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Use of E-Resources by Research Scholars and Postgraduate Students of University of Dhaka, Bangladesh: A Study

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The aim of this paper is to examine the use of e-resources by research scholars and postgraduate students in University of Dhaka. An online survey was conducted among the participants to collect data. A link of the questionnaire was sent to the respondents through e-mails and the link also sent to a few faculty members with a request to circulate the questionnaire among the students and invite them to take part in this online survey. The purposes of the study are to investigate the reasons and level of awareness of using e-resources by both the research scholars and postgraduate students. The study also initiates to know the methods which they use to learn using these resources and the obstacles of reading and accessing them. The study explores the types of e-resources they prefer, their preferable format, the level of usefulness and satisfaction of the available e-resources in the University of Dhaka library. It is observed in the study that not only research scholars but also postgraduate students are aware of different types of e-resources and almost everyone uses them daily. The study revealed that self-instruction is the best method to learn using e-resources. The result showed that PDF is the most popular format and they use these resources for different purposes and there were some problems in library so that they did not use library e-resources.

Key Words: *E-resources, Research Scholars, Postgraduate students, Library, University of Dhaka, Information, University of Dhaka Library, Bangladesh.*

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1 INTRODUCTION

Libraries which are known as the jugular veins and sub-institutions¹, are an integral part of universities and e-resources have become an integral part of libraries². The concept of libraries has changed due to the impact of e-resources and they have placed themselves at the top priority in academic and research institutes. These resources are more current and comprehensive than comparable print equivalents³.

E-resources are those resources which require computer access whether locally or via the Internet⁴ and far from traditional and classical philosophical approaches⁵. They require tools such as computers, e-book readers, smart phones, etc as they are produced, preserved, used, managed and shared by electronic means⁶. These resources can be searched, browsed, downloaded and saved in different formats through various techniques and interlinked with other publications and databases⁷.

E-resources such as e-book, e-journal, images, multimedia products, etc. have been created and delivered through a number of techniques. They can be accessed and delivered by electronic devices. Libraries used magnetic and optical media to build e-resource collections and developed retrieval tools such as search engines to access required literature. Nowadays, the Internet is a dependable place for several forms and types of e-resources⁸. Users can access an overwhelming range of e-resources available on the Internet within a few seconds⁹.

The blessing of advanced technologies has paved the way for production of e-resources which are part and parcel of library collection and invisible web¹⁰. E-resources have significantly revolutionized the landscape of activities. The accessibility and utilization of e-resources in a suitable platform have made a positive effect on research productivity¹¹.

Today, it is only possible for intellectual movement with the essence of e-resources¹². The explosion of e-resources has come into being with the growth of electronic publication and it is the most powerful invention in human history¹³. The quality and required resources reach to the doorstep of the users round the clock due to the electronic publishing houses and societies. The invaluable and up to the minute e-resources are irreplaceable and come to users without any delay just after publishing online¹⁴.

The value and popularity of e-resources have increased among the students and research scholars not only in University of Dhaka (DU) but also around the globe with the passing of time. The dependence on e-resources has reached the highest point because of why the libraries spend the lion's share of the budget for it. The University of Dhaka library (DUL) is empowering users by providing up-to-date information. The DUL had started the University of Dhaka Automation Project in 1998 in order to provide effective services to the users. Besides, it had converted some selective and rare printed resources to electronic

format. It is subscribing to e-resources from 35 publishers and 20000 online journals, but the most of their access are confined to the members of the university only¹⁵. All the arrangements, in fact, have been done to reach e-resources to the fingers end of the users to fulfil the demands.

Although the major universities in Bangladesh have accessed e-resources from individual subscriptions from the databases like HeinOnline, EIKON, SciFinder, they have obtained these resources primarily from two consortia – Library Consortium of Bangladesh (LiCoB) and UGC Digital Library (UDL). The DUL accesses e-journals, e-magazines, e-books from different databases like ACM, IEEE, Emerald, JSTOR, Oxford, Cambridge, Wiley, WorldScience, Sage, Springer, McGraw-Hill, Taylor and Francis etc. and provides remote access with remote gateway system¹⁶.

