Assessing The Factors Affecting Effective Utilization Of E-Library Resources Among Staff And Students Of Jigawa State College Of Education Gumel, Nigeria

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Abstract: The management of Jigawa State College of Education had made several efforts to educate both staff and students on the importance of using e-library resources. In the face of all the efforts, the utilization of the college e-library resource by the students and staff is still low. This study investigated the factor that affect the effective utilization of e-library resources among staff and students of Jigawa State College of Education, Gumel, Nigeria. The objective of the study is to examine human factors that affect the utilization of e-library resources in Jigawa State College of Education, Gumel. The study employs Descriptive Survey, both for quantitative and qualitative data collection. The target population was 9,063 participants and the sample size was 365 respondents. The main research instrument is questionnaires, discussion as well as Key informant interviews. Quantitative data collected was analyzed using SPSS while qualitative data was also analyzed using thematic method. The study found that the human factors affecting the utilization of e-library resources include; user awareness and willingness to use e-library resources and lack of computer skills. With regards to the enhancement of utilization of e-resources in the College, it was revealed that measures such as capacity building and proper orientation for staff and students, stable power supply and dedicated internet connections, provision of sufficient resources and so on were believed to be potential utilization and improvement measures according to the respondents. This study has found that user awareness and willingness to use the e-resources among both staff and students were found to be satisfactory. The study concluded that human factors, affect the effective utilization of the e-library resources in the College. Eventually, this could affect teachers’ productivity and students’ academic performance. Therefore, the study recommends the following; provision of stable power supply and resources, capacity building training, provision of strong internet services, provision of integrated information system and provision of enough manpower etc.

Keywords: Factors, Effective utilisation, e-library resources, college of Education, Gumel.

I. INTRODUCTION

Globally, the use of electronic resources in the libraries began with the development of computer in 1950s which facilitated information generation and dissemination in the United States and later spread to Europe and Asia (Adeniji and Babalola, 2015). Thus the development has posed challenges to libraries and information institutions in their attempt to meet the information needs of the user in the digital era. Libraries are now investing heavily in electronic resources especially academic libraries where users are exposed to various electronic resources to enhance their academic
performance. This development is noticeable in the developed nations of the world like Africa, and other developing countries are still struggling to bridge the digital gap that is preventing them from the full benefits of the electronic era (Adesanya and Idogwu, 2015). It is noted that effective utilization of e-library resources enhance digital conversion which can increase accessibility to users and advance availability to individuals who may not be customary clients of a library, due to geographic location or organizational link (Adesanya et al., 2015).

According to Johnson, Evensen, Gelfand, Lammers, Sipe, and Zilper, (2012) an electronic library is a particular library with a collection of digital objects which includes video, audio and text materials, which is stored as electronic media formats along with the resources for organizing, storing, and retrieving the files and media in the library. The e-library can vary immensely in size and scope, and can be maintained by individuals, organizations, or affiliates. It may be housed within an established physical library building in an academic institution (Witten and Bainbridge, 2014).

Generally, the university libraries objectives are to support academic activities in their university communities. To achieve these, relevant resources needs to be put in place to satisfy the learning, teaching and research needs of users. According to Ani and Edem, (2012) the resources utilized in the universities libraries were mostly in printed format made up of books, journals, magazines, dissertations/thesis, and other local materials. Nevertheless, in the recent development, libraries experienced new technological transformation identified as the electronic information era being powered by Information and Communication Technology (ICT). With its capabilities in promoting and improving information services, it has helped in provision of timely information in higher learning institutions in Nigeria, and has led to the establishment of digital libraries in Nigerian Universities and Colleges (Ani, 2013).

For instance, Gani and Magoi (2014) in their study on the emergence and development of digital libraries in Nigeria Universities with specific reference to Northwest Nigeria found that the benefits of the digital library included digitization of local content, wide access range of services and scholarly publishing. Their study also highlighted funding, infrastructure, and technology as challenges facing the application of digital libraries in northwest Universities and concludes that, though they are faced with numerous challenges, however, the university libraries could gradually overcome such challenges in the course of time especially through library collaboration.

