PSYCHOLOGICAL FACTORS AND USE OF OPEN ACCESS RESOURCES BY UNDERGRADUATES

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Abstract

The study explores influence of psychological factors on use of open access resources by undergraduates in two universities in Ibadan, Oyo State, Nigeria. Descriptive survey research design was adopted and the population consisted of 257 undergraduates. Multi-stage sampling was adopted, data was collected with questionnaire and analysed with frequencies, mean, standard deviation, Pearson's Product Moment Correlation. Result showed that majority of the undergraduates used electronic books and electronic databases. The respondents majorly used open access resources because they are digital in nature, while a little above half of the undergraduates (53.6%) indicated that they use open courseware on a daily basis. Also, result revealed that there is positive significant relationship between psychological factors and use of open access resources by undergraduates. It was therefore recommended that orientation programmes should be organised for proper awareness of the benefits of open access resources and to exhibit positive attitude towards its use.

Keywords: Use of open access resources, psychological factors, undergraduates, universities. Introduction

Universities are institution of learning where people go to learn more about specific subjects they're interested in. The goal of university education is to help people expand their knowledge and develop strong thinking skills. This, in turn, enables them to become valuable members of society who care about others. Clear communication is important as it helps improve work relationships and job success. Individuals with higher education often enjoy a better standard of living compared to those without the skills needed to succeed in today's competitive world. Additionally, universities provide personal and professional growth, helping students face different challenges effectively. Undergraduate students, in particular, benefit from a well-rounded learning experience, with access to various digital resources and open access information

Open Access Resources (OARs) are academic journal articles reviewed by experts and made freely available online to anyone, anywhere (Velmurugan, 2016). Bala, Bansar, and Sharma (2018) explain that open access resources are open to everyone, allowing users to access them without cost or legal restrictions. People can download, use, and share these resources for noncommercial purposes. In the 21st century, these resources have become valuable tools for students, researchers, academics, and faculty members in universities, helping them easily find answers to academic questions with just a click on their computers. According to Bala, Bansal, and Sharma (2018), open access resources include research reports, conference papers, research articles, audio/video lectures, and e-newspapers, accessible to users anywhere.

Oguntimihin and Enamudu (2020) outlined several advantages of open access resources for undergraduate students in higher education. These benefits include free publishing opportunities for authors, greater visibility and impact for researchers' work, free online access to essential literature, support for personal and career growth, access to high-quality academic materials, and enhanced overall academic performance. Regarding how often undergraduates use open access resources, Acharya and Rout (2022) explored the awareness and use of these resources among Library and Information Science students and researchers in Odisha, India. Their study found that most students accessed open access resources daily, some used them more than three times a week, and others twice weekly, showing high frequency in usage. Despite the opportunities and enhanced flexibility that open access resources provide, literature and observation have affirmed that the level at which undergraduates use these resources is still low and can be improved. A factor that

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might be responsible for the low use of these resources is the psychological factors of undergraduates.

According to Thomas, Nilsson, Festin, Henriksson, Lowén, Löf, and Kristenson (2020), psychological factors are traits or characteristics that impact a person's decisions mentally or socially. These factors can describe how people relate to their social environment and how this affects their physical and mental health. This study will examine attitude, self-efficacy, and anxiety in undergraduates as factors that influence their use of open access resources. It was observed that some undergraduates are not self-confident or have belief in themselves to effectively perform a given task or use an electronic information resource. This can make undergraduates shy away from using online open access resources. In addition, undergraduate's predisposition and fear of using open access resources can result to low use of open access resources.

Jato and Diyaolu (2021) looked at undergraduate students' attitudes at McPherson University in Ogun State, Nigeria, toward electronic resources and services. The study revealed that while electronic resources have much to offer, their usefulness depends on users' attitudes and perceptions towards them. A student's level of anxiety can either help or hinder their use of electronic information resources (Dawood, Ghadeer, Mitsu, Almutary & Alenezi, 2016). Eravwoke (2020) agrees, observing that very high anxiety levels may lead to panic attacks, causing physical symptoms like shaking that interfere with resource usage. In contrast, moderate anxiety can prevent such effects and positively impact how students use these resources. Additionally, Azonobi, Uwaifo, and Tella (2020) highlight that self-efficacy is key for motivation and personal success, especially in using electronic resources effectively in a rapidly advancing technological world. High self-efficacy is essential for students to thrive in their studies and adapt to the information-driven society.