2 REVIEW OF LITERATURE

2.1 INFLUENTIAL FACTORS FOR USING E-RESOURCES

The information and instructions in the university library website might help the postgraduate students in using e-resources as they were self-learners. Millawithanachchi¹⁷ had initiated a study among the postgraduate students of University of Colombo in order to investigate critical success factors which affected the use of e-resources. The study indicated that the six factors out of nine such as technology, library support, information literacy, computer competency, usefulness, user attitudes had positive influence and three of them like ease of use, library support and accessibility had no significant effect on e-resources.

Alison, Kiyangi and Baziraake¹⁸ investigated in three universities in Uganda offering medical education to know the influencing factors utilization of e-resources. They found that human and institutional factors influenced a lot of using e-resources. They also found that the quality of research and student grades improved when informed clinical decisions were made. It would guide to formulate policy in setting up minimum standards in university libraries.

2.2 IMPACT OF E-RESOURCES

Akussah, Asante and Adu-Sarkodee¹⁹ initiated an investigation to find the relationship between the impact of e-resources and its usage. They surveyed the academic libraries in Ghana and found that there was a significant positive relationship between e-resources and its usages. They had closed the study giving recommendation to adopt dynamic marketing strategies such as arrange students' orientation, faculty seminars, mailing to users, SDI and verbally to create awareness of the available e-resources.

Bhat and Ganai²⁰ surveyed to investigate the impact of e-resources on budget appropriation in agricultural libraries of northern India. They found that the libraries spent major chunk of allocated budget on acquisition of printed books and journals. They found that there was no impact of e-books and e-journals on budget appropriation. Though the libraries wanted to enrich their collection with e-journals, they could not able to buy many e-journals of their own so that they accessed full text e-journals through consortium subscribed platforms.

2.3 ACCEPTANCE AND PATTERN OF E-RESOURCES

Hoq and Haque²¹ surveyed among the undergraduate and postgraduate students of Rajshahi University, Bangladesh to explore the pattern of e-resources used by them. They found that e-resources were extremely and moderately useful for study. They also noticed that e-journals were generally a more reliable source of information to the users than that of websites.

Siddike and Islam²² had surveyed at Diarrhoeal Disease Research, Bangladesh in order to investigate the acceptance of e-resources to the medical researchers. They found that the researchers had a positive attitude towards e-resources. The e-resources were very useful and MEDLINE is the most popular database to them.

2.4 COLLECTION DEVELOPMENT WITH E-RESOURCES

Lixin and Thu²³ reviewed literature on e-resources collection development process. Information and Communication Technology helps libraries for speedy and timely functioning, collection development and services. In this present era, libraries cannot survive with only printed materials, they need to build collections with e-resources which provide the latest information and are very essential in the scholarly community. The paper also attempts to address the trend of e-resources collection development and analyse published literature on e-resources.

Kaur and Walia²⁴ surveyed management libraries to examine e-resource collection development practice in India and found that the collection of e-resources had been gaining popularity and the budget for collecting them was increasing gradually which in some cases had reached 50 per cent of library budget. Some factors such as subject coverage, quality vendor support, accessibility, cost etc. affected collection of e-resources. They also found that e-resources remained under-utilization because of facing difficulties like preservation, lack of remote access, ICT infrastructure, outdated computers etc.

The review of literature indicates that many surveys had been conducted on the use of e-resources worldwide. Although it is found that a few surveys included research scholars and postgraduate students as a target group, they were not treated exclusively and there was no study carried out on the selected

topic. The literature review also disclosed that there is a research gap on the use of e-resources by research scholars and postgraduate students in Bangladesh. It is on this assertion because of why the survey was carried out to investigate the use of e-resources by research scholars and postgraduate students of University of Dhaka, Bangladesh.

