



Access to Open Educational Resources among Postgraduate Students in the Faculty of Education: A Case of Hezekiah Oluwasanmi Library, Obafemi Awolowo University, Ile-Ife, Nigeria

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Abstract

This study examined postgraduate students' access to Open Educational Resources (OERs) at the Faculty of Education at Hezekiah Oluwasanmi Library, Obafemi Awolowo University, Ile-Ife, Nigeria. Despite the increasing availability of OERs in academic libraries, there is limited empirical evidence of their effectiveness in supporting lifelong learning among postgraduate students in Nigerian universities. This study adopted a quantitative research approach and a descriptive survey research design. The population comprised 155 postgraduate students (PGDE, M. Ed, and PhD), and an enumerative (census) approach was employed, whereby all members of the population were included in the study. A total of 155 questionnaires were administered, of which 151 were completed and returned, yielding a response rate of 97.4. Data were analysed using descriptive statistics, including frequencies, percentages, and mean scores. The findings revealed that Open Educational Resources (OERs) are widely available and accessible to postgraduate students, who demonstrated positive awareness and utilisation of these resources. Respondents perceived OERs as supporting self-directed learning, continuous knowledge acquisition, and research activities. However, inadequate institutional

support, limited familiarity with some OERs platforms, and infrastructural challenges constrain their optimal utilisation for lifelong learning. The study concluded that effective OERs utilisation requires sustained institutional support, user education, and improved digital infrastructure. It recommends that academic libraries strengthen awareness and training programmes to promote the continuous use of OERs for lifelong learning.

Keywords: Open Educational Resources (OERs), Lifelong Learning, Access to Information Resources, Postgraduate Students, Faculty of Education

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Introduction

The integration of digital technology into education has significantly transformed how students and educators access and utilise information. Open Educational Resources (OERs) refer to teaching, learning, and research materials that are freely accessible and openly licenced, allowing users to retain, reuse, revise, remix, and redistribute them with minimal or no restrictions (UNESCO, 2019). According to Wiley (2014), these resources include textbooks, course materials, videos, software, and research articles, often licenced under Creative Commons, to promote free knowledge dissemination. According to the Commonwealth of Learning and UNESCO (2012), Open Educational Resources (OERs) are teaching, learning, and research materials that are in the public domain or released under an open licence that permits free access, use, adaptation, and redistribution by others with few or no restrictions. They serve as an alternative to costly commercial textbooks and provide inclusive educational opportunities for students, educators and researchers worldwide.

Lifelong learning refers to the continuous pursuit of knowledge and skills beyond formal schooling, driven by personal or professional development (Mishra, 2017). In academic settings, OERs play a crucial role in fostering lifelong learning by providing unrestricted access to quality educational content. The integration of digital technology into education has significantly transformed the way students and educators access and utilise information in the learning process. OERs have emerged as powerful tools for expanding educational opportunities by providing free, openly licenced learning materials that can be reused, modified, and shared

across various platforms (UNESCO, 2019). OERs are teaching, learning, and research materials that are either in the public domain or released under an open licence, such as a Creative Commons licence, permitting free access, reuse, adaptation, and redistribution. Examples include OpenStax textbooks, MIT OpenCourseWare, OER Commons, MERLOT, and Wikipedia. While resources such as open-access journals, institutional repositories, MOOCs, YouTube EDU, and TED-Ed provide free access to educational content, they should not automatically be classified as OERs because they may not carry open licences that permit reuse or adaptation. Their classification depends on the licencing terms attached to a specific resource. By eliminating financial and geographical barriers, MOOCs tend to promote inclusive education and lifelong learning, particularly in higher-education institutions (Wiley, 2014).

The concept of lifelong learning is strongly rooted in the theories of self-directed learning and andragogy, as advanced by Knowles. Self-directed learning emphasises learners' ability to take the initiative in diagnosing their learning needs, setting goals, identifying resources, and evaluating outcomes independently. In this regard, OERs empower learners, especially postgraduate students, to take control of their learning processes by providing flexible and unrestricted access to educational content and resources. Similarly, andragogy highlights that adult learners are self-motivated, goal-oriented, and rely on prior learning experiences. Open educational resources align with these principles by offering adaptable, learner-centred resources that support independent and continuous learning.

