

# **Impact Assessment of E-journal Usage in University Libraries of Bangladesh**



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Thesis submitted to the  
Department of Information Science and Library Management,  
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**Impact Assessment of E-journal Usage in University  
Libraries of Bangladesh**



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## **Certificate**

This is to certify that the thesis entitled “**Impact Assessment of E-journal Usage in University Libraries of Bangladesh**” submitted by Sabrina Aktar, Reg. No - 252 for the degree of Master of Philosophy (M.Phil) in Information Science and Library Management, University of Dhaka under my supervision and guidance and is worthy of examination.

**Dr. Md. Shiful Islam**

**Supervisor**

## **Declaration**

I hereby declare that the thesis entitled “**Impact Assessment of E-journal usage in university libraries of Bangladesh**” is my own work and to the best of my knowledge and belief such material as has been obtained from other sources is duly acknowledged in the thesis. The whole research work was conducted by me under the guidance and kind supervision of Dr. Md. Shiful Islam, Professor, Department of Information Science and Library Management, University of Dhaka. This thesis has not been previously submitted in partial or in full by me to any university or institution for the award of any degree or diploma.

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*Dedicated to:*

This work is dedicated to my son

*Md. Swab Samiur Khan*

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## **List of Abbreviations**

E-Journal	Electronic Journal
E-mail	Electronic Mail
E-Resource	Electronic Resources
PDF	Portable Document Format
HTML	Hyper Text Markup Language
UGC	University Grand Commission
DOAJ	Directory of Open Access Journals
CD	Compact Disc
WWW	World Wide Web
IT	Information Technology
ICT	Information Communication Technology
LIS	Library and Information Professionals
OPAC	Online Public Access Catalogue
IFLA	International Federation of Library Association
OA	Open Access
SPSS	Statistical Packages for Social Science
DUL	Dhaka University Library
BUETL	Bangladesh University of Engineering and Technology
CUETL	Chittagong University of Engineering and Technology
JNUL	Jagannath University Library
RUL	Rajshahi University Library
AAL	Ayesha Abed Library
EWUL	East West University Library
NSUL	North South University Library
IUTL	Islamic University of Technology
AUW	Asian University of Women Library

## **Abstract**

### **Purpose**

University library provides information and other knowledge resources to the research scholars and other users. E-journals are the vital resources for the researchers and scholars in the modern age. This study has made an attempt to assess the impact of e-journal usage in the university libraries of Bangladesh. E-journals are necessary resources for information seekers, e.g. researchers, faculty members, students and others. Sometimes the usage of e-journals and their level of satisfaction fully depends on the performance of the library. This study has been conducted for identifying present status, level of satisfaction, purpose, impact, problems and suggestions to overcome the existing problems.

### **Methodology**

In conducting this research the survey method was applied and a structured questionnaire was used to collect data and information. The respondents were academics and research students who are the frequent users of the e-journals. Both qualitative and quantitative data were collected in the survey. In the literature review section, a number of literatures have been reviewing, i.e. research reports, journal articles, books and conference papers on the different aspects of e-journals. A total of 120 questionnaires were distributed to 10 university library users to obtain feedback of e-journals and determine their conceptual issues, present status, purpose and impact of e-journals on academics. Among 120, we received 100 questionnaires and 50 faculty members and 50 research students. Responses to closed-ended questions in particular on 7-point Likert scales were analyzed using the descriptive analysis techniques of SPSS 16.0 and responses to other closed-ended questions were analyzed using general statistics.

## **Major findings**

The findings of the survey showed an outlook on the overall situation about e-journals perception of the academics and research students. Almost all respondents were interested about the e-journals and it was observed that faculty members used it frequently and by the long time. But maximum students were not using e-journals frequently and they didn't show strong reason for their limited use. Some of them were very much satisfied with e-journals services. We observed that many of the users, especially faculty members used e-journals from their home and other place of the university. The main purposes of using the e-journals as reported by the faculty members include research, education, professional achievement and current information. However, academics and research students reported the reasons of using e-journals for research, publishing research articles, education, course work assignment and completion of thesis. A maximum number of the respondents stated that their research skill is increased throughout using the scholarly journals. Almost all academics reported that the number of research articles is amazingly increasing after using e-journals which was the great impact of using e-journals.

## **Originality**

This study creates the possibility to the academics and researchers in their area of research and their own academic field. The results of the study will be helpful for the research scholars to create knowledge and awareness as well as improve the impact of e-journals on the research work.

**Keywords:** Electronic journals; Researcher; Academics; Research Students; University Library.



# Chapter-1

## Introduction

### **1.1 Preamble**

The Internet plays an essential role in meeting knowledge and information needs of the academic organizations since it creates potential to access a large amount of resources, such as current investigation results, from anywhere in the globe. It also facilitates researchers and university libraries in delivering resources to a wider audience in any place the world over the internet and a way to access the literature and maintain the result (Luambano and Nawe, 2004). Electronic journals (e-journals) are developing day after day. The developments are being taken place in the framework of the university libraries in journals' associated matters. This study deals with the impact assessment of e-journal usage in the university libraries of Bangladesh. The term e-journal is very ambiguous in nature and as such various terms like 'Virtual Journal', 'The Paperless Journal', 'E-series', 'E-Publishing', 'Web Journals', 'Electronic Periodicals' and the 'Online Journal' were coined, before the term electronic journal and e-journal came to light. E-journals have been in existence for so many years. E-journals appeared in the 1970s but gradually got popularized in the 1990s. In the modern world, e-journals appear to be the solution to many of the difficulties related to the normal print version. E-journal enables immediate access to articles by eliminating the lengthy publication and distribution process associated with paper journals (Kumar, 2017). Moreover, academics and research scholars use e-journals to up to date their lesson, course work assignment, research as well as avoiding duplication of efforts. Additionally, e-journals have included immense of information in the acquisition and enhanced benefits of the library, increased search to the scholarly articles and decreased requirement for reprography facilities as well as Document Delivery Services (Madhusudhan, 2010; and Chirra, 2009). This introductory chapter provides an outlook of this study. The background, significance,

scope, aims and objectives of the research, research questions, research design and methodology have also been discussed in this chapter. The definition of the terminologies used in the research and structure of the thesis are also conversed. This chapter concludes with a brief summary of the whole chapters providing an overall structure of the study.

## **1.2 Background**

E-journals are the greatest blessing of modern technology and communication. Most of the publication processes of e-journal are now done electronically, over the internet-submission, peer review, editing and hosting on the publisher's website. Any user having access to the Internet can now have access to e- journals, as publishers are able to deliver them directly to the users' desktops. Development of the ICT technology offer new capacities, which if fully exploited, would inevitably result in the divergence of e-journals from their paper counterparts, creating new models of scholarly communication. E-journals are convenient medium of access and the flexibility of the medium makes it possible to include far more information that is possible in a printed journal, for example, extensive reports, and giving access to complete sets of experiments results. (Woodward, 1998). Nowadays the print format is readily available in an electronic format that is easily accessible via the Internet. E-journals may be defined as any serial publication (such as journals, magazine, and newsletter) in digital format and available on CD-ROM, DVD, online systems and the internet. E-journals are often referred to interchangeably as "electronic publishing", "electronic serials", "online journals" and "electronic periodicals" (Liza, 2004).

E-journals were first introduced some years ago as possible means of revolutionizing the world of research journals. Significant concerns remains regarding the impermanence of materials in electronic formats and the use of innovative features of the electronically formatted material. It has taken some time for e-journals to



become integrated into the scientific information system, indexed by major services, and to appear in library catalogs, or to be cited by other researchers (Zaharah, 2004). According to Llewellyn (2002) journals that are published exclusively in electronic format present an innovation in the way that scientific information is communicated to the research community. The e-journals are defined here as “any journals that are available online, including both electronic only journals, and journals that are available both electronically and in print” (Smith, 2003). The definition stills hold true. Any journal produced, published, distributed and received via an electronic medium is considered an e-journal (Zainab, et. al., 2000). E-journals have become a major part of the resources for the purpose of research. Researchers and users are searching e-journals from the other areas of the university for their research needs and e-journals fulfill the demand of users to have an access to the resources. Various search techniques are the most popular ways to access for the resources. It is expected by the users that orientation programme is significant for the effective access to e-journals. The most common problem faced by the users that there is problems in searching the databases and many of the users or researchers are not satisfied through the online facilities available in the university (Chirra and Rekha, 2009).

Thus, there is a great need to study the impact of e-journals usage in the university libraries of Bangladesh among academics and research students. However, this study has made an attempt to find out the present status, usage, purpose and impact of using e-journals. Further the study also examines challenges and put forward suggestions to overcome the existing problems about e-journals in the library. This study is conducted in some selected public and private university libraries in Bangladesh. By analyzing the results of those libraries, we can know the recent status of e-journals at public and private universities in Bangladesh. Today, e-journals have become a significant resources and information for the research activity. This study helps in knowing the importance and use of e-journals in comparison to printed version especially for the research society. Most of the researchers are searching e-

journals from other place of the university and their residence for their research work and e-journals plays an important role to access information easily and quickly. They used almost all leading publishers and popular advance search technique for their desired articles. The study shows that there is a need for user orientation for efficient searching and use of e-journals. The most common problem faced by the users is that there is difficulty in accessing e-journals for content search is difficult and many of the respondents are not satisfied with the present internet facilities available in the university library and they contribute some productive recommendations for developing the searching and accessing of e-journals.

### **1.3 Significance of the Study**

The study is significant because previous studies on e-journal have focused mainly on the awareness, access, usage, and applications and many more aspects in the university libraries of Bangladesh. A few of the studies were conducted in research institutions that cover the areas other than Bangladesh. No study has yet been conducted on impact assessment of e-journal usage in the university libraries of Bangladesh. There is a considerable dearth of knowledge of the pertinent area which underscores the need for undertaking such a study. This study would contribute to knowledge, as no work has been carried out in that area. The findings of the study may also help to show the conceptual issues, present status, purpose and impact of e-journal usage in the university libraries of Bangladesh.

### **1.4 Statement of the problem**

E-journals are published exclusively in electronic format present an innovation in the way that scholarly information is disseminated to the research community (Llewellyn, 2002). Researchers can access the information and resources anytime from anywhere in the world. Resources are readily available from users' desktop and users can search every time through the internet (Gray, 2001). The Research community using e-

journals for education, students and staffs throughout the entire world can derive surely unlimited information resources from anywhere in the globe instantly. The rate of online information resources are increasing day after day over the print format (Dalgeish and Hall, 2000). Therefore an attempt has been made to examine the conceptual issues, usage, experiences, purposes and impact of e-journal usage of academics (i.e. faculty members and research students). The statement about the research problems are noted below:

**First problem:** Although almost all university libraries in Bangladesh have adopted e-journals, no study has been conducted so far to assess the impact of e-journals usage in the university libraries of Bangladesh.

**Second problem:** Still now there has been a number of obstacles that prevent the effective use of these resources. There have not been ample surveys to identify those barriers and to overcome the problems.

**Third problem:** There is considerable lack of studies about the perceptions of academics (i.e. faculty members and students) regarding e-journals usage in the university libraries of Bangladesh.

### **1.5 Objectives of the study**

The aim of this study is to assess the impact of e-journal usage in university libraries of Bangladesh. The specific objectives are:

- I. To explore the present status of existing e-journal services in some selected university libraries of Bangladesh;
- II. To find out the purposes of using e-journals available in the libraries;
- III. To ascertain the impact of using e-journals of academics in the university

libraries;

IV. To identify major problems in providing e-journal services in the university libraries;

V. To offer suitable suggestions for the improvement of e-journal services in university libraries of Bangladesh.

## **1.6 Research Questions**

In order to comply with the aforementioned aims and objectives, this study has formulated one major research question and four subsidiary research questions.

### **One Major Research questions (MRQ)**

1. How have the e-journals impacted on academics?

### **Four Subsidiary Research Questions (SRQs)**

1. What is likely to be the present status of using e-journals in the university libraries of Bangladesh?
2. What are the purposes of using e-journals in the university libraries?
3. What are the main problems in providing e-journal services in the university libraries of Bangladesh?
4. What are likely to be the suggestions for the improvement of e-journal services in university libraries of Bangladesh?

## **1.7 Research Design and Methodology**

The survey was designed to assess the impact of online journal usage in the university libraries of Bangladesh. The respondents consist of academics (i.e. faculty members and research students) regarding e-journals in the university libraries of Bangladesh. Among the respondents, faculty members were 50 (Fifty) and research students were

50 (Fifty) in numbers. In order to explore the concept, present status, purpose, and impact of e-journals by the sample participants, a structured questionnaire was developed. The questionnaire consists of both the closed and open ended questions. Generally two types of data are required in a research work i.e. qualitative and quantitative data. The survey method was used for the collection of data with the help of the questionnaire. The respondents were selected based on their experiences and knowledge regarding e-journals. The data has been analyzed by using the Statistical Package for Social Sciences (SPSS) version 16.0 and Microsoft excel 2013.

### **1.8 Scope of the study**

This study has brought in a dramatic and an unprecedented revolution in the research and academic work in the university libraries of Bangladesh. At present there are 95 private and 40 public universities in Bangladesh (UGC-Website, 2017). The present study does not cover all the public and private university libraries of Bangladesh. It covers only five (5) public and five (5) private university libraries.

These university libraries are:

#### **Public University Libraries**

1. Dhaka University Library (DUL)
2. Bangladesh University of Engineering and Technology Library (BUET)
3. Chittagong University of Engineering and Technology Library (CUETL)
4. Rajshahi University Library (RUL)
5. Jagannath University Library (JUL)

#### **Private University Libraries**

1. Ayesha Abed Library (AAL)
2. North South University Library (NSUL)

3. East West University Library (EWUL)
4. Islamic University of Technology Library (IUBL)
5. Asian University for Women Library (AUWL)

## 1.9 Terminologies used in the research

**E-journal:** E-journal have been used in this study as any research publications in electronic format available on the internet helpful for the scholars and researchers.

E-journals are also called as electronic journals, online journals and so on.

**Academics:** Academics have been used in this study to denote a teacher or scholar and research student in a university or other institution of higher education.

**Research Student:** The term research students have been used to express the research scholars who are dedicated to research in a university of higher education.

**LIS professional:** LIS professionals have been used to mean work in the library to disseminate library services according to user's requirement. They should have knowledge of ICT and dynamic quality for maintaining better services to the end users.

**Researcher:** A researcher is the research scholars who conduct research on a topic or interested area.

**Full-text:** The full-text of a document provide the format choice to the users in a place of just a citation or abstract, it is typically available in pdf.

**E-mail:** E-mail means electronic mail distributed electronically basically text and attachment from one individual to another over the internet.

**Download:** The term download has been used in this study to mean copy of data from one computer system to another or other device, typically over the Internet.

**Subscribers:** Subscribers have been used to mean a payment made to achieve access or use to the specific resources or services.

**Search techniques:** Applying various techniques or strategies to find needed and relevant information from the ocean of information within a short time.

**Publishers:** An individual or company that publishes the resource contribution.

**Research article:** A **research article** presents the output of original research work, written by the author or any research scholars.

**Remote access:** Remote access is the use or access to library databases from outside of the library or access from user's convenient residence via proxy servers or other online authentication.

**Workshop:** Present any work or performance where some audience is involved in comprehensive conversation and activity on a particular topic or project.

**Respondents:** Respondents in this research refer to the academics, i.e. faculty members and research students who are the main users of library resources.

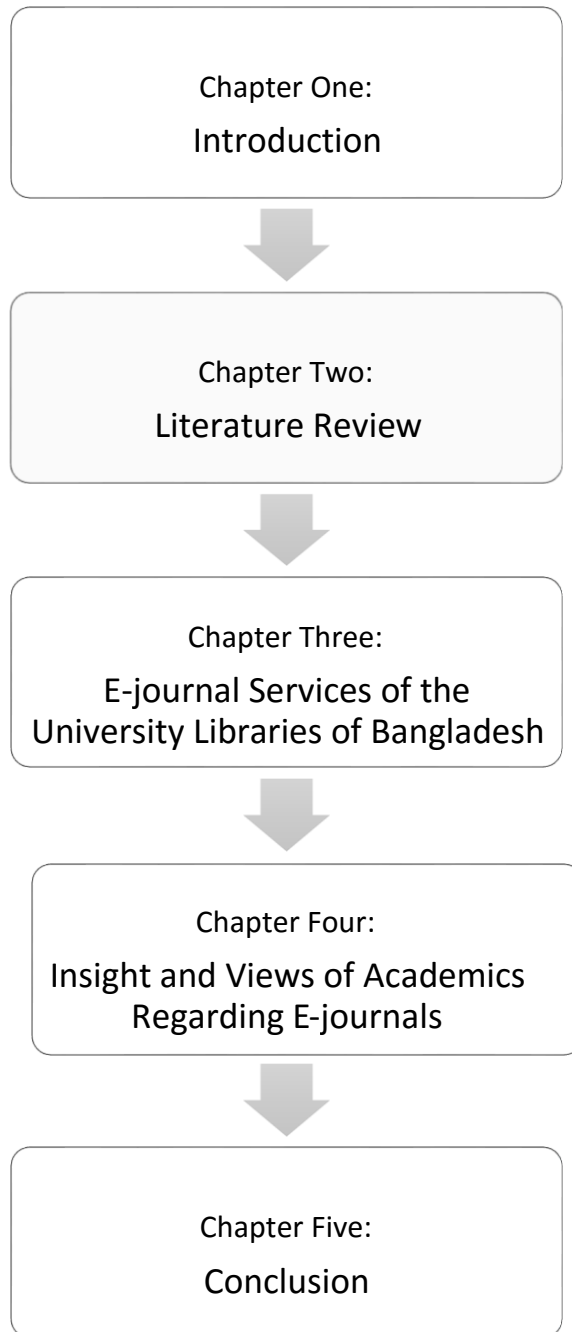
**University Library:** A University library is a library that is attached to a University, distribute all the academic needs of the faculty, students as well as staff.

**Training:** Training is an instruction, or improving peoples regarding skills, capability, knowledge, performance that is related to any specific thing.

**Awareness:** Awareness is the capability to directly learn and recognize, to gather or to be knowledgeable of events. More specifically, it is the proficiency to get a sense of something.

### 1.10 Structure of Thesis

The thesis is organized into five chapters as shown in figure 1.



**Figure 1. Structure of Thesis**



**Chapter 1:** Provides the research background, statement of the problem, significant of the problem, research aims and objectives, research questions, research design and methodology, scope as well as an overview of the thesis.

**Chapter 2:** Review the related literature covering the following streams: concept of e-journals, usage of e-journals, purpose of using e-journals, Impact of using ejournals, problems of using e-journals.

**Chapter 3:** Discusses the e-journals services of the surveyed libraries, as well as the list of publishers and rules for using e-journals in the university libraries of Bangladesh.

**Chapter 4:** Analyzes the data obtained from the respondents for e-journal concept, present status, purposes and impact as well as problems and suggestions regarding e-journal services in the university libraries of Bangladesh.

**Chapter 5:** Answers the research questions, presents the practical implications of the study for academics (i.e. faculty members and research students). It also discusses the limitations and the solutions to existing problems of the research, as well as directions for future research.

### **1.11 Summary**

The crush of information and communication technology has switched the process that knowledge is preserved and distributed and also changed the traditional systems of the libraries and its facilities. E-journal is one of the best products of modern information technology. Libraries have traditionally collected printed journals to provide access to researchers and the availability of the resources has a number of powerful impacts on the use of library resources (Kumar, 2017). This is the introductory chapter of the research. This chapter has presented the background, statement of the problem, significant, objectives, research questions, research design and methodology, scope, terminologies used in this study and overall structure of the research. The next Chapter will review the literature relevant to this research.

## **Chapter-2**

### **Literature Review**

#### **2.1 Introduction**

Review of literature is an essential part before conducting any research which gives necessary input to the research scholars to form the study on the selected area. To determine the study a number of literatures have been reviewed. A number of research reports, journal articles, books and conference papers on the different areas of e-journals have been published. The user and usage studies of e-journals appear in the literature in the late 1990s when a large number of journals had become widely available. These studies were mostly carried out among the academics and research students who were the most frequent users of e-journals. Searching of literature were conducted multiple times from the period of 2000-2017. The following literature review reported a number of existing related literature of different authors.

#### **2.2 Area of the study**

The literature reviewed for this study has been divided under the following streams:

1. Conceptual issues of e-journals
2. Access and usage of e-journals
3. Purpose of using e-journals
4. Impact of e-journals
5. Problems and barriers of using e-journals

### **2.3 Conceptual issues of e-journals**

Kumar, (2017) reported simple definition of e-journals as any journal or scholarly information available in digital form. E-journals may also be defined as those resources which can read on and print from any device alternatively. The term ejournal or online journal referred to journals and newsletters that are designed and allocated digitally and they may or may not have a printed version.

Malarvizhi and Sarangapani, (2015) stated that the electronic resource is a type of resource which needs computer access that gives an information about the collection of data, e-journals and other multimedia products. Most of them have been published with a prime interest of marketing it and available in the form of tape, CD ROM, internet and other electronic formats. Now a days academic libraries are collecting data through optical and magnetic media. One of the very important types of electronic resources is E-Journals. UGC-INFONET and INDEST consortium are two major initiatives stretching out their helping hands to cater the needs of library users to subscribe a reasonable fee to use these libraries and suggest some measures for the evaluation of electronic resources as well as the electronic services. This study gives a clear outlook of the changing trend of Libraries with emphasis on the skills necessary for the Academic Librarians to keep pace with the new digital environment.

Vasishta, (2013) expressed that the e-journals are improving as a new knowledge podium, their developmental movements desire another advertisement for better usage. Advertisement is the essential aspects in the significant use of a practical services considered as online journal. Academic libraries try to enhance to create awareness about the online journals and to act as a gateway to provide a customized interface for increased easy interface and access. The aim of this study is to examine the online services of the university library determine that libraries are importantly

promoting the online resources section to provide easy access to the e-journals available in the subscription list.

Sharma, (2009) stated online resources means journals, manuscripts, magazines, maps, research reports, theses paper, newspapers, e-mail, and reference information. The digital formation has been observed in the building of information resources and knowledge activities and procedures. The printed version of the resources is increasingly giving path to the digital format of resources.

Islam and Chowdhury, (2006) mentioned the information about electronic journals their subscribers, management issues and necessities from the Bangladesh perspective. This study explored the infrastructural facilities and the existing problems of libraries and information centers that are subscribing e-journals .The study also discussed the status of e-journals usage and accessibility in selected libraries and information centers, as well as advantages, limitations and prospects for e-journals in the context of this country. Finally they suggested that there is a need to establish a workable sustainable consortium among libraries and information institutions in Bangladesh. It also recommends that systematic efforts should be made urgently for the proper organization and management of e-journals. Correia and Neto, (2006) explored e-journal is one of the most effective resources of knowledge in the present digital era. The development of the internet, academics and researchers have realized the effectiveness of the modern tools and technologies as powerful means to share outputs and to get around barriers by full transfer of intellectual property rights from the author to the publisher, it is also a means of improving the slow turn-over of traditional publishing.

Afolabi, (2007) described e-journals are collections of virtual information sources i.e. e-journals and other knowledge and information by the publishers from different subjects and fields. Portable storage of the resources offer to the user's access to important resources without the online connection in the library. It is therefore cheap than digital resources as information could be accessed without the internet

connection. CD-ROM resources are the vital storage medium for analyzing the reference information of significantly useful resources and allow easy access to large amount of resources for the research purpose.

Joes and Pacios, (2005) described e-Journals are the resources whose full text is easily accessible and available on the internet, with both those that began in printed version but later integrated the digital form and those which were in online version from the beginning.

Zaharah, (2004) stated that e-journals were first suggested some years ago as possible means of revolutionizing the world of research journals. Significant concerns remains regarding the impermanence of materials in electronic formats and the use of innovative features of the electronically formatted material. It has taken some time for e-journals to become integrated into scientific information system, indexed by major services, appear in library catalogs, or to be cited by other researchers.

Llewellyn, (2002) explained e-journals are published completely in digital format present an innovation in the way that scholarly communication is shared to the research groups.

Smith, (2003) defined e-journals as any journals that is available on the internet, including both electronic only journals, and journals that are available both electronically and in print. Zainab et al., (2000) reported e-journal as any journal composed, published, disseminated and collected through electronically is called ejournal.

Landoni and Gibb, (2000) explored the resources that are available and accessible electronically and the result of transferring print materials to an electronic format, with the occasional inclusion of information that cannot be incorporated in print, such as music.

## 2.4 Access and usage of e-journals

Gladys, (2015) examined the level of awareness and usage of online resources by the graduate students at the University of Ghana. The survey showed that the majority of the students knew about the resources from the faculty and access the resources from the university library. The study revealed that many of the student does not aware about the services, low using level, lack of subject coverage in their interested area of knowledge. Further, some of the students were satisfied with the resources that enhanced their learning ability and research activities. Analyzing the outputs it is suggested that the service provider should raise the advertising of the resources and the research supervisors to both students and academics so that they would become recognizable about the resources and access the resources properly.

Vasishta, (2013) revealed that advertisement is the important part efficient use of the resources and information such as online journals. The study showed that the ejournals are promoting as a current knowledge resource, their advertisement needs activities which increase the number of users.

Schopfel and Leduc, (2012) showed the subscriptions to e-journals and usage statistics is not an easy process. The survey examined that the long tail of usage statistics and its relations with the subscription activities of the particular chosen articles and packages which is considered as big deals.

Baskaran, (2012) reported that most of academics are access to e-journals at weekly. Academics and research students were aware about UGC@Infonet accounted 103 (85.99%) and 17(14.16) respondents were not aware of this service. The study explored that the academics who responded to the study, 70 (59.1%) learned through guidance from their research guide 28 (56%). It is showed that the highest portion of

academics 21 (42%) use their department for accessing the e-journal, while 28 research students (40%) were accessing their e-journals in their department itself.

Nicholas, et.al. (2012) stated that journals have become essential to maximum subjects, and basically the e-form has become the best means of access. The results for history suggest that the old scholarly communication mantras (scientists primarily communicate through articles, historians through monographs) are rapidly breaking down. Indeed, all researchers seem addicted to journal content. Research without the e-journals now seems impossible, journals are considered as a researcher's soul. Gateway services, hugely attractive in science, are reconnecting the broken chain between publisher and user, they are the new information suppliers.

Ali and Nisha, (2011) revealed that more than sixty percent of the researchers in the library are using e-journals weekly for the aim of research. Printed version are suggested by the majority of users compared with online version. Keyword is the most popular search method for searching e-journals among research scholars, whereas the date of publication carries the least percentage among all the options. However, it is found that slow downloading of PDF files is the major problem that would decrease the using rate of e-journals.

Sharma, et. al., (2011) analyzed the ICT based development and dissemination of research using online journals for two universities belonging to different states in the western Himalayan region of India. The paper used an assessment period for the analysis of usage of e-journals of 36 months from 2007-2009. It demonstrated a relative comparison of the usage of e-journals within the framework of a logistic model and the S-curve. In the process, the status of internet users, from international level to national and university level, was also analyzed.

Suseela, (2011) highlighted the application of usage reports by the university library in decision making during renewals or subscriptions, i.e. the selection of databases, upgrading the versions, increasing licenses, cancellation of subscriptions, etc. In the context of subscribing to the latest e-journal databases in university libraries, different types of usage studies are discussed, including the recent application of usage log data or vendor reports. The genesis, standardization of usage reports and the significance of counter statistics in establishing the usefulness of the e-journals are described. The use of various electronic databases by the University of Hyderabad academic community is referred to according to these statistics/reports, mentioning the way in which it is helpful to university library in assessing their actual usage and usefulness. Gupta, (2011) reported that the researchers are more fascinated towards e-journals than print journals. However, they depend more on open-source materials than those available via INFONET. Researchers also mentioned the need for training or workshop in using e-journals and retrieving knowledge from the source time after time.

Thanuskodi and Ravi, (2011) examined that the sources of information available via the Internet are increasing exponentially, leading to steady increase in the use of Internet for education and research. Since past few years, free online information sources like e-journals, e-books, e-databases have increased considerably. Earlier, information and knowledge were passed by word of mouth or through manuscripts, and communication was a slow process. Today, it is passed from one individual to an infinite number of other users through a number of media and formats which makes rapid and widespread dissemination of information possible. This paper discusses utilisation of digital resources by faculty and research scholars of Manonmaniam Sundaranar University, Tirunelveli. Results show that 67.14 per cent of the faculty is familiar with the use of digital resources, and majority of these members are using digital resources for research purpose. Study also reveals that majority of the faculty members are learning the required skills for the usage of digital resources through self-study.



