
Utilization of Electronic Information Resources and Their Influence on Reading Culture of Undergraduate Students in Federal University Dutse

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ABSTRACT

A cross sectional survey method was used to determine the utilization of e-resources and their influence on the reading culture of 119 undergraduate students registered with the JD Amin library of Federal University Dutse. The data collected was analysed using both descriptive (frequency counts and means) and inferential statistics (regression analysis). The research found that databases (mean=4.00) and e-journal (mean=4.00) are available to the undergraduate students. It further found that e-resources are often utilized by the undergraduate student, with social media (mean=4.00), databases (mean=4.00) and e-journal (mean=4.00). the most commonly used e-resources. It was also found that erratic power supply (mean=3.91) and inability to seek, obtain and evaluate information (mean=3.67) are the prominent factors hindering the utilization of e-resources. The regression analysis rejected the null hypotheses of the study where it shows that the level of utilization of e-resources have positive statistical correlation ($r=0.772$) with the reading culture of undergraduate students. The study proposed a conceptual model for the sustainable reading culture of students by libraries providing of e-resources. The general conclusion of the research is that e-resources are necessary tools and are moderately available and adequately utilized for influencing reading culture. The study recommended that Internet facilities should be made available to undergraduate students to facilitate more utilization of e-resources.

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1. Introduction

Reading is a very important aspect of the development and success of every educational progress of people, as it allows them to access the width and breadth of the educational parlance to improve their communication and language skills. Reading is an essential tool for lifelong learning; hence, reading is the basic foundation for academic skills of every individual. It helps in the overall development and provides steps to excel in each and every sphere.

Reading according to Mohammed and Amponsah (2018) is an activity engaged in by most people throughout their life time, hence, it is pertinent to note that undergraduate students who engage in in-depth reading have developed self-confidence and they know that their ability to read can open doors for them. Chireac, Olivares, and Arbona (2022) added that improving access to relevant information and promoting reading culture are prerequisites for strengthening literacy skills, widening education and learning opportunities, and helping people to address the causes of poverty. In addition, one of the most important factors in education is ability to read, understand and critically apprehend the text.

Bala and Lal (2016) noted that reading is a priceless activity, but its importance is deteriorating rapidly due to technology boom, owing to which people end up spending most time in front of television or computer screen without actually utilizing the technology for self-development. Sadly, people nowadays seem to have totally lost interest in reading physical resources, hence the only resources that is of interest to them now is technology driven facilities, which the e-resources fall within the description. This shows the lack of understanding by the present generation of the blessing presented them by the new technology. According to Ntakirutimana and Okoro (2021) reading culture is a regular activity involving the cultivation of an attitude and the possession of skills that make reading pleasurable and constant activity. Ailakhu and Unegbu (2017) is also of the view that reading culture is having the habit of reading in every life and not just for school purposes.

The e-resources are not single entities as opine by Joshua and King (2020), and they include various types of resources such as e-books, e-journals, e-databases, digital archives and internet resources. Thus, e-resources are available in the electronic form and their access is through the intranet, Internet, standalone computer, online and offline databases. These e-resources are used mainly for reading and research purposes. To this regard, the diverse environment which undergraduates confront in academic institutions today increases the complexity, as not only the format of the resources they access, but also the number of resources seems to grow exponentially. It was based on this premise that Olujuwon (2017) stated that the rapid changes in the educational system have become the vital part of various information needs of information users. Today, the development of digital environment expands the sources of information through which undergraduate students use.

Despite the numerous e-resources available which makes access to, and utilization of information easier and more accessible, there is a growing concern over the reading culture of undergraduate students (Sotiloye and Bodunde, 2018; Wema, 2018). Hence, it is the aim of this research work to assess the influence of e-resources on the reading culture of undergraduate students.

2. Objective of the Study

1. To identify the e-resources available to undergraduate students of Federal University Dutse
2. To find out the level of utilization of e-resources by the undergraduate students under study
3. To assess the influence of the utilization of e-resources on reading culture of the undergraduate students under study
4. To identify the purpose of using e-resources by the undergraduate students under study
5. To examine the factors affecting the use of e-resources by the undergraduate student under study

Hypothesis

- H₀.1.** There is no statistically significant correlation between utilization of e-resources and reading culture of undergraduate students.