In addition, the use of OERs in digital learning environments can be explained through connectivism, a theory proposed by Siemens. Connectivism posits that learning occurs through networks of information, digital platforms, and social interactions, emphasising the role of technology in knowledge acquisition (Goldie, 2016; Dunaway, 2016). They support networked learning by enabling users to access, share, and collaborate on knowledge across multiple digital platforms (Hilton, 2016; Wiley et al., 2017). Furthermore, Social Constructivism, associated with Lev Vygotsky, views learning as a social process that occurs through interaction and collaboration (Vygotsky, 1978; Schunk, 2020). Open educational resources facilitate this process by allowing users to adapt, remix, and share content, thereby promoting collaborative knowledge construction and participatory learning (Cronin, 2017; Bali, Cronin, & Jhangiani, 2020).

Globally, in developed countries, the integration of OERs into educational systems has been relatively smooth, supported by strong digital infrastructure, institutional policies, and widespread digital literacy. For instance, countries such as the United States, Canada, and members of the European Union have institutionalised OERs initiatives through platforms like MIT OpenCourseWare, Open Educational Resources Commons, and Europe's Framework, enhancing postgraduate students' ability to engage in independent, lifelong learning (Wiley & Hilton, 2018; Inamorato dos Santos et al., 2017).

Conversely, developing countries, including many in sub-Saharan Africa, face significant challenges in implementing and accessing OERs. While the potential of OERs to democratise education is recognised, barriers such as limited internet connectivity, lack of awareness, inadequate institutional support, and low digital literacy persist (Oyo & Kalema, 2014; Eya et al., 2021). In Nigeria, for example, postgraduate students in Faculties of Education often encounter difficulties in accessing OERs because of infrastructural deficits and minimal advocacy from academic institutions (Olufunke & Chukwuemeka, 2020).

In Nigeria, academic libraries are gradually integrating OERs into their collections, yet there is limited empirical evidence on how students and academic staff in the Faculty of Education at Obafemi Awolowo University access and use these resources for lifelong learning. Therefore, this study aims to investigate the accessibility of OERs and Lifelong Learning among Postgraduate Students in the Faculty of Education at the Hezekiah Oluwasanmi Library, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria. Specifically, it seeks to assess the available types of OERs, the level of awareness and knowledge of the OERs, extent of accessibility and utilisation, role of Hezekiah Oluwasanmi Library in facilitating access to and promoting the use of OERs, the impact of Open Educational Resources on lifelong learning and academic performance, and challenges affecting their effective use. Therefore, by examining these factors, this study provides insights into how academic libraries can enhance OERs accessibility and promote continuous learning within higher education institutions. Therefore, this study was guided by the following research questions:

1. What are the available types of Open Educational Resources (OERs) for postgraduate students in your Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria?

2. What is the level of awareness and knowledge of Open Educational Resources (OERs) among postgraduate students at the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria?
3. What is the extent of accessibility and utilisation of Open Educational Resources (OERs) for teaching, learning and research purposes by postgraduate students in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria?
4. What is the impact of Open Educational Resources (OERs) on lifelong learning and academic performance among postgraduate students in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria?
5. What are the challenges affecting the adoption and effective use of Open Educational Resources (OERs) among postgraduate students in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria?

Methodology

This study adopted a quantitative research approach because it enabled the collection and analysis of numerical data on postgraduate students' access to and utilisation of OERs. A descriptive survey research design was employed because it allows researchers to describe existing conditions, perceptions, and behaviours without manipulating the study variables. The population for this study comprised 155 postgraduate students, such as PGDE, Master, and PhD in the Faculty of Education who registered in Hezekiah Oluwasanmi Library, Obafemi Awolowo University, in the 2024/2025 academic session. The focus on postgraduate students is based on their higher reliance on academic resources, including Open Educational Resources (OERs), for research, teaching and continuous professional development. However, owing to the relatively small and manageable population size ($N = 155$), the study adopted a total enumeration (census) approach, in which all members of the population were included in the study. This approach eliminated sampling errors and ensured that every subgroup of postgraduate students (PGDE, Master's, and PhD) was adequately represented. A self-structured questionnaire was used for the data collection. A total of 155 questionnaires were administered, and 151 were returned, with a response rate of 97.42%. The questionnaire was analysed using descriptive statistics, including frequencies, mean scores, and standard deviations. Ethical considerations were followed throughout the study.