Rob & Lisa, (2010) expressed while the number of e-journals is growing steadily, these journals have not yet been accepted as legitimate publication outlets by the scholarly communities.

Stewart, (2010) explored that the use of e-journals to understand through students' personal narratives what factors (gender, living situation, classroom, social network) may have influenced their learning during the study abroad semester. Pretests on language measures were compared with posttest results, and information was gleaned from students' journal entries to assess possible relationships between a student's language gains and the development of his or her social identity during study abroad. In view of the call for more targeted assessment of program goals and learning outcomes by accrediting bodies in higher education, e-journals are proposed as a means of closely following students' progress and the factors that may be affecting their learning in the study abroad context.

Ganski, (2008) showed the accessibility of e-journals from the library websites. She used the qualitative content analysis method and found that half of the websites make e-journals available and are easily accessible through a quick navigational pathway.

Margam, (2008) showed that e-journals perform an increasingly significant role in research at the Department of Library and Information Science. Not only current e-journals are required, but research scholars and students need to be provided the use of significant electronic back runs as well. There is an ever increasing demand for subscriptions of more e-journal titles in LIS. There appears to be some need for academics to be provided with training in using e-journals. The area where the greatest need for training is around managing references.

Singh, et. al. (2008) the study found that the majority of users are aware of the availability of e-journals. 60% of respondents wanted to use the web version of

journals whereas a few want to use printed journals. Majority of respondents used e-journals for their research work. 70% of respondents took printout before using e-journals. It was found that users faced problems when using e-journals. They are also mentioned to take training to the e-resources.

Karasozen, et. al., (2007) stated that with the establishment of the Anatolian University Library Consortium (ANKOS), the number of accessible databases and usage of e-journals has increased rapidly. In this study, a comparison between the research activity in Turkey and electronic journal usage through the Anatolian University Library Consortium has been carried out in order to obtain an indication of a strong correlation between the number of published articles online and their usage. Voorbij and Ongering, (2006) concluded that electronic journals have become indispensable for scientists and social scientists, and have a profound effect on information behavior, varying from methods of becoming aware of relevant articles to benefits on research.

Colvin and Keene, (2004) presented in the UK a project designed to test a hypothesis that learning can be enhanced by promoting the use of e-journals was conducted by the business school at University College Worcester (UCW). Analysis of the results indicated that effective collaboration between academic and library staff, the timely embedding of e-journals into the learning process and associating it with the assessment process, can significantly enhance the learning of students. The data indicated an encouraging increase in journal usage for assignment research.

Obst, (2003) showed that print journals usage decreased by 22.3 in the first year and 30.2 percent in the second after the introduction of online journals. Journals published both in print and online lost 30.4 percent of their print usage within 2 years. Two clearly distinguishable grouping emerged: while with an academic press and Elsevier, e-journals of Blackwell, High Wire and Springer were used on average 14.6 times as

frequently as the corresponding print journals. Print titles not available online suffered a greater decline in usage compared with print /online journals.

## **2.5 Purpose of using e-journals**

Arshad and Ameen, (2017) showed that the academics made more frequent use of e-journals, bibliographic information and discussion with others for scholarly activities. E-journals were used predominantly for research-related activities rather than for teaching and instruction. Academics obtained e-journal articles primarily from open access sources, i.e. general search engines and Google Scholar as compared to subscribed and other sources of e-journal articles. Disciplinary differences were also found in academics' use patterns of e-journals. However, academics showed just satisfactory skills regarding use of advanced searching techniques and evaluation of the quality of e-journals.

Zia and Singh, (2017) revealed that the use of e-journals with the objective to ascertain their relevance in research and teaching in the discipline of Area Studies in Jawaharlal Nehru University (JNU). For undertaking this study, structured questionnaires were distributed among faculty and research scholars of select/three Area Studies Centres of JNU. The study brings out that e journals are getting popular for research and teaching in Area Studies. Another noteworthy aspect is that Consortia in Area Studies are gaining popularity amongst the specialists. The study indicates that if the users are imparted training through ILPs regularly, it would hone their skills and enable them to optimally use subscribed as well as open access databases.

Gaffar and Gunjal, (2016) investigated different aspects such as awareness, access and usage of e-journals among the research scholars at Biju Patnaik Central Library (BPCL) of National Institute of Technology (NIT) Rourkela, Odisha. The scope of this paper limits to: (i) E-Resources: Only e-Journal is considered among the various types of e-resources subscribed by library; (ii) Respondents: Only Research scholars are taken into consideration; and (iii) Questionnaires: 150 questionnaires collected from 700

research scholars. This paper also reveals the problems and suggests some solutions. The study shows that User Education Programmes (UEP), stable highspeed internet supply and adequate number of computers should be provided to ensure constant access that can effectively enhance the usage of ejournals.

Margam, (2014) showed that the level of use of e-journals was flat and the use of search engines was high among the faculty members. It was further revealed that, ejournals were mainly used by faculty members for research and academic purposes. It is however found that, unawareness and lack of search skills were the main obstacles which were militating against efficient access to e-journals. In order to develop and increase the optimum usage of e-journals by the faculty members, the study suggests the following: the institution should employ proactive marketing strategies such as the use of calendars, newsletters, posters, workshops/training, flyers and brochures, website; conduct training on the use of scholarly electronic journals databases and subscribe to relevant scholarly electronic journals.

Shethi and Panda, (2012) examined e-resources in collaboration with internet have become a sign of modern age being an invaluable tool for teaching, learning, and research. The library and information landscape has transformed with the onset of the digital era and today traditional libraries have changed their roles to serve as Knowledge Centers with priority on value added electronic information services. Academic and research institutions are focusing on how best they can facilitate research by canalizing specific information services which compliment as cuttingedge technology. With the advent of globalization in the realm of education, there has been an information explosion. Most of the science and technology, academic institutions as well as R & D Organizations have changed their contemporary outlooks towards the functions, operations and services. The traditional environment has been rapidly changing to an electronic one and the demand for Internet and e-resources among

the academic and research community has increased manifold over the years being the most popular source of undertaking research.

Nisha and Ali, (2012) found that most of the users are aware of e-journals and they are not only using them for building and updating their knowledge but also for collecting relevant material for their study and research purposes as information can be acquired expeditiously through e-journals. The main aim of consulting these journals is for retrieving information regarding research, publishing research papers and manuscripts, assignments, presentations, seminars, and largely to update their own knowledge. However, this study also reveals several inherent problems especially with the use of e-journals e.g. slow downloading as revealed by maximum IIT Delhi and Delhi University users. Other mechanical deficits like no availability of a particular issue, lack of training and limited access to terminals are also present while using e-journals.

Vasishta, (2011) revealed that the libraries are trying to build up useful websites but most of the institutes seem to be at primitive stage. Majority of the library websites have very simple and basic features. Overall, they fall short of their potential to act as a platform for delivering of e-journal services. There is huge scope for the betterment of the websites of the libraries under study. A few recommendations were made for the betterment of these websites in the form of enhancement in various aspects.

Shukla and Mishra, (2011) observed that the researchers were used e-resources at a great extent & they were blessed and satisfied from e-resources but they had complaints on slow connection. They also gave recommendations for uplifting slow connection problem.

Raza & Upadhyay, (2010) explored the level of awareness and use of e-journals by the researcher scholars. The study revealed that most of the research scholars are aware of using e-journals and most of the research scholars use them for their research work.

Most of the researchers were fully agreed with the usage of ejournal. Most of the researchers access e-journals from computer lab. It was found that lack of training is the main barriers in effective and proper utilization of ejournals.

Chirra, (2009) concluded that the e-journals have become a vital part of resources for research activity. This study helps in knowing the importance and use of e-journals in comparison to printed journals particularly for the research community. Most of the respondents are accessing e-journals from the Department Computer Labs for their research work and e-journals meet the instant desire of users to have an access to information. The study shows that there is need for user orientation for efficient searching of e-journals. The most common problem faced by the respondents is that there is difficulty in accessing full text and many of the respondents are not satisfied with the internet facilities available in Goa University and they provide some constructive suggestions for improving the accessing of ejournals.

Bisht, (2005) stated that the vast growth of e-journals across the world and growing technology and the resource sharing activities led to consortium. A library consortium is a collective activity of a group of libraries towards a common goal of resource sharing. Consortia based subscription to e-journals is a viable solution in order to increase the access of e journals across the sharing institutions at a lower cost. (Abdulla, 2005)E-journals offer many facilities, they add enormous resources to the collection; save libraries shelving space; satisfy users' expectations for user friendly, convenient and remote access; and provide powerful searching tools and features linking to more resources.

Liu, (2004) stated the arrival and proliferation of electronic resources and digital libraries have a number of significant impacts on the use of print resources and traditional libraries. This study explored the extent to which graduate students in a metropolitan university setting use print and electronic resources. Reading preferences and use of print and electronic resources vary among different disciplines.

Graduate students seem to expect a hybrid of print and electronic resources. They desire to meet their information needs through a mix of print and online resources, even though reasons for supplementing another type of resource differ. Circumstances that affect the selection of use between digital libraries and traditional libraries are also discussed.

Johnson and Tin, (2005) mentioned that a library website can function as an information gateway an entry point to a range online resources, with key components being the library catalogue and journal databases”.

Colvin and Keene, (2004) a project designed to test a hypothesis that learning can be enhanced by promoting the use of e-journals was conducted by the business school at University College Worcester (UCW). Analysis of the results indicated that effective collaboration between academic and library staff, the timely embedding of e-journals into the learning process and associating it with the assessment process, can significantly enhance the learning of students. The data indicated an encouraging increase in journal usage for assignment research.

Carol, (2003) regulated an analysis on use and users of e-resources. Here, he noticed that both faculty members and students use and prefer e-resources and most readily received them if the sources are found as convenient, relevant, and time saving to their natural workflow.

Montgomery and Sparks, (2002) studied at Drexel University, doctoral students appeared to be more dependent on the library copies of journals than faculty members who had a greater number of personal subscriptions.

Tenopir, et. al., (2003) founded that faculty members often preferred to browse the e-journals, whereas doctoral students in particular preferred to search. These findings are supported by similar observations made in other studies. Ashcroft and Watts

(2004) mentioned the potential advantages of e-books including easier access, speedy publications space-saving and lower costs. For any researcher, availability from a desktop computer means a significant increase in accessibility, particularly for those who do not work within easy reach of the library. Access is independent of time and place. Information is readily available from desktop and accessed 24 hours a day (James Gray, 2001). This is different with the study made by Rusch-Feja and Siebeky (1999) where they bring out the impact of e-journals on information seeking behavior. The study came out with a conclusion that scientists find e-journals advantageous due to the direct access from their workplace, the prompt availability and the ability to download a copy of relevant articles or doing full text searches. Interestingly, this may also vary according to the type of user. Technology platform are essential for maximizing the number of users. There is a need to be sure that there is solid customer support for the online global client base, especially to perform an accurate and faster transmission of e-journals, internationally and locally.

## **2.6 Impact of e-journals**

Uddin, et. al., (2017) revealed the impact of the use of e-resources and HINARI services for medical research libraries in Bangladesh, emphasizing the International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b). Purposeful use of e-resources, time and cost-saving benefits, research impact, and challenges of using HINARI are discussed. The basic study was conducted at icddr,b in January–February 2014, using a mixed methodology, combining qualitative and quantitative approaches, including a background literature review, usage data shared from the HINARI secretariat at the World Health Organization (WHO), questionnaires, personal observations, and interviews with staff members of icddr,b. Findings revealed that icddr,b is the heaviest user of HINARI (a major source of public health and medical e-resources) in Bangladesh, with demonstrable increases of health research journal articles after introducing HINARI in 2003.



Padma, (2016) mentioned that the use of e-journals and e-books has created a new source of information to the professional development of the research scholars and students. E-journals very important source for the professional development and research. E-resources are becoming a vital to carry any meaningful research. Information resources are the heart of technological progress and scientific information. Scholarly communication system is being carried out worldwide, particularly with respect to e-journals. E-journals and e-books are electronic equivalents of their print counterparts possessing many added features. E-resources offer a range of potential advantages to libraries and research scholars; multiple simultaneous access to the same issue, remote access, in-built searching facilities, multimedia capabilities and reduced storage concerns. Libraries today buy licenses for an ever-increasing number of e-journals from a range of different publishers and providers. Consortia based library subscription to E-journals and electronic full-text databases are picking up good momentum in worldwide. It was implemented a webbased electronic refereeing system for an electronic journal whose many valueadded features are described in detail in this paper.

Singh and Mera, (2013) explored libraries are going onward to create resources available in online versions such as e-journals, e-databases, e-books etc. The paper showed users are more comfortable with the online version rather than the printed form.

Lamothe, (2012) identified that the number of full-text articles downloaded was compared to the size of the e-journal collection, the number of students, and the number of faculty members at the university: all of which exerted varying degrees of influence on the rate of use of e-journals. Pearson's Product-Moment Correlation Coefficients were calculated to determine the strength of any existing linear relationship. Although the size of the e-journal collection did impact its level of use, there seems to be a "critical mass" which, once reached, will slow or stop any further

increase in usage. Among the student population, the number of doctoral students demonstrated the strongest linear relationship to the use of the e-journal collection while the undergraduate population showed the least strong linear relationship. Faculty members were important users of the library's e-journal collection, but the linear relationship was not as strong as that observed for graduate students. In fact, faculty members demonstrated the least strong linear relationship of all segments of the Laurentian University community. It may be wise for the library to consult not only its faculty members but also its graduate students when seeking advice on collection building and management.

Branch, (2012) revealed that the e-resources are important in academic libraries. The focus is being placed on ways to provide users with easy access and accomplish tasks at the same time. When e-journals first arrived, libraries created workflows that followed the way of a print version. These workflows were effective for a while, but are now breaking down. Libraries performed review and analysis to discover problems, and created new workflows. They have learned that workflows need to be constantly reviewed, analyzed, and updated to identify inefficiencies and eliminate them. Libraries must be willing to devote time and energy to maintain effective workflows to prepare for the future. A summary will be provided of one library's transition from a print to an electronic environment and the steps taken to maintain effective workflows through the years. The early days of cloud computing are here and libraries are taking first steps into the cloud. Workflows must be evaluated before moving into the cloud. Migration should be carefully structured for the move. Libraries are witnessing the benefits of the cloud environment. This article will discuss the benefits of maintaining effective workflows in the cloud. Readers will learn about a journey into the cloud with Ex Libris' Alma system. Sadia (2011) stated libraries are using technology to improve the management of scholarly information to strengthen and speed access to scholarly information not held locally.

Kaur, (2011) provided useful information regarding the impact of e-journals on subscription to e-journals, infrastructure, staff, space, technical services, photocopying, inter-library loan, and library use and reference services. The study will have important implications for information creators, publishers, libraries, scholars and researchers. It evaluates the impact of e-journals on libraries and points out the directions that e-journals will take in the future.

Sethi and Panda, (2011) conducted a case study in Sambalpur University India on Use of E-Resources by Life Scientists. The study has shown that e-resources perform an increasingly important role in research. Not only are required the current eresources, but academics also needed to be able to use significant electronic back runs as well.

Thanuskodi and Ravi, (2011) discussed utilization of e-resources by faculty and research scholars .Study revealed that majority of the faculty members learned the required skills for the usage of digital resources through self-study. Majority of the faculty members and research scholars felt that the information available in the eresources was adequate.

McClanahan, et. al., (2010) synthesized the findings from the qualitative portions of two studies (conducted in 2005 and 2008) that assessed the activities and attitudes of faculty members in several US universities, regarding their interactions with scholarly materials, and their scholarly reading patterns. The systematic interpretation of their comments and descriptions of their own experiences and opinions offers an image of scholars who enthusiastically embrace the electronic information environment, in spite of some frustrations with its imperfections. Their use of e-journals, Internet resources, and email communication has become indispensable to their scholarly activities, and has profoundly changed the way they interact with information, create new knowledge, and relate to their university library. For these faculty members, e-

journals have supplanted the print format, because of their convenience, flexibility of work location, advantages for interdisciplinary access, and ease of storage.

David, et. al., (2009) mentioned the results of the project "Evaluating the usage and impact of e-journals in the UK". The particular research reported here evaluated the use of the Science Direct journals database with regard to Life Sciences, Economics, Chemistry, Earth & Environmental Sciences and Physics by ten major UK research institutions. The aim of the study is to investigate researchers' digital behaviour, and to ascertain whether their use and behaviours varied by subjects and disciplines, or in relation to the institutions in which they worked.

Kaur and Verma, (2009) on use of E-resources in Thapar University showed that huge number of user accessing E-resources for their purpose. The impact of E-resources is visible from the decrease in number of printed journals in comparison to increase in number of electronic journals.

Haridasan, (2009) the major findings of the study indicated that respondents are aware of the e-resources (such as e-books, e-journals, e-encyclopedias, e-theses, CD-ROM databases, e-mail, internet and the OPAC). Large numbers of research scholars and faculty members are using these e-resources for their research work. Many faculty members strongly agreed with the necessity for computer and internet literacy to access information. A majority of users were satisfied with the e-resources available at the NASSDOC library. The appearance of e-resources, has extremely distorted information treatment and management in academic environments and in University libraries in particular. E-resources is one of the emerging environment in libraries & Information communication in the competitive service. E-Resources usually consist of e-books, e-Journals, articles, newspaper, thesis, dissertation, databases and CD-ROMs, which are likely to be the alternative to the print media. The familiarity and use of electronic information resources in the libraries for rapid development are

becoming more and more important for the academic community (Kumar and Kumar, 2008).

Astani and Elhindi, (2008) explored the effectiveness of university websites to attract students. They concluded that higher education institutions are required to address the needs of their target audience and design effective websites so that they will attract students. These websites also need to improve in updating their information and presenting it in a layout that will make it easier for users to locate the information of interest.

Shuling, (2007) noticed that electronic information has gradually become a major resource in every university library in recent years. The growth and diversity of eresources, especially e-journals, has led many to predict the extinction of the printed journal. It has been suggested that a new paradigm is sweeping scholarship.

Wiley and Tina, (2007) determined the impact of electronic journals on interlibrary loan (ILL) activity. The hypothesis predicted that ILL requests would fall by approximately 10% during a four-year period, that e-journal use would increase by 10% per year and that there would be a correlation between the two.

Patra, (2006) discussed Patra's experience of providing electronic journal services to the scientists at the Central Glass and Ceramic Research Institute – a centre of excellence in the field of glass and ceramics situated in Kolkata. It describes the developmental activities involved in providing user access to the e-journals and its impact on library operations. The author shows that providing training to the staff as well as library users and managing services of the e-journals were the most important issues. This study yield same results as Ali Dualeh Abdulla study; that ejournals have added enormous resources to the collection, improved service, enhanced access to journal literature, increased its usage, and decreased the demand for document

delivery of single articles. This case study of the Central Glass and Ceramic Research Institute experience should be useful to others for deciding their activities to access e-journals as well as the library community in general.

Rowley, (2006) mentioned that electronic journals take two different forms: journals that are published in print form, available in digital form and e- journals which do not necessarily need a publisher, and which can be managed by an editor and the scholarly community. Both types may have a significant impact on scholarly communication and in the way knowledge is created and disseminated.

Campbell, (2006), numerous creative and useful services have evolved within academic libraries in the digital age: providing quality learning spaces, creating metadata, offering virtual reference services, teaching information literacy, choosing resources and managing resource licenses, collecting and digitizing archival materials, and maintaining digital repositories.

Lesley, (2004), stated that academic libraries are at the forefront of technological innovation within academic institutions. Networking and communication technologies have enabled distributed library services across college and university campuses. As various sectors of academic communities are harnessing technology to enhance academic programs, the library, at the center of research and scholarship, is also leveraging the new technology capabilities to provide new and enhanced services. University academics are a unique population and rely on recent and timely information.

Colvin and Keene, (2004) expressed a project designed to test a hypothesis that learning can be enhanced by promoting the use of e-journals was conducted by the business school at University College Worcester (UCW). Analysis of the results indicated that effective collaboration between academic and library staff, the timely

embedding of e-journals into the learning process and associating it with the assessment process, can significantly enhance the learning of students. The data indicated an encouraging increase in journal usage for assignment research.

Nelson, (2001) e-journals have led to much speculation about their likely impact. While some saw electronic publishing as simply a new medium of delivery, others believed it constituted a force for change which could revolutionize scholarly communication. In contrast to these claims and predictions, user surveys suggested that e- journals have only had a limited scholarly impact.

Ashcroft, (2001) focused on the evaluation and promotion of electronic journals in academic libraries in the UK and in North America. The aim is to highlight any significant differences in the way that electronic journals are managed and to identify successes in order to establish “best practice”. Several issues emerged from research. For electronic journals to become a significant alternative to the print version, there needs to be a recognition that the introduction of electronic journals will impact on working practices and staffing requirements, requiring more technical skills and competencies and changes in management priorities. Furthermore, electronic journals are still a “moving target”, making realignment even more difficult and posing awkward questions for decision makers as to the best way forward. The whole process of electronic journal development requires effective management of change.

Interoperability would seem to provide the key to many of the issues involved. All of these factors influenced the changing arena of LIS education.

Pullinger, (1999) reported that the academic use of journals is influenced by many factors, e.g. users’ subject disciplines, their roles or level within the university, their local information environment of print and electronic resources, awareness of those resources, and their information needs on a particular day. Super Journal is a project

in the Electronic Libraries Programme (eLib) researching academic use of electronic journals, the features they value most and the factors that will make e-journals successful. The project has developed a number of hypotheses about the factors that influence usage and is testing them in a systematic and quantitative way. This paper focused on articulating the factors to be considered in the impact of the local information environment and early evidence for their importance in the implementation and use of electronic journals.

## **2.7 Problems of using e-journals**

Husain and Muhammad, (2015) explored that the University libraries have mostly been included in handling Information and Communication related solutions for the execution of different library activities and services, especially for establishing and recovering knowledge and information. ICT related services in academic libraries become significant tools for knowledge sharing and distribution. Lack of skilled professionals, library users, in ICT, lack of awareness about the advantages of ICT and poor ICT infrastructure facilities were found as the leading obstacles of ICT related services in libraries.

Oyedapo and Ojo, (2013) observed very low usage of e-resources in the academic libraries. The main reason that supported to low implementation of electronic resources was inadequate of searching proficiency regarding the services.

Mohamed, (2013) made a work as a survey study at some selected private universities of Bangladesh about the use and impact of electronic resources. The result showed that like all other e-resources the majority of respondents to the e-thesis. Similarly, e-books, e-newspapers and e-journals. It was seen that number of participants uses e-resources according to their need. But the server encountered a major problem with the use of electronic resources.



Baro, et. al., (2011) studied that digital scholarly journal databases were underutilized. Researcher and scholars mentioned lack of knowledge about the existing services as the major barriers that decrease the effective use and utilization of the digital scholarly communication.

Okelo and Magara, (2008) supported this perception of not used in the full potential of the scholarly communication. The study revealed that the major problems in using e-journals in the institution of higher education was lack of awareness regarding the benefits of the resources and services.

Hulya, et. al., (2008) surveyed to examine the use of e-journals in the academic libraries. The highest portion of the users supported the conversion from the printed version to electronic format. This support was particularly provided by the faculty members in the field of natural sciences. The study also showed that the majority of the respondents explained the significant obstacle to use of e-journals was the lack of subscriptions in their subject or discipline.

Fox, (2007) discussed the problems of online journal resources. This research revealed the mechanization established to help in e-journal storing and preservation. The finding is preparatory in quality and examined two possible results for the electronic journal security problem, practical assumption and individuality or value. Practical assumption includes the improvement of online journal licensing of electronic born content, while individuality or value focus the benefits and problems related with the two primary organizations of Portico, which involved to the online journal content storage. However, Fox believed that this information will be useful to the service provider who are possibly exploring the means to establish electronic preservation and will direct them to further information which will be helpful in creating a knowledgeable opinion.

Liu, (2005) showed that an online based reading habits is raising for reading digital resources. The online based reading behaviors is categorized by more time used on scanning and browsing, one-time reading, non-linear reading, keyword spotting, and reading more selectively, while less time is used on in-depth reading and concentrated reading. Annotating and highlighting while reading is a common activity in the printed environment. However, this traditional pattern has not yet shifted to the online medium when users reading digital resources.

Khan, (2004) stated computers are becoming popular in Bangladesh, but the country is still lack of computers and computer literate users. The number of computers in the country is about 0.5 million. Many senior academics and researchers do not experience how to operate the computer. This has led to them being not interested in using journals in the libraries.

Islam and Chowdhury, (2004) suggested that e-journals need promotional activities such as workshops conducted at regular basis in order to promote the usage of e-journals. This is not so much required for the print journals. Therefore it is an extra work for the information professionals or the library to promote e-journal to prospective users.

Pazur, (2002) showed a high acceptance and use of electronic journals. The RBI respondents stressed the availability before the print versions at the most important advantage of the electronic journals, and as the most important disadvantage the slow download. Very few respondents thought that e-journals have no disadvantages at all. Most of the respondents preferred print version in the situation where both versions were available, but many used both versions equally (32 percent and 33 percent).

Brennan, et. al., (2002) studied the usage patterns of e-journals have compared print and e-journal features, surveyed academics for their knowledge and assumptions, and evaluated the impact on library traditions. This study, a qualitative exploration of a

wide array of issues related to the research and teaching habits of early adopters of e-journals in a research setting, was conducted in the spring of 2001 with faculty in the basic and health sciences at the University of Illinois at Chicago. Open-ended questionnaires provided a framework to wide-ranging discussions of perceptions, expectations, and changing practices pertaining to e-journals and other electronic resources. The results were analyzed with a specific focus on shared behaviors and values, discipline-dependent variations, and changing research and teaching habits. Several challenges for library resources and services are identified and discussed. Groote and Dorsch, (2001) reported that the usage of printed journal diminished meaningfully since the development of electronic resources. This diminished appeared inconsiderate of whether a journal was convenient only in print or both in electronic and in printed version. Inter-library loan services also efficiently declined since the establishment of electronic journals. The diminished in using printed resources recommends that many philanthropist prefer to access the resources in electronic format.

## **2.8 Summary**

The above literature review indicates that there are lots of national and international articles or research papers on the different aspects regarding e-journals by various types of scholars. But there is a lack of literature on impact assessment of e-journal usage in the university libraries of Bangladesh. Furthermore, there is an insufficiency of information and resources about the insight and views of academics and research scholars about the impact of using e-journals in libraries. Therefore, we made an attempt to conduct this study for fulfilling the existing gaps. The research contributes to finding out the academics and research students' perceptions about e-journal services in the university libraries of Bangladesh. This study has also identified the challenges of using e-journals and given some suitable suggestions that will help to improve e-journal services in the university libraries of Bangladesh in the future.

## Chapter-3

# E-Journal Services of the University Libraries of Bangladesh

### 3.1 Introduction

In a recent time, e-journals are becoming essential among academics and research scholars all over the world opposite to printed journals. For example, in higher education, scholarly electronic journals have become important tools for acquiring knowledge and research activity as they provide easy accessibility, time saving with high quality and relevant resources to academics and research students with a view to keep them equal with new learning and improvement (Madhusudhan, 2010). The leadership of the PERI was especially established to aid heighten research capability in developing and emerging countries by offering research and scholarly resources, distributing national research, increasing Information and Communication Technology skills, and improving local publishing (Rosenberg, 2008). The Library offers diverse knowledge and information resources including scholarly electronic journals to its research community as well as training of end users in order to acquire flexible knowledge and education (Msagati, 2014). In this chapter, ten university libraries were selected purposefully and describe their e-journal facilities and services. Library and information professionals (LIS) provided information about e-journal services of their libraries. Here, we also explored the list of publishers of ejournals in the university libraries of Bangladesh.

### **3.1.1 Rules of using e-journals:**

The university library provides a wide range of scholarly information resources and there are some downloading and using rules which are very important for users before using the online resources.

### **3.1.2 User of the e-journals**

University library users, i.e. faculty members, research scholars, students and staffs of the university will have full and unlimited access to the e-journal facilities of the publisher's resources. The following rules relate to the downloading and printing of the resources.

### **3.1.3 Downloading rules of e-journals**

Library users may download and store it to a local electronic device and particular numbers of titles or chapters from any e-journals not to exceed 15% of the issue. It is not acceptable to download full journal issues.

