Weingarten, S. & Fred, T. (2018). Utilization of library resources for effective research output among Post-graduate Students in Adventist university of Africa. Global advanced journal of social science. 3(4): 052 - 057.

All Correspondents to the first Author (Dr. Nna-Etuk, nnaetuk@gmail.com or godwinmnnaetuk@uniuyo.edu.ng, 08135298801)