The study prioritised voluntary participation, comprehensive informed consent, assured confidentiality, and the participants' right to withdraw from the study at any time if necessary. This approach ensured transparency and respect in its conduct, valuing the participants' experiences and contributions. The questionnaire was validated by three experts in the Department of Library and Information Science. Their observations were incorporated before the final administration. A pilot study involving postgraduate students from another institution produced a Cronbach's alpha reliability coefficient of 0.87. Two four-point Likert scales were used in this study: For research question one: Table 1 uses Strongly Available = 4, Available = 3, Rarely Available = 2, Not Available = 1. While table 2 – 5 use Strongly Agree = 4, Agree = 3, Disagree = 2, and Strongly Disagree = 1. The mean scores were computed using weighted averages based on response frequencies. The aggregate mean score represents the average of all item mean scores. Decision rule: $\text{mean} \geq 2.50 = \text{Available}$; $\text{Mean} < 2.50 = \text{Not Available}$.

Also, Aggregate Mean = $\Sigma X / N$

Where: ΣX = Sum of all individual mean scores

N = Number of items.

Results

This section presents the study findings in accordance with the research questions. The results are presented using descriptive statistics, including frequency, percentage, mean score, and standard deviation. Tables are used to facilitate the interpretation of the findings, and each table is followed by a narrative explanation that highlights the major outcomes.

Table 1:*Types of Open Educational Resources (OERs) for Postgraduate Students*

S/N	Types of Open Educational Resources (OERs)	SA	A	RA	NA	M	Decision
1	Open access e-books	71	61	16	3	3.32	Available
2	Open access journal articles	72	63	14	2	3.36	Available
3	Massive Open Online Courses (MOOCs)	57	55	27	12	3.04	Available
4	Open educational videos (e.g., YouTube EDU, TED-Ed)	61	63	19	8	3.17	Available
5	Open lecture notes or syllabi from other universities	59	53	23	16	3.03	Available
6	Institutional repositories of theses/dissertations	73	69	5	4	3.40	Available
7	Open data sets for research	65	44	23	19	3.03	Available
8	Educational podcasts and audio materials	59	61	21	10	3.12	Available
9	Open-source educational software/tools	53	65	19	14	3.04	Available
10	Open learning modules and textbooks (e.g., from OER Commons)	68	59	14	10	3.23	Available
Aggregate mean score = 3.17							

Note. SA = Strongly Available; A = Available; RA = Rarely Available; NA = Not Available; M = Mean. Decision rule: Mean ≥ 2.50 = Available; Mean < 2.50 = Not Available.

Table 1 reveals that participants agreed that institutional repositories of theses/dissertations (3.40), open access journal articles (3.36), open access e-books (3.32), open learning modules and textbooks (e.g. from Open Educational Resource Commons) (3.23), open educational videos (e.g. YouTube EDU, TED-Ed) (3.17), educational podcasts and audio materials (3.12), massive open online courses (MOOCs) (3.04), and open-source educational software/tools (3.04) were available. However, the least available types of Open Educational Resources (OERs) among postgraduate students in the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria are open lecture notes or syllabi from other universities (3.03) and open data sets for research (3.03). It was concluded that all the listed open educational resources are available, as their mean scores are above the benchmark of 2.50. Furthermore, the aggregate mean score of 3.17 indicates that open educational resources are generally highly available to

postgraduate students in the faculty. Therefore, the high availability of institutional repositories and open-access resources supports Knowles' Theory of Andragogy, which argues that adult learners are self-directed and actively seek learning resources that meet their educational needs. Since postgraduate students are adult learners, the availability of OERs enables them to independently identify and utilise relevant learning materials for continuous learning and development.

