Full Length Research

Use of E-Journals by Bio-Science Students at Kuvempu University: A Study

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The present study examined the use of e-journals by the Bio-Science students of Kuvempu University. A questionnaire was prepared to draw opinions from the users of e-journals. The responses were gathered from 100 users. The survey results provided information about the e-journals usage, purpose of use, benefits of using e-journals, influence of e-journals on individual academic efficiency, views regarding the unique features of e-journals, and problems faced by the users while accessing e-journals.

Keywords: ICT, Information Sources, E-Journals, Kuvempu University.


INTRODUCTION

Advances in Information and Communication Technology (ICT) over a decade have brought radical changes in the way information is gathered, stored, organized, accessed, retrieved, and consumed. The application of computers in information processing has helped in bringing out new and improved information products and services. E-journals, a major example of ICT application in information processing and dissemination have revolutionized the scholarly communication.

The main trait of e-journals is the ease in communication and retrieval of information stored on the databases. An e-journal database search for relevant content can be performed with much ease and the results can be quickly retrieved.

The increasing cost of printed journals, shrinking budgets, and increasing user expectation are some of the key causes that have contributed to the e-journals popularity. The user community of university library depends more on the journals. The university libraries have realized the important traits of e-journals and believe that the e-journals are the best solution for satisfying the information needs of its users. They also believe that the e-journals are the best possible answer for the problem related to storage of huge volumes of printed journals. Many university libraries are relatively building the e-journal collection along with the printed journals.

In recent years, the use of e-journals has become very prominent in the drive for making information and data available to users, especially students and research scholars. Therefore, this study has been conducted to find out the awareness and use of e-journals by the students of Bio-Science department at Kuvempu University. The study used questionnaire as a data
collection tool and a total of 120 questionnaires were distributed to the students of Bio-Science department. Among them, 100 questionnaires with reply were received back. The collected data has been analyzed using the SPSS (12.0) tool. The study also focused to find out the preference of access and to identify the areas in which the training is required for the students in using the e-journals.

LITERATURE REVIEW

Several research studies have been conducted on usage of e-journals. Tenner and Yang (2000) concluded from their study that Texas A&M faculty are cautiously optimistic about electronic journals but unwilling to forego print journals. Dillon and Hahn (2002) revealed from their study about increased level of adoption of e-journals among faculty, giving support to multiple formats for core disciplinary journals and the differing perceptions of various constituencies among the respondents. Llewellyn, Pellack, and Shonrock (2002) found that journals published exclusively in electronic format present an innovation in the way that scientific information is communicated to the research community. Borrego et.al (2007) concluded from their study that a high proportion of teaching and research staff are aware of the collection of electronic journals and that there is an increasing preference for the electronic to the detriment of the printed form. Dhingra and Mahajan (2007) highlighted the level of usage of the available electronic journals. Bharati and Zaidi (2008) pointed out the importance of electronic resources and significant role of UGC-Infonet for the research and academic community in the present environment. Singh (2009) research results showed a growing interest in online journals among the users at Faculty of Science, BHU. Nicholas et.al (2010) found from their studies that the academic journals have become central to all disciplines and that the e-form is the prime means of access. Kumar (2013) had conducted a study to access the use of e-journals in the discipline of life science in Kurukshetra University, India. It was found that 89.24% of the respondents were aware of e-journals. He suggested improvements in library network speed and organization of training programs for the upcoming information professionals.

OBJECTIVES OF THE STUDY

The study is conducted with the following objectives:

- To find out the awareness and use of e-journals by the students of Bio-Science department.
- To study the purpose and frequency of e-journals usage.
- To know the benefits of e-journals over printed journals.
- To identify the problems encountered by the students while accessing e-journals.
- To identify the training areas in e-journals usage.
- To suggest users the ways for optimum utilization of e-journals.

DISCUSSIONS AND RESULTS

The data for the study was collected by distributing the questionnaires among the students of the Bio-Science department. The collected data is systematically analyzed based on the objectives and is interpreted in the form of following tables and graphs.

Table 1 provides the gender distribution of respondents. Among the 100 respondents, 38 were male and 62 were female.

Table 2 is respondents’ self-analysis details related to the level of computer literacy. Major portion (63%) of respondents’ feel that they are average followed by (23%) group who feel that they hold above average skills. 6% of respondents rated themselves as beginners.