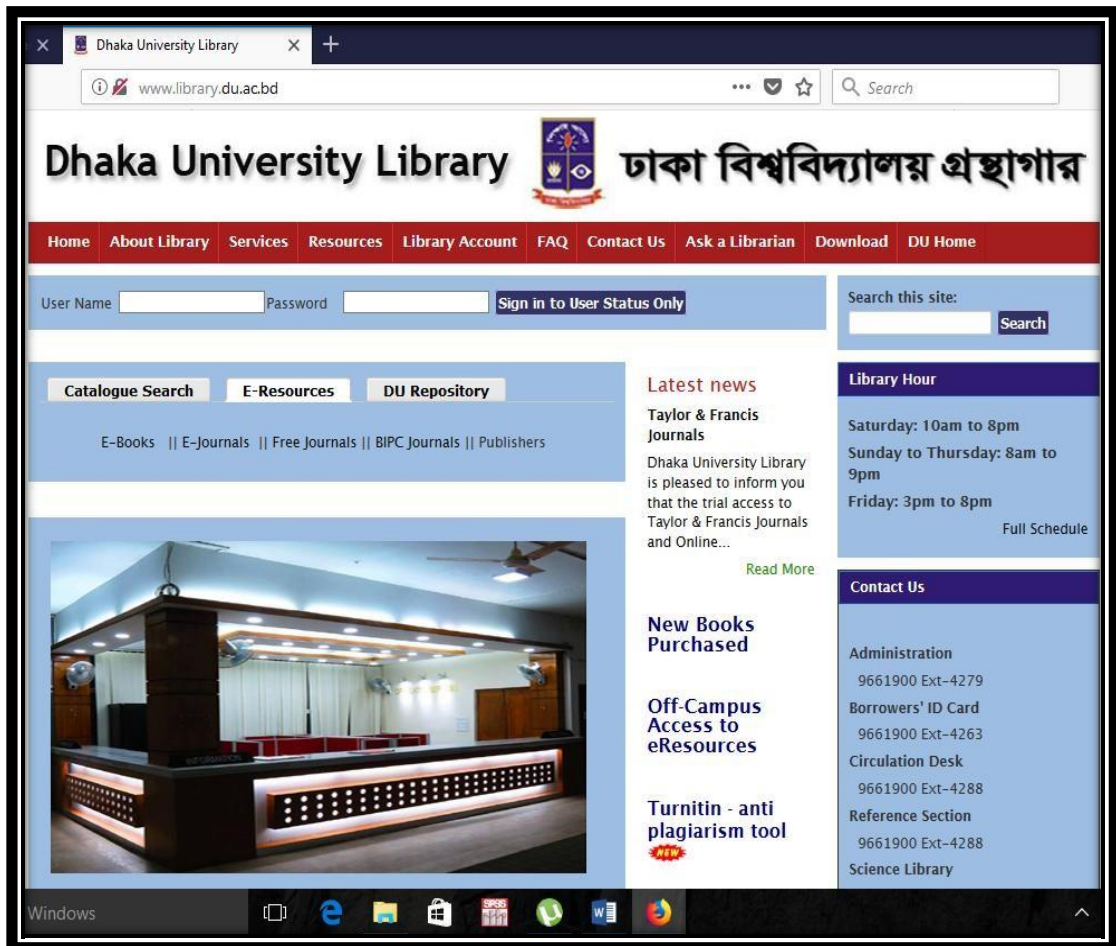
### **3.1.4 Printing rules of e-journals**

University library users may print single copies of articles from the resource for their personal use or learning not to exceed 15% of the issue. It is not permitted to print full issues of e-journals.

## **3.2 E-journals Service in Dhaka university library**

The Dhaka University Library offers e-journal services for the academics, research scholars, other officers and staff within the campus area and offers remote access with a user ID and password for the faculty and researcher scholars. These resources are

licensed for the non-profit educational use of the Dhaka University. Use of these e-resources is controlled by the copyright law and individual licensed agreements.



**Figure: Dhaka University Library Website**

The Dhaka University Library subscribes e-resources through PERI and UDL publishers. Titles are easily searchable and which can fulfill various subject area of the Dhaka University. The link of the publishers' is available in the DUL website and help users to access easily the desired journal articles. Every year, DUL includes new publishers through consortium for their valuable users. If the user click on the link and they get e-journals facilities of the Dhaka University Library.

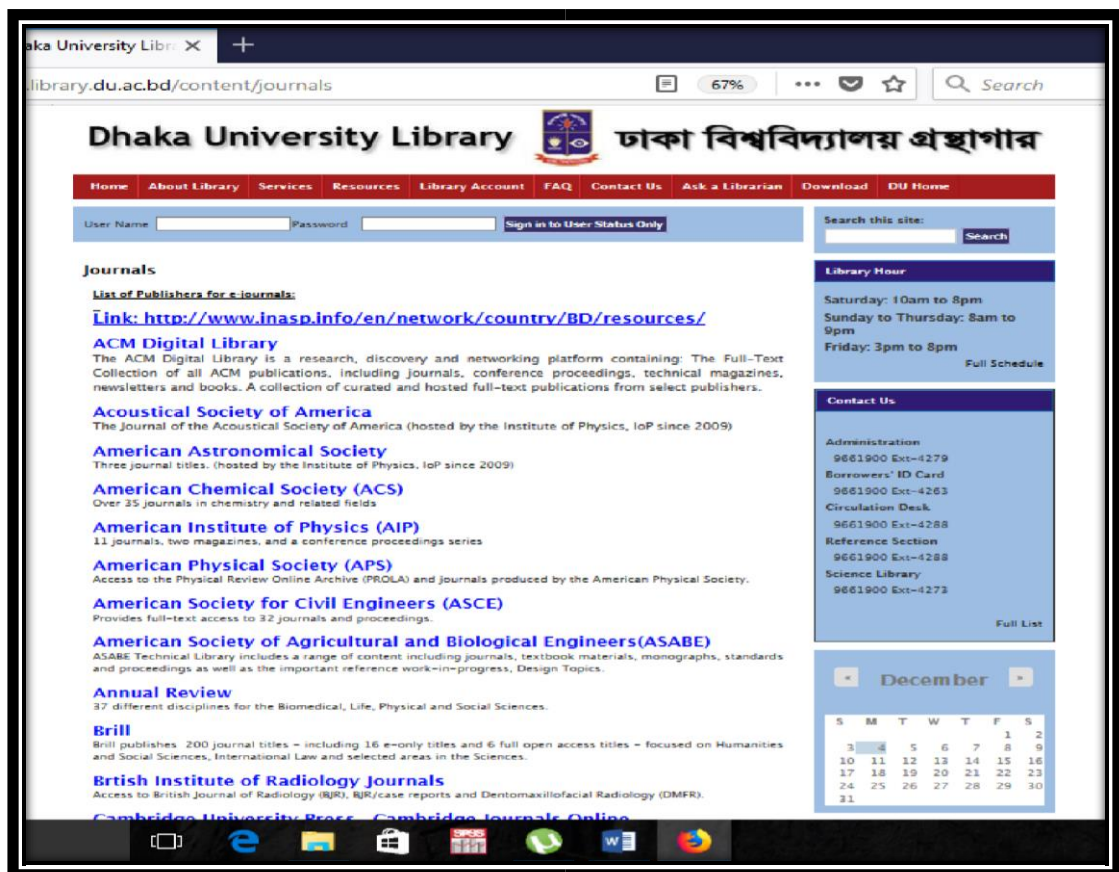


Figure: DUL E-journal services

### 3.2.1 List of Publishers

The following are the List of publishers of e-journals in the Dhaka university library:

- ACM Digital Library
- Acoustical Society of America
- American Astronomical Society
- American Chemical Society (ACS)
- American Institute of Physics (AIP)
- American Physical Society (APS)
- American Society for Civil Engineers (ASCE)
- American Society of Agricultural and Biological Engineers(ASABE)
- Annual Review

- Brill
- Cambridge University Press - Cambridge Journals Online
- Canadian Science Publishing (was NRC Press)
- The Cochrane Library
- De Gruyter
- Duke University Press
- EBSCO Host
- Edinburg University Press
- Emerald Insight
- Geological Society
- IEEE Xplore Digital Library
- IndianJournals
- International Forestry Review
- International Monetary Fund
- JSTOR
- Mary Ann Liebert
- NRC Research Press Journals Online
- Open Access Journal- Directory of Open Access Journals(DOAJ)
- OSA - Optical Society of America
- Oxford University Press - Oxford Journals
- Palgrave Macmillan Journals
- Policy Press
- Project MUSE
- Royal College of Physicians
- Royal Society - Royal Society Journals Online
- Society for Industrial and Applied Mathematics Journals (SIAM)
- SPIE Digital Library (Online journals and conference proceedings)
- Springer



- Symposium Journals
- The Essential Electronic Agricultural Library
- University of Chicago Press
- Wiley Online Library (1360 titles)
- World Bank elibrary

#### **3.2.1.2 Open Access Journals**

Directory of open access journals (DOAJ)

#### **3.2.1.4. User ID and Password**

The following resources can be accessed within the Dhaka University network using User ID and Password.

- HINARI
- AGORA
- OARE
- ARDI

### **3.3 E-journals service in BUET library**

Bangladesh University of Engineering and technology library subscribe online journals through PERI and UDL publishers which fulfill different field coverage of the BUET university and all publishers' links are available to the BUET website ([lib.buet.ac.bd/home/?q=node/6](http://lib.buet.ac.bd/home/?q=node/6)).The library has a collection of many titles are in the current subscription list of e-journals.

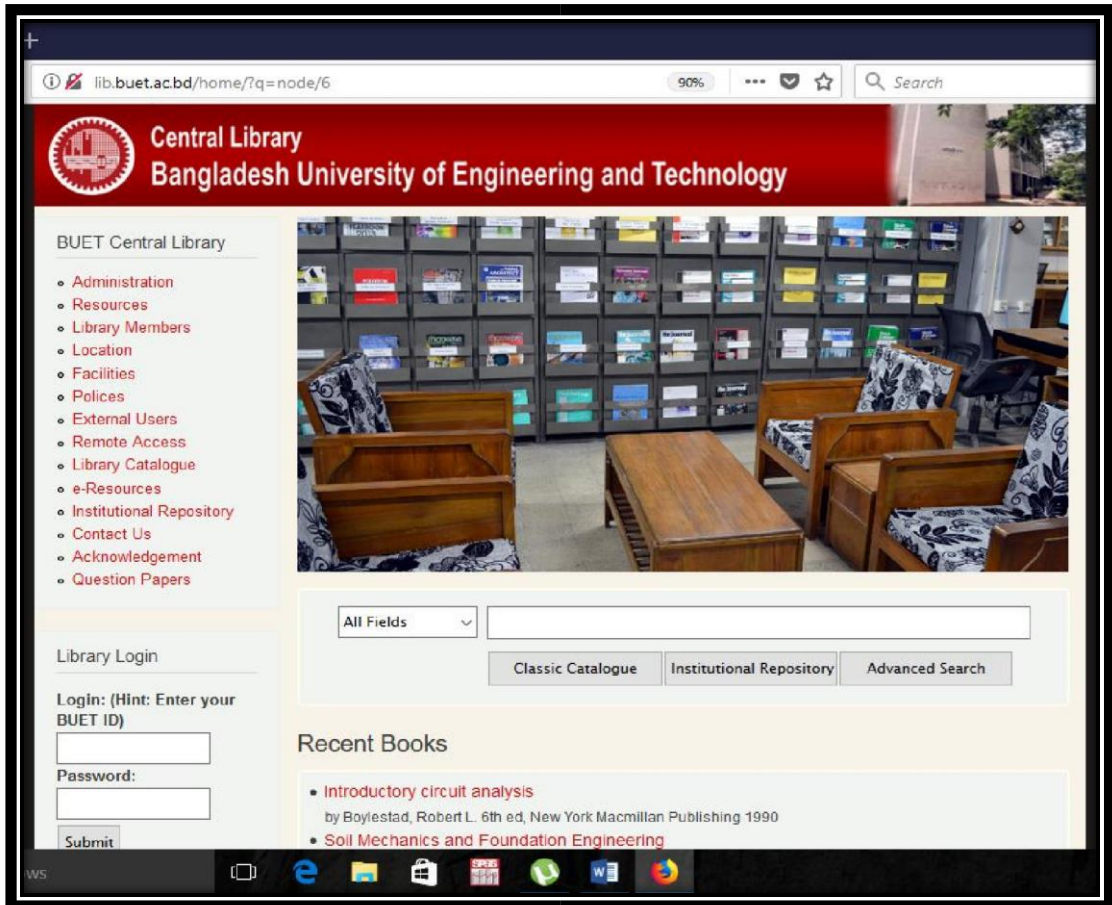


Figure: BUET Library Website

From the link users can easily access to the expected journal articles. Each year, BUET library subscribes new journals through the consortium for fulfilling their valuable user's needs.

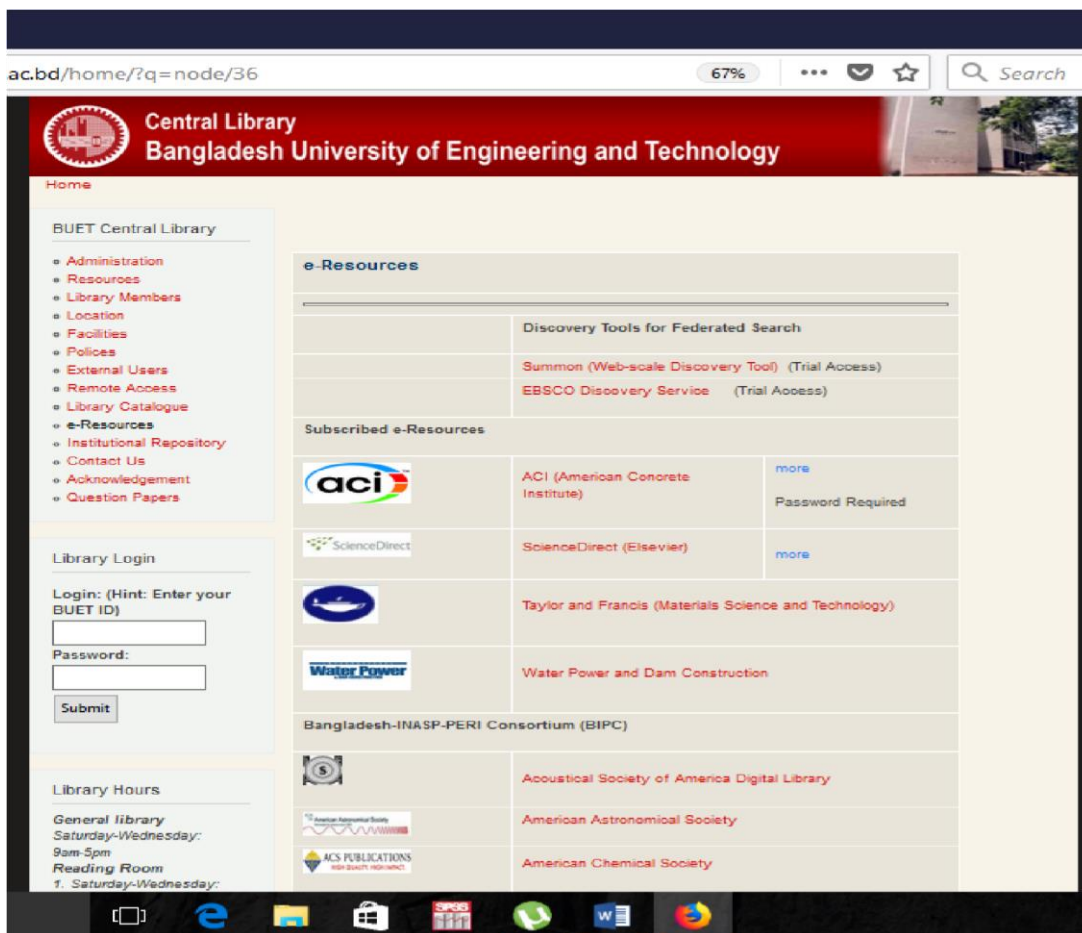


Figure: BUET Library E-journal services

If the user click on the publisher’s link and they get BUET Library e-journals facilities. BUET library provides e-journal services for all users (i.e. faculty members, students, research scholars, officers and staff) within the university area and allow remote access with a user ID and password only for faculty members.

### 3.3.1 List of publishers

The following are the List of publishers of e-journal services at Bangladesh University of Engineering and Technology Library:

### **3.3.2 New publishers**

- Summon (Web-scale Discovery (Tool) (Trial Access) □
- EBSCO Discovery Service (Trial Access)

### **3.3.3 Subscribed e-journals**

- ACI (American Concrete Institute)
- Password Required
- ScienceDirect (Elsevier)
- Taylor and Francis (Materials Science and Technology)
- Water Power and Dam Construction

### **3.3.4 Bangladesh-INASP-PERI Consortium (BIPC)**

- Acoustical Society of America Digital Library
- American Astronomical Society
- American Chemical Society
- American Institute of Physics
- American Physical Society
- American Society of Civil Engineers
- Annual Reviews
- Beech Tree Publishing
- Blackwell Publishing - Synergy
- The British Psychological Society
- Cambridge University Press
- DE GRUYTER
- EBSCO Host
- The Geological Society
- Institute of Physics Publishing
- International Forestry Review

- Multilingual Matters & Channel View Publications
- NRC Research Press
- Optical Society of America
- Professional Engineering Publishing
- Institute of Mechanical Engineers
- Project Muse
- The Policy Press
- SPIE Digital Library
- Springer
- Symposium Journals
- University of Chicago Press
- Wiley Inter Science - John Wiley and Sons
- The World Bank
- SAGE Journals On-Line

### **3.3.5 UGC Digital Library (UDL)**

- ACM Digital Library
- Emerald
- IEEE
- JSTOR
- Taylor & Francis journal (Trial Access)
- South Asia Archive
- Secret Files from World Wars to Cold War

### **3.3.6 Free e-journals**

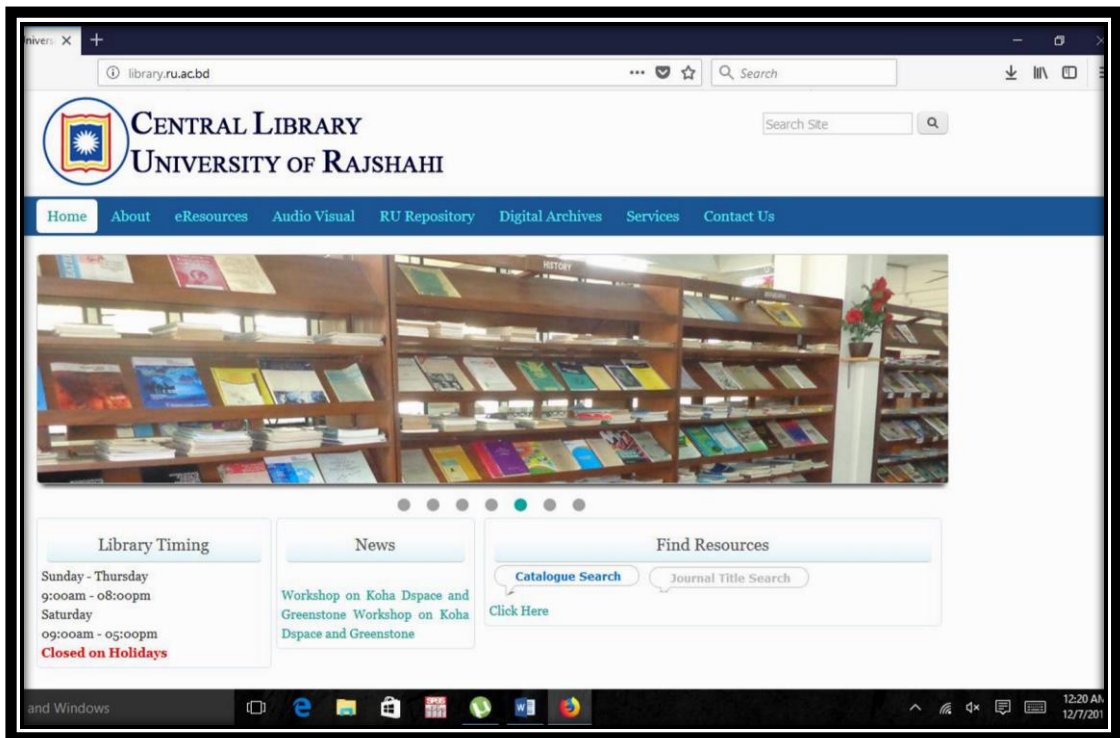
- Bangladesh Journals OnLine- BanglaJOL
- Directory Open Access Journal

### **3.3.7 User ID and password**

- ACI
- ARDI
- Hinari
- Journal of Civil Engineering
- OARE

### **3.4 E-journal services in RUL**

The Rajshahi university library provides e-journal services from their subscribed publishers which are made accessible via PERI and INASP (Bangladesh INASP-PERI Consortium-BIPC), the UDL (UGC Digital Library), BanglaJOL, Research4Life (OARE, AGORA, HINARI and ARDI), etc. Users of the library can access all those resources (apart from Research4Life) in the campus area without any password and resources are linked to the RU library website (<http://library.ru.ac.bd/>).



**Figure: RU Library Website**

RUL allow access of e-journal for all users in the campus area without any user ID and password. The Library has got the trial access to Remotex and EZProxy to use their subscribed e-journals from home and abroad.

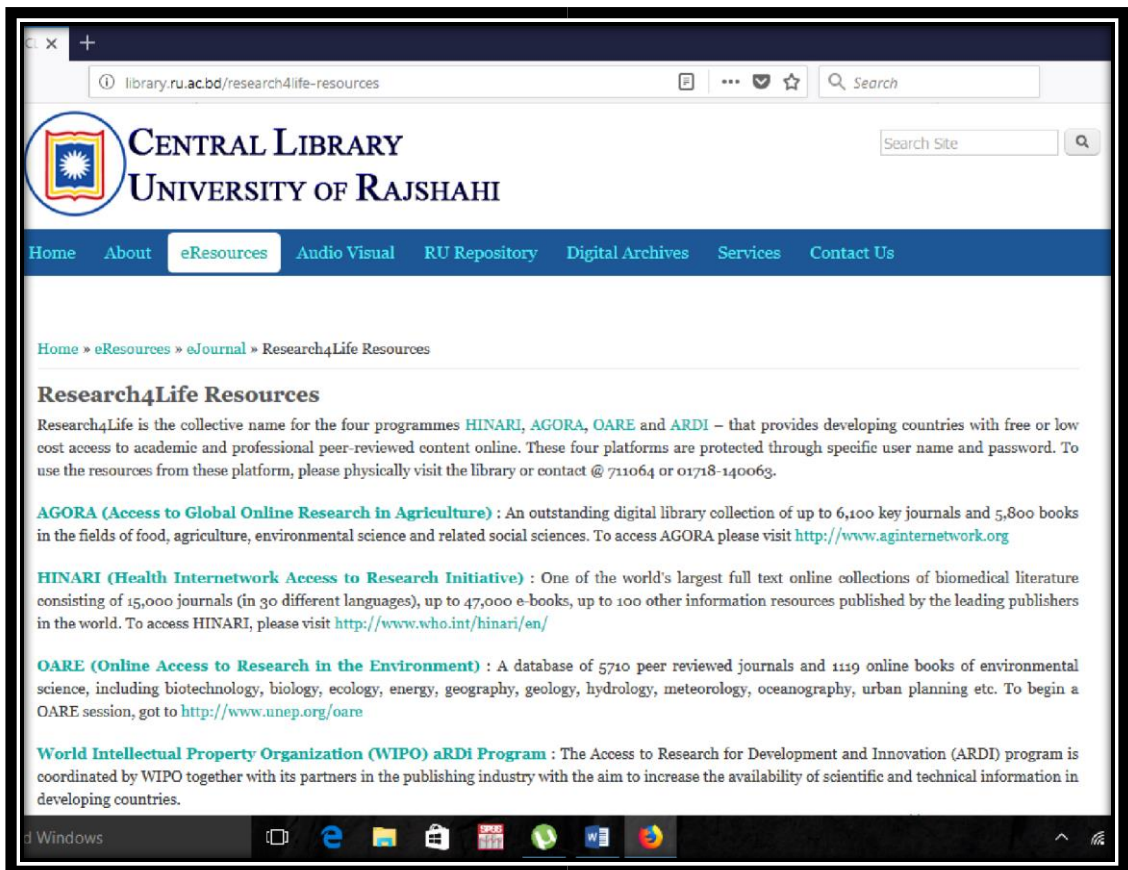


Figure: RU Library E-journal services

If the user clicks on the publisher's link and they get Rajshahi University Library e-journals opportunities.

### 3.4.1 List of publishers

The following are the List of publishers of e-journals at Rajshahi University Library:

- American Astronomical Society (AAS)
- American Chemical Society (ACS) (Discontinued)
- American Institute of Physics (AIP)
- American Physical society (APS)
- American Society of Agricultural and Biological Engineers (ASABE)
- American Society of Civil Engineers (ASCE)
- Annual Reviews (AR)



- BanglaJOL
- Brill's Developing Countries Journals Program
- British Institute of Radiography (BIR)
- Cambridge University Press (CUP)
- Canadian Science Publishing (NRC Research Press)
- Cochrane Library
- De Gruyter Library & Information Science (LIS) Journals
- EBSCO Host Research Databases
- Edinburgh University Press
- Geological Society
- Indian Online Journals
- Institute of Physics Journals
- IET Digital Library
- International Forestry Review
- IMF eLibrary
- Mary Ann Liebert
- Nature Publishing Group (NPG)
- Oxford Journals (Discontinued)
- Optical Society of America (OSA)
- Palgrave Macmillan Journals
- Policy Press
- Project MUSE Journals
- Royal Society
- Royal College of Physicians
- SIAM
- SPIE Digital Library
- Springer
- University of Chicago Press

- Wiley Online Library

### **3.4.2 UGC e-journals**

The University Grants Commission of Bangladesh has provided trial based access to the online databases for Rajshahi University library. User click on the link to use the respective database.

- Tylor & Francis Journal
- South Asia Archive
- Secret Files from World Wars to Cold War
- Sage Journals
- Oxford Journals Online
- ACM Digital Library
- Emerald
- IEEE

### **3.5 E-journal services in CUET library**

The Chittagong University of Engineering Technology library purchases scholarly online journals through the UDL (UGC Digital Library) and BIPC (Bangladesh INASPPERI-Consortium). Faculty members, students and other staff can search and access the online resources. The Library allows remote access services to the online resources for research scholars and faculty members as well as other members.

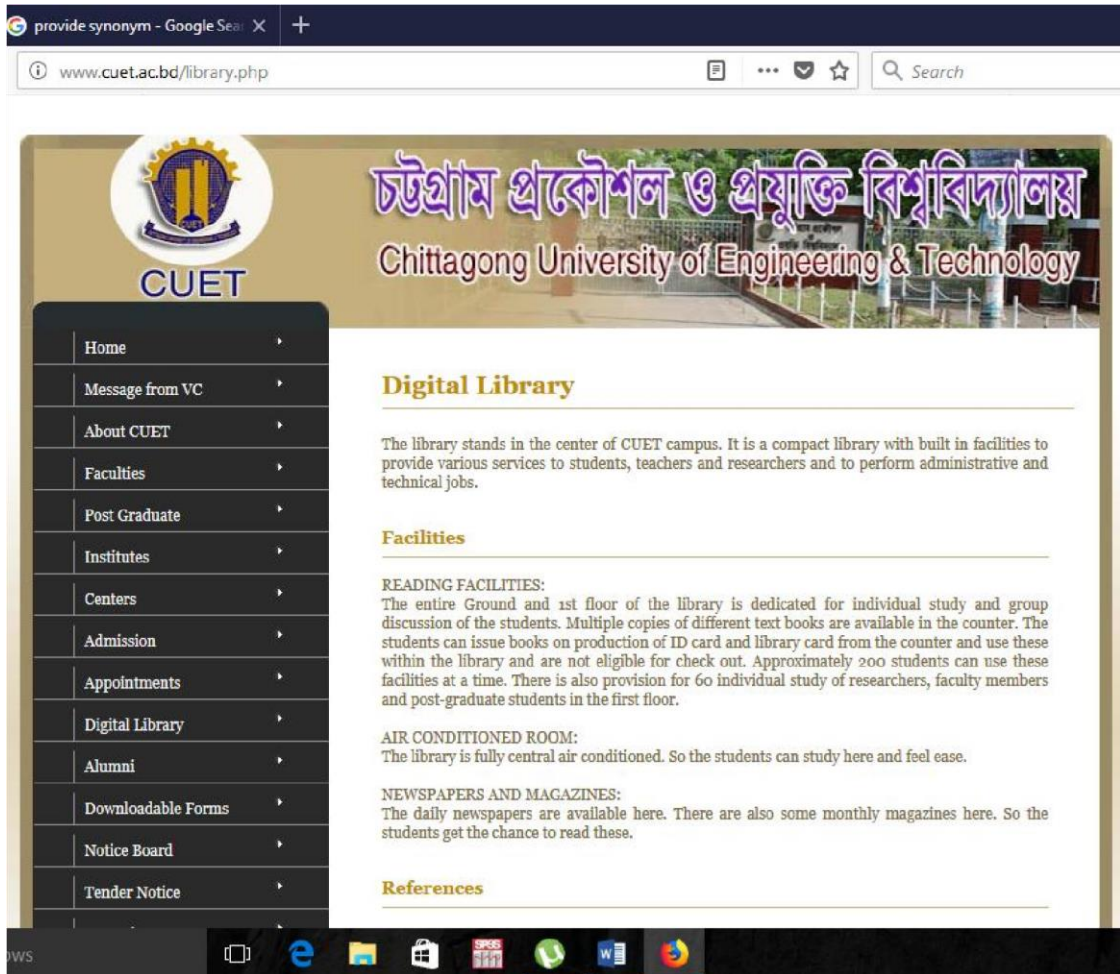


Figure: CUET Library Website

The e-resources are linked to the CUET library website

(<http://www.cuet.ac.bd/library.php>) and provide users easy access to the resources.