Table 2:

Awareness and Knowledge of OERs

S/N	Awareness and Knowledge of OERs	SA	A	D	SD	M	Decision
1	I am aware of the concept of Open Educational Resources (OERs).	67	56	15	13	3.17	Agree
2	I have a good understanding of how to access OERs for academic purposes	63	57	17	14	3.12	Agree
3	I have learned about OERs through university-organized programs or library initiatives	62	69	11	9	3.22	Agree
4	I am familiar with OER platforms such as OpenDOAR, OER Commons, and MIT OpenCourseWare.	57	51	23	20	2.96	Agree
5	University library provides adequate information about available OERs.	59	61	19	11	3.12	Agree
6	I actively use OERs for my research and academic work.	67	69	10	5	3.31	Agree
7	I believe OERs enhance my academic performance and research productivity	69	63	11	8	3.28	Agree
8	I am confident in differentiating between high-quality and low-quality OERs.	59	63	19	10	3.13	Agree
9	I receive sufficient guidance from librarians on using OERs.	67	59	19	6	3.24	Agree
10	OERs have significantly reduced my reliance on expensive textbooks and journal subscriptions	61	69	16	5	3.23	Agree
Aggregate mean score = 3.18							

Note. SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree.

Decision rule: Mean ≥ 2.50 = Agree; Mean < 2.50 = Disagree

Table 2 shows that participants agreed that they actively use open educational resources for research and academic work (3.31), believe open educational resources enhance academic performance and research productivity (3.28), receive

sufficient guidance from librarians (3.24), and that open educational resources reduce reliance on expensive textbooks and journal subscriptions (3.23). They also agreed that they have learned about open educational resources through university-organized programs (3.22), are aware of open educational resources (3.17), can differentiate between high- and low-quality open educational resources (3.13), understand how to access open educational resources (3.12), and that the university library provides adequate information (3.08). However, the least agreed statement is familiarity with open educational resources platforms such as OpenDOAR, open educational resources commons, and MIT OpenCourseWare (2.96). It is concluded that participants agreed that awareness was positive on knowledge of open educational resources, as all mean scores exceed 2.50. The aggregate mean of 3.17 further confirms a high level of awareness and knowledge among postgraduate students. Therefore, this finding is consistent with Self-directed Learning Theory, which suggests that learners who possess awareness of available learning resources are more likely to initiate and manage their own learning activities. Participants agreed that awareness was positive therefore strengthens students' capacity for lifelong learning.

Table 3:*Accessibility and Utilization of OERs*

S/N	Accessibility of OERs	SA	A	D	SD	M	Decision
1	I have easy access to Open Educational Resources (OERs) through the university library.	65	62	13	11	3.20	Agree
2	The university provides adequate internet facilities to access OERs.	67	63	14	7	3.26	Agree
3	I am aware of the various OER platforms available for academic use.	67	66	13	5	3.29	Agree
4	OERs are readily available in formats that suit my learning and research needs.	58	61	17	15	3.07	Agree
5	I have received training or guidance on how to access and use OERs.	59	63	13	16	3.09	Agree
6	I can access OERs on my personal devices (laptop, tablet, or smartphone) without restrictions.	67	63	11	10	3.24	Agree
7	The university's institutional repository includes sufficient OER materials relevant to my field of study.	69	65	10	7	3.30	Agree
<i>Utilization of OERs for Teaching, Learning and Research</i>							
8	I frequently use OERs for my academic coursework and assignments.	63	61	13	14	3.15	Agree
9	OERs are useful in supplementing lecture materials and expanding my understanding of course topics.	59	61	12	19	3.06	Agree
10	I use OERs for conducting research and writing academic papers	64	61	11	15	3.15	Agree
11	OERs help me develop critical thinking and problem-solving skills.	65	62	13	11	3.20	Agree
12	I prefer OERs to traditional textbooks because they are more accessible and cost-effective.	56	61	22	12	3.07	Agree
13	OERs provide up-to-date and high-quality academic content relevant to my research needs.	58	59	20	14	3.07	Agree
14	I share OERs with colleagues and classmates for collaborative learning.	61	63	15	12	3.15	Agree
15	The availability of OERs has improved my overall academic performance.	56	51	27	17	2.97	Agree
Aggregate mean score = 3.15							

Note. SA = Strongly Agree; A = Agree; D = Disagree; SD= Strongly Disagree.