It is on this background that this study investigated the influence of information literacy skills and psychological factors on use of open access resources by undergraduates in two universities in Ibadan, Oyo State, Nigeria.

Objectives of the study

- find out the types of open access resources used by undergraduates in two universities in Ibadan, Oyo State, Nigeria;
- ii. determine the purpose of use of open access resources by undergraduates in two universities in Ibadan, Oyo State, Nigeria;

- iii. determine the frequency of use of open access resources by undergraduates in two universities in Ibadan, Oyo State, Nigeria;
- iv. examine the psychological factors influencing the use of open access resources by undergraduates in two universities in Ibadan, Oyo State, Nigeria;

Hypothesis -There is no significant relationship between psychological factors and use of open access resources by undergraduates in two universities in Ibadan, Oyo State, Nigeria.

Methodology

The descriptive survey research design was adopted for the study. The population of this study consisted of 15,479 undergraduates in University of Ibadan, Ibadan, Nigeria and 6,359 undergraduates in Lead City University, Ibadan, Oyo State, Nigeria. Therefore, a total of 21,838 undergraduates formed the population of this study. Multi-stage sampling was adopted by the study due to the homogeneous characteristics of the population. The first stage involved random selection of three similar faculties in each of the two universities. At the second stage, two similar departments was randomly selected each from the three selected faculties in both universities. At the last stage, a sampling fraction of 10% from each of the selected departments was used to select the sample size. Therefore, the final sample size was 257 undergraduates.

Questionnaire was the main data collection instrument for the study. The data was analysed using descriptive and inferential statistics. Analysis of the information obtained from data collected was done on computer using the Statistical Product and Service Solutions (SPSS) version 21 software. Simple percentage was used to analyse the demographic information of the respondents. Descriptive statistics such as frequency counts, simple percentages, mean and standard deviation was also used to answer research questions 1 to 4. Pearson Product Moment Correlation (PPMC) was used to test the hypothesis. The hypotheses was tested at 0.05 level of significance.

Results and Discussion

Types of open access resources used by undergraduates in two universities in Ibadan, Oyo State, Nigeria?

S/N	Statement	VHU	HU	MU	NU		S.	Rank
		F	F	F	F		Dev.	
		(%)	(%)	(%)	(%)			
1	Open access journals	48	80	73	19\	2.71	.904	9
		(21.8)	(36.4)	(33.2)	(8.6)			
2	Open courseware	46	97	59	18	2.78	.871	8
		(20.9)	(44.1)	(26.8)	(8.2)			
3	Open educational resources	76	87	54	3	3.07	.802	6
		(34.5)	(39.5)	(24.5)	(1.4)			
4	Open access archives	84	90	39	7	3.14	.818	5
		(38.2)	(40.9)	(17.7)	(3.2)			
5	Electronic databases	92	117	10	1	3.36	.593	2
		(41.8)	(53.2)	(4.5)	(0.5)			
6	Institutional repositories	84	127	8	1	3.34	.570	4
		(38.2)	(57.7)	(3.6)	(0.5)			
7	Open access articles	60	101	47	12	2.93	.840	7
		(27.3)	(45.9)	(21.4)	(5.5)			
8	Open access thesis and	87	123	9	1	3.35	.580	3
	dissertation	(39.5)	(55.9)	(4.1)	(0.5)			
9	Electronic books	95	119	6	0	3.40	.545	1
		(43.2)	(54.1)	(2.7)	(0.0)			
	Total	75	105	34	6	28.21		
		(34.1)	(47.7)	(15.5)	(2.7)			
	N=220, Weighted average me	an=3.12	Grand n	nean=2.		3.12	0.724	

Table 1.1: The types of open access resources used by undergraduates

Key: VHU=Very Highly Used, HU=Highly Used, MU=Moderately Used and NU=Not Used

Table 1.1 shows the types of open-access resources used by the respondents. The result revealed that electronic books (x=3.40), electronic database (x=3.36), open access theses and dissertations (x=3.35), institutional repositories ($x=\overline{3}.34$) and open access archives (x=3.14) are the major types of open access resources used by undergraduates in the two universities. The result further revealed a weighted average mean score of 3.12 which is greater than the grand mean score of 2.50. This implies that the examined types of open-access resources were used by undergraduates in University of Ibadan and Lead City University.

Purposes of use of open access resources by undergraduates in two universities in Ibadan, Oyo State, Nigeria?