3. Review of related literature

It is pertinent to note that undergraduate students who engage in in-depth reading have developed self-confidence and they know that their ability to read opens doors for them. Reading is very powerful and an indispensable equipment for learning and acquisition of the varied skills and experiences needed by man to develop a satisfactory personal life style. It is important that undergraduate students should develop positive habits towards reading. Consequently, Chaputula (2018) advised Nigerian youths to imbibe the reading culture in all their endeavours. According to Wema (2018), undergraduate students have to read books other than textbooks to improve thinking and other cognitive activities. However, Sotiloye and Bodunde (2018) averred that undergraduate students read less as they get themselves involved in watching television and playing of electronic games while some surf the internet for movies and videos and abandon information materials. Similarly, Otache (2020) examined the reading culture among students in tertiary institutions in Nigeria. The major findings affirmed that the causes of poor reading culture in Nigeria include amongst others the defective education system, reading language problem, lack of well-equipped or functional libraries in schools and low patronage of school libraries.

The concept of reading is of particular interest to libraries by virtue of the fact that libraries are major providers of information especially within the university environment. While the school educates undergraduate students through the help of teachers, the library offers information to aid classroom teaching and research. Danladi and Yohanna (2018) asserted that the library works in line with the parent institution to achieve a common goal. Unfortunately, Kolajo and Agbetuyi (2021) reported low usage of university libraries in Nigeria despite its' role in enabling the development of full potentials through the use of library resources and services. In a study by Asif and Yang (2021) 66% of the respondents claim that they read in order to pass exams; 40% claim to read because they think they should, additional 40% read because they are interested in a topic or subject,

while only 10% read because they think reading is fun. Itsekor and Nwokeoma (2017), in a similar study found that the most common use of the library by undergraduate students is for reading books and notes, followed by using the library for borrowing books, making photocopies and searching the library catalogue.

From the review, it can be deduced that the library is there for undergraduate students to read and pursue various academic goals. However, it was not evident from the review that undergraduate students use the technological advances while using the library, rather, they spend time on videos and games. It needs noting however, as pointed out by Keboh and Baro (2020) that emergence of e-resources has tremendously transformed information handling and management in academic environment in general, and university libraries in particular. E-resource are a wide variety of products ranging from e-periodicals, CD-ROMs, mailing list and databases, all of them having a common feature of being used and sometime modified by a computer.

Abbas and Song (2019) in their study on the accessibility and utilization of e-resources for research activities in Agricultural Research Institutes, found that e-theses, e-journals, e-books, e-manuscripts, e-newspapers, are the library e-resources available in the three libraries under study. Similarly, studies by Buba, Song, and Abdullahi (2021); Manjack, Dangani, and Fari (2019); Odede and Zawedde (2018); Tiemo (2017) found that the most available e-resources in Nigerian Universities are e-databases such as Journal Storage (JSTOR), AGORA, HINARI, EBSCO, Science Direct, OARE and MIT Open Courseware; e-journals, CD-ROM, OPAC (Online Public Access Catalogue), online indexes, e-books and e-references. Alkhafaji and Samea (2020) found that the Internet stand out to be the most highly used e-resource which serves as a gateway to other e-resources in the three libraries representing 392 (41.5%) responses, while e-books and e-journals follows with 165 (17.23%) and 125 (13.09%) respectively. The least responses are e-theses and dissertations which has a frequency of 18 (1.88%), this might be attributed to small number of postgraduate undergraduate students in the study.

From the review so far, it can be deduced that e-resources are those information resources that can only be accessed by the use of computers and other ICT devices. These materials may require the use of a peripheral device directly connected to a computer, for example, CD-ROM drive or a connection to computer network, for example, the Internet. And there are different types of e-resources such as Compact Disc Read Only Memory (CD-ROM), Internet, online public access catalogues (OPAC), e-books, e-journals and electronic index. Despite the various benefits of e-resources, there are a lot of challenges to the effective use of the resources. Hence, Kushwaha and Patel (2022) observed that there are various problems militating against the effective use of e-resources. Song, Buba and Song (2018) found that most respondents had no previous knowledge of e-resources, therefore experience and knowledge in using e-resources among undergraduate students seem to be limited. While Alzahrani (2019) found that a common problem faced by the users of e-resources is slow internet access. This may be why Alcober (2022) stated that for university libraries to deliver effective and efficient services to its clients, they must all have stable Internet connectivity in their libraries.