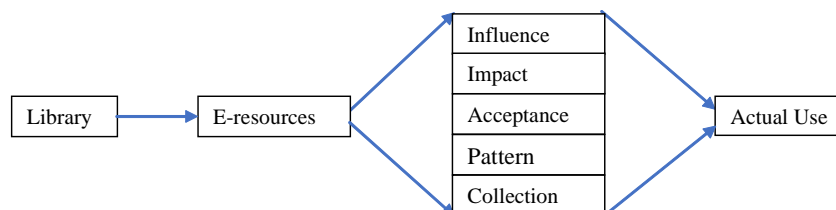


Figure1. Conceptual Model of Using Library E-resources.

3 OBJECTIVES OF THE STUDY

The objectives of this study are:

- To know the types of e-resources preferred by the research scholars and postgraduate students.
- To identify the level of awareness of using available e-resources.
- To find out the reasons and frequency of using e-resources.
- To determine preferred database and file format to access and read e-resources.
- To examine the level of usefulness of e-resources in DUL.

4 METHODOLOGY

The study employed a questionnaire-based online survey among research scholars and postgraduate students of University of Dhaka for a period of four weeks. As the survey tool, Google Form was used to design questionnaire for collecting data from research scholars and postgraduate students of the university. A total of 448 participants of the university responded to the survey. A link of the questionnaire was sent to them through e-mails. The link was also sent to a few faculty members with a request to send it to the participants of their departments. One follow-up e-mail was also sent to the participants after two weeks and requested the faculty members through e-mail to invite research scholars and postgraduate students to take part in this online survey. The survey data was downloaded from Google Form which was saved in Excel sheet. The data was then tabulated for the purpose of calculation and analysis through MS Excel.

5 ANALYSIS OF DATA

5.1 DEMOGRAPHICAL INFORMATION

It is shown in Table1 that the percentage of male (53.57%) is greater than female (46.43%) respondents. In the survey, 55.36% PG students and 44.43% RSs took part.

Table 1: Demographics of the Respondents

Demographics	Categories of Respondents	No. of Respondents	%
Gender	Male	240	53.57
	Female	208	46.43
Status	Research scholars (RSs)	200	44.64
	Postgraduate (PG) students	248	55.36

5.2 FREQUENCY OF USING

It is apparently seen in Table2 that 80.65% of PG students used ERs daily. 3.23% of them used ERs once a month and twice a week. But in the case of once a week, they used ERs four times more than once a month and twice a week. Besides, 4% of RSs used ERs once a fortnight, once a month and once a week whereas 68% and 8% of RSs used these resources daily and rarely respectively.

Table 2. Frequency of Using E-resources

Frequency	PG Students		RSs	
	No.	%	No.	%
Daily	200	80.65	136	68
Once a fortnight	0	0	8	4
Once a month	8	3.23	8	4
Once a week	32	12.90	8	4
Twice a week	8	3.23	24	12
Rarely	0	0	16	8

5.3 METHODS OF LEARNING

Table3 illustrates that self-instruction was the best method for PG students and RSs to learn how to use ERs. Almost an equal per cent of PG students and RSs had come to know about ERs from their colleagues or friends and guidance from teachers. Almost a quarter and twenty per cent of RSs and PG students respectively received training offered by university. Almost three times more

than PG students, RSs (36%) experienced receiving help from library staff. Trial and error methods had been followed by 45.16% and 28% of PG students and RSs commonly for using ERs.

Table 3. Methods to Learn Using E-resources

Methods	PG Students		RSs	
	No.	%	No.	%
Trial and error methods	112	45.16	56	28
From colleagues or friends	144	58.06	112	56
Help from library staffs	32	12.90	72	36
Training offered by university	48	19.35	48	24
Guidance from teachers	136	54.84	112	56
Self-instruction	200	80.65	184	92

5.4 REASONS OF USING E-RESOURCES

The data in Table4 clearly shows that the highest with 87.10% of PG students used ERs for finding more relevant information followed by the second highest with 77.42% for updating subject knowledge. More than seventy per cent of PG students thought that the DUL preserves more useful ERs contents for their works. Around sixty per cent of them believed that ERs helped in the decision-making process whereas 54.84% of them used these resources for its time saving quality and research purposes. PG students with 64.52% employed ERs for career development and around thirty per cent used for publishing articles.