S/N	Statement I use open access	SA	Α	D	SD		S.	Rank
	resources:	F	F	F	F		Dev.	
		(%)	(%)	(%)	(%)			
1	for classwork/assignment	6	119	95	0	2.60	.54	9
		(2.7)	(54.1)	(43.2)	(0.0)			
2	to prepare for examination	10	118	92	0	2.63	.57	8
		(4.5)	(53.6)	(41.8)	(0.0)			
3	to learn difficult or challenging	11	117	92	0	2.64	.59	7
	subjects	(5.0)	(53.2)	(41.8)	(0.0)			
4	to update my knowledge and	9	127	84	0	2.66	.57	4
	supplement my personal reading	(4.1)	(57.7)	(38.2)	(0.0)			
5	because they are free	59	101	60	0	3.05	.84	2
		(26.8)	(45.9)	(27.3)	(0.0)			
6	to compare topics taught in class	10	123	87	0	2.65	.58	5
		(4.5)	(55.9)	(39.6)	(0.0)			
7	for my research work	9	122	89	0	2.65	.59	6
		(4.1)	(55.5)	(40.4)	(0.0)			
8	because they contain relevant	29	122	69	16	2.84	.70	3
	information	(13.1)	(55.5)	(31.4)	(25.4)			
9	because they are digital in nature	173	28	7	12	3.97	1.03	1
		(78.6)	(12.7)	(3.2)	(5.5)			
	Total	35	108	75	2	25.69		
		(15.9)	(49.1)	(34.0)	(1.0)			
	N=220, Weighted Average mean	n=2.85,	Grand n	nean=2.	50	2.85	0.667	

Table 1.2: The purpose of use of open access resources by undergraduates

Key; Strongly Agree (SA=4), Agree (A=3), Disagree (D=2), Strongly Disagree (SD=1)

Table 1.2 shows the purpose of use of open access resources by the respondents. The study revealed that the major purpose of use of open access resources by the respondents were: because they are digital in nature (x=3.97), because they are free (x=3.05), because they contain relevant information (x=2.84), to update my knowledge and supplement my personal reading (x=2.66). The result revealed a weighted average mean score of 2.85 which is greater than the grand mean score of 2.50.

Frequency of use of open access resources by undergraduates in two universities in Ibadan, Oyo State, Nigeria?

S/N	Statement: I use	D	W	Μ	Y	Ν		S.	Rank
		F	F	F (%)	F	F		Dev.	
		(%)	(%)		(%)	(%)			
1	open access journals	65	98	36	10	11	3.89	1.04	4
		(29.5)	(44.5)	(16.4)	(4.5)	(5.0)			
2	open courseware	118	74	20	6	2	4.36	.83	2
		(53.6)	(33.6)	(9.1)	(2.7)	(0.9)			
3	open educational resources	65	84	46	13	12	3.80	1.09	5
		(29.5)	(38.2)	(20.9)	(5.9)	(5.5)			
4	open access archives	92	80	32	7	9	4.09	1.02	3
		(41.8)	(36.4)	(14.5)	(3.2)	(4.1)			
5	electronic databases	49	89	49	14	19	3.61	1.15	6
		(22.3)	(40.5)	(22.3)	(6.4)	(8.6)			
6	institutional repositories	134	64	17	3	2	4.48	0.77	1
		(60.9)	(29.1)	(7.7)	(1.4)	(0.9)			
7	open access articles	2	2	97	119	0	2.49	0.56	9
		(0.9)	(0.9)	(44.1)	(54.1)	(0.0)			
8	open access thesis and	2	9	97	112	0	2.55	0.62	7
	dissertation	(0.9)	(4.1)	(44.1)	(50.9)	(0.0)			
9	electronic books	1	6	106	107	0	2.55	0.57	8
		(0.5)	(2.7)	(48.2)	(48.6)	(0.0)			
	Total	59	56	56	43	6	31.8		
		(26.8)	(25.5)	(25.5)	(19.5)	(2.7)	2		
	N=220, Average Weighted	mean=3	3.53, Gra	and mea	n=3.00		3.53	0.85	

 Table 1.3: The frequency of use of open access resources by undergraduates in two universities in Ibadan, Oyo State, Nigeria

Table 1.3 revealed that about a half of the undergraduates 118 (53.6%) indicated that they use open courseware on a daily basis. A moderate number of the respondents 98 (44.5%) pointed out that they use open access journals weekly. In addition, almost half of the respondents 106 (48.2%) noted that they use electronic books on a monthly basis. Also, half of the respondents 112 (50.9%) were of the opinion that they use open access theses and dissertations yearly while 19 (8.6%) of the respondents never used electronic database.