BACKGROUND TO THE STUDY

Library is the heart of the educational enterprises, and also the reservoir of knowledge communicated through information resources (Adigun, Ojo, Salvador- Olayokun, Yewande, Abdul Zoeex, and Babatunde, 2011). Information technology transformed the entire domain of the library, such as techniques, resources and services. A few years ago, a significant revolution has been noticed in academic library, especially in electronic library regarding policy formation, acquisition, and practice. Omeluzor, and Akinwoye (2016) affirms that electronic information resources and services are acquired in libraries, to complement existing library resources to reduce pressure on print sources. They also added that, the advantage of electronic library resources is that they can be duplicated, manipulated, copied, printed, shared and distributed among library users. The e-library was introduced to the library system worldwide because of the value placed on the availability of information. The increasing acceptance of the e-library might be due to the diverse materials that they contain (Omeluzor, and Akinwoye, 2016). The options for what is available in the e-library are virtually endless as well as becoming more boundless as technology advance, which offers a wide range of online service to their users (Tamil Selvan, Sevukan, Silverman, and Silva Kumar, 2013). These could be the reason why several higher institutions of learning are also in pursuit of this technological advancement so as not to be left out. Thus, this study assessed the factors affecting effective utilization of e-library resources by staff and students of Jigawa State College of education, Gumel.

STATEMENT OF THE PROBLEM

The Jigawa State College of Education Library subscribes to over five (5) e-resource packages which include: e-journals, e-newspapers, e-books, e-bibliographic database, Higher Education Research (HER, an offline e-resources book that covers a wide range of subjects) among others, Adeleke, Samuel, and Emeahara, (2016) pointed out that with e-library resources, staff and students can retrieve seemingly endless volumes of information from all over the globe in a short span of time.

The utilization of the college e-library resource by the students and staff was reported to be very low. The underutilization record of 2016 shows over 53% of the students were not efficiently utilizing the e-resources while only 35% of the teaching staff made use of e-library resources (Babandi, 2016). It implies that both the students and teaching staff utilization of e-library resources was inadequate.

The management of Jigawa State College of Education had made several efforts to educate both staff and students on the importance of using e-library resources. These efforts include conducting orientations and seminars where the newly admitted students and members of staff are enlightened on the availability of these resources in the College based on their subscription of over five (5) e-resource packages. Despite all the over mentioned efforts by the management, the utilization of the college e-library resource by the students and staff was still low. Therefore, this study aimed at assessing the factors affecting effective utilization of e-library resources among teaching staff and students of Jigawa State College of Education, Gumel, Nigeria.

II. MATERIALS AND METHODS

The study which studied the factors affecting effective utilization of e-library resources among staff and students of Jigawa state college of education Gumel made use of Descriptive Survey method involving mixed methods. It targeted a population of 8823 people including staff and...
students of the college with a sample size of 365 obtained through the Slovenes formular. Closed ended questionnaire, structured interview and target group discussion were the instruments used. Respondents were selected using Systematic random and purposive sampling techniques. All data collection procedures were self- administered while data was analysed in SPSS Version 20 using Descriptive statistics. The table below shows the sample size proportions.

### Distribution of the Population of Staff and Students in Jigawa State College of Education

<table>
<thead>
<tr>
<th>S/N</th>
<th>Schools</th>
<th>No. of Staff</th>
<th>No. of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>School of Education</td>
<td>31</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>School of Secondary Education Language Programme</td>
<td>44</td>
<td>1971</td>
</tr>
<tr>
<td>3.</td>
<td>School of Arts &amp; Social Science</td>
<td>49</td>
<td>2000</td>
</tr>
<tr>
<td>4.</td>
<td>School of Secondary Education Vocational &amp; Technical Programme</td>
<td>30</td>
<td>900</td>
</tr>
<tr>
<td>5.</td>
<td>School of Early Child Care &amp; Primary Education</td>
<td>14</td>
<td>891</td>
</tr>
<tr>
<td>7.</td>
<td>School of Adult, Non-Formal &amp; Special Education</td>
<td>10</td>
<td>1080</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Total</strong></td>
<td><strong>240</strong></td>
<td><strong>8,823</strong></td>
</tr>
</tbody>
</table>