Decision rule: Mean ≥ 2.50 = Agree; Mean < 2.50 = Disagree

Table 3 shows that participants agreed that the university's institutional repository contains sufficient open educational resource materials relevant to their field of study (3.30), they are aware of various open educational resource platforms (3.29), and that the university provides adequate internet facilities (3.26). They also agreed that they can access open educational resources on personal devices (3.24), have easy access through the university library (3.20), and that open educational resources enhance critical thinking and problem-solving skills (3.20). Additionally, the participants agreed that they frequently used open educational resources for coursework (3.15), research (3.15), and collaborative learning (3.15), and had received training (3.09). Other agreed statements included availability in suitable formats (3.07), preference for open educational resources over textbooks (3.07), and access to up-to-date content (3.07). The least agreed-upon statement was that open educational resources have improved overall academic performance (2.97). Therefore, it is concluded that participants agreed that the accessibility and utilisation of open educational resources were positive, as all mean scores were above 2.50. The aggregate mean score of 3.15 indicates favourable accessibility and utilisation. Therefore, this finding also supports connectivism, which emphasises that learning occurs through digital networks and online information systems. The accessibility of institutional repositories, online journals, and digital platforms demonstrates how technology facilitates continuous knowledge acquisition.

Table 4:*Impact of OERs on Lifelong Learning and Academic Performance*

S/N	Impact of OERs on Lifelong Learning	SA	A	D	SD	M	Decision
1	OERs have improved my ability to engage in self-directed learning	67	63	17	4	3.28	Agree
2	I use OERs to continuously update my knowledge beyond my academic coursework.	61	59	19	12	3.12	Agree
3	OERs have enhanced my access to diverse learning materials beyond traditional textbooks	63	61	13	14	3.15	Agree
4	OERs provide flexible learning opportunities that allow me to study at my own pace	61	57	20	13	3.10	Agree
5	The availability of OERs has encouraged me to explore new areas of knowledge	58	61	15	17	3.06	Agree
6	OERs have helped me develop problem-solving and critical thinking skills	61	63	15	12	3.15	Agree
<i>Impact of OERs on Academic Performance</i>							
7	OERs have enhanced my understanding of course concepts	59	56	21	15	3.05	Agree
8	The use of OERs has improved my research skills and academic writing.	61	63	14	13	3.14	Agree
9	OERs provide access to high-quality and up-to-date academic content.	62	57	20	12	3.12	Agree
10	The use of OERs has positively impacted my grades and academic performance	59	61	17	14	3.09	Agree
11	OERs help me complete assignments and projects more efficiently.	65	62	13	11	3.20	Agree
12	I rely on OERs to complement lecture materials provided by my lecturers	59	62	19	11	3.12	Agree
13	OERs have made learning more engaging and interactive.	61	57	20	13	3.10	Agree
<i>Challenges in Using OERs for Lifelong Learning and Academic Performance</i>							
14	Internet access and network issues affect my ability to use OERs effectively.	63	61	14	13	3.15	Agree
15	I need more guidance from faculty and librarians on how to maximize the use of OERs.	61	63	13	14	3.13	Agree
Aggregate mean score = 3.13							

Note. SA = Strongly Agree; A = Agree; D= Disagree; SD = Strongly Disagree.

Decision rule: Mean ≥ 2.50 = Agree; Mean < 2.50 = Disagree

Table 4 shows that participants agreed that open educational resources improve self-directed learning (3.28), help complete assignments efficiently (3.20), and

enhance access to diverse learning materials (3.15). They also agreed that open educational resources develop critical thinking skills (3.15), improve research skills and academic writing (3.14), and that Internet access issues affect usage (3.15). Additionally, participants noted the need for more guidance (3.13) and acknowledged that open educational resources provide flexible and engaging learning opportunities. However, the least agreed statements were that open educational resources encourage the exploration of new areas of knowledge (3.06) and enhance understanding of course concepts (3.05). It is concluded that students perceived OERs as contributing positively to the lifelong learning and academic performance, as all mean scores exceed 2.50. The aggregate mean of 3.13 indicates a favourable impact. Therefore, the collaborative sharing of OERs among students reflects the assumptions of Social Constructivism, which views learning as a social process in which knowledge is created through interaction and collaboration.