Key: D-Daily, W-Weekly, M-Monthly, Y-Yearly and N-Never

Psychological factors that influence use of open access resources by undergraduates in two universities in Ibadan, Oyo State, Nigeria?

S/N	Item Description	SA	Α	D	SD		S.	Rank
		\mathbf{F}	\mathbf{F}	\mathbf{F}	\mathbf{F}		Dev.	
1	Attitude	(%) 71	(%) 75	(%) 60	(%) 14	2.76	0.88	12
1	Using open access resources has	(32.3)	(34.1)	(27.3)	(6.4)	2.70	0.00	12
	been fascinating to me	(32.3)	(31.1)	(27.5)	(0.1)			
2	I find using open access resources	73	116	31	0	3.10	0.65	10
	easier than using printed resources	(33.2)	(52.7)	(14.1)	(0.0)			
3	I am convinced that the use of	67	128	21	4	3.17	0.66	8
	open access resources will	(30.5)	(58.2)	(9.5)	(1.8)			
	enhance my academic							
4	performance	(0)	110	20	2	2.11	0.71	0
4	I think the use of open access	69 (21-4)	116	32	3	3.11	0.71	9
	resources is too technical for me to understand	(31.4)	(52.7)	(14.5)	(1.4)			
5	Self-Efficacy	132	56	26	6	3.55	0.64	1
5	I cope very well with encountered	(60.0)	(25.5)	(11.8)	(2.7)	5.55	0.04	1
	difficulties when using open	(00.0)	(23.3)	(11.0)	(2.7)			
	access resources							
6	I am always sure that I could get	92	120	6	2	3.35	0.58	2
	the desired information when	(41.8)	(54.5)	(2.7)	(0.9)			
	using open access resources							
7	I am always sure that I can solve	65	107	46	2	3.03	0.72	11
	all my academic problems using	(29.5)	(48.6)	(20.9)	(0.9)			
	open access resources							
8	I am always sure that I can use		112	25	0	3.25	0.64	6
	open access resources	(37.7)	(50.9)	(11.4)	(0.0)			
9	independently	87	110	20	1	2.24	0.64	7
9	Anxiety		112	(9.1)	(0.5)	3.24	0.64	/
	I think about the consequences of failing to achieve my aims when	(39.5)	(50.9)	(9.1)	(0.5)			
	using open access resources							
10	I do not worry about what people	93	110	15	2	3.31	0.63	4
10	will say if am unable to use open	(42.3)	(50.0)	(6.8)	(0.9)	0.01		.
	access resources	()	(2 5.0)		(0.5)			
11	1 am always calm when using open	89	117	14	0	3.31	0.58	5
	access resources	(40.5)	(53.2)	(6.4)	(0.0)			

Table 1.4: Psychological factors influencing use of open access resources by undergraduates.

12	1 am emotionally unstable when	96	112	10	2	3.34	0.61	3
	using open access resource	(43.6)	(50.9)	(4.5)	(0.9)			
	Total	85	107	25	3	38.52		
		(38.6)	(48.6)	(11.4)	(1.4)			
	N=220, Average weighted mean=3.21, Grand mean=2.50							

Key: SA-Strongly Agree, A-Agree, D-Disagree and SD-Strongly Disagree

Table 1.4 presents the psychological factors influencing the use of open access resources by undergraduates in University of Ibadan and Lead City University which are measured by three indicators: attitude, self-efficacy and anxiety. The grand mean score for the indicator was 2.50 and the average weighted mean score for the indicators is 3.21 which is greater than the grand mean score. This connotes that attitude, self-efficacy and anxiety of undergraduates can greatly influence their use of open access resources. As of self-efficacy, majority of the respondents (x=3.55)⁻ were of the opinion that they cope very well with encountered difficulties when using open access resources. With reference to anxiety, most of the respondents (x=3.34)⁻ indicated that they are emotionally unstable when using open access resource. As of attitude, a high number of respondents (x=3.17)⁻ maintained that they are convinced that the use of open access resources will enhance their academic performance.

Test of Hypothesis

Hypothesis: There is no significant relationship between psychological factors and use of open access resources by undergraduates in two universities in Ibadan, Oyo State, Nigeria.

Table 1.5: PPMC; The relationship between psychological factors and use of open access
resources by undergraduates.