Similarly, Anyim (2021) found that 84.8% of the respondents indicated that they are not aware of the availability of the Internet and e-databases in their library while only 15.2% affirmed that

e-databases are available in the library. According to the study, the interview with the librarians and observation in libraries revealed that there were various types of e-resources in the libraries but the majority of the students under study were unaware of the availability. This corroborated the finding by Buba, Abubakar, and Lawal (2019) who concluded that there is lack of availability of e-resources in university libraries that forced researchers to rely on the available books and journals in the library. Chidiadi (2022); Kushwaha and Patel (2022); Moustapha (2021); Alkhafaji and Samea (2020); Abdullahi, Buba, and Mohammed (2020); Manjack, Dangani, and Fari (2019); Gautam and Sinha (2017) all found that the most recurring challenges to the use of e-resources to include, access control, personnel and workload, overlapping of coverage of same titles by providers, funding, slow speed of PCs, electricity failure, lack of support from IT, unwillingness of library staff for help, lack of knowledge of the existence of resources, lack of internet search skills, retrieval of too much irrelevant information, financial problem, poor training programme and excessive academic workload.

The review revealed that the most prominent impediments to the utilization of e-resources by undergraduate students includes but not limited to poor internet connectivity, erratic power supply, lack of technical knowhow of using the resources, and excessive workload of the undergraduate students.

4. Methodology

The Cross sectional survey method was used to carry out the research and the target population was the registered library undergraduate students of Federal University Dutse which totalled 2360 as at the time of collecting the data, out of which 10% (236) of the undergraduate students was sampled and were used for the research. A structured questionnaire was used as the instrument for collecting data for the study, where a total of 236 questionnaire were administered to the respondents and 119 copies were returned and found useful for the study (50.4%). The data collected were analysed on SPSS statistical software using descriptive and inferential statistics.

5. Findings and Discussion

The data collected for the study on the influence of e-resources on reading culture of undergraduate students in Federal University Dutse, is presented, analysed and interpreted in line with the objectives of the study. The decision rule for mean marks is:

- | | |
|------------------|--|
| 1.00-2.49 | Not Significant / Not Applicable / Rejected / Low Significant / Low Extent / Not Available / Rejected |
| 2.50-4.00 | Moderately Significant / High Extent / Available / Accepted / Highly Significant / Highly Available / Accepted |
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NOTE

VHE = Very High Extent

HE = High Extent

LE = Less Extent

NE = Non Applicable

- **Research Objective One:** To identify the e-resources available to undergraduate students

Table 1. E-resources available to undergraduate students

S/No	Types of e-resources	N	Mean	Std. Deviation	Decision
1	Audiotape	119	2.7395	1.02892	Available
2	CD- ROM	119	2.8655	.96484	Available
3	E-book	119	3.7731	.42059	Available
4	E-dictionaries	119	2.0084	.09167	Not Available
5	E-dissertation and theses	119	3.5798	.97855	Available
6	E-journal	119	4.0000	.00000	Available
7	E-magazines	119	2.3361	.47438	Not Available
8	E-mail	119	3.5630	1.03037	Available
9	E-reference	119	3.8235	.38283	Available
10	Full text database	119	4.0000	.00000	Available
11	Image collection	119	2.1176	.99300	Not Available
12	Online newspaper	119	2.2353	.64710	Not Available
13	Social media	119	3.0504	1.16334	Available
14	Videos	119	2.0000	.81303	Not Available

Table 1 represents the different types of e-resources generally available to undergraduate students of Federal University Dutse. The analysis revealed that all the respondents rated e-journals (mean=4.00), full text databases (mean=4.00), e-reference (mean=3.82) and e-books (mean=3.77) are readily available to the undergraduate students of Federal University Dutse. It was further revealed from the table that e-dissertations and theses (mean=3.58), e-mails (mean=3.56), social media (mean=3.05), CD-ROM (mean=2.87) and audiotape (mean=2.73) are also available to the undergraduate students in Federal University Dutse, because their mean marks are greater than 2.49 bench mark.