Table4 also indicates that the highest with 92% of RSs utilized ERs for research purposes and 76% of them used these resources for career development. 84% and 56% of RSs applied these resources for updating subject knowledge, finding more relevant information and project work, publishing articles respectively. RSs with 44% considered that existing ERs contain more useful contents and helpful in decision making for carrying out their works.

Table 4. Reasons of Using E-resources

Reasons	PG Students		RSs	
	No.	%	No.	%
For research	136	54.84	184	92
For project work	104	41.94	112	56
For career development	160	64.52	152	76
Updating subject knowledge	192	77.42	168	84
Finding more relevant information	216	87.10	168	84
Helps in decision making	144	58.06	88	44
Time saving	136	54.84	80	40
More useful contents	176	70.97	88	44
Publishing articles	72	29.03	112	56

5.5 AWARENESS OF E-RESOURCES

Table5 conspicuously shows that both PG students and RSs were aware of all types of ERs. All the PG students were aware of the Web. The awareness regarding EJ, ED, EM, EI, ER, OCP and EAV for PG students were more than eighty per cent. A large proportion with 96.77% of them were aware of EB, EN and EDE. They were aware of ETD (70.97%),OAJ (74.19%), SG (54.84%). All the RSs were aware of EB and EN. At 96% of them were conscious of EI, EAV and Web; 92% of them were aware of ED, EDE, ER and OCP; 84% of them were mindful of EJ and OAJ and 76% of them were well known of ETD. 88% and 68% of them were familiar with EM and SG respectively.

Table 5. Awareness of available E-resources

ERs	PG Students		RSs	
	Aware		Aware	
	No.	%	No.	%
EB	240	96.77	200	100
EJ	216	87.10	168	84
ED	216	87.10	184	92
EN	240	96.77	200	100
ETD	176	70.97	152	76
EM	216	87.10	176	88
EDE	240	96.77	184	92
ER	200	80.65	184	92
OCP	200	80.65	184	92
OAJ	184	74.19	168	84
SG	136	54.84	136	68
EI	216	87.10	192	96
EAV	200	80.65	192	96
Web	248	100	192	96

N.B.: EB=e-book, EJ=e-journal, ED=e-database, EN=e-newspaper, ETD=e-thesis and dissertation, EM=e-magazine, EDE=e-dictionary and encyclopaedia, ER=e-report, OCP=online conference proceeding, OAJ=online access journal, SG=subject gateway, EI=e-image, EAV=e-audio visual, Web=website.

5.6 PREFERRED E-RESOURCES

It is crystal clear in Table6 that Web was the most performable ER not only to PG students but also RSs followed by EJ (70.97%), EB (84%) and EJ (84%). More than fifty per cent of PG students pilfered on EN and OAJ. At 38.71% of PG students preferred ED, ETD and OCP and RSs liked ETD (60%),

OCP (60%), ED (56%), OAJ (56%), EM (52%), EDE (48%) and ER (48%) for their study purposes. Roughly one quarter of PG students showed preference to EI and EAV whereas a significant majority (72%) of RSs favoured EN for their research works. PG students searched at EM (35.48%), SG (19.35%), EI (22.58%) and RSs explored at SG (32%), EI (44%) for required information.

Table 6. Preferred E-resources for Work

Preferred ERs	PG Students		RSs	
	No.	%	No.	%
EB	160	64.52	168	84
EJ	176	70.97	168	84
ED	96	38.71	112	56
EN	144	58.06	144	72
ETD	96	38.71	120	60
EM	88	35.48	104	52
EDE	120	48.39	96	48
ER	104	41.94	96	48
OCP	96	38.71	120	60
OAJ	128	51.61	112	56
SG	48	19.35	64	32
EI	56	22.58	88	44
EAV	64	25.81	80	40
Web	224	90.32	176	88

N.B.: EB=e-book, EJ=e-journal, ED=e-database, EN=e-newspaper, ETD=e-thesis and dissertation, EM=e-magazine, EDE=e-dictionary and encyclopaedia, ER=e-report, OCP=online conference proceeding, OAJ=online access journal, SG=subject gateway, EI=e-image, EAV=e-audio visual, Web=website.