Table 5:

Challenges Affecting the Adoption and Effective Use of OERs

S/N	Challenges Affecting the Adoption and Effective Use	Sa	A	D	Sd	M	Decision
<i>Technological Challenges</i>							
1	Limited or unreliable internet access affects my ability to use OERs	67	69	13	2	3.33	Agree
2	Lack of access to digital devices (laptops, tablets, smartphones) hinders my use of OERs.	65	63	14	9	3.22	Agree
3	Technical difficulties (e.g., slow loading, compatibility issues) make it hard to access OER platforms	65	61	17	8	3.21	Agree
4	The university does not provide adequate ICT support for accessing and using OERs.	67	51	18	15	3.13	Agree
<i>Awareness and Training Challenges</i>							
5	I have limited awareness of the availability of OERs for academic use.	62	59	16	14	3.12	Agree
6	There is inadequate training or orientation on how to effectively use OERs.	59	61	15	16	3.08	Agree
7	Lack of knowledge about reliable OER platforms affects my ability to use them effectively.	67	62	14	8	3.25	Agree
8	Faculty members and librarians do not actively promote the use of OERs	65	61	13	12	3.19	Agree
<i>Quality and Content-Related Challenges</i>							

9	Some OERs lack credibility and quality, making it difficult to trust the content	59	61	18	13	3.10	Agree
10	Many OERs do not align with my academic curriculum or research needs.	61	63	15	12	3.15	Agree
11	Some OERs are outdated or not frequently updated with current information	59	60	19	13	3.09	Agree
12	Difficulty in navigating OER platforms discourages me from using them.	61	63	15	12	3.15	Agree
<i>Institutional and Policy Challenges</i>							
13	The university does not have a clear policy to promote OER adoption	63	65	14	9	3.21	Agree
14	There is a lack of institutional support for integrating OERs into postgraduate education	61	57	18	15	3.09	Agree
15	Copyright and licensing issues make it difficult to reuse or modify OER content.	55	57	25	14	3.01	Agree
Aggregate mean score = 3.16							

Note. SA = Strongly Agree; A = Agree; D = Disagree; SD = Strongly Disagree.

Decision rule: Mean ≥ 2.50 = Agree; Mean < 2.50 = Disagree

Table 5 reveals that participants agreed that limited or unreliable internet access (3.33), lack of knowledge of reliable open educational resource platforms (3.25), and lack of access to digital devices (3.22) are major challenges. Other challenges included technical difficulties (3.21), lack of institutional policy (3.21), insufficient promotion by faculty and librarians (3.19), poor alignment with the curriculum (3.15), and difficulty navigating open educational resource platforms (3.15). Participants also identified inadequate ICT support (3.13), limited awareness (3.12), concerns about quality (3.10), outdated content (3.09), lack of institutional support (3.09), and inadequate training (3.08) as challenges. The least challenging issue identified was copyright and licencing issues (3.01). It is concluded that there are significant challenges affecting the adoption and effective use of open educational resources, as all mean scores are above 2.50. The aggregate mean score of 3.16 indicates a tremendous level of challenge. Therefore, from the perspective of connectivism, poor Internet connectivity and inadequate ICT infrastructure weaken learners' ability to participate in digital knowledge networks, thereby limiting the effectiveness of OERs in supporting lifelong learning.

Discussion

Regarding the available types of OERs, the study revealed a high level of availability of open educational resources among postgraduate students in the Faculty of Education. The high availability of institutional repositories, open-access journal articles, and e-books supports Knowles' Theory of Andragogy, which posits that adult learners are autonomous, self-directed, and actively seek learning resources that meet their educational needs (Knowles et al., 2015). Notably, institutional repositories, open-access journal articles, and open-access e-books were the most available resources for these researchers. This finding supports Atenas and Havemann's (2014) study, which emphasised that institutional repositories and open-access journals are central to open educational resource ecosystems in higher education. Similarly, Yuan and Powell (2013) observed that universities worldwide increasingly provide access to open textbooks and digital learning materials. The high availability recorded in this study may be attributed to the growing adoption of digital library services and institutional repositories in Nigerian universities. This finding also aligns with Self-Directed Learning Theory (Knowles, 1975), which emphasises that learners become more effective when they have unrestricted access to learning resources that enable them to identify their learning needs, set goals, and independently pursue knowledge. However, the relatively lower availability of open datasets and lecture notes suggests gaps in localised content development and sharing practices in Africa. This partially aligns with Hatakka (2009), who argued that although open educational resources are globally available, contextual and infrastructural limitations in developing countries may affect their availability and usability of these resources.