The analysis further revealed that e-magazines (mean=2.34), online newspapers (mean=2.24), image collection (mean=2.12), e-dictionary (mean=2.08) and videos (mean=2.00) are not available to the undergraduate students of Federal University Dutse. The result is in line with findings of Odede and Zawedde (2018) who found that the e-resources most available in Nigerian universities is full text databases.

- **Research Objective Two:** To find out the level of utilization of e-resources by the undergraduate students under study

Table 2. Mean Statistics of types of e-resources available

Descriptive statistics for total responses						
Item	Readily Available	Available	Not Available	Not Applicable	Mean	Decision
Mean of available e-resources	825 (49.51%)	147 (8.82%)	549 (32.95%)	145 (8.70%)	2.9376	Moderately Significant
Valid N (listwise)	1666					

The analysis in Table 2 represent the total mean descriptive statistics for total responses of the different types of e-resources available in Federal University Dutse. The analysis revealed that out of the 119 valid questionnaire analysed, which generated a total 1666 responses, where 825 (49.51%) responses were rated “Readily Available”, 147 (8.82%) responses were rated “Available”, 549 (32.95%) responses were rated “Not Available” while only 145 (8.70%) responses were rated “Not Applicable”. The analysis further shows that 58.33% of the total responses showed that the e-resources identified above are available in the university with a total mean mark of 2.94 which is moderately significant based on the decision rule of the study. This shows that e-resources are available (mean=2.94) to the undergraduate students of Federal University Dutse. The findings of the study are in contradiction with the conclusion of Buba, Abubakar, and Lawal (2019) that there is lack of availability of e-resources in Nigerian libraries.

- **Research Objective Three:** To assess the influence of the utilization of e-resources on reading culture of the undergraduate students under study

Table 3. Utilization of e-resources among the undergraduate students

S/No	Utilization of e-resources	VHE	HE	LE	NA	Mean	Decision
1	Audiotape	0	59	60	0	2.4958	Not Significant
2	CD- ROM	117	1	1	0	3.9748	Accepted
3	E-book	100	14	5	0	3.7983	Accepted
4	E-dictionaries	0	14	44	61	1.6050	Not Significant
5	E-dissertation and theses	76	17	23	3	3.3950	Accepted
6	E-journal	119	0	0	0	4.0000	Accepted
7	E-Magazines	0	23	71	25	1.9832	Not Significant
8	E-mail	105	14	0	0	3.8824	Accepted
9	E-reference	104	14	1	0	3.8655	Accepted
10	Full text database	119	0	0	0	4.0000	Accepted
11	Image collection	0	23	58	38	1.8739	Not Significant
12	Social media	119	0	0	0	4.0000	Accepted
13	Online newspaper	0	23	71	25	1.9580	Not Significant
14	Videos	0	0	49	70	1.4118	Not Significant

Table 3 represents the extent of utilization of e-resources by undergraduate students of Federal University Dutse. The analysis revealed that the respondents indicated Very High Extent utilization of e-journals (mean=4.00), full text database (mean=4.00) and social media (mean=4.00). The analysis further revealed that CD-ROM (mean=3.97), e-mail (mean=3.89), e-reference (mean=3.87), e-book (mean=3.80) and e-dissertation and theses were highly utilised e-resources by the undergraduate students. On the other hand, the analysis shows that audiotapes (mean=2.49), e-magazines (mean=1.98), online newspaper (mean=1.96), image collection (mean=1.87), e-dictionaries (mean=1.61) and videos (mean=1.41) are not significantly utilized e-resources by the undergraduate students. This corroborates the findings of Joshua and King (2020) which indicated that the most used e-resources are e-books and e-journals.