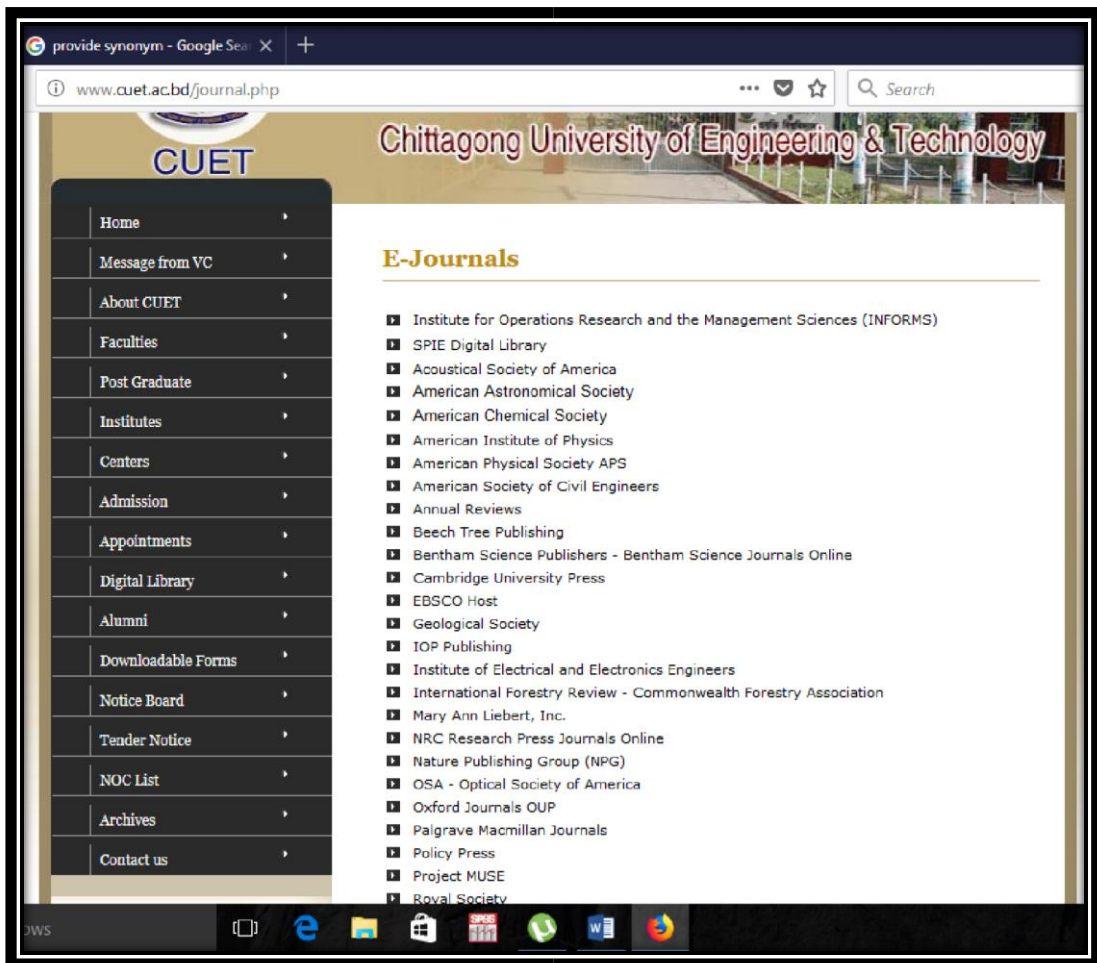


Figure: CUET Library E-journal services

If the user click on the publisher's link and they get Chittagong University of Engineering and Technology Library e-journals opportunities.

### 3.5.1 List of publishers

The following are the List of publishers for e-journals at Chittagong University of Engineering and Technology library:

- Institute for Operations Research and the Management Sciences (INFORMS)
- SPIE Digital Library
- Acoustical Society of America

- American Astronomical Society
- American Chemical Society
- American Institute of Physics
- American Physical Society APS
- American Society of Civil Engineers
- Annual Reviews
- Beech Tree Publishing
- Bentham Science Publishers - Bentham Science Journals Online
- Cambridge University Press
- EBSCO Host
- Geological Society
- IOP Publishing
- Institute of Electrical and Electronics Engineers
- International Forestry Review - Commonwealth Forestry Association □  
Mary Ann Liebert, Inc.
- NRC Research Press Journals Online
- Nature Publishing Group (NPG)
- OSA - Optical Society of America
- Oxford Journals OUP
- Palgrave Macmillan Journals
- Policy Press
- Project MUSE
- Royal Society
- Springer eJournals
- University of California Press - Caliber
- University of Chicago Press
- Walter de Gruyter GmbH & Co KG
- Wiley-Blackwell - former Interscience content

- Wiley-Blackwell - former Synergy content
- World Bank Online Resources
- American Society of Agricultural and Biological Engineers (ASABE)
- Cochrane Library
- De Gruyter Journals
- EBSCO Communication and Mass Media Complete (CMMC) Database
- Edinburgh University Press
- Institution of Engineering and Technology (IET) Digital Library
- NPG - Palgrave Macmillan Journals
- Royal College of Physicians
- Symposium Journals
- Wiley Online Library

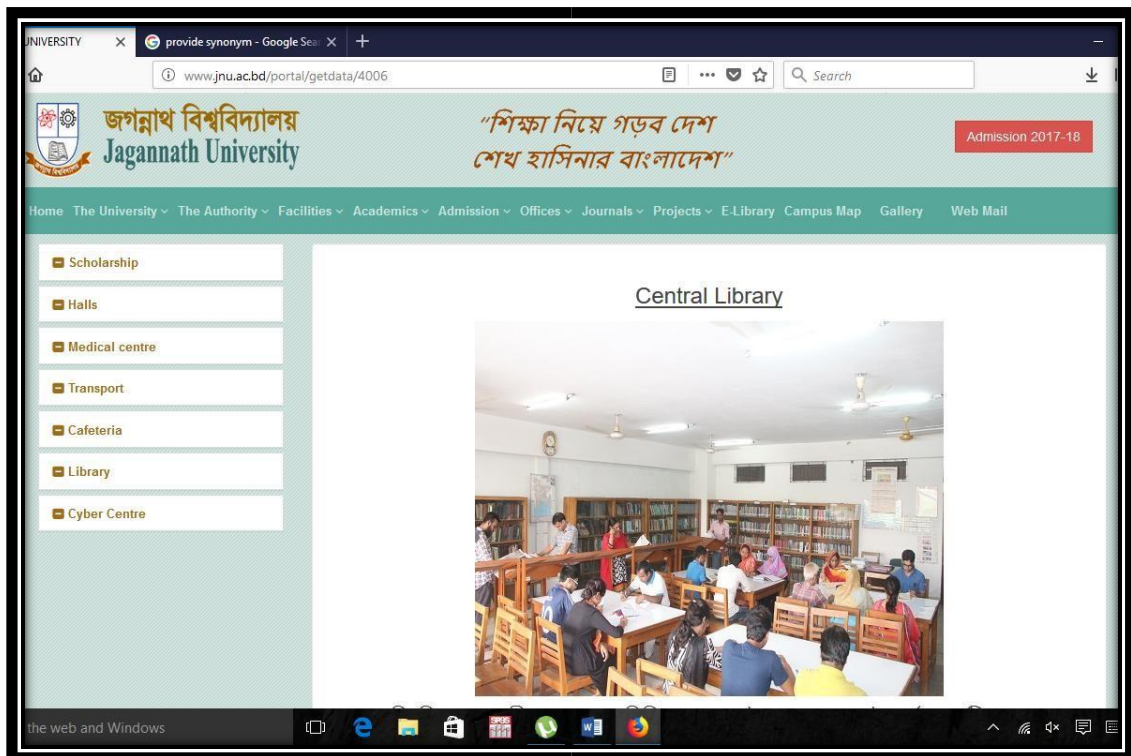
### **3.5.2 UGC Consortium**

- ACM Digital Library
- Emerald
- JSTOR
- SAGE Journals Online

### **3.5.3 Free E-Journals**

□ HINARI

- AGORA
- OARE
- Taylor & Francis
- South Asia Archive
- Secret Files from World Wars to Cold



**Figure: JNU Library Website**  
**3.6 E-journals services at JNUL**

Since July 2016, Jagannath University library provides e-journal services to assist students, teachers and researchers. The library subscribes four reported publishers from where users can access to millions of online journals.

If the user click on the publisher's link and they get Jagannath University Library e-journals facilities.

### **3.6.1 List of publishers**

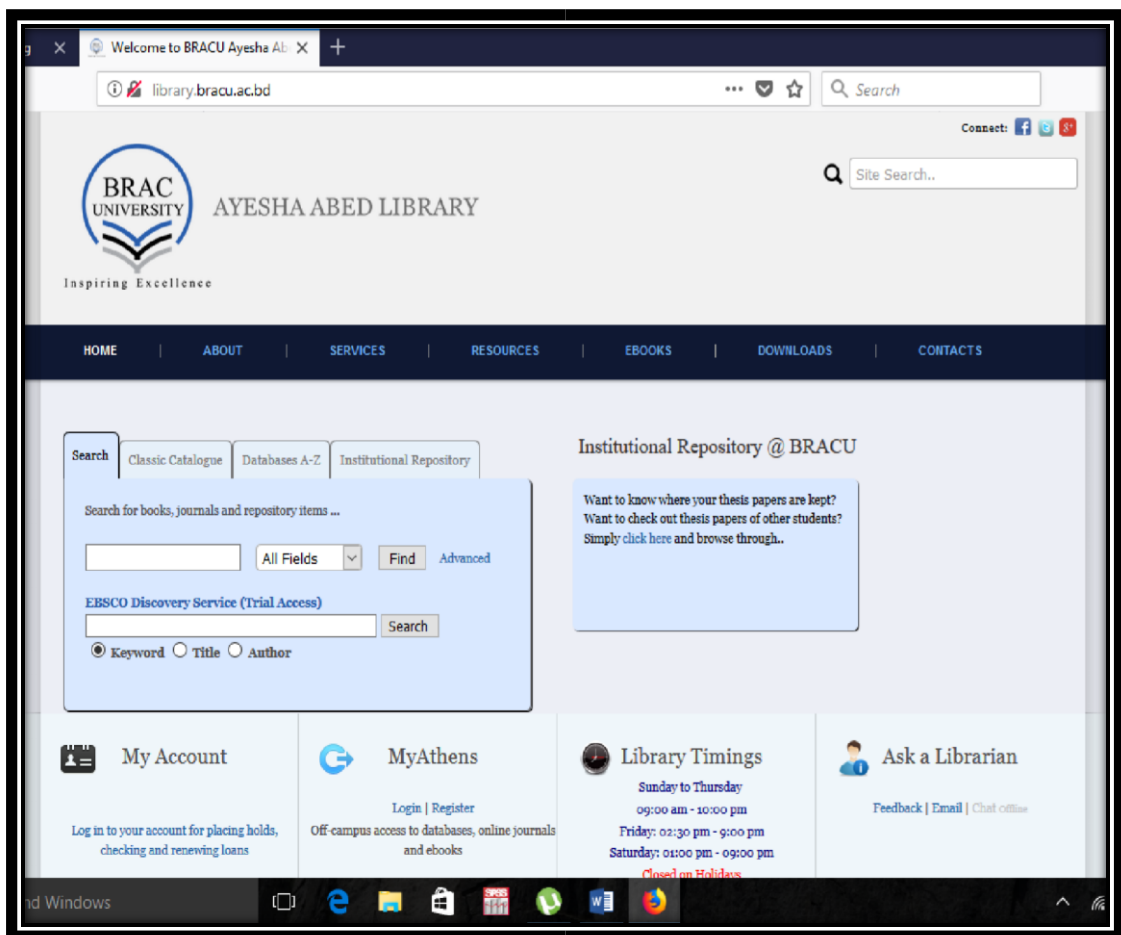
The following are the List of publishers for e-journals at Jagannath University library:

- IEEE
- Acm Digital Library

- Emerald □ JSTOR

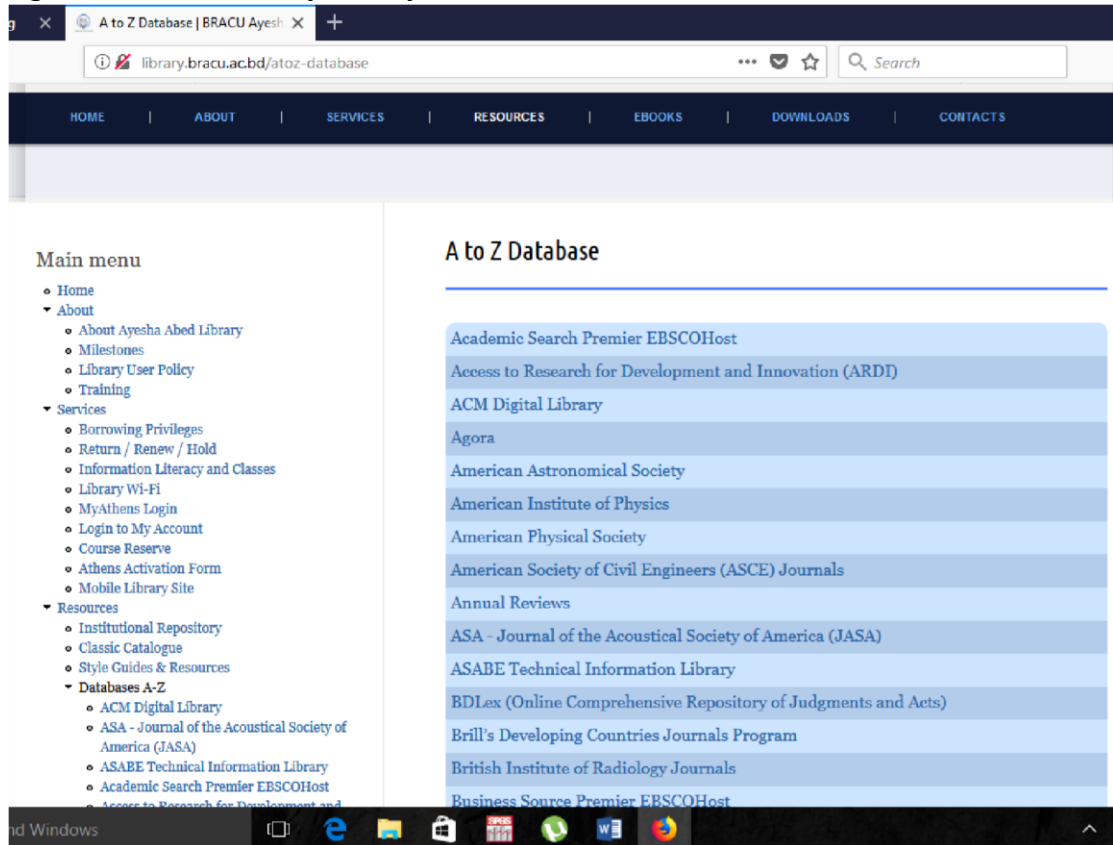
### 3.7 E-journal services at AAL

Aysha Abed Library of BRAC University provides access to a number of online resources to help research, user studies and teaching. The online resources are subject to copyright law and the license agreements Aysha Abed Library signs with the provider of e-journal publisher. Through the library website (<http://www.bracu.ac.bd/resources/aysha-abed-library>) users can access and search for making effective use of the resources very easily.





**Figure: BRAC University Library Website**



**Figure: AAL e-journal services**

If the user click on the publisher's link and they get Aysha Abed Library e-journals services. The library subscribes to a huge range of online databases which provided anytime access to thousands of full text journals in different subject areas including general and multidisciplinary databases.

### 3.7.1 List of e-journals

The following are the List of publishers for e-journals Aysha Abed library of BRAC University:

- EBSCOHost
- Access to Research for Development and Innovation (ARDI)
- ACM Digital Library

- Agora
- American Astronomical Society
- American Institute of Physics
- American Physical Society
- American Society of Civil Engineers (ASCE) Journals
- Annual Reviews
- ASA - Journal of the Acoustical Society of America (JASA)
- ASABE Technical Information Library
- BDLex (Online Comprehensive Repository of Judgments and Acts)
- Brill's Developing Countries Journals Program
- British Institute of Radiology Journals
- Business Source Premier EBSCOHost
- Cambridge University Press (eBooks)
- Cambridge University Press (Journals)
- Canadian Science Publishing (NRC Research Press journals)
- Cochrane Library
- Communication and Mass Media Complete [CMMC] Database EBSCOHost
- De Gruyter eBooks
- De Gruyter Journals
- DOAJ
- Duke University Press Journals
- Edinburgh University Press
- Emerald
- ERIC EBSCOHost
- Geological Society
- Health Source - Consumer Edition EBSCOHost
- Health Source: Nursing/Academic Edition EBSCOHost
- HINARI

- IEEE Xplore Digital Library
- IMF eLibrary
- International Forestry Review
- IOP Publishing- IOPscience
- JSTOR
- Library, Information Science Technology Abstracts EBSCOHost
- Mary Ann Liebert, Inc
- MasterFILE Premier EBSCOHost
- McGraw Hill Education India (eBooks)
- MEDLINE EBSCOHost
- Newspaper Source EBSCOHost
- OARE
- OSA - Optical Society of America
- Policy Press
- Project MUSE Journal
- Regional Business News EBSCOHost
- Royal College of Physicians
- Royal Society - Royal Society Journals Online
- Scopus
- Society for Industrial and Applied Mathematics (SIAM) Journals
- SPIE Digital Library
- Springer eBooks
- Springer eJournals
- University of Chicago Press
- Wiley Online Library
- Wiley-Blackwell
- World Bank Online Resources

### 3.8 East west University e-journals service

The East West University Library is one of the avant-grade libraries in Bangladesh for the variety of services, comprehensive collections, up to date technology, user education, professionally trained service provider, service marketing, etc. EWU Library offers online information resources to meet the research, information, and other commitments for the academics, students and staff.

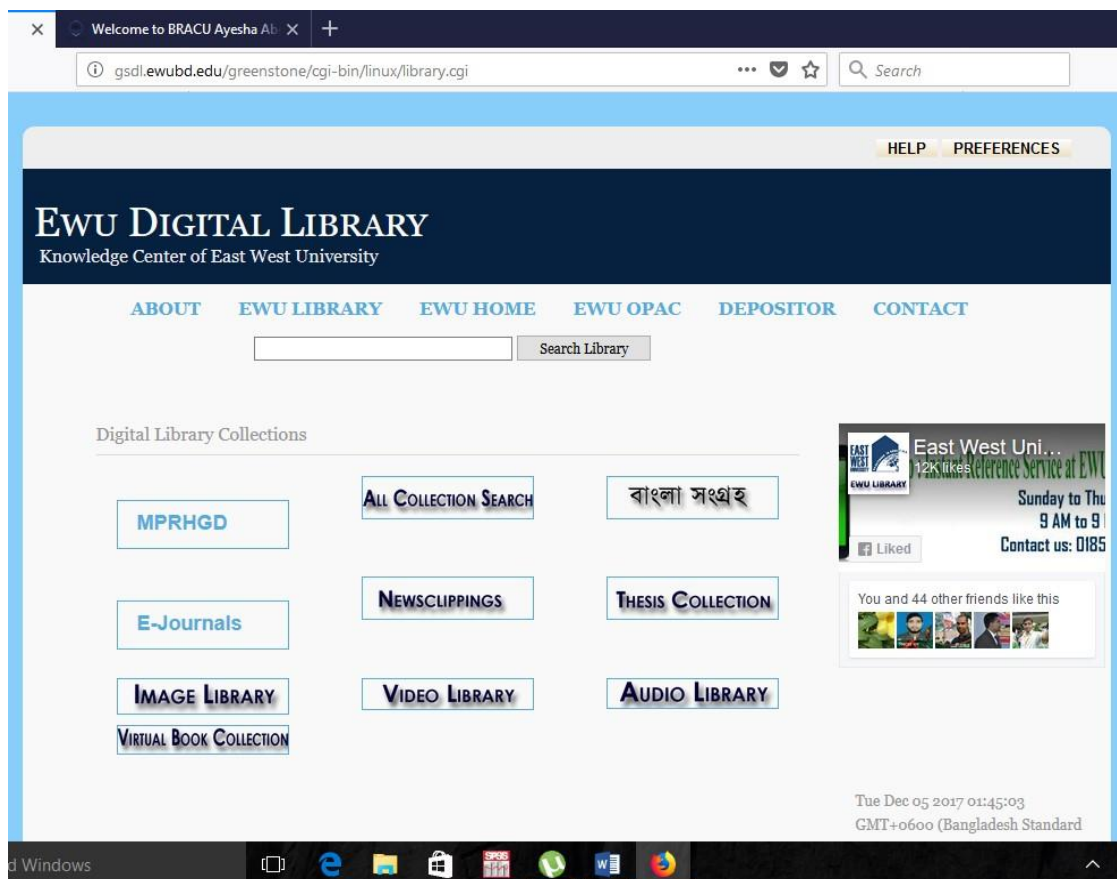


Figure: EWU Library Website

The e-resources are linked to the EWU library website (<http://lib.ewubd.edu/>) and allow users easy to reach the resources.

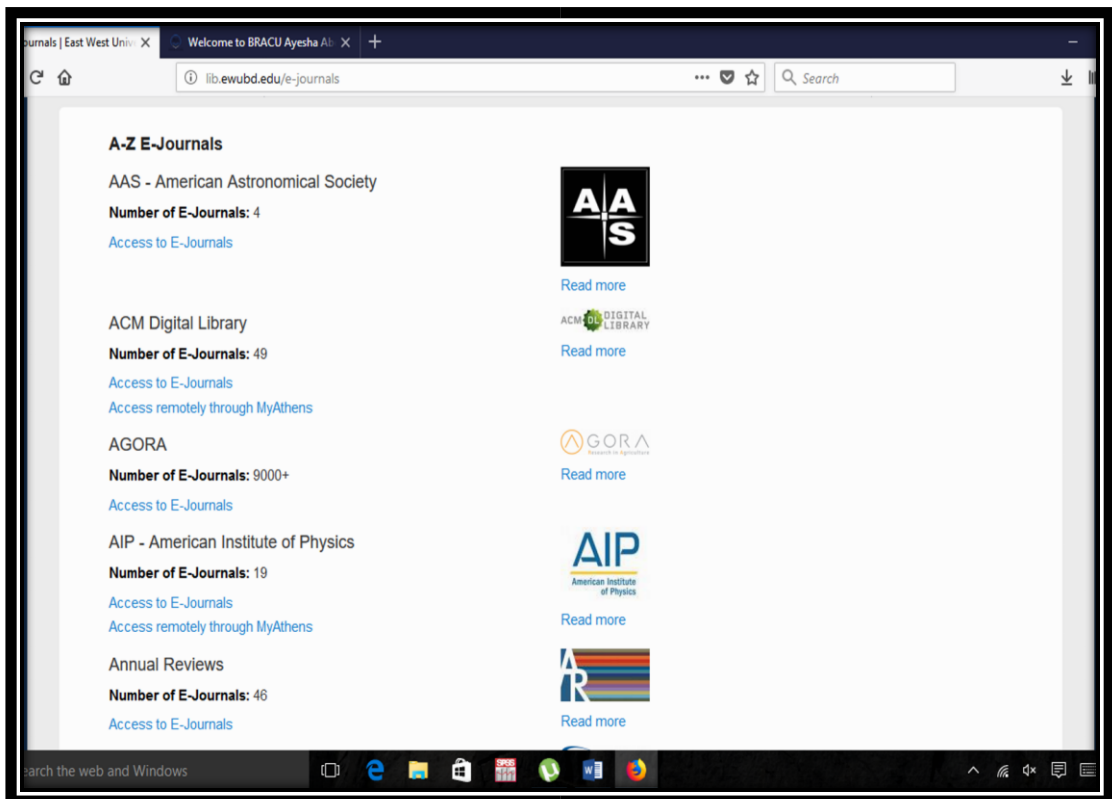


Figure: EWU Library e-journal services

If the user click on the publisher's link and they get East West University Library e-journals facilities.

### 3.8.1 List of e-journals

The following are the List of publishers for e-journals East West University Library:

- AAS - American Astronomical Society
- ACM Digital Library
- AGORA
- AIP - American Institute of Physics
- Annual Reviews
- APS - American Physical Society
- ARDI
- ASABE - American Society of Agricultural and Biological Engineers

- ASCE - American Society of Civil Engineers
- Bangladesh Journals Online
- BioMed Central
- BIR - British Institute of Radiology
- Brill Online Journals
- Cambridge University Press
- Canadian Science Publishing
- Cochrane Library
- De Gruyter Library & Information Science
- DOAJ - Directory of Open Access Journals
- EBSCO Host
- Edinburgh University Press
- Emerald
- Geological Society
- HINARI
- IEEE Xplore Digital Library
- IMF eLibrary
- Indian Open Access Journals
- International Forestry Review
- Johns Hopkins Guide to Literary Theory and Criticism
- Journal of the Acoustical Society of America (JASA)
- Manupatra
- Mary Ann Liebert
- OARE
- Optical Society of America
- PMC - PubMed Central
- PNAS - Proceedings of the National Academy of Sciences of the United States of America

- Access to E-Journals
- Read more
- Policy Press
- Project MUSE
- Royal College of Physicians
- Society for Industrial and Applied Mathematics (SIAM)
- SPIE Digital Library
- Springer
- The Royal Society
- UN Data Portal
- University of Chicago Press
- Wiley Online Library
- World Bank Open Resources

### **3.9 E-journal services NSUL**

The North South University library has imported subscription to electronic journals for the first time in Bangladesh. It has initiated subscribing to electronic journals, many titles of electronic journals of different subjects in 2002. All types of authorized users of North South University library get access to these resources straightly within the university campus area and from outside of the campus using username and password.