**Source:** Field Study, 2019.

### III. RESULTS INTERPRETATION

#### Human factors affecting the utilization of e-library resources in the college

<table>
<thead>
<tr>
<th>Questions</th>
<th>SA (Strongly Agree)</th>
<th>A (Agree)</th>
<th>D (Disagree)</th>
<th>SD</th>
<th>Mean</th>
<th>Std</th>
</tr>
</thead>
<tbody>
<tr>
<td>User awareness about the e-library resources is very essential for effective utilization</td>
<td>120 (35.2%)</td>
<td>189 (55%)</td>
<td>10 (2.9%)</td>
<td>22 (6.5%)</td>
<td>3.19</td>
<td>0.777</td>
</tr>
<tr>
<td>User willingness in using the e-library resources play a significant role</td>
<td>96 (28.2%)</td>
<td>215 (63%)</td>
<td>17 (5%)</td>
<td>13 (3.8%)</td>
<td>3.16</td>
<td>0.679</td>
</tr>
</tbody>
</table>

#### Table 3: Students’ questionnaire responses on human factors affecting utilization of e-library resources (n=341)

<table>
<thead>
<tr>
<th>Questions</th>
<th>SA (Strongly Agree)</th>
<th>A (Agree)</th>
<th>D (Disagree)</th>
<th>SD</th>
<th>Mean</th>
<th>Std</th>
</tr>
</thead>
<tbody>
<tr>
<td>The e-library resources are user-friendly and easy to manipulate</td>
<td>38 (11.1%)</td>
<td>115 (33%)</td>
<td>90 (26.4%)</td>
<td>98 (28.7%)</td>
<td>2.27</td>
<td>0.999</td>
</tr>
<tr>
<td>Locating and sourcing of information is faster and easier on e-library resources than a conventional library</td>
<td>124 (36.2%)</td>
<td>215 (62%)</td>
<td>2 (0.6%)</td>
<td>0 (0.0%)</td>
<td>3.35</td>
<td>0.545</td>
</tr>
<tr>
<td>E-library resources are usually manipulated by more skilled user only</td>
<td>62 (18.2%)</td>
<td>151 (44%)</td>
<td>88 (25.8%)</td>
<td>40 (11.7%)</td>
<td>2.69</td>
<td>0.903</td>
</tr>
</tbody>
</table>

**Source:** Field study, 2019.

**Keys:** SA (Strongly Agree), A (Agree), D (Disagree), SD (Strongly Disagree)

Although some of the student respondents disagreed that user awareness and user willingness could influence utilization of e-resources, 35.2% strongly agreed with the question while others 55.4% agreed with it. A total of 28.2% of the respondents also strongly agreed that user willingness could influence the effective utilization of e-resources while 63.0% agreed with it. Thus, it can be said the respondents agreed with the two questions put to them with the mean and standard deviation (3.19 ± .777 and 3.16 ± .679). Although a good number of the respondents 26.4% disagreed, 28.7% strongly disagreed with the question that e-resources are user friendly, 11.1% strongly agreed, 33.7% agreed that the e-resources were user-friendly with mean and standard deviation (2.27± .999). Combined percentages of those who strongly agreed and those who agreed that locating and sourcing information is faster in e-library than in conventional library constitute (98.9%) indicated that the item got a wider acceptance from the respondents. However, 0.6% disagreed with the question put to them. Also agreed with the student respondents; strongly agreed constitutes 18.2%, and agree constituted 44.3% with mean and standard deviation (2.69 ± .903) was that those with more computer skills usually used the e-library resources. However, a good percentage of respondents 25.8% disagreed, 11.7% strongly disagreed, with mean and standard deviation (2.69±0.903).
User willingness in using the e-library resources play a significant role

| User willingness in using the e-library resources | 3(30%) | 7(70%) | 0(0%) | 0(0%) | 3.30 | 0.483 |

The e-library resources are user friendly and easy to manipulate

| The e-library resources are user friendly and easy to manipulate | 5(50%) | 5(50%) | 0(0%) | 0(0%) | 3.50 | 0.527 |

Locating and sourcing of information is faster and easier on e-library resources than conventional library

| Locating and sourcing of information is faster and easier on e-library resources than conventional library | 5(50%) | 5(50%) | 0(0%) | 0(0%) | 3.50 | 0.527 |

E-library resources are usually manipulated by more skilled user only

| E-library resources are usually manipulated by more skilled user only | 2(20%) | 6(60%) | 2(20%) | 0(0%) | 3.00 | 0.666 |

Average mean 3.38 0.544

Source: Field study, 2019.