Variable	Ν	Mean	Std.	Df	r	Р	Remark
			Dev.				
Use of open access resources	220	28.10	3.96				
				219	.495**	.000	Sig.
Psychological factors	220	35.52	4.57				

**Correlation is significant at 0.05(2-tailed)*

Table 4.12 shows the relationship between psychological factors and use of open access resources by undergraduates in two universities in Ibadan, Oyo State, Nigeria. The result indicated that psychological factors significantly influenced use of open access resources by undergraduates in University of Ibadan and Lead City University ($r=.495^{**}$, Df= 219; p<.05).

Discussion of the findings

Types of open access resources used by undergraduates

The findings indicated a significant usage of all types of open access resources analyzed in the study. It was also shown that undergraduates at both universities primarily utilized electronic books, electronic databases, open access theses and dissertations, and institutional repositories. This preference may stem from the unique characteristics of the students, which influence their diverse information needs, as well as the accessibility and availability of these resources for use. This result aligns with the findings of a case study of universities in the National Capital Region, India by Tyagi (2012) which found that the majority of the respondents showed key interest in use of a range of databases like Web of Science, Science Direct, IEEE/IEE/IEL Online and the other online resources for variety of purposes that mainly include study, lecture preparation, research and reflection.

Purpose of use of open access resources by undergraduates

The study found that undergraduates at both universities utilized open access resources due to their digital nature, cost-free access, and the ability to enhance their knowledge and supplement their personal reading. Additionally, these students used open access resources to compare topics discussed in class and for their research projects. It was noted that undergraduates were able to obtain relevant information from these resources, indicating that open access resources deliver valuable information quickly. This aligns with Chanda's (2021) study, which showed that most respondents prefer open access e-resources because they save money, making them highly beneficial. The respondents also indicated that they use open access e-resources because they are freely available online. Other advantages mentioned included ease of access, a broader range of potential evidence, time savings, and a greater depth of information.

Frequency of use of open access resources by undergraduates

The findings of this study indicated that undergraduates at both universities frequently use open access resources. The high usage of these resources likely supports their daily academic activities. This suggests that undergraduates tend to rely on various types of open access resources for tasks such as exams, assignments, research, and seminar presentations. This result is consistent with the study by Bala, Bansal, and Sharma (2018), which examined the use of open access resources (OARs) by researchers at Punjab Agricultural University, Ludhiana. Their findings revealed that most researchers use OARs daily, while some use them weekly.

Psychological factors influencing use of open access resources by undergraduates

The findings of this study indicated that the attitudes, self-efficacy, and anxiety levels of undergraduates significantly affect their use of open access resources. These psychological factors play an important role in the activities in which students engage. The degree of these factors influences how positively or negatively undergraduates utilize open access resources. This finding is consistent with several other studies that have reported on the impact of psychological factors on the use of open access resources. For instance, Issa, Ibrahim, Onojah and Onojah (2020) studied undergraduates' attitude towards the utilization of open educational resources for learning and found that undergraduates have a positive attitude towards utilization of OER for learning. Similarly, Dawood, Ghadeer, Mitsu, Almutary, and Alenezi (2016) noted that a student's anxiety level could also positively or negatively affect their use of electronic information. Additionally, Eravwoke (2020) examined psychological factors, digital literacy skills, and the use of electronic information resources among postgraduate students in the Faculty of Education at Delta State University, Abraka, and found that self-efficacy plays a crucial role in the utilization of electronic information resources.

Relationship between psychological factors and use of open access resources by undergraduates

The results of this study indicated a significant relationship between psychological factors and the use of open access resources by undergraduates at the two universities in Ibadan, Oyo State, Nigeria. This can be linked to the frequent use of open access resources by undergraduates, who benefit from these resources. As students continue to utilize open access resources, they become more self-assured and skilled in using them. Additionally, regular use fosters a positive attitude and helps reduce any anxiety or nervousness associated with accessing these resources. These findings align with the research by Issa, Ibrahim, On1ojah, and Onojah (2020), which showed that undergraduates have a positive attitude towards using open educational resources (OER) for learning. Earlier, Olaojo and Gbotosho (2016) suggested a significant relationship between students' self-efficacy and their usage of e-libraries, noting that when students know how to do something, they are more likely to engage in it and enjoy the process. Furthermore, Eravwoke (2020) noted that high anxiety levels can lead to panic attacks, resulting in unnecessary shaking that negatively impacts the use of electronic information resources. Conversely, moderate anxiety levels can help avoid panic attacks and positively influence open access resource usage.