Table 4. Overall Mean statistics for Utilization of e-resources

Descriptive Statistics for Total Responses						
Item	Very High Extent	High Extent	Low Extent	Not Applicable	Mean	Decision
Extent of Utilization of e-resources	1201 (72.09%)	149 (8.94%)	241 (14.47%)	75 (4.50%)	3.0174	Highly Significant
Valid N (Total Response)	1666					

Table 4 shows the overall descriptive mean analysis of extent of utilization of e-resources by undergraduate students. The analysis revealed that of the 119 valid questionnaire analysed which generated a total of one thousand six hundred and sixty-six (1666) responses, there were 1201 (72.09%) responses which were rated “very high extent”, 149 (8.94%) responses were rated “high extent”, 241 (14.47%) responses were rated “low extent” while only 75 (4.50%) responses were rated “not applicable”. The analysis further reveals that about 81.03% of the total responses rated very high extent and high extent utilization of e-resources in the University, with a total mean mark of (mean=3.02) which is highly significant. This is also in agreement with the finding of Moustapha (2021) that students use different type of e-resources to satisfy their informational needs.

- **Research Objective Three:** To assess the influence of the utilization of e-resources on reading culture of the undergraduate students under study

Table 5 represents the analysis for the purpose of using e-resources by the undergraduate students of Federal University Dutse. The analysis revealed that all the respondents (119 responses, mean=4.00) indicated that they use e-resources for research purposes. It was also revealed from the analysis that undergraduate students utilise e-resources for convenient purpose (mean=3.67), use e-resources for social and personal reasons (mean=3.30), using e-resources to check for recent publications in their field (mean=3.30), using e-resources to submit assignments (mean=3.25), using e-resources to search for new topics (mean=3.17), using e-resources to write seminar, conference or exhibition (mean=3.05) and using e-resources to update knowledge and generate new ideas (mean=2.90) are the purposes for using e-resources in the university.

Table 5. The purpose of using e-resources by undergraduate students of Federal University Dutse

S/No	Item	VHE	HE	LE	NA	Mean	Decision
1	I use e-resources for research purposes	119	0	0	0	4.0000	Accept
2	I use e-resources to search for new topics	66	11	38	4	3.1681	Accept
3	I use e-resources for convenient purposes	94	11	14	0	3.6723	Accept
4	I use the e-resources to consult colleagues for discussion group	0	23	76	20	2.0252	Reject
5	I use e-resources for seminars, conferences or exhibitions	36	61	14	8	3.0504	Accept
6	I use e-resources to update my knowledge and generate new ideas	51	24	25	19	2.8992	Accept
7	I use e-resources to check for recent publications in my field	65	30	13	11	3.3025	Accept
8	I use e-resources to submit my assignments	81	25	0	13	3.2521	Accept
9	I use e-resources for social and personal reasons	83	0	25	11	3.3025	Accept
10	I use e-resources to communicate with friends and colleagues	0	46	59	14	2.2689	Reject

It was further revealed from the study that using e-resources to communicate with friends and colleagues (mean=2.27) and using the e-resources to consult colleagues for discussion group (mean=2.06) are insignificant results and hence rejected as purposes for using e-resources by the undergraduate students in Federal University Dutse. This is in line with findings of Chidiadi (2022) which revealed that in academia, they make use of e-resources for more than one purpose either in personal assignment or for the assistance of the undergraduate students who approached in their field of study.

Table 6. Overall Mean statistics of purpose of utilization

Descriptive Statistics of Total Responses						
Item	Very High Extent	High Extent	Low Extent	Not Applicable	Mean	Decision
Purpose of utilizing e-resources	530 (44.54%)	224 (18.82%)	309 (25.97%)	127 (10.67%)	2.9513	Moderately Significant
Valid N (Total Responses)	1190					

Table 6 above represent the overall mean statistics of purpose of utilizing e-resources by undergraduate students of Federal University Dutse, Jigawa State. From the table, the analysis revealed that the 119 valid questionnaires distributed generated a total one thousand one hundred and ninety (1190) responses analysed, 530 (44.54%) responses were rated “very high extent”, 224 (18.82%) responses were rated “high extent”, 309 (25.97%) responses were rated “low extent” and 127 (10.67%) responses were rated “not applicable”. The analysis further revealed that over 63.36% of the total respondents rated that there is high purpose of utilization of the e-resources. This signifies the

importance of the e-resources to the studies of the respondents in the university. The total mean of purpose of utilization (mean=3.09) is significant based on the decision rule of the study. This finding corroborates the work of Alcober (2022) who found that majority of their respondents were motivated to use e-resources for their research activities, and that e-resources facilitate faster, easier and convenient access to relevant information.