5.7 PREFERRED FILE FORMAT

Table7 explains that all PG students and RSs accepted PDF for accessing and reading ERs. Approximately three-quarter of PG students and just over a fifty per cent of RSs desired DOC for their studies. Around forty per cent of PG students and just under fifty per cent of RSs embraced HTML. The PG students did not prefer ASCII, Rich Text Format and PostScript Format whereas a tiny per cent of them opted Desktop Author Format (6.45%). Similarly, an insignificant per cent of RSs chose PostScript Format (4%) and ASCII (8%) while a small per cent of them favoured Desktop Author Format (16%) and Rich Text Format (12%).

Table 7. Preferred File Format for Accessing and Reading E-resources

Preferable Format	PG Students		RSs	
	Like		Like	
	No.	%	No.	%
PDF	248	100	200	100
HTML	104	41.94	96	48
DOC	192	77.42	104	52
ASCII	0	0	16	8
Desktop Author Format	16	6.45	32	16
Rich Text Format	0	0	24	12
PostScript Format	0	0	8	4

5.8 PREFERRED DATABASES

According to Table8, JSTOR was the most favourite database not only with PG students but also RSs. The second acceptable database for PG students and RSs was SpringerLink and SpringerLink and Science Direct respectively for retrieving necessary information. Compared with SpringerLink, INSIGHT was used by half of the PG students. A tiny per cent of them visited J Gate (6.45%), DELNET (6.45%), ABI/INFORM (6.45%), ACM (6.45%) and EBSCO (6.45%). A small per cent of them accessed ProQuest (16.13%) and IEEE (12.90%) whereas roughly one quarter explored AGORA. On the other hand, ProQuest, ABI/INFORM and INSIGHT were fond of 20% of RSs and just double of them used ACM. 44% of them preferred IEEE for their research activities. Around fifty per cent of them scrutinized EBSCO and a tiny per cent looked up J Gate (4%) and DELNET (8%) databases for reading and accessing required information.

Table 8. Preferred Databases for Study

Databases	PG Students		RSs	
	No.	%	No.	%
SpringerLink	112	45.16	104	52
ProQuest	40	16.13	40	20
JSTOR	144	58.06	128	64
Science Direct	88	35.48	104	52
J Gate	16	6.45	8	4
IEEE	32	12.90	88	44
DELNET	16	6.45	16	8
ABI/INFORM	16	6.45	40	20
INSIGHT	56	22.58	40	20
AGORA	64	25.81	72	36
ACM	16	6.45	80	40
EBSCO	16	6.45	96	48

5.9 OBSTACLES OF USING E-RESOURCES

Table9 demonstrates that PG students (74.19%) and RSs (60%) faced insufficiency of computers in the library for accessing ERs in order to fulfil their information demands. Besides, more than fifty per cent of PG students and RSs thought that they had lack of guidance and training to use ERs. The indistinguishable 32.26% of PG students believed that they were unfamiliar with database structure and search methods and some ERs had restrictions to access. It is also obvious in the Table9 that the equivalent at 22.58% of them considered that the ERs available in the library were inadequate in their fields. Around fifty per cent of them had no good experiences regarding library staff as they did not get enough support from them. A small per cent of them did not use library ERs because these were irrelevant (16.13%) and too much information available (12.90%) to retrieve. They did not use ERs because of non-availability of full text documents (41.94%) and the slow speed of the Internet network (45.16%).

Table9, however, illustrates that 20% of RSs did not use ERs for unfamiliarity with database structure, search methods, irrelevant ERs and too much information available. 32% of them believed that the library housed inadequate resources in their fields and non-availability of full text documents. They did not use library ERs because of slow speed of Internet (52%), restriction (36%), non-cooperation of library staff (24%). and traditional resources fulfilling their needs (4%).