Conclusion and recommendation.

Due to their accessibility and user-friendliness, open access resources were highly valued by students. This is because these materials support their learning and research activities, and they always find it simple to use. Undergraduates' utilisation of open access resources is significantly influenced by their psychological makeup. These factors play vital role in task performance and goal achievement. The findings of this study revealed that student's attitude toward using open access resources determines the frequency of use, and self-efficacy, the conviction that one can use open access resources effectively, raises engagement. On the other hand, anxiety can limit the use of electronic information resources, especially when it comes to navigating them. It may be inferred from this that undergraduates psychological makeup is a significant determinant of open access resources use. Based on the findings of this study, researcher recommends that the university management should ensure that information resources should not only be available and accessed physically, but also electronically to intensify the use of open access resources by students. Also, educators can boost self-efficacy of undergraduates with credible communication and feedback to guide them through on how to effectively have access and use open access resources. In addition, for undergraduates to exhibit positive attitude toward use of open access resources, orientation programmes should be organized by the university library especially at various faculties and departmental levels to inform and indulge students to take full advantage of the benefits that open access resources could offer to their studies.

References

- Velmurugan. C, (2016). Open Access Resources: a free access to information and knowledge in Digital libraries on higher education in India, *Proceedings of Management of open access resources*. 159- 167.
- Bala, S., Bansal, S., & Sharma, Y. (2018). Awareness of Open Access Resources among the researchers of Punjab Agricultural University, Ludhiana. *International Journal of Library Information Network and Knowledge*, 3 (1), 139-145.
- Oguntimehin, A. T., & Enamudu, J. O. (2022). Open Access Resources Usage and Copyright Violation amongst Undergraduates in Two Universities in Ibadan, Oyo State. *Library Philosophy and Practice*.
- Acharya, S., & Rout, L. (2022). Use analysis of various LIS open access resources in pandemic situation in Odisha State: A survey include LIS user's opinion. *Qualitative and Quantitative Methods in Libraries*, 11(3), 429–454.
- Thomas K, Nilsson E, Festin K, Henriksson P, Lowén M, Löf M, &Kristenson M. (2020) Associations of Psychosocial Factors with Multiple Health Behaviors: A Population-Based Study of Middle-Aged Men and Women. *International Journal of Environmental Res Public Health*, 17 (4), 12-39.
- Jatto, E.O. &Diyaolu, B.O. (2021). Users' Attitudes to the Use of Electronic Resources and Services by Undergraduate Students of McPherson University, Ogun State, Nigeria. *Library Philosophy and Practice (e-journal)* 6643. Retrieved September 9, 2023 from https://digitalcommons.unl.edu/libphilprac/6643
- Dawood, E., Ghadeer, H., Mitsu, R., Almutary, N., &Alenezi, A. (2016). Relationship between test anxiety and academic achievement among undergraduate nursing students. *Journal of Education and Practice*, 7 (2), 57-65
- Eravwoke E. (2020). Psychological Factors, Digital Literacy Skills and Use of Electronic Information Resource by Postgraduate Students of Delta State University, Abraka. *Library Philosophy and Practice (e-journal).* 6519. Retrieved August 21, 2023 from https://digitalcommons.unl.edu/libphilprac/6519
- Azonobi, I., Uwaifo, S., &Tella, A. (2020). Determinants of postgraduates' use of electronic information resources in federal universities in Southern Nigeria. *International Information & Library Review*, 52 (3), 202-215.
- Tyagi, S. (2012). Adoption of Web 2.0 technology in higher education: A case study of universities in the National Capital Region, India. International Journal of Education and Development using ICT, 8(2), 28-43
- Chanda, A. (2021). Awareness of Open Access E-Resources among the LIS Professionals of North-East India: A Study. GRANTHAKUTI-A Peer Reviewed and Refereed Annual Journal on Library and Information Science and Related Studies, 7 (1), 136-145.
- Issa, A.I., Ibrahim, M.A., Onojah, A.O. and Onojah, A.A., (2020). Undergraduates' Attitude towards the Utilization of Open Educational Resources for Learning. *International Journal of Technology in Education and Science*, 4(3), pp.227-234.
- Olaojo, P. O., and Gbotosho, A. S. (2016). Influence of Self-Efficacy on E-Library Usage By some selected Undergraduate Students of a Nigerian University. *African Journal of Educational Management*, 17(03), 115-133.