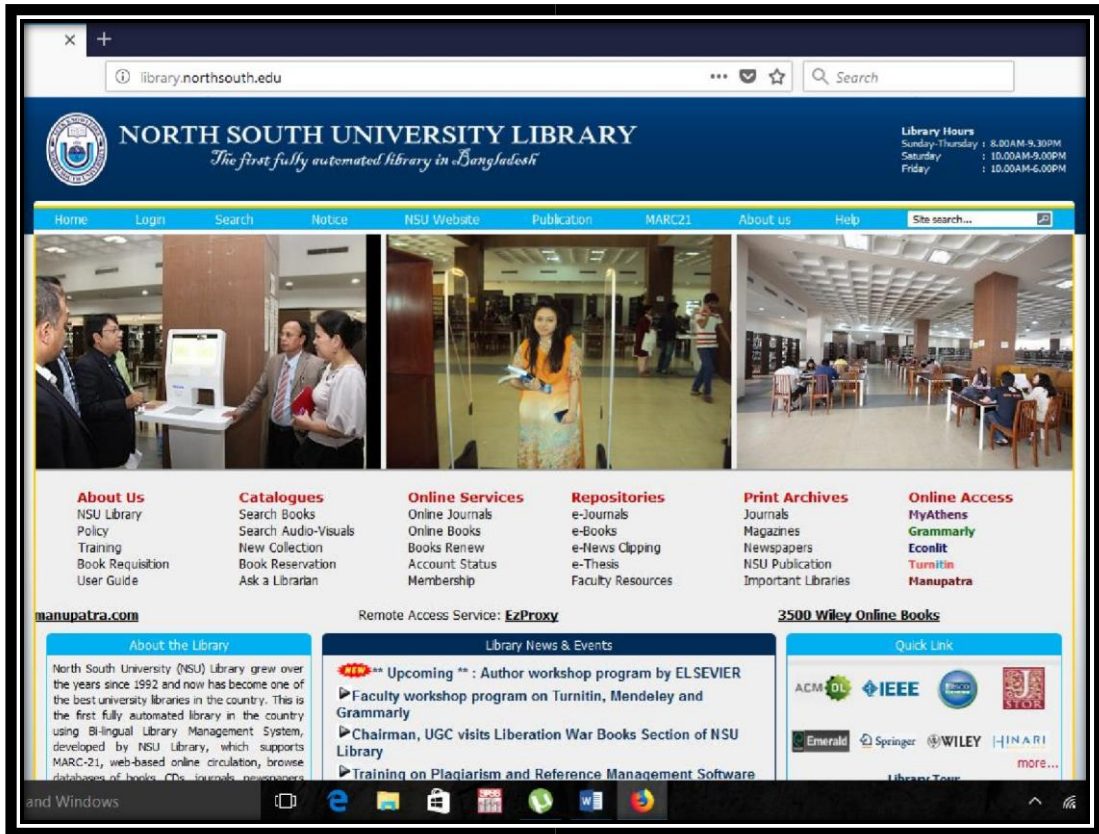


Figure: NSU Library Website

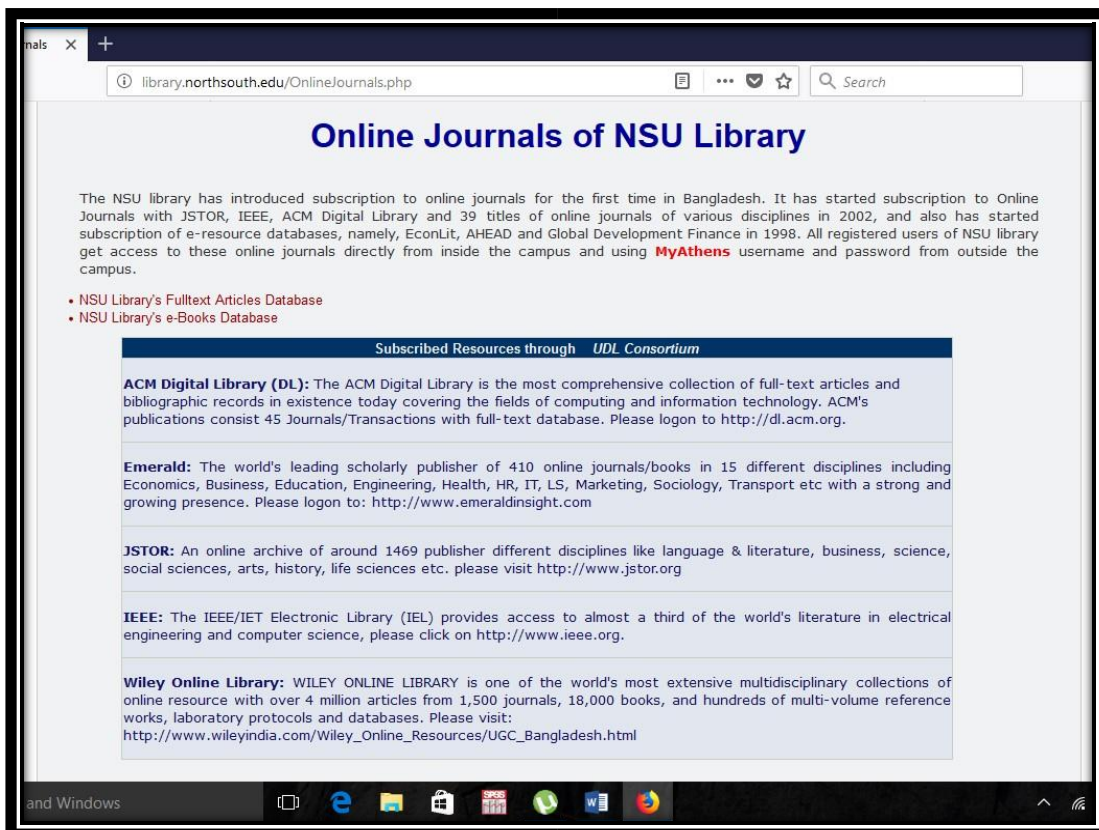


Figure: E-journal services of NSU Library



If the user click on the publisher's link and they get North South University Library ejournals services.

### **3.9.1 List of publishers**

The following are the List of publishers for e-journals of North South University Library:

#### **3.9.1.1 Resources through UDL Consortium**

- ACM Digital Library (DL)
- Emerald
- JSTOR
- IEEE
- Wiley Online Library

#### **3.9.1.2 Subscribed through BIPC-INASP PERI Consortium**

- American Astronomical Society
- American Physical Society
- American Institute of Physics
- American Society of Agricultural and Biological Engineers (ASABE)
- American Society of Civil Engineers
- Annual Reviews
- Brill online Journals
- British Institute of Radiography (BIR)
- Cambridge University Press Online Journals
- Canadian Science Publishing (NRC Press)
- Cochrane Library
- De Gruyter Online Journals
- EBSCO Host

### 3.9.1.3 EBSCOhost Research Databases

- EBSCOhost Mobile
- EBSCO Discovery Tool
- Publication Finder Interface
- Econlit FullText
- Edinburgh University Press
- Geological Society
- International Forestry Review
- International Monetary Fund □ Mary Ann Liebert, Inc.
- OSA
- Policy Press:
- Project MUSE: □ Royal College of Physicians □ Royal Society: □ SPIE Digital Library □ Springer:
- Wiley Online Library:
- Indian Journals: Indian Journals(IJ)

### 3.9.1.4 Registered Online Resources

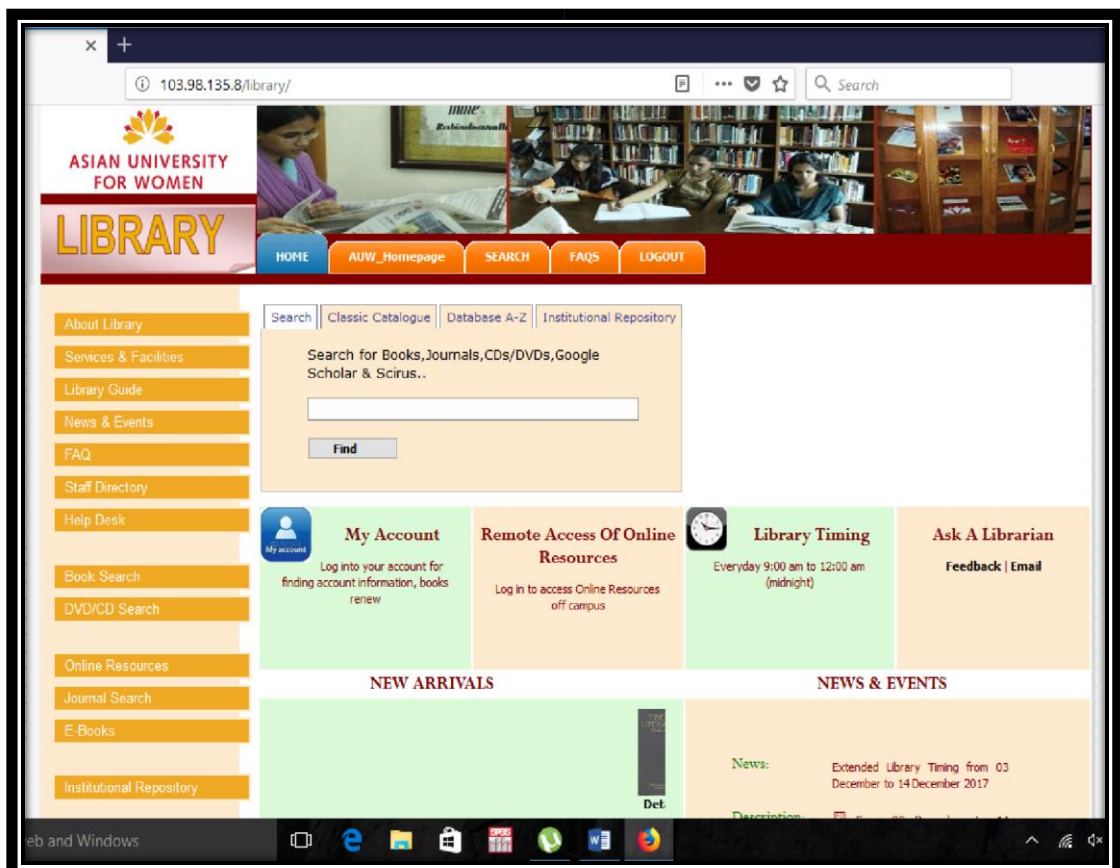
- AGORA
- HINARI
- OARE
- Research4Life Portal:
- World Intellectual Property Organization (WIPO) aRD Program:
- Econlit
- Manupatra

### □ Trial Access

- Science-Direct
- Scopus:
- SAGE Journals:
- Taylor & Francis Online Journal:
- Oxford University Press

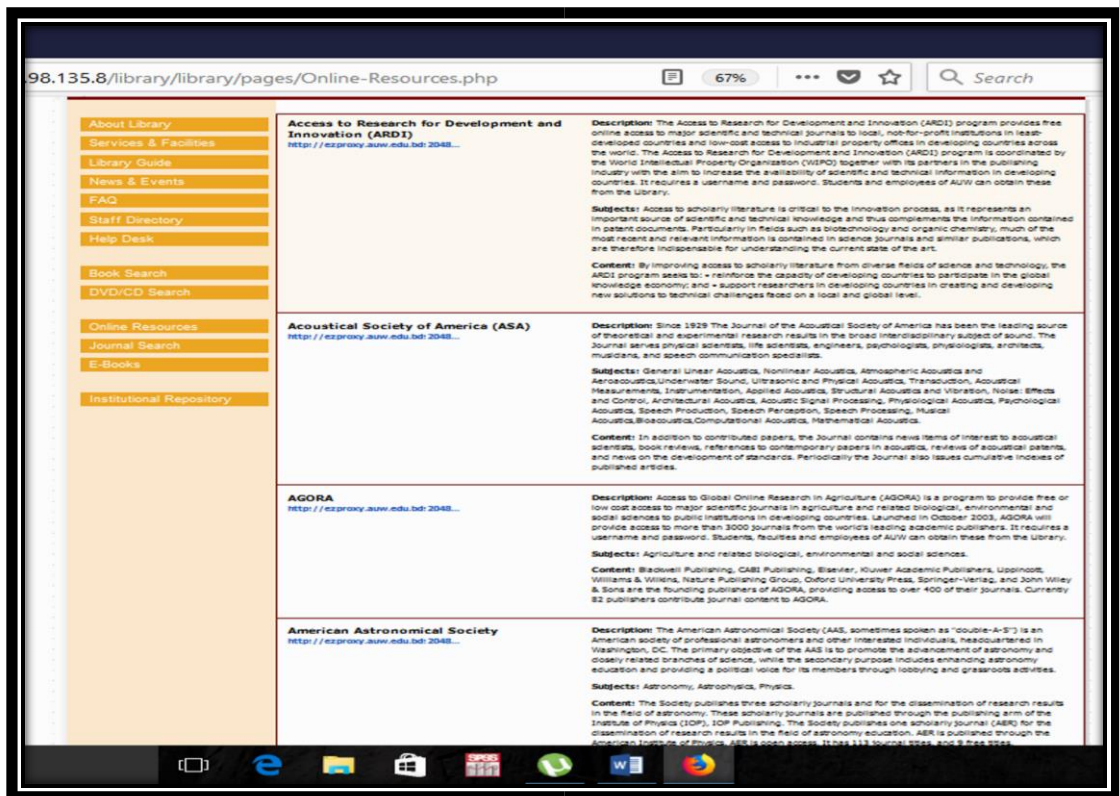
## 3.10 Asian University for Women

The mission of the library at the Asian University for Women is to support the curriculum of AUW. University library provides research, teaching and learning resources to the users over the digital resource services. The library offers services to increase the accessibility of the AUW community by giving original knowledge and resources for the research purpose and intellectual exploration and growth.



**Figure: AUW Library Website**

Online resources are subscribed through INASP/PERI, Research4life, Online Archive, EBSCO Host, LexisNexis, Chronicle of Higher Education and The Chronicle of Philanthropy. Academics and students of Asian university of Women can gather knowledge through the university library website ([www.auw.edu.bd/library/0/](http://www.auw.edu.bd/library/0/)).



**Figure: E-journal service of AUW Library**

If the user click on the publisher’s link and they get Asian University for Women Library e-journals opportunities.

### 3.10.1 List of publishers

The following are the List of publishers for e-journals of Asian University for Women library:

- Access to Research for Development and Innovation (ARDI)
- Acoustical Society of America (ASA)
- AGORA
- American Astronomical Society
- American Chemical Society
- American Institute of Physics Journals
- American Physical Society
- American Society of Agricultural and Biological Engineers (ASABE)
- American Society of Civil Engineers
- Annual Reviews
- Beech Tree Publishing
- Brill's Developing Countries Journals Program
- British Institute of Radiology Journals
- Cambridge Journals Online
- Canadian Science Publishing (NRC Research Press)
- Chicago Journals
- Cochrane Library
- de Gruyter Electronic Journals
- De Gruyter LIS Books
- De Gruyter LIS Journals
- Duke University Press Journals
- EBSCOhost Research Databases
- Edinburgh University Press
- Encyclopedia of Earth
- Financial Times
- Geological Society
- HEDBIB
- HINARI

- Indian Journals
- Institution of Engineering and Technology (IET) Digital Library
- IOP Publishing
- JSTOR
- Lexis Nexis
- Mary Ann Liebert, Inc.
- NPG - Nature
- NPG - Palgrave Macmillan Journals
- OARE
- OSA - Optical Society of America
- Oxford Journals (OUP)
- Policy Press Journals
- Project MUSE
- Royal College of Physicians
- Royal Society
- SPIE Digital Library
- Springer Journals
- Symposium Journals
- Taylor & Francis eBestseller Packages □ Content: eBook.
- The Boston Globe
- The Economist
- The International Forestry Review (IFR)
- The New York Times
- University of Chicago Press
- Wall Street Journal
- Wiley Online Library (formerly InterScience)
- Wiley Online Library (formerly Synergy)
- Wiley Online Library Full

- World Bank E-Library
- World Development Indicators
- World Higher Education Database (WHED)

### 3.11 E-journal services for IUT library

Islamic University of technology library associated with publishers and regional providers to establish the information resources accessible. They help the library professionals, research scholars and policy makers to find out and search the knowledge resources that are available and of interest to the users.

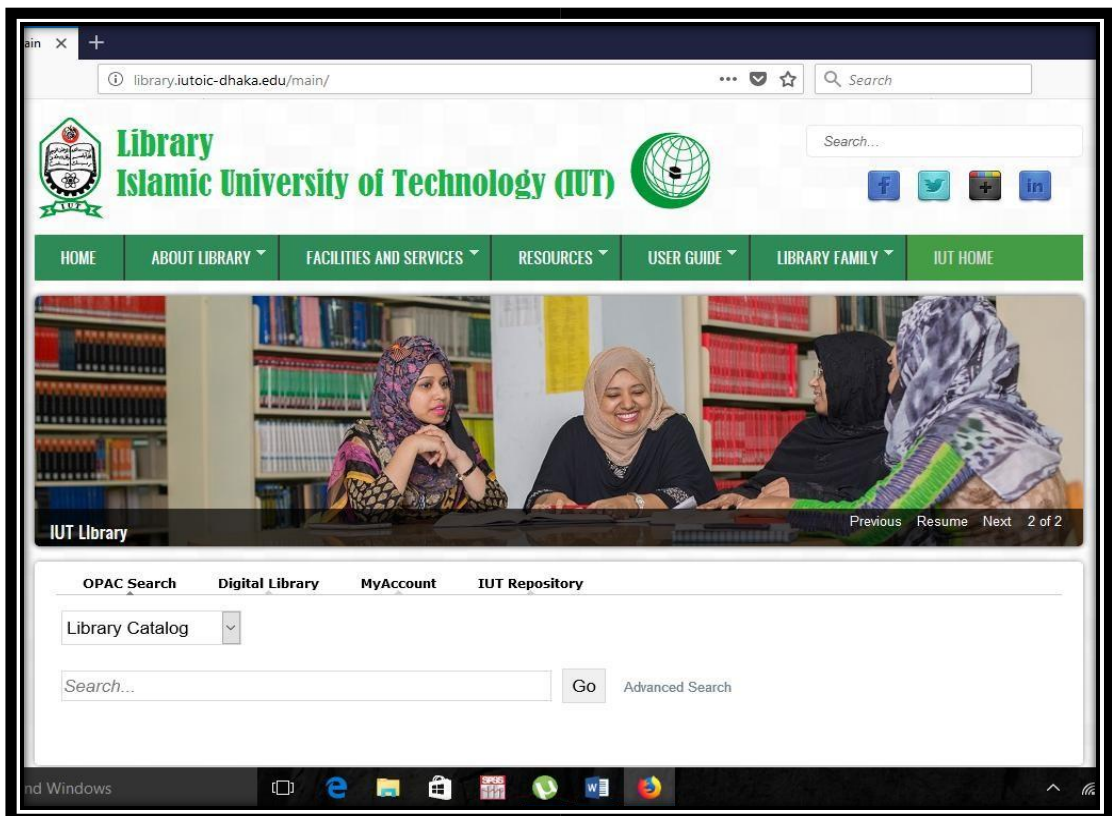


Figure: IUT Library Website

If the users click on the link ([library.iutoic-dhaka.edu/main](http://library.iutoic-dhaka.edu/main)) they can access a list of electronic resources which are subscribed to the library.

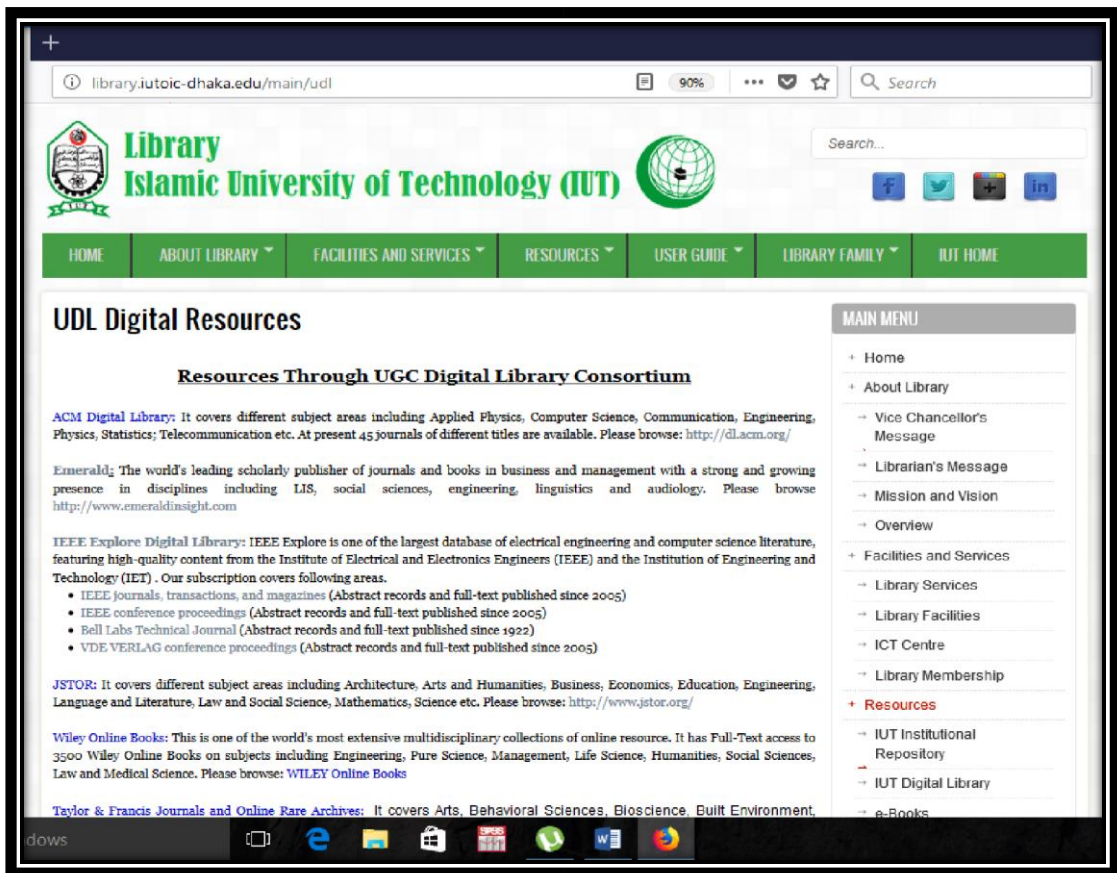


Figure: IUT Library e-journals service

If the user click on the publisher's link and they get Islamic University of Technology Library e-journals facilities.

### 3.11.1 List of publishers for e-journal

The following are the List of publishers for e-journals of Asian University for Women:

- American Astronomical Society
- American Institute of Physics journals
- American Physical Society
- Annual Reviews
- ASA - Journal of the Acoustical Society of America (JASA)
- ASABE Technical Information Library
- ASCE Journals Online



- British Institute of Radiology Journals
- Cambridge University Press - Cambridge Journals Online
- Canadian Science Publishing (publisher of the NRC Research Press journals)
- Cochrane Library (external resource - not available directly through INASP)
- De Gruyter Journals
- De Gruyter LIS Books
- De Gruyter LIS Journals
- EBSCO CMMC
- EBSCO Host Research Databases
- Edinburgh University Press Developing Countries Initiative (external resource - not available directly through INASP)
- Geological Society - The Lyell Collection Complete
- IMF eLibrary
- International Forestry Review - Commonwealth Forestry Association
- Liebert Online
- Nature Publishing Group eJournals
- OSA Journals
- Oxfam Digital Repository
- Palgrave Macmillan eJournals
- PNAS (external resource - not available directly through INASP)
- Policy Press
- Project MUSE journals
- Research4Life (external resource - not available directly through INASP)
- Royal College of Physicians
- Royal Society - Royal Society Journals Online
- Society for Industrial and Applied Mathematics Journals
- SPIE Digital Library
- Springer eJournals

- University of Chicago Journals
- Wiley Online Library Full

### **3.12 Summary**

E-journals are the knowledge and information resources that the university library offers to access digitally. The academic library has purchased subscriptions to many online knowledge resources in order to disseminate users with access to them without any charge. Academics and Researchers maintain a personal profile in order to keep up to date about the new content of the resources via email or RSS feeds. University library provides twenty four hours access to the online resources on campus or remotely via the library's proxy server or within the university network area.

## Chapter-4

# Insight and Views of Academics Regarding E-Journals

### 4.1 Introduction

E-journals are the major part of the digital collections, which is published in electronic format and easily accessible over the internet. The creation of a multiple digital communication system of the Internet and other virtual community networks has meaningfully changed the way academics and researchers directly or indirectly exchange information. As e-journals are developing as a new information platform, their promotional activities require something more than just notifications. Promotion is the decisive factor in the effective use of a sophisticated service called electronic journals. Library websites act as a better promotional medium to spread awareness about electronic journals. It is also analogous to an “electronic billboard” for the publicity of the electronic journals thereby providing increased visibility and enhanced access (Vasishta, 2011). This chapter shows the result of insight and views of academics and research students regarding e-journals, who are the frequent users of e- journals. The surveyed data have been analyzed using SPSS (16.0). The graphical presentations have been made using Microsoft Excel 2013. The analysis of results has been explained within the framework of the research.

### 4.2 Methodology

In order to assess the impact of e-journal usage in the university libraries of Bangladesh the survey method was utilized and a structured questionnaire was used to gather knowledge and experiences of the respondents (i.e. academics and research students). The data were collected 20<sup>th</sup> March, 2017 - 20<sup>th</sup> August, 2017. Both qualitative and

quantitative data was collected in the survey. Responses to closed-ended questions in particular on 7-point Likert scales were analyzed using the descriptive analysis techniques of SPSS 16.0 and responses to other closed-ended questions were analyzed using general statistics. Responses to the open-ended questions were coded to identify the themes within the questionnaire data that relates to the research questions of this study. To ensure the anonymity of the respondents, qualitative data were analyzed using the short form of respondents as Respondents 1 (R1), Respondents 2 (R2), etc.

### **4.3 Population and sampling**

A total of 120 questionnaires were distributed to 10 university library users (i.e. academics and research students) to obtain feedback of e-journals and determine their conceptual issues, present status, purpose and impact of e-journals on academics. Among them, we received 100 questionnaires with properly filled up and the response rate was 83.3%. Data were gathered from the faculty and students of Dhaka university Library (DUL), Bangladesh University of Engineering and Technology Library (BUETL),

Rajshahi University Library (RUL), Chittagong University of Engineering and Technology Library (CUETL), Jagannath University Library (JNUL), Ayesha Abed Library (AABL), EastWest University Library (EWUL), Islamic University of Technology Library (IUTL), Asian University for women Library (AUWL) and North South University Library (NSUL). From each university, five (5) faculty members and seven (7) research students were selected, who were using e-journals. They were requested to give some times for the questionnaire. We used a set of structured questionnaire. Respondents (faculty members and research students) those who were participating and experienced about e-journals, sharing their insight and observations regarding the impact of e- journals usage in the university libraries of Bangladesh. To contact with academics and research students, we took the help of library professionals. We gave questionnaires to the librarians and then they returned back us those questionnaires after filling up by the users.

**Table: 4.1 Distribution of questionnaire for survey**

Type of University	Name of the University	Distribution of questionnaires	Questionnaires received form respondents	Percentage of received questionnaires
<b>Public</b>	DUL	12	10	8.33
	CUETL	12	10	8.33
	RUL	12	10	8.33
	BUETL	12	10	8.33
	JNUL	12	10	8.33
<b>Private</b>	AAL	12	10	8.33
	EWUL	12	10	8.33
	IUTL	12	10	8.33
	AUWL	12	10	8.33
	NSUL	12	10	8.33
<b>Total</b>	<b>Ten</b>	<b>120</b>	<b>100</b>	<b>83.33</b>

#### 4.4 Findings

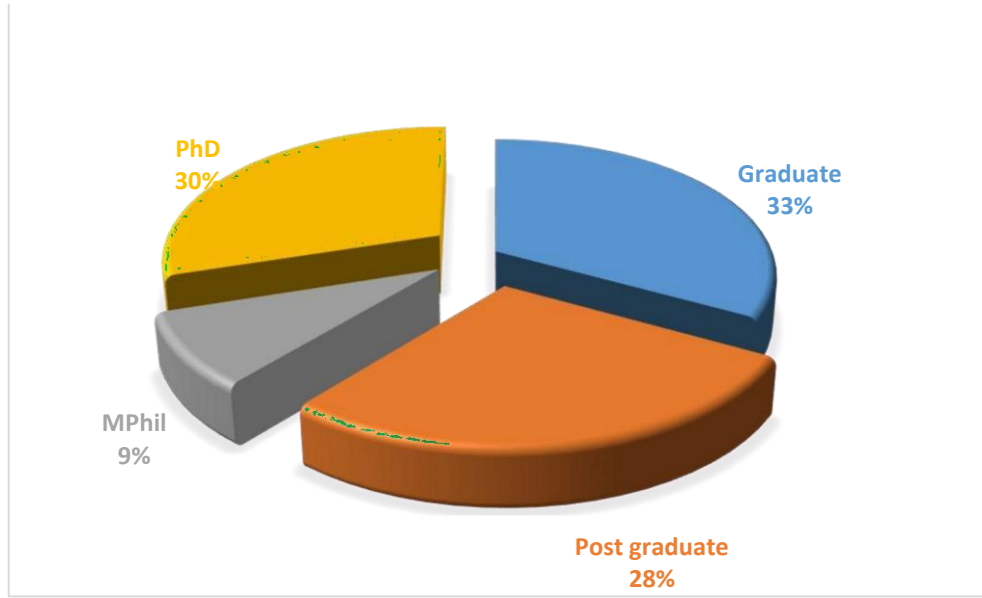
The findings of the survey showed an outlook on the overall situation about e-journals perception of the academics and research students. The sample of ten universities stand in a superior position among all public and private universities. The libraries were taken as sample based on the top ranking universities in Bangladesh. To select the sample, we used the UGC university ranking list and previous reputation of the universities. We calculated from the survey that one hundred (100) responses received from ten different disciplines

to notice the concept, present status, usage and purpose of using ejournals by the users and impact of e-journals on academics. Almost all respondents were interested about the e-journals and it was observed that faculty members used it frequently and by the long time. But maximum students were not using e-journals frequently and they didn't show strong reason for their limited use. Some of them were very much satisfied with e-journals services. We observed that many of the users, especially faculty members used e-journals from their home and other place of the university. The main purposes of using the e-journals as reported by the faculty members include research, education, professional achievement and current information. However research students reported the following reasons for using ejournals education, course work assignment and completion of thesis. Almost all academics reported using it for research purpose, and they would do the same in the future also.