Table 9. Obstacles of Using Available E-resources

Obstacles	PG Students		RSs	
	No.	%	No.	%
Lack of sufficient computers	184	74.19	120	60
Slow speed of Internet network	112	45.16	104	52
Lack of guidance and training	136	54.84	112	56
Unfamiliarity with database structure and search methods	80	32.26	40	20
Inadequate ERs available in my field	56	22.58	64	32
Irrelevant ERs	40	16.13	40	20
Restriction of some ERs	80	32.26	72	36
Too much information available	32	12.90	40	20
Non availability of full text ERs	104	41.94	64	32
Lack of support from library staff	120	48.39	48	24

5.10 USEFULNESS OF E-RESOURCES

It is evidently visible in Table10 that both PG students and RSs expressed various experiences about the usefulness of ERs available in DUL. 52% and 32.26% of RSs and PG students respectively revealed that the existing ERs were very much useful. An identical 19.35% of PG students believed that

these resources were useful and not useful as it was thought. Less than thirty per cent of them put into words that these resources were average useful. A small per cent of RSs asserted that the applicable ERs were useful (20%) and average useful (16%) level. At the same time, a tiny per cent of them declared that these resources were not at all useful (4%) and not useful as it was thought (8%).

Table 10. Usefulness of E-resources

Usefulness	PG Students		RSs	
	No.	%	No.	%
Very much useful	80	32.26	104	52
Useful	48	19.35	40	20
Average useful	72	29.03	32	16
Not at all useful	0	0	8	4
Not useful as it is thought	48	19.35	16	8

5.11 LEVEL OF SATISFACTION

Table11 enumerates that around thirty per cent of PG students were extremely satisfied with Web. At 22.58% of them mentioned that they were fully satisfied with EJ. They were highly satisfied with EDE (45.16%), EN (41.94%), OCP (41.94%), SG (35.48%), ETD (32.26%), OAJ (32.26%), EAV (29.03%), ED (25.81%), ER (22.58%), EI (19.35%) and EM (12.90%). It is also found in the study that more than forty per cent of PG students satisfied with EN, EDE and OCP. They informed that their demands met EJ (22.58%), ETD (32.26%) and SG (35.48%). They were satisfied on EI (19.35%), EAV (29.03%) and EB (38.71%) to fulfil their information demands. Almost one third per cent of PG students disliked EB followed by EM in the second position. Roughly one quarter of them showed their detestation on EAV. Around twenty per cent of them hatred EDE and ER. They disrelished 16.13% on EJ, ED, EN, OCP and EI and 6.45% on OAJ and SG. Almost one third per cent of PG students thought that OAJ available in DUL was average standard. More than a quarter of them believed that EJ was average in level. 16.13% of them assessed that ETD, EDE, OCP, EI and Web were average in quality. They remained neutral 12.90% on EJ, EN, ETD, ER, OCP and OAJ; 22.58% on ED and EAV and 16.13% on EM and Web. They showed neutral standing on EB (3.23%), EDE (9.68%) and EI (29.03%).

On the other hand, it can be clearly observed in Table11 that 44% of RSs were extremely satisfied with e-resources available on the Web whereas less than half of them were exceptionally satisfied on EAV and OAJ for accessing their needed information. The RSs had an utterly faith on EB (28%), EJ (28%) and EM (12%). They had an extreme satisfaction 24% on ED, EN, OCP and EI and 16% on ETD, EDE, ER and SG. At 52% of them satisfied with ED

whereas they were pleased 48% on ETD and OAJ; 32% on EN, OCP, SG, EI and Web; 36% on EDE, ER and EAV and 40% on EB and EM. Almost a quarter and twenty per cent of RSs dissatisfied with ER and SG respectively. A small per cent of them disappointed with EN (12%), ETD (16%), EM (16%), EDE (16%), OCP (12%), EI (16%) and EAV (12%) whereas a tiny per cent displeased with EB (4%), EJ (8%), OAJ (4%) and Web (4%). Only twenty per cent of them informed that the quality of EB and EN were average grade and the standard of other ERs such as EJ, ED, ETD, EM, EDE, ER, OCP, OAJ, SG, EI, EAV and Web was below twenty per cent. They remained neutral 24% on EAV and 20% on SG and EI. They showed their neutral position on other types of ERs such as EM, EDE, ER, OCP; EN, ETD and EB, EJ, ED, Web in order were 16%, 12% and 8%.