- **Research Objective Four:** To identify the purpose of using e-resources by the undergraduate students under study

Table 7. Influence of e-resources use on reading culture of undergraduate students

S/N	Item	VHE	HE	LE	NA	Mean	Decision
1	It awakens my interest in reading	109	10	0	0	3.9160	Accepted
2	It improves my reading comprehension	63	43	13	0	3.4202	Accepted
3	It expands my reading possibility	65	30	13	11	3.2521	Accepted
4	It makes reading more enjoyable	68	23	15	13	3.2269	Accepted
5	It reduces waste of time	34	5	70	10	2.5294	Accepted
6	It improves my reading skills	49	55	0	15	3.1597	Accepted
Valid N		119					

Table 7 represent the analysis of influence of utilizing e-resources for enhancing reading culture of undergraduate students. The analysis revealed that there is a significantly high influence of e-resources on the reading culture of undergraduate students. It shows that, it awakens their interest in reading (mean=3.92), it improves their reading comprehension (mean=3.42), it expands their reading possibility (mean=3.25), it makes reading more enjoyable (mean=3.22), it improves their reading skills (mean=3.16) and it reduces waste of time (mean=2.53) are all rated very high extent as influences of e-resources on enhancing reading culture. This is also in line with the findings by Alkhafaji and Samea (2020) which also revealed how e-resources influence reading culture of most of their respondents, where it revealed that it improved their reading habit; it has expanded their reading possibility; it made reading more enjoyable and it has improved their independent and lifelong reading skills.

Table 8. Overall Mean of influence of e-resources on enhancing reading culture

Descriptive Statistics for total responses						
Item	Very High Extent	High Extent	Low Extent	Not Applicable	Mean	Decision
Benefits derived from utilizing e-resources for enhancement of reading culture	366 (51.26%)	164 (22.97%)	113 (15.83%)	71 (9.94%)	3.1534	Highly Significant
Valid N (Total Response)	714					

Table 8 above represents the mean statistic of influence of e-resources on enhancing reading culture. The analysis shows that the 119 valid questionnaires analysed generated a total of seven hundred and fourteen (714) responses where, 366 (51.26%) responses were rated “very high extent”, 164 (22.97%) responses were rated “high extent”, 113 (15.83%) responses were rated “low extent” while only 95 (9.94%) responses were rated “not applicable”. The analysis further revealed that about 530 (74.23%) of the total responses were rated very high extent and high extent as influence of utilization of e-resources in the University with a total mean mark of 3.25. It is therefore apparent that e-resources is highly significant in influencing reading culture based on the decision rule of the study. This is also in line with the study by Chireac, Olivares, and Arbona (2022) which concluded that the new technological development had a great influence towards the reading culture of library users.

- **Research Objective Five:** To examine the factors affecting the use of e-resources by the undergraduate student under study

Table 9. Factors hindering the effective use of e-resources by undergraduate students

S/No	Item	VHE	HE	LE	NA	Mean	Decision
1	Lack of relevant and up-to-date online databases	0	0	49	70	1.4118	Not Significant
2	Lack of trained personnel to handle e-resources in the library	0	15	104	0	2.1261	Rejected
3	Inadequate infrastructure such as networking facilities, printing technologies	0	114	5	0	2.9580	Accepted
4	Limited access to computer terminals	10	70	39	0	2.7563	Accepted
5	High cost and poor quality of internet service providers	0	46	73	0	2.3866	Rejected
6	Insufficient communication from the library about availability of e-resources	0	63	56	0	2.5294	Accepted
7	Too much unwanted retrieved information	0	114	5	0	2.9580	Accepted
8	No access to full text of citations and/or abstracts which makes utilization ineffective	0	15	76	28	1.8908	Not Significant
9	Inability to seek, obtain and evaluate information	94	11	14	0	3.6723	Accept
10	It is time consuming to access and utilize the resources	0	59	60	0	2.4958	Rejected
11	Erratic power supply	109	10	0	0	3.9160	Accept
12	Lack of adequate skills to effectively explore the services of e-resources	0	14	44	61	1.6050	Not Significant
13	Excessive academic workload	0	23	76	20	2.0252	Reject
14	Some of the information are restricted and can only be subscribed	36	61	14	8	3.0504	Accept
Valid N (listwise)							119