Table 4: Staff questionnaire responses on human factors affecting utilization of e-library resources (n=10)

The above shows that 60% of the respondents strongly agreed while the remaining 40% agreed that user awareness was essential for effective utilization of e-resources with mean and standard deviation (3.60±0.516) while other 30% strongly agreed and 70% agreed that user willingness also plays vital role in the utilization of e-resources with mean and standard deviation (3.30±0.483). None of the respondents disagreed with the two questions put to them. Similarly, the respondents also agreed that the e-resources were user friendly 50% strongly agreed, 50% agreed, with mean and standard deviation (3.50±0.527). Locating and sourcing of information was also unanimously accepted by the respondents that e-library resources is faster and easier than the conventional library 50% strongly agreed, 50% agree, with mean and standard deviation (3.50±0.527). None of the respondents disagreed with the two questions put to them. Although 20% of the respondents disagreed that the skilled users usually manipulated the e-library, 20% of the respondents strongly agreed while 60% agreed with the question put to them with the mean and standard deviation (3.00±0.666).

In a qualitative survey, key informant interviews (KII) were asked the following question: How do you assess the awareness of e-library by staff and students in the College? Their responses were summarized as below:

Yes staff and students of the College are fully aware of the e-library resources in the College. Moreover, they do not utilize it frequently which calls for orientation programmes to sensitize them.

Awareness through library orientations and inductions. The main objective of awareness is to introduce the students to the physical plant of the library, its policies and procedures as well as its resources and services, furthermore, learners do not use the online library because they do not know the existence of the website there is need for the College to improve more on its orientations programme to both staff and students about the enormous importance of library website in teaching and learning activities.

I see that the level of awareness of the e-library resources among most of the students and some few teaching staff is low. So many of the students still prefer to go to the conventional library and use printed materials to seek for information about their studies, due to the non-awareness of its applications and simplicity.

Furthermore, the researcher asked the KII the following question: How do you assess the utilization of e-library resources by both the staff and students of the College? Their responses were summarised as below:

I believe the level of utilization of the e-library resources among staff and students is low. Despite the large number of students in the College, when one goes to the e-library section only very few users could be seen using it. Even among the teaching staff, the level of the utilization is not appreciable.

The e-library resources are being utilized by the staff and students in the College especially the teaching staff but not to the optimum because most often you hear staff and students complaining of not visiting the e-library section due to lack of basic computer skill.

Some students and teaching staff have a negative attitude towards using e-library resources, for the simple reason they are more familiar with the use of the conventional library, consider it easier than using e-library resources. And as you know, change is not an event it is in process.

Furthermore, Focus Group Discussion was also administered and integrated in an attempt to answer the first objective of the study. Both staff and student respondents were subjected to Focus Group discussions using the same questions. Hence, the first question asked the discussants was: what assistance do you need to enable you make use of the different e-resources in the library? Their responses were summarized as below:

Response to the question:

I think the best assistance I will need is that of orientation/skill on how to effectively use the e-library resources, because most of us are not computer literate, so for that we shy away from it.

The students do not waste time for using e-library resources, thus, this kind of students needs to be oriented and trained on the importance of learning by the use of the e-library resources.

So many teaching staff and students have limited computer skills to make effective use of the e-library resources thus, they need proper orientation and training in computer skills in order to enable them to make full utilize the e-library resources as expected of them.

In general, a summary of the responses of the participants in the focus group discussions with regards to the assistance they will require in order to make optimum use of the e-library resources showed that they need nothing more than orientation and training on how to use the e-library resources.
Furthermore, KIIIs were asked the following question: How is it easy to make use of the different e-resources in the library? Their responses were summarised as below:

**The e-library resources are not so difficult to use but require basic computer skills for operations.**

The majority of students in the College especially new students find it very difficult to use the e-library resources because of lack of basic computer skills. However, the e-library resources do not seem to be very difficult to use but we find it difficult to use simply because the majority of us are computer illiterates. He further stated that: 'The students and our colleagues need to be educated and oriented on the importance of e-library resources.'

The above responses indicate that the human factors affecting the use of e-library resources among the students and teaching staff in Jigawa State is lack of computer skills, fear, lack of awareness of the availability of the e-library resources, and lack of training on the use of e-library resources.

**COMPARISON OF QUESTIONNAIRE RESPONSES OF STAFF AND STUDENTS’ RESPONDENTS ON HUMAN FACTORS**

Comparison of staff and students’ responses in respect to human factors affecting utilization of e-library resources was done to assess the similarity and difference in the two responses put together. The motive behind this was to compare and evaluate the perceptions between the two sets of respondents understudied. Thus, the comparison results showed that an average of 96.0% of the staff agreed with all the questions put to them (Table 4.12) while an average of only 77.6% of the student respondents did agree with the questions put to them. The figure below shows the results of the comparison in diagrammatic form (Bar chart).