#### ***4.4.1 Profile of the respondents***

The respondents of the public and private university libraries were requested to mention their higher educational qualifications.

Figure 4.1 reveals the distribution of educational qualification of academics. We can see that 33.0% of the respondents were graduate, followed by 28.0% postgraduate, 9.0% Mphil and "30.0% PhD.



**Figure 4.1: Highest Educational Qualification of Academics**

### **3.4.2 Type of Respondents**

Respondents were asked about their category (i.e. whether they academics or research students). The following Table 4.2 shows that 50% of the respondents were faculty (n=50) while the rest 50% were research students (n=50).

**Table 4.2: Showing the type of respondents**

Type of academics	Frequency	Percentage
Faculty	50	50.0
Research students	50	50.0
<b>Total</b>	<b>100</b>	<b>100.0</b>

## **4.5 Concept, present status and usage of E-journals**

### **4.5.1 Concept of e-journals from different levels of understanding**

The participants were requested to mention the concept of e-journals. The data received from the participants, were summarized regarding their concept of e-journals. They expressed their knowledge from different parts of views. However, their understandings are reported below under some specific and relevant headings:

#### ***4.5.1.1 Scholarly or online journals***

R1 defined e-journals as scholarly journals that can be accessed over the internet. R1 also reported that it is also called online journals that include tremendous features for the users.

#### ***4.5.1.2 Periodical publication***

R2 stated that e-journal is a periodical publication which is published in electronic format and available on the internet.

#### ***4.5.1.3 Full-text of journals with a range of titles***

On the other hand, R3 mentioned that E-journals have several advantages over printed journals and users can search the content pages and/ or the full text of journals to get articles on a certain topic. Similarly R4 stated that e-journals support searching across a range of titles that enables users to save time and money.

#### ***4.5.1.4 Electronic or digital format and easily accessible and available***

R5 explained that e-journals are easily accessible and available as soon as or even before the print version is published. Similarly, R6 reported that e-journals means, electronic format of information and knowledge available in digital format and easily accessible by the users.



#### **4.5.1.5 Remote and multiple access**

R7 stated that remote access is the excellent feature of e-journals whereas many users prefer to access those journals from their residence. Another respondents R8 mentioned that different users can access the same copy of e-journals simultaneously from the same place and/or different places.

#### **4.5.1.6 Important resources for research**

R9 defined electronic journals are important resources for research scholars and plays a vital role in scholarly communication. It contains lots of resources which are very helpful for the academics and research students and it's also fulfill their research needs.

#### **4.5.1.7 Electronic document**

R10 reported that it is a version of printed or paper based journals which are used electronically over the internet.

Similarly, R11 stated that an electronic journal as a publication that is delivered to the subscribers through a computer file. They have almost all the characteristics of print journals and are available either online or offline or both.

#### **4.5.1.8 Electronic format**

R12 defined electronic journals or e-journals is the term used for journals and newsletters that are prepared and distributed in electronic format. R13 mentioned that electronic journals also known as E-journals, online journals, Electronic serials etc. that can be accessed electronically via the internet. In practice, this means that they are mainly published on the web.

#### 4.5.1.9 Digital storage

R14 explained that the e-journals are collections of huge information resources very much useful for the research scholars which can be saved digitally for further use.

#### 3.5.1.10 Current information

R15 expressed e-journals as a bundle of current or update information on research or scholarly articles published on the internet.

#### 4.5.2 Searching of e-journals

Figure 4.2 shows that 89% of the respondents (n=89) reported searching of e-journals, while 11.0% (n=11) of the respondents reported not searching of e-journals.

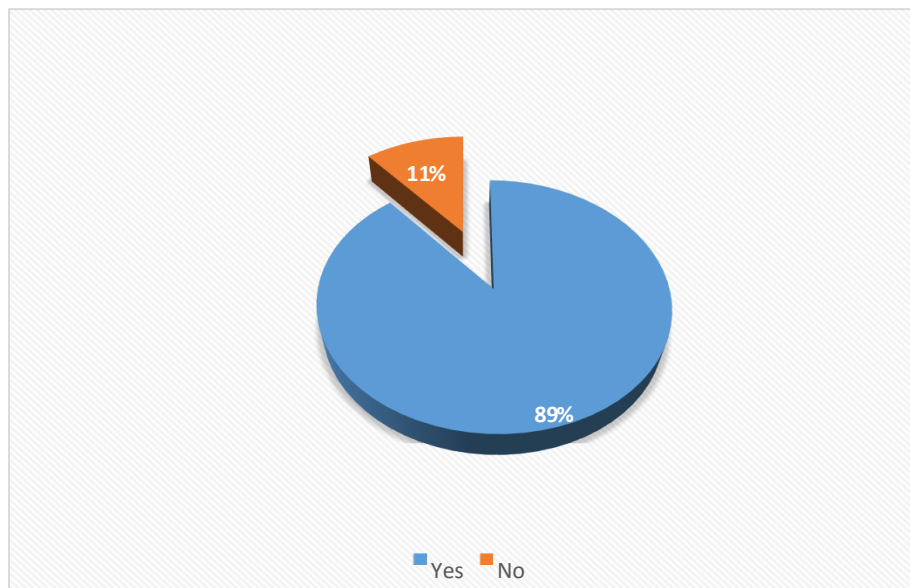


Figure 4.2: Showing the searching ratio of e-journals

#### 4.5.3 Reasons for searching e-journals

Respondents were asked to report the reasons for searching of e-journals. The reasons, as mentioned by the respondents are illustrated in figure 4.3. It shows that the highest 73.0% (n=65) of the respondents used e-journals for research purpose, whereas 14.60% (n=13) of the respondents used e-journals for “education”. 6.74% (n=6) of the respondents used

e-journals for current information, 3.37% (n=3) of the respondents used wining award and 2.24% (n=2) of the respondents used for professional improvement.

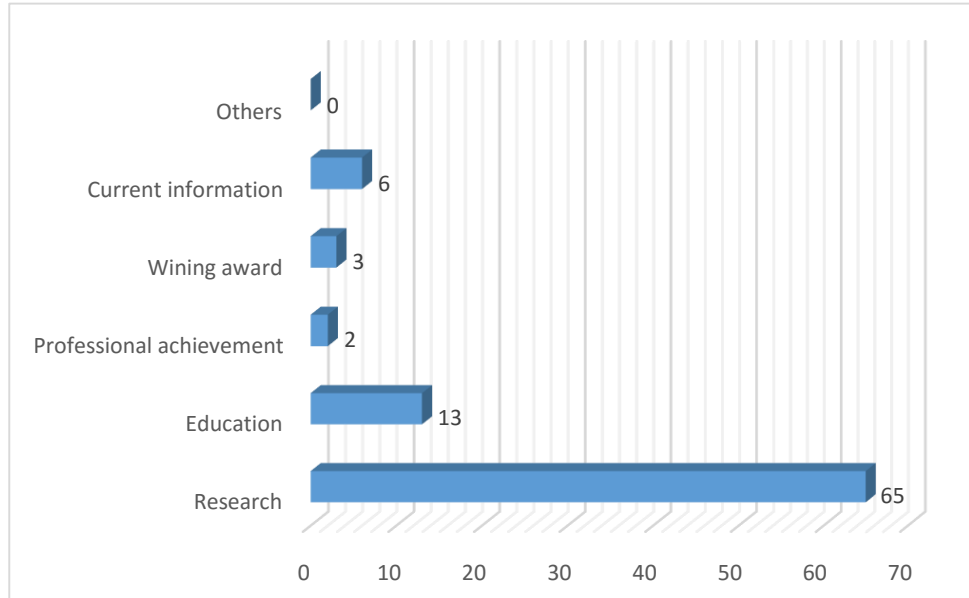
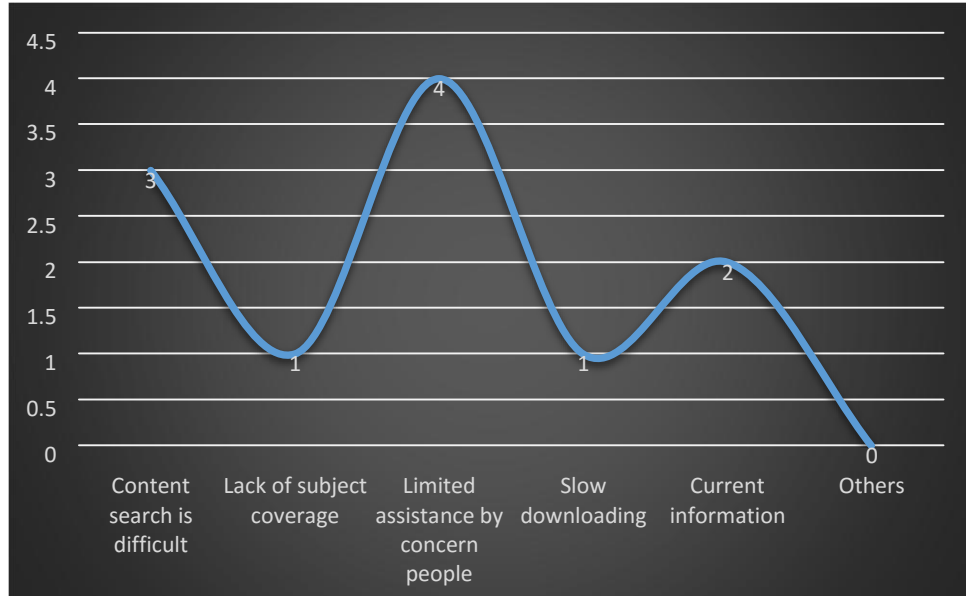


Figure 4 .3 : Reflects the reasons of searching e-journals

Figure 4.3: Reflects the reasons of searching e-journals

#### ***4.6.3 Reasons for not searching e-journals***

Respondents were asked about the reasons why they were not searching or using ejournals from the university libraries.



**Figure 4.4: Showing the result for not searching EJ**

Figure 4.4 reflects that 27.27% (n=3) of the respondents were found not using e-journals for “content search is difficult” while 36.36% (n=4) of them were for the cause of “limited assistant by concern people”. Similarly, 18.18% (n=2) of the respondents were not interested searching e-journals due to the reason of “lack of awareness” and 9.9% (n=1) of the respondents because of “content search is difficult” and another for slow downloading.

#### **4.6.4 List of using e-journals**

The participating respondents were asked to know about the e-journals they had frequently used. The data, received from the respondents, were summarized regarding e-journals subscription list to the library. The following table clearly shows the frequency of using e-journals by the respondents which are subscribed to the library.

**Table 4.3: Showing the list of using e-journals subscribe to the library**

List of e-journals	Frequency	List of e-journals	Frequency
ACM Digital Library	91	Cambridge University	100
Acoustical Society of America	91	Royal Society	91
American Society for Civil En.	91	IEEE	90
Brill	81	Mineralogical Abstract	20
Annual Review	91	American Chemical Society	80
Duke University Press	71	American Physical Society	90
Emerald Insight	90	Multilingual Matters	59
JSTOR	100	University of Chicago	80
AGORA	80	Cochrane Library	90
HINARI	80	ELSEVIER	40
OARE	80	Springer	90
World Bank eLibrary	60	Project Mouse	90
SPIE Digital Library	91	EBSCO Host	80
Wiley Online Library	91	Canadian Science Pub.	60
Oxford University	91	Edinburg University	70

Table 4.3 indicates the frequency of using e-journals subscribe to the library. The table reflects that the highest portion of the respondents (n=100) used “JSTOR” and “Cambridge University Press”. The second highest portion of the respondents (n=91) used “ACM Digital Library”, “Acoustical Society of America”, “American Society for Civil Engineers Annual Review”, “SPIE Digital Library”, “Wiley Online Library”, “Oxford University Press” and “Royal Society”. The third highest portion of the respondents (n=90) reported using “Emerald Insight”, “IEEE”, “Cochrane Library” and “Project Mouse” followed by (n=81) using “Brill”,

“AGORA”, “HINARI”, “OARE”, “ American Chemical Society”, “ University of Chicago Press”, “ EBSCO Host”, “Duke University Press”. Further followed (n=71) indicated “Edinburg University Press”, the respondents of (n=70) “Canadian Science Publishing” and “World Bank eLibrary”, the respondents of (n=60) reported using “Multilingual Matters” (n=59), “ELSEVIER” (n=40). It is also shown that the lowest number (n=20) of the respondents used “Mineralogical Abstract”.

#### 4.6.5 Experience of using e-journals

Respondents were asked about their experience of using e-journals in the university library. Figure 4.5 reveals that, 13.0% of the respondents (n=13) had been using e- for “less than 6 months”, followed by 20. 0% (n=20) using for “6 months-1 year”, 19.0% (n=19) of the respondents using for “1-2 year” and 21% .0 (n=21) of the respondents reporting “2-4 years” and the rest 27.0% (n=27) reporting “more than 4 years”.

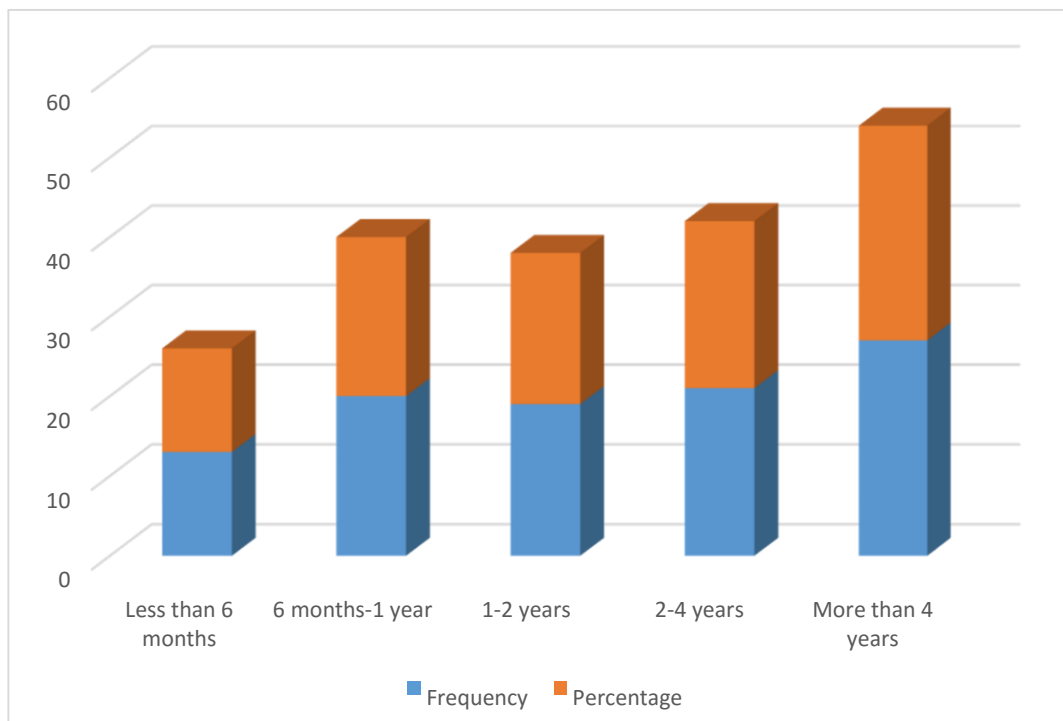


Figure 4.5: Showing the experience of using e-journals

#### 4.6.6 Frequency of using e-journals

The respondents were asked to report the frequency of using e-journals in the university libraries. Figure 4.6 shows the frequency of using e-journals by respondents in the libraries. Among the respondents, 15.0% (n=15) reported that they have been using e-journals for “Daily”, while 41.0% of the respondents (n=41) mentioned “2-3 times a week”, followed by 30.0% (n=30) of the respondents asserted “2-3 times a month”, 14.0% (n=14) and 1% (n=1) of the respondents reported “Once a year”.

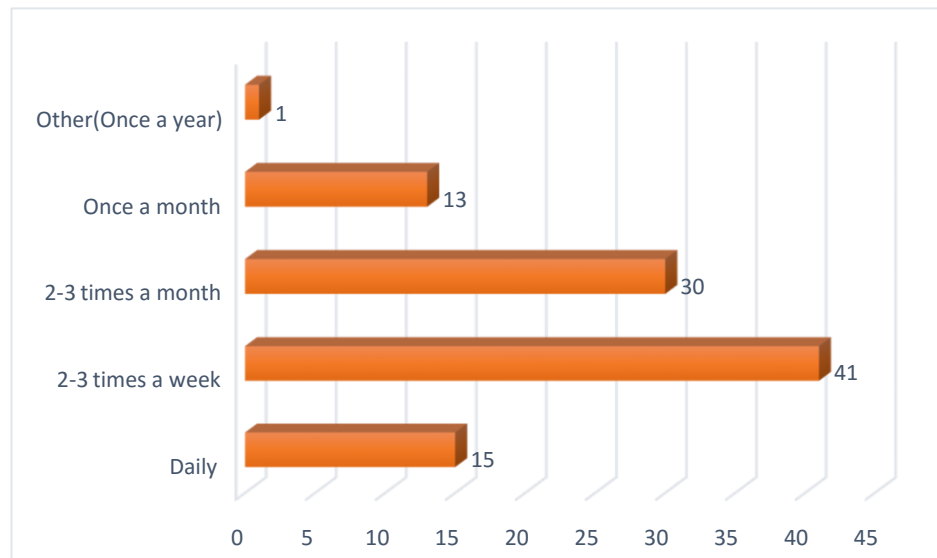
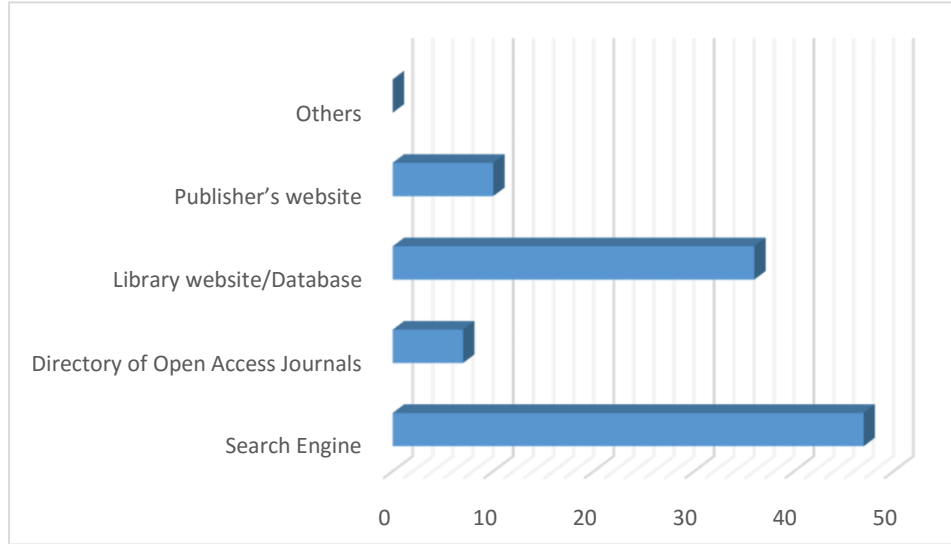


Figure 4.6: Bar chart displaying the frequency of using e-journals

#### 4.6.7 Preferred route to access e-journals

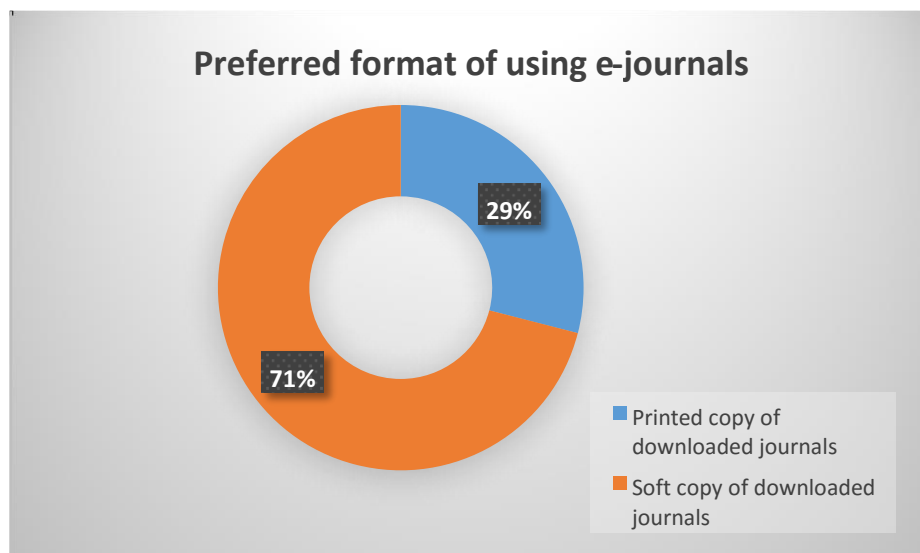
From the Figure 4.7, it is clear that search engine and library website are the most preferred route to access e-journals among the academics using e-journals frequently for their research purpose. Among the respondents, 47% (n=47) preferred search engine, while 36% (n=36) of the respondents preferred library website. On the contrary, Directory of Open Access Journals (DOAJ) is the least preferred route, for which the responses were 7% (n=7). Publisher’s website positioned in between the most and least preferred route where the number of respondents were 10% (n=10). The following chart would be helpful to have clear idea on the preferred route to access to e-journals in the library.



**Figure Figure 4.7: Showing the result of preferred route to access e 4 . 7 : Bar chart showing the result of preferred route to access EJ-journals**

#### ***4.6.8 Preferred format of using e-journals***

Figure 4.8 shows the percentages of respondents reporting about their preferred format of using e-journals. The figure indicates that, 29% of the respondents (n=29) reported printed copy of downloaded journals being their preferred format, and 71% (n=71) reporting about soft copy of downloaded journals.



**Figure 4.8 Showing the percentage of preferred format of e-journals**



#### 4.6.9 Searching place access to e-journals

Figure 4.9 shows that 37% (n=37) of the respondents reported they searched e-journals from university library, while 30% (n=30) stated searching e-journals at home, the 25% (n=32) mentioning about other place at university, 8% (n=8) mentioning about searching e-journals from university hall.

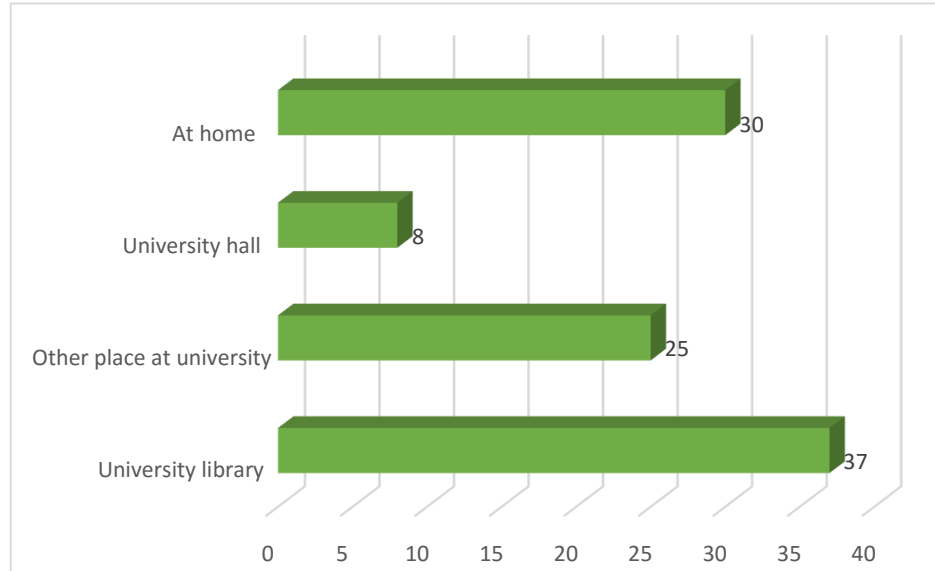


Figure 4.9: Searching place to access e-journals

4.9 : Searching place to ac

#### 4.6.10 Overall capacity of using e-journals

Figure 4.10 reveals that 14% of the respondents (n=14) had fully acquired their expertise in using e-journals. As high as 28% (n=28) of the respondents reported their capacity to be above the average, 32% (n=32) stating about their capacity being average, 4% (n=4) reporting below average. However, the rest 22% respondents (n=22) reported that they were just beginner in using e-journals.

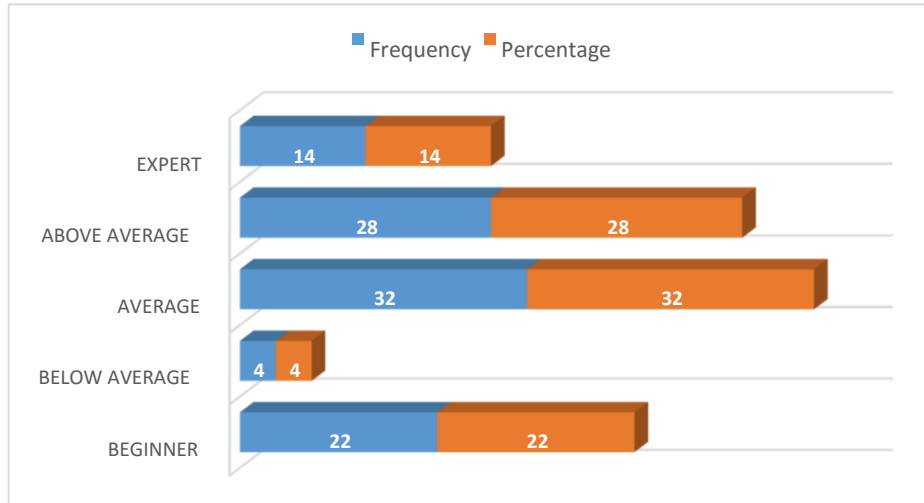


Figure 4.10: Showing the overall capacity of using e-journals

#### 4.6.11 Level of satisfaction about e-journals

Nearly half 47.0% (n=47) of the respondents reported that they were “Fully” satisfied in using the e-journals (Figure 4.11). The second largest portion 30% (n=30) of the respondents stated that they were “Partially” satisfied, followed by the 17.0% of the respondents (n=17) reported neutral and 6% (n=6) proclaimed “less satisfied” with the e-journals facilities.

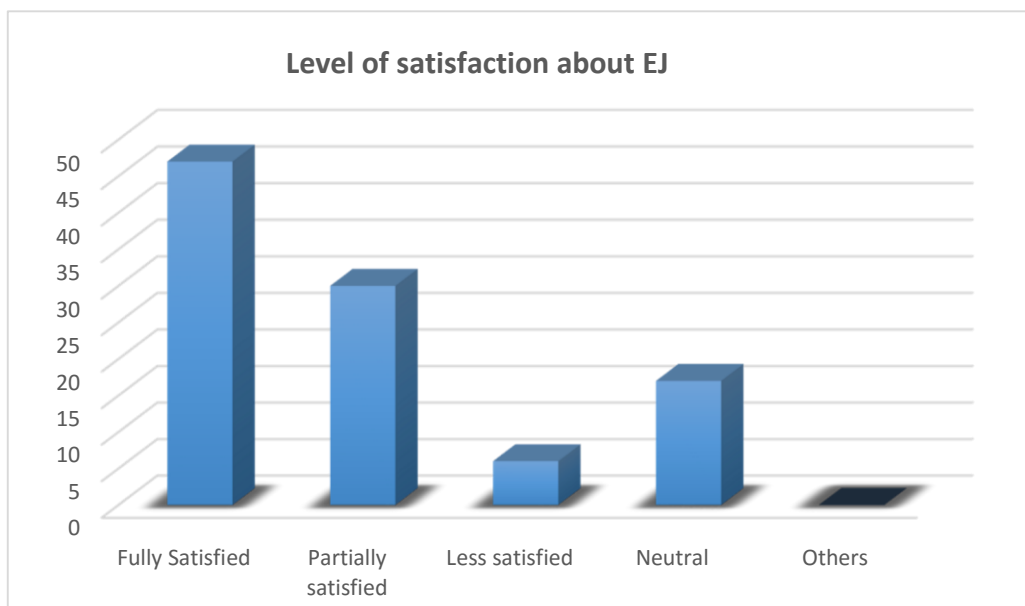


Figure 4.11: Displaying the results of level of satisfaction about e-journals

## 4.7 Purpose and impact of using e-journals

### 4.7.1 Rating on the degree to which interviewees agree/disagree for the purpose of using e-journals

Participants were asked to indicate the degree to which they agree or disagree about the purpose of using e-journals. The responses received from them were measured in seven point Likert scales, and responses were calculated according to the following scores: strongly disagree=1.00; disagree=2.00; somewhat=3.00; neutral=4.00; agree=5.00; agree somewhat=6.00; strongly agree=7.00.