Table 3 shows the awareness of e-journals among the respondents. A positive indicator that we found during the study was that all the respondents were aware of the e-journals.

While all the respondents were aware of the e-journals, but majority (53%) of them rate themselves as beginners in accessing e-journals. 29% of respondents found themselves technically good in accessing the e-journals (Table 4).

The majority of respondents learnt the skills of accessing e-journals from friends (41%) and through self-trial and error method (34%). It is significant to note that only around one-quarter (27%) of respondents learnt the skills through library orientation. Only 4% have learnt the skills by approaching the library staff (Table 5).

Majority (65%) of respondents rarely used the e-journals. The monthly (11%) and weekly (17%) access to e-journals were also found low (Table 6).

University campus (50%) and library (40%) were the two places widely used by the respondents for accessing the e-journals. It is surprising to note that only 3% accessed the e-journals from the computer lab (Table 7).

The maximum (59%) use of e-journals is for project & dissertation followed by 36% of respondents using it for preparing notes. Only 16% of them used e-journals for research activities whereas few of them (7%) used e-journals for writing articles (Table 8).

The major reasons for accessing the e-journals was for latest formation (67%) and for colorful and animated illustrations (20%). 10% used for statistical data and the same percentage of respondents used for audio and video content (Table 9).

44 % of the respondents feel that the e-journals access helps in saving the time. 24% feel that they can access anytime and for any length, while the same percentage of
respondents feel that accessing e-journals does not cost them as many journals are being subscribed by the university library. Only 22% feel that the e-journals access is easy and user-friendly (Table 10).

As reported earlier, all the respondents were aware of the e-journals. And a majority of them consider e-journals as important (63%) and of high importance (24%). A very small percentage (5%) of respondents considers them of
Table 7: E-Journals - Access Points

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Location</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>University Campus</td>
<td>Yes: 50% No: 50%</td>
</tr>
<tr>
<td>2</td>
<td>Library</td>
<td>Yes: 40% No: 60%</td>
</tr>
<tr>
<td>3</td>
<td>Dept. Computer Lab</td>
<td>Yes: 3% No: 97%</td>
</tr>
<tr>
<td>4</td>
<td>Home</td>
<td>Yes: 13% No: 87%</td>
</tr>
</tbody>
</table>

Table 8: E-Journals – Usage Purpose

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Purpose</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Preparing notes</td>
<td>Yes: 36% No: 64%</td>
</tr>
<tr>
<td>2</td>
<td>Writing articles</td>
<td>Yes: 7% No: 93%</td>
</tr>
<tr>
<td>3</td>
<td>Project &amp; dissertation</td>
<td>Yes: 59% No: 41%</td>
</tr>
<tr>
<td>4</td>
<td>Research purpose</td>
<td>Yes: 16% No: 84%</td>
</tr>
<tr>
<td>5</td>
<td>General awareness</td>
<td>Yes: 11% No: 89%</td>
</tr>
<tr>
<td>6</td>
<td>Preparing for competitive examination</td>
<td>Yes: 5% No: 95%</td>
</tr>
</tbody>
</table>

Table 9: Reasons for Using E-Journals

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Reasons</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Most latest information</td>
<td>Yes: 67% No: 33%</td>
</tr>
<tr>
<td>2</td>
<td>Colorful and animated illustration</td>
<td>Yes: 20% No: 80%</td>
</tr>
<tr>
<td>3</td>
<td>Statistical data</td>
<td>Yes: 10% No: 90%</td>
</tr>
<tr>
<td>4</td>
<td>Audio and video content</td>
<td>Yes: 10% No: 90%</td>
</tr>
</tbody>
</table>

Table 10: Benefits of Accessing E-Journals

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Benefits of Accessing E-Journals</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Saves time</td>
<td>Yes: 44% No: 56%</td>
</tr>
<tr>
<td>2</td>
<td>User friendly</td>
<td>Yes: 22% No: 78%</td>
</tr>
<tr>
<td>3</td>
<td>No time limit for accessing</td>
<td>Yes: 24% No: 76%</td>
</tr>
<tr>
<td>4</td>
<td>No fee</td>
<td>Yes: 24% No: 76%</td>
</tr>
<tr>
<td>5</td>
<td>User independence</td>
<td>Yes: 16% No: 84%</td>
</tr>
</tbody>
</table>