Figure 1: Comparing responses on human factors (Staff and Students)

![Bar chart](image)

**IV. DISCUSSIONS OF THE FINDINGS**

**HUMAN FACTORS AFFECTING THE UTILIZATION OF E-LIBRARY RESOURCES IN THE COLLEGE**

The first objective of the study was to examine the human factors that affect the utilization of e-library resources in Jigawa State College of Education, Gumel, Nigeria. The findings obtained from questionnaire responses as well as key informant interview (KII), and Focus Group Discussions with the student respondents indicated that majority of them agreed that user awareness, user willingness and ease of locating information were vital human factors that could affect the effective utilization of e-library resources in the College. However, some of the respondents 55.1% disagreed with the questions that the e-library resources were user friendly and easy to manipulate. On the other hand 62.5% agreed that more skilled users manipulated the e-library resources. As regard to staff responses to this objective, about 96% of the respondents agreed with the fact that user willingness and awareness as well as e-library resources friendliness, and ease of locating and sourcing of information were essential human factors that influenced effective utilization of the e-library in the College.

The findings of the study concurred with those of Ahmad and Panda, (2013) who found that majority of the faculty members of Indian Institutes in Dubai International Academic City were aware of the existence and uses of electronic information resources. On a similar ground, Dolo-Ndlwana, (2013) found out that most of the academic and postgraduate students at Cape Peninsula University of Technology used electronic resources but few were not aware of its existence. In the same vein, Paulina’s et al., (2014) study on awareness of faculty’s electronic resources and online academic data bases found out that faculty members depended highly on online electronic resources for their support of teaching. However, patronage of the library’s online academic databases was very low. This was largely because faculty members were either not aware of the existence of these databases or were not aware that the library had subscription to these databases. This implies that lack of awareness of e-library resources lead to less utilization.

In addition, Kwasdzo (2015) conducted a study on awareness and usage of electronic database (e-database) in Geography and Resource Development Information Studies for Graduate Students in the University of Ghana and found out that the students were aware of the availability of subscribed databases. However, awareness level was generally higher than usage. This suggests that awareness may only be a necessary condition but not sufficient for the use of Library resources. In a similar study, Akpojotor (2016) found out that postgraduate students of library and information science were quite aware and highly use electronic information resources. This can be said to imply that, the level of utilization of e-library resources is very much dependent on level of awareness of the e-resources.

However, concerning the level of utilization of the e-library resources among the staff and students, it was gathered from the interviews that users of the e-library resources find it very difficult to use the e-library because they lack the required skills to do so. Besides, the orientation and induction programs were dying out due to laxity and lack of seriousness from staff and students. This could also be a limiting factor towards the effective utilization of the e-resources in the college. The study found that many of the students and some staff still prefer to go to the conventional library and use printed materials to seek for information pertaining to their studies. From the finding of this study, most staff and students complained of not visiting the e-library section due to lack of basic computer skills. The study found that the students fear to use computer to avoid being laughed at because they have limited computer skills. For this reason some of the students
do not waste time for using the so called e-library resources. So there is need for the Jigawa State College of Education Library to improve more on its orientation and training on how to use the e-library resources.

V. CONCLUSION

Conclusively, all the respondents agreed that user awareness and willingness were essential factors for effective utilization of e-resources while it was also found that user awareness and willingness of the e-library among both staff and students were satisfactory. Hence, the possibility of making good use of the e-library can be guaranteed based on this finding which shows that user awareness and willingness of e-library were found to be good. Utilization was also found to be commendable. However, most of the users were found to lack the required basic skills to use the e-library resources. This could hamper or militate against effective utilization of the e-library resources among both staff and students.

VI. RECOMMENDATIONS

Based on the findings made by this study and the conclusion drawn, the following recommendations are hereby proffered:

✓ The students and staff should be educated on Computer skills and mandate all students to use the e-library resources in other to appreciate.

✓ The College Management should provide adequate manpower and upgrade facilities required by the e-library section. Alternative sources of power such as solar power should be provided to ensure stable power supply. Alternative internet service should also be provided for stable and reliable internet services in the e-library section. Library staff should be well trained to enable them manage efficiently the e-library resources.

REFERENCES