However, on what is the level of awareness and knowledge of OERs, the findings also indicated a high level of awareness and knowledge of open educational resources among postgraduate students. Students demonstrated familiarity with the concept of OERs, their benefits, and their applications in academic work. The high level of awareness and knowledge of Open Educational Resources observed among postgraduate students further supports Self-Directed Learning Theory (Knowles, 1975). According to the theory, learners who possess adequate knowledge of available learning resources are better positioned to plan, monitor and evaluate their learning activities. This result is consistent with Okonkwo and Ikegbunam (2021), who reported high awareness levels of OERs among Nigerian university students, particularly in education-related fields. Similarly, Belikov and Bodily (2016) found that postgraduate students generally exhibit positive attitudes toward and awareness

of open educational resources, especially in digitally enabled learning environments. However, the relatively lower familiarity with specific OER platforms (e.g. OpenDOAR, OER Commons) suggests that awareness may be more conceptual than practical. This finding corroborates Mishra (2017), who observed that the effective use of Open Educational Resources depends not only on their availability but also on users' awareness, digital competencies, and institutional support. This finding also aligns with Atenas and Havemann (2014), who emphasised that capacity building and user training are essential for enabling learners to discover, access, and effectively use OERs. This underscores the need for academic libraries to strengthen user education and training programs on OER platforms.

Equally, on what are the challenges affecting the adoption and use of OERs, the study further revealed a high level of accessibility and utilisation of OERs on what is the extent of accessibility and utilisation of open educational resources. The high level of accessibility and utilisation of OERs supports connectivism, which explains that learning occurs through digital networks, technological platforms, and connections with diverse sources of information (Goldie, 2016; Dunaway, 2016). Respondents indicated that OERs are easily accessible through institutional repositories, personal devices and university Internet facilities. They also reported the frequent use of OERs for coursework, research and collaborative learning. The high level of accessibility and utilisation of OERs supports Connectivism, which explains that learning occurs through digital networks, technological platforms, and connections with diverse sources of information (Siemens, 2005; Goldie, 2016; Dunaway, 2016). This finding aligns with that of Adewumi and Akinyemi (2017), who found that Nigerian postgraduate students extensively utilise OERs through mobile technologies and institutional repositories. Likewise, Harish and Sridhar (2019) highlighted the increasing role of mobile-enabled learning in enhancing access to OERs in developing countries. Despite this positive trend, the relatively low impact on overall academic performance suggests that accessibility does not automatically translate into measurable outcomes. This supports the argument of Czerniewicz and Brown (2013), who emphasised that digital inequalities and contextual barriers can limit the effective utilisation of digital learning resources, even when access is available.

Equally, findings showed that Open Educational Resources have a significant positive impact on lifelong learning and academic performance on what is the impact of OERs on lifelong learning and academic performance. Specifically, open

educational resources enhance self-directed learning, improve research skills, and support continuous knowledge acquisition. The finding that OERs enhance self-directed learning, research skills, and continuous knowledge acquisition is consistent with Knowles' Theory of Andragogy, which maintains that adult learners are internally motivated to pursue learning that is relevant to their personal and professional development (Knowles et al., 2015). This result is consistent with Hilton (2016), who concluded that Open Educational Resource use does not negatively affect learning outcomes and often enhances student performance. Similarly, Tang and Bao (2020) reported that Open Educational Resources increase student engagement, motivation, and independent learning capabilities. However, the relatively moderate impact on academic performance indicators, such as grades, suggests outcome variability. This aligns with De Los Arcos et al. (2016), who found that while many students benefit from Open Educational Resources, the extent of impact varies depending on individual learning contexts and usage patterns. This implies that while open educational resources support lifelong learning, their effectiveness depends on how well they are integrated into the teaching and learning processes.