**Table 4.4: Purpose of using e-journals by the respondents**

Statements	N	Min	Max	Mean	S.D
Academic & professional development	100	1	7	5.36	1.851
Preparation of lectures	100	1	7	4.84	1.710
Course work Assignment	100	1	7	4.81	1.680
Writing & publishing research article(s)	100	1	7	5.36	1.946
Completion of Thesis/Dissertation	100	1	7	5.35	1.882
Recommend reading for students	100	1	7	4.87	1.704
Further reading(s) on topic interest(s)	100	1	7	5.02	1.711
Pursuing e-abstract of journals	100	1	7	4.74	1.942
Professional competency	100	1	7	4.97	1.017
Regular updating of content	100	1	7	5.11	1.922
Search for necessary resources	100	1	7	5.48	1.573

Table 4.4 elaborates the purpose of using the e-journals. The analysis shows that the majority of the respondents preferred e-journals for “search for necessary resources” (with the mean score of 5.48) while the second highest of the respondents preferred e-journals for “writing & publishing research articles” and “academic & professional development” (with the mean score of 5.36). “completion of thesis/dissertation” as a purpose of using e-journals ranked third (with the mean score of 5.35), followed by “regular updating of content” (with the mean score of (5.11). The other purposes for using e-journals are: “further reading(s) on topic interest(s)” (with the mean score of 5.02), “professional competency” (with the mean score of 4.97) “recommend reading for students” (with the mean score of 4.87), “preparation of lectures” (with the mean score of 4.84), “course work Assignment” (with the mean score of 4.81) and “pursuing eabstract of journals” (with the mean score of 4.74).

### ***4.7.3 Impact of e-journals on academics***

The respondents were asked to know about the impact of e-journals on academics. The responses received from them were measured on the same scale appeared in 3.7.1.

**Table 4.5: Impact of e-journals on academics**

<b>Statements</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>S.D</b>
Facilitate to improve quality of research work	100	1	7	5.41	1.821
Enable to improve quantity of research work	100	1	7	5.46	1.566
Simpler to keep up development of own field	100	1	7	5.09	1.826
Provide access to a wide range of information	100	1	7	5.38	1.710
Give access to up-to-date information	100	1	7	5.46	1.755

Accelerate the research process	100	1	7	5.32	1.728
Extend the range of work	100	1	7	5.32	1.582
Reduce working time	100	1	7	5.47	1.696
Improve professional competency	100	1	7	5.32	1.746
Interest to use of EJ for research in future	100	1	7	5.48	1.738

***Facilitate to improve quality of research work***

E-journals enhance the speed of communication and it is accessible even from a different users desktop and easily searchable as they support different searching capabilities that increase the quality of research work (Kumar 2017). The respondents agreed with the statement (with the mean score of 5.41) that e-journals improved quality of research work.

***Enable to improve quantity of research work***

E-journals reach in the hands of the users soon after their publications and able to derive rapidly as they are not fixed to a setup, printer or distribution network. No theft or mutilation problems occur with e-journals and authors and readers get closer (Kumar, 2017). Swift publication and availability of e-journals on the user's screen are the key features that attract the scholars that can increase the research work (Avjyoyi, 2007). Respondents were asked to know how much they do agree that e-journals improve quantity of research work. The respondents agreed with the statement (with the mean score 5.46) that e-journals improved the quantity of research work.

***Simpler to keep up development of own field***

The experts are consulting e-journals to the research scholars and students for research purposes and to keep update knowledge in their own field or subject. The infrastructure facilities for using e-journals are excellent and there is no technological problem

especially hardware and software related support with high bandwidth of Internet speed (Qasim 2017). The interviewees agreed with the statement (with the mean score of 5.09) that e-journals simpler to keep up development of user's own field.

***Provide access to a wide range of information***

Now-a-days we are living in the era of information explosion and the present progression of ICT brings considerable development in the way of acquiring knowledge and resources. The improvement of modern technology creates a wide pathway to the scholarly communication and publication of the resources. E-resources is the dissemination of resources digitally and accessible through the internet. The explosion of communication technology has become very quick, resources can be easily searchable just in a single click through various searching, linking and facility. The preference of the users towards e-resources is increasing and the requirement of the users for delivering online resource services in the library is raising. Therefore, academic libraries in particular are anxious in collecting and subscribing the information resources (Pachauri, 2017). The respondents agreed with the statement (with the mean score of 5.38) that E-journals provide access to wider range of information.

***Give access to up-to-date information***

Now-a-days e-journals are increasing due to the increasing of awareness among the research scholars about the e-resources and services. University library allow easy access at other places in the university so that they are accessing the resources at university hall, departments and their residence more as compared to the library. Their visits to library have decreased (Natarajan, 2017). E-journals are the best means of getting current and up-to-date information and digital resources very quickly (Nasreen and Zuberi, 2010). The respondents were agreed with the statement (with the mean score of 5.46) that e-journals accelerated research process.

***Accelerate the research process***

Consortium based subscription of e-journals provides an opportunity to maximize cooperative collection building and for resource sharing over the long term (Reitz, 2014). E-journals have become the most popular tools for research and academic activities that can boost up the process of research functions easily (Golwal et al.; 2008). Thus e-journals can accelerate the research process. The participated users agreed with the statement (with the mean score of 5.32) that e-journals accelerated research process.

***Reduce working time***

Remote access is the ability to get access to a computer or a network from a remote distance. This allows users to work offsite, at present the more accepted system of resource sharing is called library consortia. With the advent of electronic information the concept of consortia has been mooted mainly for the acquisition of E-journals (Chander and Gupta, 2015). For any researcher, availability from a desktop computer means a significant increase in accessibility, particularly for those who do not work within easy reach of the library. Access is independent of time and place. Information is readily available from desktop and accessed 24 hours a day (James Gray, 2001). The respondents agreed with the statement (with the mean score of 5.47) that e-journals reduce working time.

***Improve professional competency***

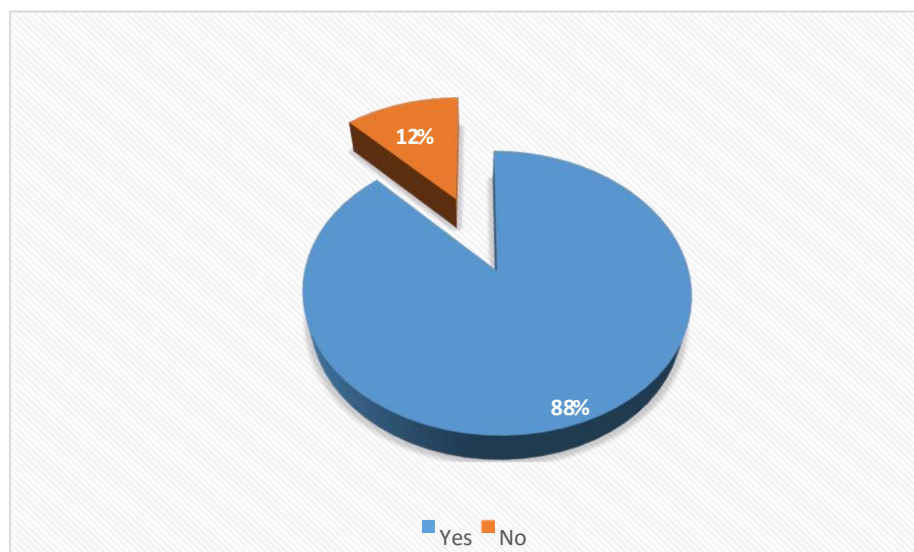
According to Llewellyn (2002), journals that are published exclusively in electronic format present an innovation in the way that scientific information is communicated to the research community. Thus e-journals can improve professional attitude of the researchers. The respondents agreed with the statement (with the mean score of 5.32) that e-journals Improve professional competency.

***Interest to use of e-journals for research in future***

The availability and easy accessibility of information resources increase the interest of users for using e-journals more frequently (Naid and Motiyani, 2007).The respondents agreed with the statement (with the mean score of 5.48) that they intended to use the e-journals for research in the future.

### ***3.7.4 Improvement of research skills***

The respondents were asked to know whether their research skills improved or not by the using of e-journals in the library. Figure 4.12 reflects that 88% of the respondents (n=88) improved their research skills by using e-journals whereas 12.0 % (n=12) of the respondents declared not improved.



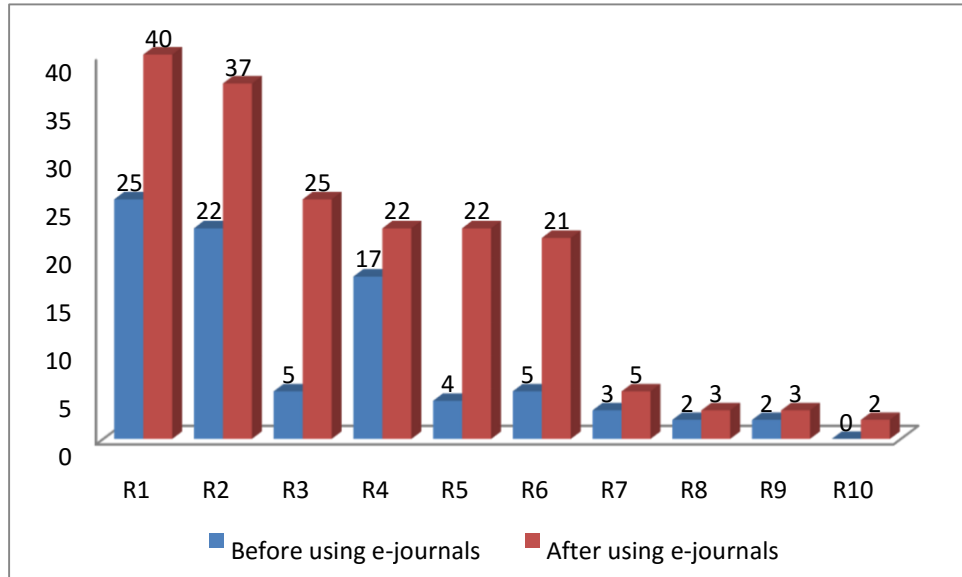
**Figure 4.12: Pie chart reflecting the percentage of research skills**

### ***4.7.5 Number of research articles before and after using e-journals***

#### ***4.7.5.1 Users impact of DUL***

The participating academics were asked to mention their number of research articles before and after using e-journals. The data, received from the respondents, were summarized about the impact of e-journals on academics.



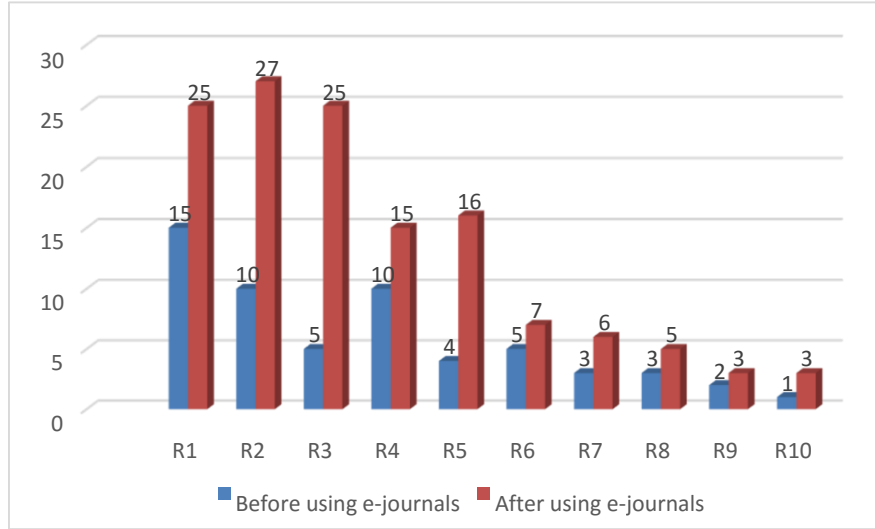


**Figure 4.13: Users impact of DUL before and after using e-journals**

Figure 4.13 shows that the respondents of Dhaka university library (R1 to R10) reported that the number of research articles had amazingly increased after using e-journals.

#### ***4.7.2 Users impact of BUET Library***

The respondents were requested to mention their number of research articles before and after using e-journals. The data, received from the respondents, were summarized about the impact of using e-journals on academics.

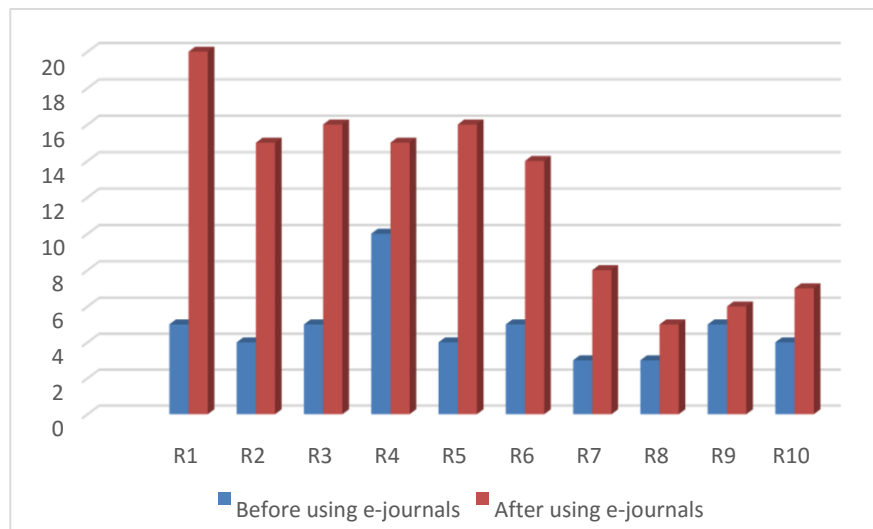


**Figure 4.14: Users impact of BUETL before and after using e-journals**

Figure 4.14 reflecting the impact of using e-journals, respondents of the BUET library (R1 to R10) indicates that the quantity of research articles had increased after using e-journals.

#### **4.7.3 Users impact of CUET Library**

The respondents were asked to reply their number of research articles before and after using e-journals. The data, received from the respondents, were summarized about the impact of using e-journals on academics.

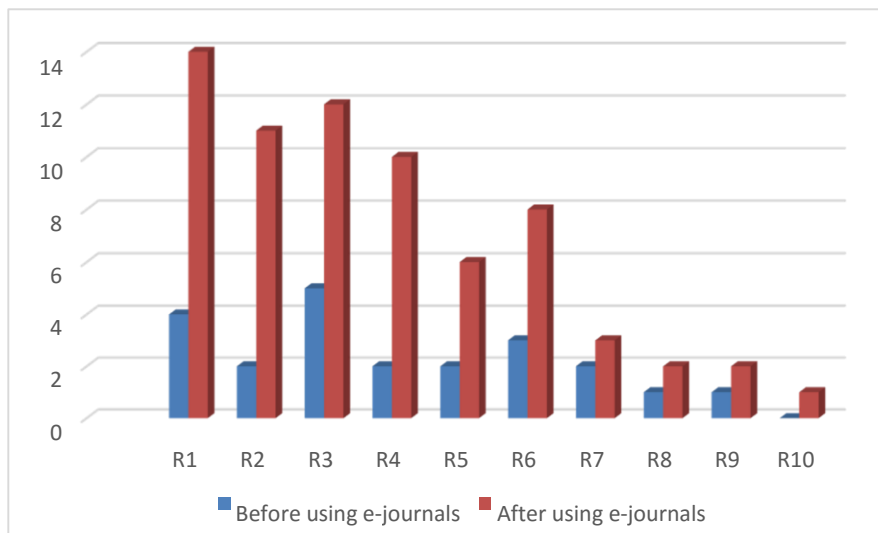


**Figure 4.15: Users impact of CUET Library after using e-journals**

Figure 4.15 shows that the respondents of CUET library (R1 to R10) explored that the number of research articles had tremendously increased after using e-journals.

**4.7.4 Users impact of RU Library**

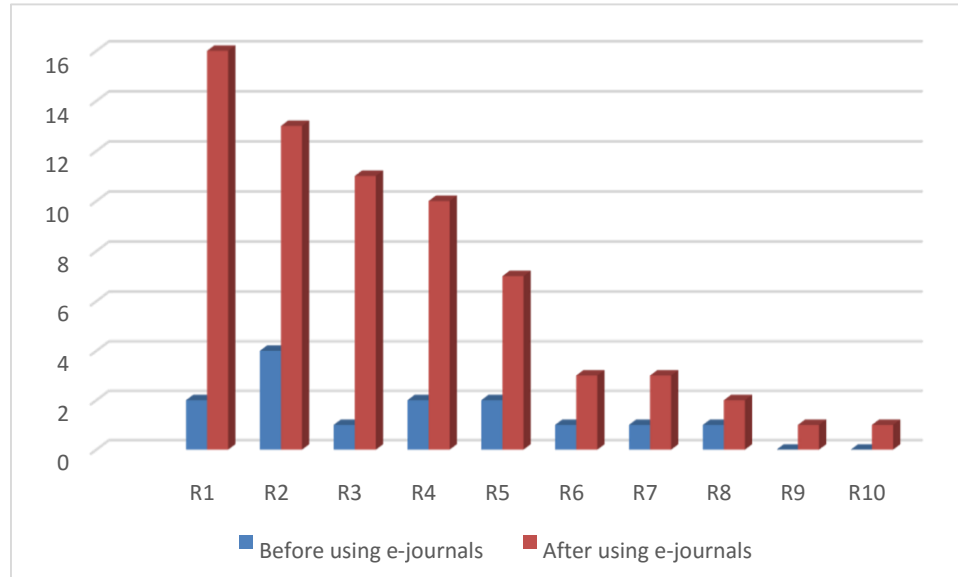
The participants were requested to mention their number of research articles before and after using e-journals of the Rajshahi University Library. Figure 4.16 showing that the respondents of RU library (R1 to R10) explored that the number of research articles had amazingly increased after using e-journals.



**Figure 4.16: Users impact of RU Library after using e-journals**

**4.7.5 Users impact of JNU Library**

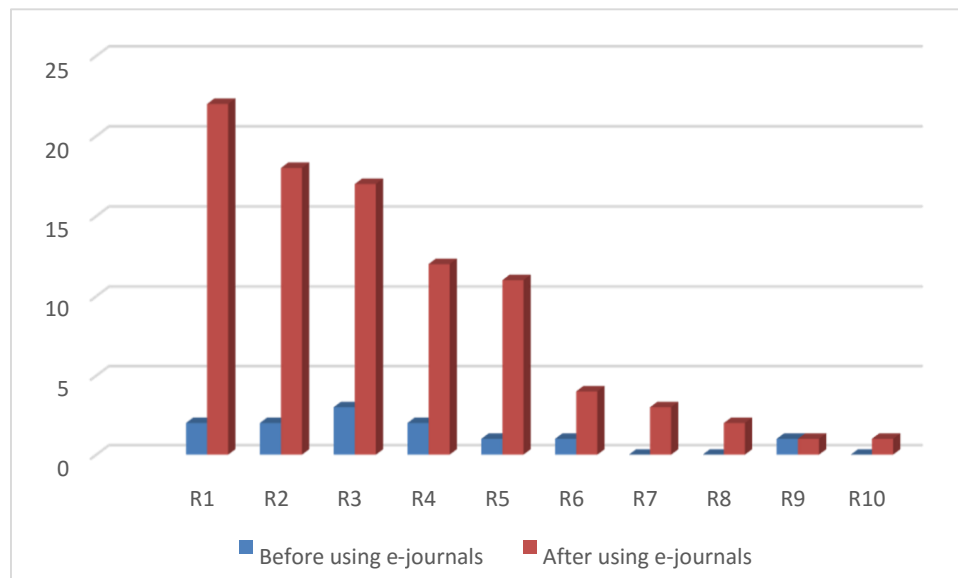
The participants were requested to mention their number of research articles before and after using e-journals in the Jagannath University Library. Figure 4.17 showing that the respondents of JNU library (R1 to R10) stated that the number of research articles had amazingly increased after using e-journals.



**Figure 4.17: Users impact of JNU Library after using e-journals**

#### ***4.7.5 Users impact of BRAC Library***

Figure 4.18 shows that the respondents of AAL library (R1 to R10) stated that the number of research articles had amazingly increased after using e-journals.



**Figure 4.18: Users impact of AAL after using e-journals**

#### 4.7.5 Users impact of EWU Library

The respondents of EWU library (R1 to R10) stated that the number of research articles had amazingly increased after using e-journals. The following figure 4.19 reflecting the impact ratio of before and after using e-journals.

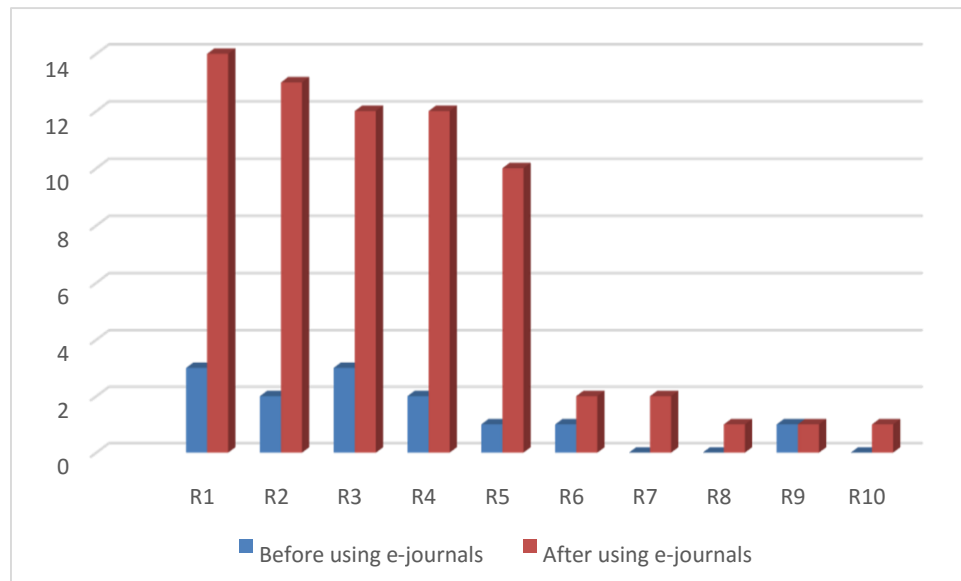
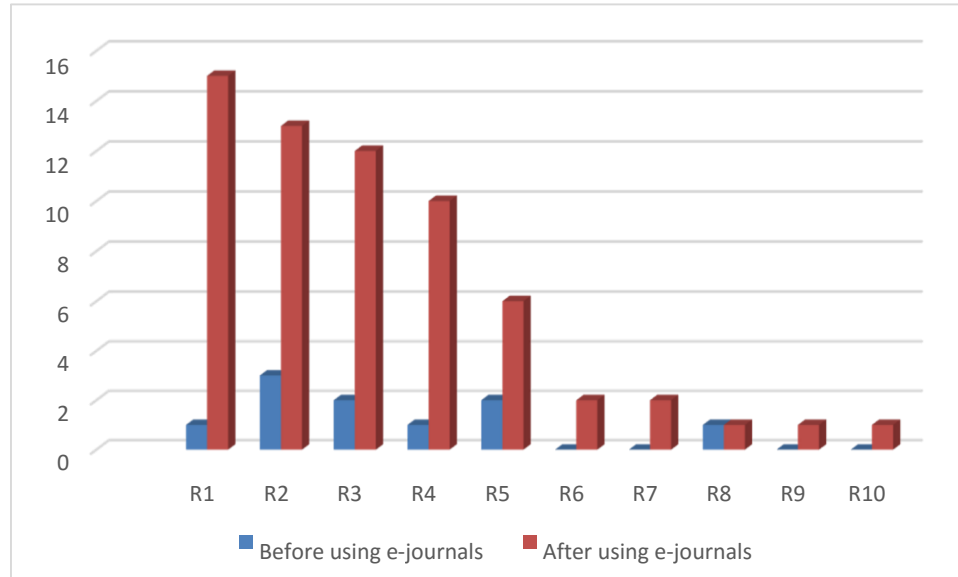


Figure 4.19: Users impact of EWUL before and after using e-journals

#### 4.7.5 Users impact of NSU Library

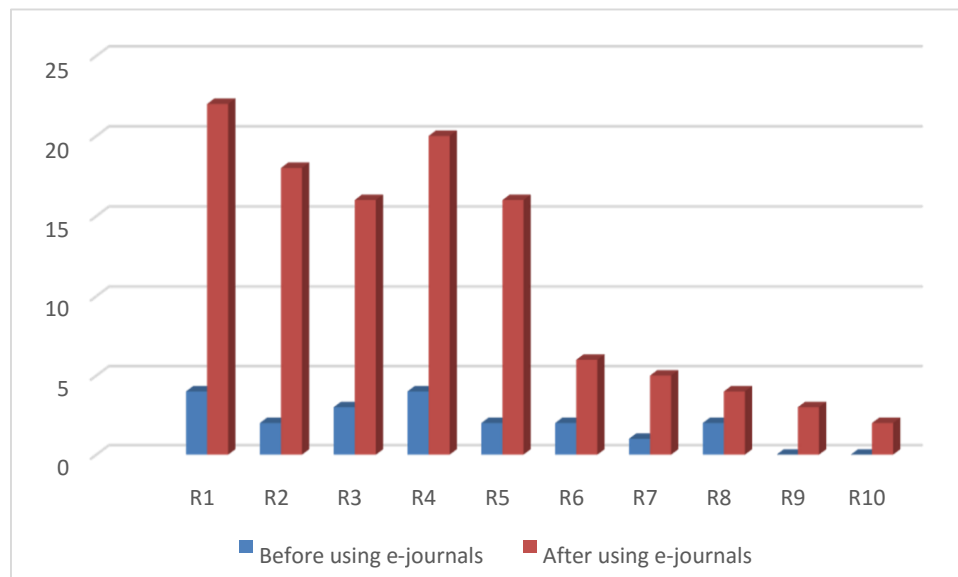
The respondents of NSU library (R1 to R10) stated that the number of research articles had amazingly increased after using e-journals. The following figure 4.20 representing the impact ratio before and after using e-journals.



**Figure 4.20: Users impact of NSU Library after using e-journals**

#### ***4.7.5 Users impact of IUT Library***

The participating respondents of IUT library (R1 to R10) showed that the number of research articles had amazingly increased after using e-journals. The following figure 4.21 to present the impact ratio before and after using e-journals.



**Figure 4.21: Users impact of IUTL before and after using e-journals**

#### 4.7.5 Users impact of AUW Library

The participating respondents of AUW library (R1 to R10) showed that the number of research articles had amazingly increased after using e-journals. The following figure 4.22 to present the impact ratio before and after using e-journals.

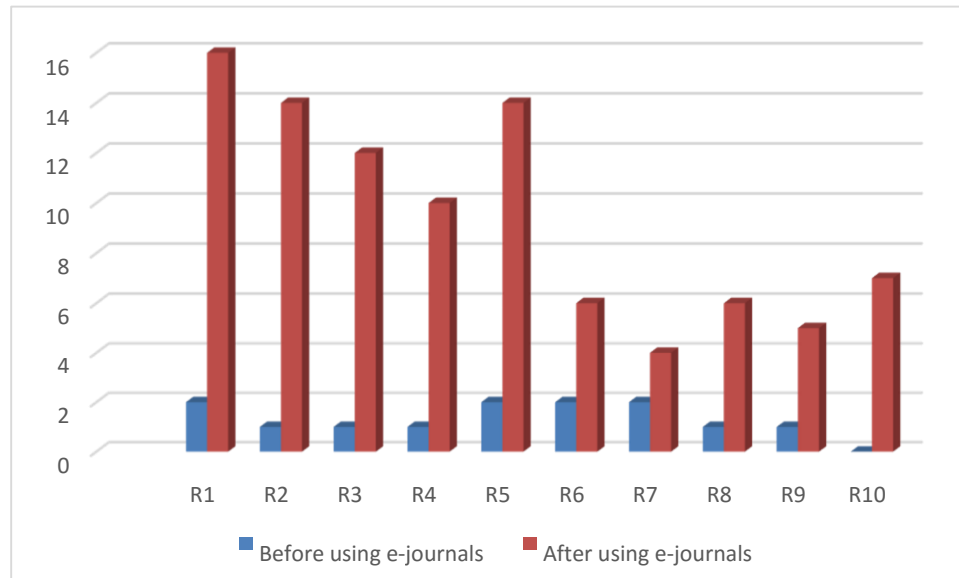


Figure 4.22: Users impact of AUWL before and after using e-journals

#### 4.8 Problems and barriers of using e-journals

The respondents were requested to identify the major problems to use e-journals in their libraries. The data, received from the participants, were summarized regarding the problems of using e-journals. The responses were measured in seven point Likert scales, and responses were calculated according to the following scores: strongly disagree=1.00; disagree=2.00; somewhat=3.00; neutral=4.00; agree=5.00; agree somewhat=6.00; strongly agree=7.00.