6 FINDINGS AND DISCUSSION

The main aim of this study is to investigate the use of e-resources by the research scholars and postgraduate students in University of Dhaka. It is found from the data analysis that more than eight per cent postgraduate students and almost seventy per cent research scholars use e-resources daily. Islam and Habiba²⁵ found that majority of the respondents i.e., 80.65% postgraduate students and 68% research scholars used e-resources daily to fulfil their information demands. It is identified from the study that self-instruction is the best method followed by guidance from colleagues or friends, teachers, library staffs and trial and error methods for learning how to use e-resources not only for postgraduate students but also research scholars. Siwach and Malik²⁶ also established that self-learning is the best way to learn using e-resources.

Moreover, it is found from the study that the highest with 87.10% postgraduate students and 92% research scholars use e-resources for finding more relevant information and research purposes respectively. But the findings of Siddiqui²⁷ do not support it because he found that 50% postgraduate students and 80% research scholars used e-resources for finding relevant information and research purposes respectively. It is observed from the study that 100% postgraduate students and research scholars are aware of e-book and e-newspaper followed by e-image, e-audio visual, e-database, e-dictionary and encyclopaedia, e-report and online conference proceedings. It is also identified that 100% postgraduate students are aware of the website.

Besides, it is determined from the study that websites are the most preferable e-resources to both research scholars and postgraduate students followed by e-book and e-journal. The most preferable file format to them is PDF followed by DOC. They also prefer HTML and Desktop Author Format to access and read e-resources. The most comfortable file format is PDF because it looks like print documents²⁸. It is discovered from the study that JSTOR is the most used database.

Table11. Satisfaction of Using E-resources

In	X.10000Y			X.100000			X.1000000			X.10000000			X.100000000			X.1000000000		
	\%	%	%	\%	%	%	\%	%	%	\%	%	%	\%	%	%	\%	%	%
1	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
2	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
3	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
4	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
5	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
6	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
7	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
8	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
9	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
10	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

N.B.: EB=e-book, EJ=e-journal, ED=e-database, EN=e-newspaper, ETD=e-thesis and dissertation, EM=e-magazine, EDE=e-dictionary and encyclopaedia, ER=e-report, OCP=online conference proceeding, OAJ=online access journal, SG=subject gateway, EI=e-image, EAV=e-audio visual, Web=website.

They also use SpringerLink, Science Direct, EBSCO, ACM, ProQuest, AGORA and IEEE databases for accessing and reading e-resources. It is found from the study that they face insufficiency of computers and full text e-resources, slow speed of Internet, lack of guidance, training and support from library staffs. The findings of Kuri and O.²⁹ and Singh³⁰ support the discovery of the present study. However, the findings of the study indicate that the useability of the available e-resources of Dhaka University Library is not satisfactory.

7 CONCLUSION

It is concluded that the research scholars and postgraduate students in Bangladesh have learned how to access and use e-resources in various ways in which self-instruction is the best path to become familiar with these resources. The results showed that they are well aware of all types of e-resources and use them for finding relevant information to update their subject knowledge, decision making and publishing articles. They visit diverse databases and websites for accessing and reading e-resources and PDF is the most preferable format to them. The research scholars and postgraduate students have expressed their miscellaneous experiences regarding the usefulness of these resources. At the same time, they also do not like using e-resources available at the university library because of slow speed of Internet, non-availability of full text documents, lack of sufficient computers, guidance, training and support from library staffs.

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