The significant challenges identified in this study, particularly poor Internet connectivity, inadequate ICT infrastructure, and limited institutional support, can also be explained by connectivism. These findings are consistent with Nkuyubwatsi (2014), who identified infrastructural and awareness challenges as major barriers to Open Educational Resources adoption in Sub-Saharan Africa. Similarly, Iloanusi and Osuagwu (2009) highlighted institutional and policy constraints in Nigeria as key limitations of technology-enhanced learning (TEL). In contrast, studies such as Bossu, Bull, and Brown (2012) in developed contexts (e.g. Australia) report stronger institutional support and policy frameworks, leading to more effective Open Educational Resource integration. This contrast underscores the importance of context in OER adoption and suggests that improving infrastructure, policy, and institutional commitment is critical in developing countries, such as Nigeria. Therefore, this study demonstrates that while the availability, awareness, and utilisation of OERs are relatively high, challenges related to infrastructure, training, and institutional support persist in the field. This further highlights the critical role of academic libraries and institutional repositories in promoting access, awareness, and the effective use of OERs.

Beyond confirming previous studies on the availability and awareness of OERs, this study demonstrates that access alone is insufficient to promote lifelong

learning. The findings reveal that although postgraduate students generally have access to OERs, sustained lifelong learning depends on institutional support, practical competencies in locating and evaluating OER platforms, and adequate digital infrastructure. This study extends the existing literature by highlighting that effective OER utilisation requires a combination of technological, institutional, and learner-related factors, rather than mere resource availability.

Conclusion and Recommendations

This study examined the availability, awareness, accessibility, utilisation, impact, and challenges of OERs among postgraduate students at the Faculty of Education, Obafemi Awolowo University, Ile-Ife, Nigeria. The findings revealed that OERs are generally highly available, widely accessible, and frequently utilised by postgraduate students for academic purposes. Students also demonstrated a high level of awareness and a positive disposition toward OERs, indicating that OERs have become an integral component of contemporary academic engagement in this study context. However, beyond these established patterns, this study provides important insights that extend the existing knowledge. While previous studies have largely emphasised the availability and awareness of OERs, this study reveals a critical disconnect between access and measurable academic outcomes. Specifically, although OERs significantly enhance self-directed learning, research skills, and lifelong learning, their impact on academic performance indicators such as grades remains moderate. This suggests that mere availability and access to Open Educational Resources do not automatically translate into optimal academic achievement.

In addition, the study found that awareness of Open Educational Resources among postgraduate students is largely conceptual rather than operational, as many students lack sufficient familiarity with OER platforms and tools. This highlights a gap that has not been sufficiently emphasised in earlier studies in similar contexts. Furthermore, the study reinforces the persistent influence of infrastructural and institutional barriers, particularly poor internet connectivity, limited access to digital devices, and inadequate institutional support, which continue to constrain the effective utilisation of Open Educational Resources despite their availability. Hence, the study contributes to knowledge by demonstrating that the effectiveness of Open Educational Resources in higher education is not solely dependent on their availability or accessibility, but significantly influenced by users' practical

competencies and the level of institutional support systems in place. It therefore underscores the need to move beyond access-oriented strategies toward more integrated approaches that combine infrastructure development, user training, and institutional policy support to maximise the educational benefits of Open Educational Resources.

Based on the findings of this study, the following recommendations are made:

1. Universities should enhance the availability of OERs, particularly open datasets and lecture notes, by encouraging their academic staff to develop and share content through institutional repositories and other OER platforms.
2. Academic libraries should organise regular training programmes and workshops to improve students' practical knowledge of accessing and utilising specific OERs platforms, thereby bridging the gap between awareness and actual usage.
3. University management should improve Internet connectivity, expand access to digital devices, and strengthen ICT infrastructure to support more effective accessibility and utilisation of OERs by postgraduate students.
4. Lecturers should integrate OERs into teaching, learning, and assessment processes to ensure that their use translates into improved academic performance and not just increased access.
5. Universities should develop and implement supportive policies and provide institutional backing to address challenges such as poor infrastructure, inadequate awareness of platforms, and limited support systems for OER adoption.

Conflict of Interest Statement

The author declares that there is no conflict of interest regarding the publication of the article. The study was conducted in the absence of any commercial or financial relationship that could be construed as a potential conflict of interest.

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