**Table 4.6: Problems and barriers regarding usage of e-journals**

Statements	N	Min	Max	Mean	S.D
Unavailability of EJ services out of university	100	1	7	3.87	2.130
Subscription period	100	2	7	4.73	1.692
Unwillingness to explore new e-journals by	100	1	7	4.32	1.896
Lack of infrastructure facilities	100	1	7	4.22	2.063
Difficulty in finding relevant information	100	1	7	4.33	1.770
Take too long to view/download pages	100	1	7	4.37	1.878
Difficulty in reading from screen	100	1	7	4.22	1.796
Content search is difficult	100	1	7	4.15	1.800
Deficit of field/theme coverage	100	1	7	4.15	1.904
lack of knowledge about advanced search techniques	100	1	7	4.09	2.085
Inadequate campaign for promoting EJ services	100	1	7	4.59	1.934
Lack of training and workshop for using e-journals	100	1	7	4.51	1.915

Table 4.6 elaborates the problems and barriers of using the e-journals. The analysis shows that the majority of the respondents indicated the problem of “subscription period” (with the mean score of 4.73) while the second highest of the respondents claimed the cause of “inadequate campaign for promoting EJ services” (with the mean score of 4.51). Followed respondents (with the mean score of 4.37) stated the obstacle of “take too long to view/download pages”. Followed by “difficulty in finding relevant information” (with the mean score of 4.33), “unwillingness to explore new e-journals by professionals” (with the mean score of 4.32), “Difficulty in reading from screen” and “lack of infrastructure facilities” (with the mean score of 4.22), “content search is difficult” and “deficit of field/theme coverage” (with the mean score of 4.15), “lack of knowledge about advanced



search techniques” (with the mean score of 4.09), “unavailability of e-journal services out of the university which affect research” (with the mean score of 3.87).

## **4.9 Suggestions from Academics**

At the end of the survey, the respondents were asked to fill some open ended questions about suggestions for improvement of e-journal services in the university libraries of Bangladesh.

### **4.9.1 Subscribe more e-journals**

R1 mentioned that to cover all the subject’s content university library should subscribe more e-journals and should arrange their online journal list according to user’s needs.

### **4.9.2 Trained and skilled staff**

R2 explored that the university library needs more skilled professionals for helping the users in accessing, downloading and printing of journal articles properly and easily.

### **4.9.3 Monitoring system**

R3 stated that libraries should introduce feedback systems for observing the proper use of e-journal facility for all kinds of users in the library.

### **4.9.4 Arrange seminar, symposium and workshop**

R4 found to increase more awareness about e-journal services for user university library authority should arrange the seminar, symposium and workshop on e-journal services.

#### **4.9.5 Emphasis on user's requirements**

R5 stated that users demand regarding e-journals should be done on a regular basis before and after the subscription of the resources. Library professionals can collect the requirements and suggestions from the academics, scholars as well as others which have to subscribe or not.

#### **4.9.6 Consortia or buying club**

R6 indicates that the university library should strongly establish consortia or buying clubs at the library, which will not only ensure e-journal subscription at minimized cost, but also give a suitable platform to share resources and conduct a joint survey and training programme for users and professionals as well.

#### **4.9.7 Policy and Procedure**

R7 mentioned that maintaining the subscription of e-journals are a significant task for the professionals. Better policy and procedure should be established and the professionals should handle the activity that will make the whole process easy and smooth.

#### **4.9.8 Remote access**

R8 stated that academicians, research scholars and students prefer to search e- journals from their residence and other place of the university. University library authority should allow remote access for use of e-journal services remotely via proxy server.

#### **4.9.9 Promotional activities**

R9 explored that in order to promote the benefits and facilities of e-journal services the university libraries should arranged advertising activities on a regular basis. This is

mandatory for creating awareness and increasing the number of the users of e-journal services.

#### **4.9.10 User study**

R10 mentioned that user study by the authority should be conducted for user's expectations and for identifying the problems as well.

#### **4.9.11 More computers and internet/network**

R11 stated that enough computers and internet connection user friendly for the users of e-journals as they can download files easily from the library. Thus, there have a need for more computers and speedy networks for e-journal services in libraries.

#### **4.9.12 Increase power supply**

R12 indicated that they suffered sometimes with electricity problems. They expected that libraries will overcome these problems in future.

### **4.7.8 Summary**

The main goal of this chapter was to explore the perception of academics and research students regarding the impact and usage of e-journals in public and private university libraries of Bangladesh. The major findings academics are leading users of e-journals in terms of library users. Findings also explored that the present status, experiences, purpose, impact, problems and suggestions for existing problems regarding e-journal services from the participated respondents. In this section we also analyzed user's perception about e-journals related issues and the suggestions they preferred for better services of e-journals. This Chapter gave an overview of using e-journals and its impact on academics.

## Chapter-5

### Conclusion

#### 5.1 Introduction

The purpose of this chapter is to summarize the research findings that were analyzed and presented in light of the responses of the academics (i.e. faculty members and research students) surveyed in the study. This chapter is divided into five sections the first section (this section) describe the introduction; the second section presents the summary findings associated with the major and subsidiary research questions; the third section explains the practical implications; the fourth section discusses briefly the limitations of this study and last section provides the directions for further research.

#### 5.2 Answers to Research Questions

##### **SRQ 1: What is the present status of using e-journals in university libraries of Bangladesh?**

Figure 4.2 reflects that 89% of the respondents (n=89) reported searching of ejournals, while 11.0% of the respondents (n=11) reported not searching of ejournals. Respondents were asked to know the reasons for searching e-journals. Their reasons have been illustrated in figure 4.3 which shows 73.0% (n=65) of the respondents used e-journals for research purpose, whereas 14.60% (n=13) of the respondents used e-journals for "education". 6.74% (n=6) of the respondents used ejournals for current information, 3.37% (n=3) of the respondents used wining award and 2.24% (n=2) of the respondents used for professional improvement. Figure 4.4 reflects that 27.27% (n=3) of the respondents were found not using e-journals for "content search is difficult" while 36.36% (n=4) of them were for the cause of "limited assistant by concern people". Similarly, 18.18% (n=2) of the respondents were not interested

searching e-journals due to the reason of “lack of awareness” and 9.9% (n=1) of the respondents because of “content search is difficult” and another for slow downloading. Figure 4.5 reveals that, 13.0% of the respondents (n=13) had been using e- for “less than 6 months”, followed by 20.0% (n=20) using for “6 months-1 year”, 19.0% (n=19) of the respondents using for “1-2 year” and 21.0% (n=21) of the respondents reporting “2-4 years” and the rest 27.0% (n=27) reporting “more than 4 years”. Figure 4.6 shows the frequency of using e-journals by respondents in the libraries. Among the respondents, 15.0% (n=15) reported that they have been using e-journals for “Daily”, while 41.0% of the respondents (n=41) mentioned “2-3 times a week”, followed by 30.0% (n=30) of the respondents asserted “2-3 times a month”, 14.0% (n=14) and 1% (n=1) of the respondents reported “Once a year “. From figure 4.7 it is clear that search engine and library website are the most preferred route to access e-journals among the academics using e-journals frequently for their research purpose. Among the respondents, 47% (n=47) preferred search engine, while 36% (n=36) of the respondents preferred library website. On the contrary, Directory of Open Access Journals (DOAJ) is the least preferred route, for which the responses were 7% (n=7). Publisher’s website positioned in between the most and least preferred route where the number of respondents were 10% (n=10). The following chart would be helpful to have clear idea on the preferred route to access to e-journals in the library. Figure 4.8 shows the respondents reporting about their preferred format of using e-journals. The figure indicates that, 29% (n=29) of the respondents reported printed copy of downloaded journals being their preferred format, and 71% (n=71) reporting about soft copy of downloaded journals. Figure 4.10 reveals that 14% of the respondents (n=14) had fully acquired their expertise in using e-journals. As high as 28% (n=28) of the respondents reported their capacity to be above the average, 32% (n=32) stating about their capacity being average, 4% (n=4) reporting below average. However, the rest 22% respondents (n=22) reported that they were just beginner in using e-journals. Nearly half 47.0% (n=47) of the respondents reported that they were

“Fully” satisfied in using the e-journals (Figure 4.11). The second largest portion 30%

(n=30) of the respondents stated that they were “Partially” satisfied, followed by the 17.0% of the respondents (n=17) reported neutral and 6% (n=6) proclaimed “less satisfied” with the e-journal facilities.

### **SRQ 2: What are the purposes of using e-journals in the university libraries?**

Table 4.4 elaborates the purpose of using the e-journals. The analysis shows that the majority of the respondents preferred e-journals for “search for necessary resources” (with the mean score of 5.48) while the second highest of the respondents preferred e-journals for “writing & publishing research articles” and “academic & professional development” (with the mean score of 5.36). “completion of thesis/dissertation” as a purpose of using e-journals ranked third (with the mean score of 5.35), followed by “regular updating of content” (with the mean score of 5.11). The other purposes for using e-journals are: “further reading(s) on topic interest(s)” (with the mean score of 5.02), “professional competency” (with the mean score of 4.97) “recommend reading for students” (with the mean score of 4.87), “preparation of lectures” (with the mean score of 4.84), “course work Assignment” (with the mean score of 4.81) and “pursuing e-abstract of journals” (with the mean score of 4.74).

### **SRQ 3: What are the main problems in providing EJ services in the university libraries of Bangladesh?**

Table 4.6 elaborates the problems and barriers of using the e-journals. The analysis shows that the majority of the respondents indicated the problem of “subscription period” (with the mean score of 4.73) while the second highest of the respondents claimed the cause of “inadequate campaign for promoting e-journal services” (with the mean score of 4.51). Followed respondents (with the mean score of 4.37) stated the obstacle of “take too long to view/download pages”. Followed by “difficulty in finding relevant information” (with the mean score of 4.33), “unwillingness to explore

new e-journals by professionals” (with the mean score of 4.32), “difficulty in reading from screen” and “lack of infrastructure facilities” (with the mean score of 4.22), “content search is difficult” and “deficit of field/theme coverage” (with the mean score of 4.15), “lack of knowledge about advanced search techniques” (with the mean score of 4.09), “unavailability of e-journal services out of the university which affect research” (with the mean score of 3.87).

#### **MRQ 1: How have e-journals impact on academics**

The respondents were asked to report about the impact of e-journals. The responses received from them were measured in seven-point Likert scales, and responses were calculated according to the following scores: strongly disagree=1.00; disagree=2.00; somewhat=3.00; neutral=4.00; agree=5.00; agree somewhat=6.00; strongly agree=7.00.

#### ***Facilitate to improve quality of research work***

E-journals enhance the speed of communication and it is accessible even from a different users desktop and easily searchable as they support different searching capabilities that increase the quality of research work (Kumar 2017). The respondents agreed with the statement (with the mean score of 5.41) that e-journals improved quality of research work.

#### ***Enable to improve quantity of research work***

E-journals reach in the hands of the users soon after their publications and able to evolve quickly as they are not tied to a format, printer or distribution network. No theft or mutilation problems occur with e-journals and authors and readers get closer (Kumar, 2017). Quick publication and easy usability are the key pops of e-journals that attract research scholars and enable to improve quantity of research work. The table shows the respondents agreed with the statement (with the mean score 5.46) that e-journals improved the quantity of research work.

#### ***Simpler to keep up development of own field***

The experts are consulting e-journals to the research scholars and students for research purposes and to keep update knowledge in their own field or subject. The infrastructure facilities for e-journals support and services are excellent and there are no technological problem especially hardware and software related support with high bandwidth of Internet speed (Qasim, 2017). The respondents agreed with the statement (with the mean score of 5.09) that e-journals simpler to keep up development of user's own field.

***Provide access to a wide range of information***

Now-a-days we are living in the era of information explosion and the present progression of ICT brings considerable development in the way of acquiring knowledge and resources. The improvement of modern technology creates a wide pathway to the scholarly communication and publication of the resources. Eresources is the dissemination of resources digitally and accessible through the internet. The explosion of communication technology has become very quick, resources can be easily searchable just in a single click through various searching, linking and facility. The preference of the users towards e-resources is increasing and the requirement of the users for delivering online resource services in the library is raising. Therefore, academic libraries in particular are anxious in collecting and subscribing the information resources (Pachauri, 2017). The respondents agreed with the statement (with the mean score of 5.38) that E-journals provide access to wider range of information.

***Give access to up-to-date information***

Now-a-days e-journals are increasing due to increase of awareness among the research scholars about the e-resources and services. University library allow easy access at other places in the university so that they are accessing these resources at hostels and departments more as compared to the library. Their visits to library have decreased (Natarajan, 2017). E-journals are the best means of getting current and up-to-date information and digital resources very quickly (Nasreen and Zuberi, 2010). The respondents were agreed with the statement (with the mean score of



5.46) that e-journals accelerated research process.

#### ***Accelerate the research process***

Consortium based subscription of e-journals provides an opportunity to maximize cooperative collection building and for resource sharing over the long term (Reitz, 2014). E-journals have become the most popular tools for research and academic activities that can boost up the process of research functions easily (Golwal et al.; 2008). Thus e-journals can accelerate the research process. The participated users agreed with the statement (with the mean score of 5.32) that e-journals accelerated research process.

#### ***Interest to use of e-journals for research in future***

The availability and the ease accessibility of information encourage the users to use e-journals more frequently (Naido and Motiyani ; 2007).The respondents agreed with the statement (with the mean score of 5.48) that they intended to use the e-journals for research in the future.

The respondents were asked to know whether their research skills improved or not by the using of e-journals in the library. From figure 4.12 it is clear that 88% of the respondents (n=88) improved their research skills by using e-journals whereas 12.0 % of the respondents (n=12) declared not improved. The respondents were asked to mention their number of research articles before and after using e-journals. The data, received from the respondents, was summarized about the impact of ejournals on academics. Figure 4.13 shows that the respondents of Dhaka university library (R1 to R10) reported that the number of research articles had amazingly increased after using e-journals. Figure 4.14 reflecting the impact of using e-journals, respondents of the BUET library (R1 to R10) indicates that the quantity of research articles had increased after using e-journals. Figure 4.15 shows that the respondents of CUET library (R1 to R10) explored that the number of research articles had tremendously increased after using e-journals. The participants were requested to mention their number of research articles before and after using e-journals of the Rajshahi University Library. Figure 4.16 showing that the respondents of RU library (R1 to R10)

explored that the number of research articles had amazingly increased after using e-journals. Figure 4.17 showing that the respondents of JNU library (R1 to R10) stated that the number of research articles had amazingly increased after using e-journals. Figure 4.18 shows that the respondents of AAL library (R1 to R10) stated that the number of research articles had amazingly increased after using e-journals. The respondents of EWU library (R1 to R10) stated that the number of research articles had amazingly increased after using e-journals. The following figure 4.19 reflecting the impact ratio of before and after using ejournals. The respondents of EWU library (R1 to R10) stated that the number of research articles had amazingly increased after using e-journals. 4.20 representing the impact ratio before and after using e-journals. The participating respondents of IUT library (R1 to R10) showed that the number of research articles had amazingly increased after using e-journals. The following figure 4.21 to present the impact ratio before and after using ejournals. The participating respondents of IUT library (R1 to R10) showed that the number of research articles had amazingly increased after using e-journals (figure 4.22).

#### **SRQ 4: What are likely to be the suggestions for the improvement of EJ services in university libraries of Bangladesh?**

The study offers some following suitable suggestions for the university libraries of Bangladesh to overcome the existing problems and barriers of e-journal services.

These are:

##### **Subscribe more e-journals**

To cover all the subject's content university library should subscribe more e-journals and should arrange their online journal list in the user's respective field.

### **Trained and skilled staff**

University library needs more trained and skilled staff for helping the users in directing, accessing, downloading and printing of journal articles.

### **Monitoring system**

Introduce feedback systems for observing the proper use of e-journal facility from all kind of users in the library.

### **Arrange seminar, symposium and workshop**

To increase awareness and usage about e-journal for user university library authority should arrange the seminar, symposium and workshop on e-journal.

### **Suggestions for subscribe e-journals**

Users demand regarding e-journals should be done on a regular basis before and after the subscription of the resources. Library professionals can collect the requirements and suggestions from the academics, scholars as well as others which have to subscribe or not.

### **Consortia or buying club**

University library should strongly establish consortia or buying clubs at the library, which will not only ensure e-journal subscription at minimized cost, but also give a suitable platform to share resources and conduct joint survey and training programme for users and professionals as well.

### **Policy and Procedure**

Maintaining the subscription of e-journals are a significant task for the professionals. Better policy and procedure should be establish and the professionals should handle the activity that will make the whole process easy and smooth.

### **Remote access**

Academicians, research scholars and students prefer to search e- journals from their residence and other place of the university. University library authority should allow remote access for use of e-journal services remotely via proxy server.

### **Promotional activities**

In order to promote the benefits and facilities of e-journal services the university libraries should arranged advertising activities on a regular basis. This is mandatory for creating awareness and increasing the number of the users of e-journal services.

### **User study**

User study by the authority should be conducted for users' needs and for identifying the problems as well.

## **5.3 Practical Implications for the study.**

The following practical indications and benefits can be expected from the research.

### **5.3.1 Implications for faculty members**

The findings of this study offered benefits to faculty members. They can get a proper idea and knowledge of e-journals facilities in libraries. The quantitative and qualitative analysis of the conceptual issues, present status, purposes, satisfaction, and challenges of using e-journals could be helpful for the faculty members. The findings also expressed the user's expectation from the service providers of ejournals.

### **5.3.2 Implications for research students**

The results of the research provide information and knowledge for the researchers and students about e-journal services. University library users i.e. research students became experienced from this study. This study has shown the right path to the research students for the research purpose.

## **5.4 Limitations of the Research**

The particular limitations of the research work were covered some selected private and public university libraries of Bangladesh. We could not include huge number of respondents that is the number of respondents was inadequate. In addition, there was a lack of research fund and insufficiency of time. Due to time and fund problems, we could not include the respondents of all university libraries in Bangladesh as well as another university libraries of other developed countries.

## 5.5 Directions for future Research

Further research is required not just for the academics, but for all the LIS professionals for the improvement of e-journal facilities and services in the university libraries of Bangladesh. Based on the results of this study, the following direction was given for the future research:

- Another research can be conducted increasing the sample area and respondents to merge all over the Bangladesh.
- Different research methods should apply in future for the research activity in the progress of gathering perception and views of faculty members, user or researchers and LIS professionals that will permit various knowledge regarding the resources and services.
- A longitudinal study could be carried out in order to investigate data for a long time.
- Pilot survey is the must do activity before the final survey in the data field or area for the betterment of research work and progress.

## 5.6 Summary

The main goal of the research was to examine the present status and impact of e-journals usage in the university libraries of Bangladesh. In order to accomplish the aim of the study, some of the objectives were generated and the findings of the research were arranged according to the objectives of the study. It is very clear from our study that the usage of e-journals expected to increase in future. We have presented results from a study impact assessment of e-journal usage in university libraries of Bangladesh. The result indicates that the impact of e-journals usage can be enhanced by taking some initiatives. The Library should organize regular workshops for enhancing awareness and usage of e-journals. Even though the majority researchers of the academics are using e-journals and some of the respondents are not due to some reasons. Most of the respondents have improved their research skills the

number of research articles has increased. So it is necessary that the university library authority should be proactive to decrease existing problems regarding e-journals to organise training programme and can provide other facilities for access to e-journal at the university their residence, hall, department computer lab, and take some initiative for the off campus researchers. It is expected that the result of this study will help the university authority to implement these recommendations to ensure better electronic journal services to its users.

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## “Impact Assessment of E-Journal Usage in University Library of Bangladesh”

**Focused Group:** Academics (i.e. faculty members and research students)

### **Framework**

The main goal of this study is to assess the impact of e-journal usage in university libraries of Bangladesh. This study is supervised by Dr Md. Shiful Islam, Professor, Information Science and Library Management, University of Dhaka. You are kindly requested to take part in this investigation to provide your insight about using e-journals (EJ) in your libraries.

### **Overview and instructions**

The questionnaire contains 4 sections. Section 1 includes 18 questions from 1.1 to 1.11, related to conceptual issues and present status of using EJ in the university libraries of Bangladesh. Section 2 includes 2 questions from 2.1 to 2.2 pointing towards identifying purpose and impact of EJ. Section 3 asks 2 questions 3.1 to 3.2, focusing the main problems faced by the users and recommendations to overcome the problems in using EJ in libraries. Section 3 contains 3 general questions regarding the background information of the respondent and the university.

### **Confidentiality**

The data and information is given by respondents will be used solely for this research purpose. In addition, the results of the research will be combined together to secure the confidentiality of respondents and the organization.

### **Contributions**

It is predicted from the study that the users and LIS professionals as a whole will get benefits through knowing the present scenario and impact of using EJ in university libraries of Bangladesh.

### **Returned of the filled-up questionnaire**

Please fill up the questionnaire and return it to me by 30 August 2017.

Thank you very much for your cooperation.

Sabrina Aktar, Mphil researcher  
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**APPENDIX-1**  
**Questionnaire On**  
**“Impact Assessment of E-Journal Usage in University Libraries of Bangladesh”**

**Section 1: Conceptual issues and present status of using e-journals (EJ).**

1.1: Would you please mention in brief your understanding about e-journal?

.....  
 .....  
 .....

1.2: Have you ever been searched E-journals in your university library?

- Yes       No

If yes, proceed to the next questions. If No, answer question no. 1.4 1.3:  
 why do you use e-journals?

- |   |  |
|---|--|
| <input type="checkbox"/> Research                 | <input type="checkbox"/> Current information If  |
| <input type="checkbox"/> Education                | <input type="checkbox"/> others (please specify) |
| <input type="checkbox"/> Professional achievement | .....  |
| <input type="checkbox"/> Wining award             |  |

1.4: Please specify, why you do not use these e-journals?

- |   |   |
|---|---|
| <input type="checkbox"/> Content search is difficult          | <input type="checkbox"/> Slow downloading           |
| <input type="checkbox"/> Lack of subject coverage             | <input type="checkbox"/> Lack of awareness          |
| <input type="checkbox"/> Limited assistance by concern people | <input type="checkbox"/> If others (please specify) |
|   | .....   |

1.5: Would you please indicate (✓) from the following list which e-journals does your library subscribe?

SL	List of e-journals	✓	SL	List of e-journals	✓
1.	ACM Digital Library		16.	Cambridge University Press.	
2.	Acoustical Society of America		17.	Royal Society	
3.	American Society for Civil Engineers		18.	IEEE	
4.	Brill		19.	Mineralogical Abstract	
5.	Annual Review		20.	American Chemical Society	
6.	Duke University Press		21.	American Physical Society	
7.	Emerald Insight		22.	Multilingual Matters	
8.	JSTOR		23.	University of Chicago Press.	
9.	AGORA		24.	Cochrane Library	
10.	HINARI		25.	ELSEVIER	
11.	OARE		26.	Springer	
12.	World Bank eLibrary		27.	Project Mouse	

<b>13.</b>	SPIE Digital Library		<b>28.</b>	EBSCO Host	
<b>14.</b>	Wiley Online Library		<b>29.</b>	Canadian Science Publishing	
<b>15.</b>	Oxford University Press		<b>30.</b>	Edinburg University Press	

1.6: Would you please mention how long have you been using the e-journal?

- |   |  |
|---|--|
| <input type="checkbox"/> Less than 6 months | <input type="checkbox"/> 2-4 years         |
| <input type="checkbox"/> 6 months-1 year    | <input type="checkbox"/> More than 4 years |
| <input type="checkbox"/> 1-2 years          |  |

1.7: How often do you use e-journals?

- |  |   |
|--|---|
| <input type="checkbox"/> Daily             | <input type="checkbox"/> Once a month               |
| <input type="checkbox"/> 2-3 times a week  | <input type="checkbox"/> If others (please specify) |
| <input type="checkbox"/> 2-3 times a month | .....   |

1.8: What is your preferred route to access e-journals??

- |  |   |
|--|---|
| <input type="checkbox"/> Search Engine                     | <input type="checkbox"/> Publisher's website        |
| <input type="checkbox"/> Directory of Open Access Journals | <input type="checkbox"/> If others (please specify) |
| <input type="checkbox"/> Library website/Database          | .....   |

1.9: What is your preferred format of reading e-journals?

- Printed copy of downloaded journals
- Soft copy of downloaded journals on screen

1.10: From which place do you most frequently use of e- journals?

- |  |   |
|--|---|
| <input type="checkbox"/> At university library     | <input type="checkbox"/> At home                    |
| <input type="checkbox"/> Other place in university | <input type="checkbox"/> If others (please specify) |
| <input type="checkbox"/> University Hall           | .....   |

1.11: Please indicate your level of satisfaction with the EJ services provided by the library.

- |  |   |
|--|---|
| <input type="checkbox"/> Fully Satisfied     | <input type="checkbox"/> Neutral                    |
| <input type="checkbox"/> Partially Satisfied | <input type="checkbox"/> If others (please specify) |
| <input type="checkbox"/> Lease satisfied     | .....   |

**Section 2: Purpose and impact of EJ**

2.1: Why do you mainly use the e-journals? Please indicate your level of agreement on the following statements using the mentioned scale. (1=strongly disagree; 2=disagree; 3=somewhat; 4=neutral; 5=agree; 6=agree somewhat; 7=strongly agree)

Statements	1	2	3	4	5	6	7
Academic & professional development							
Preparation of lectures							
Course work Assignment							
Writing & publishing research article(s)							
Completion of Thesis/Dissertation							
Recommend reading for students							
Further reading(s) on topic interest(s)							

Pursuing e-abstract of journals							
Professional competency							
Regular updating of content							
Search for necessary resources							

If others (please specify).....

2.2: What do you think about the impact of e-journals on academics? Please indicate your level of agreement from the following statements using the same scale appeared in question 2.1

Statements	1	2	3	4	5	6	7
Facilitate to improve quality of research work							
Enable to improve quantity of research work							
Simpler to keep up development of own field							
Provide access to a wide range of information							
Give access to current/up-to-date information							
Accelerate the research process							
Extend the range of work							
Inspire to do new thinking							
Reduce working time							
Enlarge view of thinking							
Increase the dependency on EJ							
Improve professional competency							
Interest to use of EJ for research in future							

If others (please specify).....

2.3: Please mention the number of research articles you have published before using e-journal.

.....

2.4: Can e-journals improve your research skills?

Yes       No

If yes, please mention the number of research articles you have published after using e-journals.

.....

**Section 3: Problems and barriers in using e-journals and recommendations to overcome the problems.**



3.1: What are the problems and barriers of using EJ in your library? Please indicate your level of agreement from the following statements using the same scale appeared in question 2.1

Statements	1	2	3	4	5	6	7
Unavailability of EJ services out of university which affect research works							
Subscription period							
Unwillingness to explore new e-journals by professionals							
Lack of power infrastructural facilities							
Difficulty in finding relevant information							
Take too long to view/download pages							
Inadequate assistance by LIS professionals							
Difficulty in reading from screen							
Content search is difficult							
Deficit of field/theme coverage							
lack of knowledge about advanced search techniques							
Inadequate campaign for promoting EJ services							
Lack of training and workshop for using e-journals							

3.2: Would you please recommend how libraries can overcome the problems and barriers of using e- journal.

.....  
 .....  
 .....

**Section 4: Background Information of the respondent**

4.1: Highest educational qualifications:

- Graduate  Post graduate  MPhil  PhD  Others

4.2: Present position of the respondents

- Faculty  Research Student

4.3: Name of the University.....

Thank you very much for your participation and co-operation.

Signature & date: .....

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