Table 9 represents the analysis of factors hindering the effective use of e-resources. It revealed that erratic power supply (mean=3.92), inability to seek, obtain and evaluate information (mean=3.67) and some of the information are restricted and can only be subscribed (mean=3.05), much unwanted information and inadequate infrastructure such as networking and printing technologies (mean=2.95), limited access to computer terminals (mean=2.76) and insufficient communication from the library about e-resources (mean=2.53) affect the utilization of e-resources by students. While it is time consuming to access and utilize the resources (mean=2.50), high cost and poor quality of internet service providers (mean=2.39), lack of trained personnel to handle e-resources in the library (mean=2.13) and excessive academic workload (mean=2.03) were rejected. No access to full text of citations and/or abstracts which makes utilization ineffective (mean=1.90), lack of adequate skills to effectively explore the services of e-resources (mean=1.61) and lack of relevant and up-to-date online databases were insignificant as factors hindering utilization of e-resources by undergraduate students of Federal University Dutse. This finding is in line the studies of Okunlola (2021) who indicated lack of knowledge of availability of resources, poor internet connection and unstable power supply were the challenges towards utilizing the resources.

Table 10. Overall Mean of factors affecting utilization of e-resources

Descriptive Statistics of Total Responses						
Item	Very High Extent	High Extent	Low Extent	Not Applicable	Mean	Decision
Factors affecting utilization of e-resources	368 (20.62%)	615 (34.45%)	615 (34.45%)	187 (10.48%)	2.6521	Significant
Valid N (Total Responses)	1785					

Table 10 represents the overall mean descriptive statistics of the factors affecting utilization of e-resources. The analysis of the 119 valid questionnaires generated a total of 1785 responses, 368 (20.62%) of the respondents indicated very high extent, while 615 (34.5%) indicated high extent and another 615 (34.5%) indicated low extent. Not applicable recorded the lowest responses with 187 (10.84%) responses. The analysis further showed that over half (55.07%) of the total responses rated very high extent and high extent to the factors affecting the utilization of e-resources by undergraduate students. The mean mark (2.65) is significant based on the decision rule of the study. The findings support that of Buba, Song and Abdullahi (2021) that, although e-resources hold great potentials in supporting and augmenting existing educational programmes, there are various problems militating against its effective use.

Hypothesis

H_{0.1}. There is no statistically significant correlation between utilization of e-resources and reading culture of undergraduate students.

Table 11. Regression Analysis of Utilization and influence of e-resources

Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-5.325	.680		-7.825	.000
	Utilization of e-resources by undergraduate students	2.442	.186	.772	13.143	.000

a. Influence of e-resources on enhancing reading culture

Table 11 represents the linear regression analysis of the utilization of e-resources and influence of e-resources on enhancing reading culture. It is important to utilize regression analysis in order to identify which variable have impact on the subject matter. The analysis on the table revealed that the correlation is significant with 0.01 level of confidence and is positive with $r = 0.772$ correlation coefficient. That shows a very strong significant relationship between the utilization of e-resources and its influence on the reading culture of undergraduate students. The analysis shows that a unit increase in utilization of e-resources will lead to more enhanced reading culture by the undergraduate students.

The table further revealed the unstandardized Beta (B) column value of 2.442 which is the slope of line of interception and an indicator of the level of effect the predictor independent variable (extent of utilization of e-resources) has on the dependent variable (reading culture). In practice it means; an average increase in utilization of e-resources will lead to 2.442 increases in reading culture. A 5% increase in utilization of e-resources will lead to (5×2.442) 12 unit's increase in the reading culture of undergraduate students.

6. Accepting or Rejecting the Null Hypothesis Two of the Study

According to Bornmann and Leydesdoff (2013) if the P value significant level is less than 0.05 ($p < .05$) then the Null Hypothesis of the study will be rejected while if the P value significant level is greater than 0.05 ($p > .05$) the Null Hypothesis of the study will be retained. Therefore, according to the analysis presented on Table 11, the H_0 is rejected ($p < 0.05$ i.e. Sig = 0.00), because there is sufficient evidence of significant correlation between utilization of e-resources and reading culture. The variations in the mean of utilization and influence of e-resources on enhancing reading culture are not happening by chance but as a result of the influence and intervention of the independent variable "utilization of e-resources". Therefore, there is a statistically significant correlation between utilization of e-resources and the reading culture of undergraduate students.