Table 11: Importance of E-Journals

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Importance of E-journals</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High importance</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>Importance</td>
<td>63</td>
<td>63</td>
</tr>
<tr>
<td>3</td>
<td>Low importance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Don’t Know</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The respondents were asked to indicate the barriers in accessing e-journals. Although, the university has a high-broadband facility all over its campus, the respondents reported the Internet related issues such as limited connectivity (36%) and slow speed (37%) as barriers for accessing the e-journals. 14% were unable to locate the e-journals as the web address they entered reported non-availability or server not found. (Table 12)

Accessing journals in electronic version is quite different to that of printed version. In printed version, the flow is continuous and does not have filter, download,
reference management options etc. The respondents were asked whether they felt the need for training on e-journals. 72% respondents felt the need for the training (Table 13).

**FINDINGS OF THE STUDY**

Based on survey results, the following findings and suggestions have been put forth for optimum utilization of e-journals:

- In order to use e-journals, respondents should be familiar with the basic computer operation skills. When asked to rate themselves on computer literacy, 63% of respondents rated themselves as average.
- The positive indicator from the findings was that all the respondents were aware of e-journals.
- Although the respondents were familiar and had been using the e-journals, 53% of respondents were still beginners in e-journals accessing skills.
- 41% of respondents gained the knowledge of accessing e-journals from their friends. As less as 4% of respondents gained the knowledge of accessing from the library staff.
- Only 7% of respondents used e-journals on a daily basis and 65% of respondents used them occasionally.
- More than half of the respondents were accessing the e-journals in University campus which excludes classrooms, departments, and computer center in library. Only 3% of respondents are using department computer laboratory.
- 59% respondents are using e-journals for their project and dissertation work. 5% of respondents are using e-journals in their preparation for competitive examinations.
- 67% of respondents have an opinion that the latest and updated information can be found in e-journals. 10% of respondents feel the information in e-journal is communicated more effectively using the audio and video formats.
- 44% of respondents were of opinion that e-journals saves time when compared to printed journals, and 16% accessed e-journal due to user-friendly environment.
- 63% respondents realize that the e-journals are important in their studies.
- The Internet connectivity and bandwidth was a major problem for accessing e-journals. 36% of respondents faced the problem that resulted in slow opening of web pages.
- 72% respondents felt the need for training on searching journal articles.

**SUGGESTIONS FROM THE STUDY**

Based on the findings, we suggest the following action points:

- Apart being an active subscriber of UGC-INFONET, the library should subscribe to more number of e-journals required by its users which are not covered under the consortia.
- It should build its own collection of e-journals from famous publishers and provide access to the collection using its integrated library management system.
- Contrary for waiting for users to approach the library staff for issues related to e-journals, the library staff needs to approach the users for their requirements in

### Table 12: Barriers in Accessing E-Journals

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Drawbacks</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>1</td>
<td>Limited connectivity</td>
<td>36%</td>
</tr>
<tr>
<td>2</td>
<td>Frequent disconnectivity</td>
<td>3%</td>
</tr>
<tr>
<td>3</td>
<td>Slow speed</td>
<td>37%</td>
</tr>
<tr>
<td>4</td>
<td>URL not found</td>
<td>3%</td>
</tr>
<tr>
<td>5</td>
<td>Server not found</td>
<td>14%</td>
</tr>
<tr>
<td>6</td>
<td>Server busy</td>
<td>10%</td>
</tr>
<tr>
<td>7</td>
<td>System problems</td>
<td>8%</td>
</tr>
</tbody>
</table>

### Table 13: Need for Training on E-Journals

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Response</th>
<th>Respondents</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>72</td>
<td>72%</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>28</td>
<td>28%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>
CONCLUSION

In the world of digital technology, many students prefer information in the e-format that can be easily accessible at their convenience. The study has clearly indicated that the e-journals are highly useful for the research and academic communities. It has become there preferable choice for greater mobility and for quick retrieval of information. Although, the importance of e-journals has been reported by the respondents, the issues such as low or limited Internet connectivity, and difficulty in understanding the user interface has been reported. There still needs to be some initiatives to be taken in order to overcome these barriers.

The UGC has to play a significant role to assist the academic community in providing the latest information printed in e-journals through its e-journal consortia. To assist the academic community, the university library authorities must conduct the user awareness programs to make users realize the rich benefits of e-journals.

REFERENCES