7. Implication of the study

The implication of this study is that utilization of e-resources has significant influence on enhancing reading culture. The more undergraduate students utilize e-resources, the better their reading culture. The study also noted that the e-dictionaries (mean=2.00) and online newspaper (mean=2.23) as major e-resources for educational and recreational purposes are not readily available. It was also established from the study that although undergraduate students utilize e-resources for research purposes, they also utilize e-resources for convenient purposes. Hence, e-resources is essential in influencing reading culture of undergraduate student.

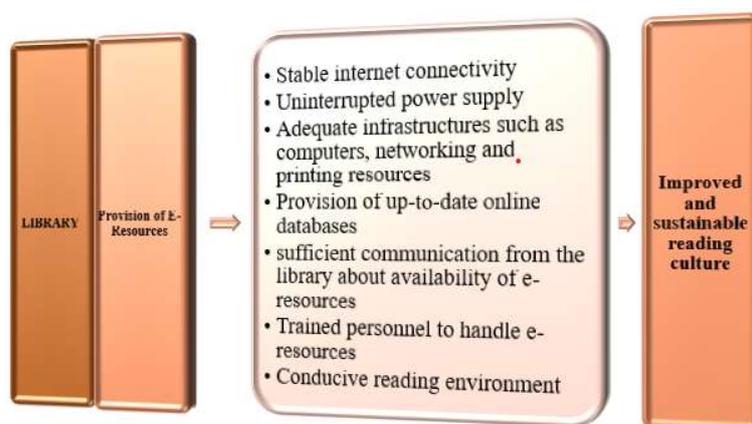


Fig. 1. Model of sustainable reading culture

The study proposed a model for improved and sustainable reading culture of undergraduate students, using e-resources provided by libraries. The model identified that, the library provides e-resources which is easy to access and always readily available. So, with the provision of stable internet connectivity, uninterrupted power supply, adequate infrastructures such as computers, networking and printing resources, provision of up-to-date online databases, sufficient communication from the library about availability of e-resources, Trained personnel to handle e-resources and conducive reading environment in the library, there will be sustained and improved reading culture.

8. Conclusions

The study basically aimed at investigating the influence of e-resources on the reading culture of undergraduate students in Federal University Dutse. Following the results obtained and analysis of the data generated, the general conclusion of the research is that utilization of e-resources is a necessary vehicle that adequately influences the reading culture of undergraduate students. Specifically, the following conclusions were arrived at:

The study concluded that the major relevant types of e-resources such as e-books, e-journals,

and e-databases are readily available and are highly utilized by undergraduate students in Federal University Dutse. The study also concluded that e-dictionaries and online newspapers are not significantly utilized by the undergraduate students. It is also concluded from the study that utilization of e-resources influence reading culture of undergraduate students in Federal University Dutse.

The study further concluded that the problem of erratic power supply and inability to seek, obtain and evaluate information are the major hindrances to the utilization of e-resources by undergraduate students in Federal University Dutse. The study finally concluded that availability and utilization of e-resources have positive significant correlations with the dependent variable of reading culture in Federal University Dutse. The more the level of utilization of e-resources the better state of reading culture of undergraduate students.

9. Recommendations

The following recommendations were made based on the findings of the study:

1. There should be more awareness on the use of e-dictionaries and online newspapers, and the few undergraduate students that do not use e-journals, databases and social media should be encouraged to use it. This will enhance their reading culture and at the same time improve their academic achievement.
2. The undergraduate students should also be advised by the librarians to read not just for academic purpose alone, but to read to increase their reading habit by reading both educational and recreational e-resources in order to be conversant with what is happening in the society.
3. Awareness program and constant training should be organised for the undergraduate students on how to access and use e-resources in the university library.
4. The University management should provide better internet facilities for undergraduate students, this will enhance effective reading habit among undergraduate students.

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