

## **Utilization pattern of e-resources, problems and suggestions by the post-graduate students of RVSKVV, Gwalior (Madhya Pradesh)**

### **Abstract**

In this digitalized world, e-resources has become the most functional tool for the higher educational institutes. It is advantageous in improving search speed, provides more access points, ability to access information that would otherwise be unavailable, and an increasing amount of information is electronic. Whereas, the old library system consumes a lot of valuable time for the scholars. The present study was carried out in the college of Agriculture, Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya (RVSKVV), Gwalior (M.P.) to realize the utilization pattern of e-resources by the respondents, the problems experienced and their suggestions while using e-resources. A total of 104 respondents were selected on the basis of proportionate random sampling method. The primary data was collected using a well-structured questionnaire and was circulated to the respondents through online mode using Google forms. Exploratory research design was used for the purpose of the study. A majority of respondents (85.58%) had medium to high utilization of e-resources and maximum respondents (88.46%) reported the lack of proper training in using e-resources whereas, a high percentage of the respondents (82.69%) suggested college institution ensures the availability of training staffs for the students.

**Keywords:** Utilization pattern; e-resources; post-graduate students; problems; suggestions.

### **1. Introduction**

The term e-resources stands for electronic resources which is also known as online information database. Many of the items that a library provides via a computer network are referred to as e-resources. In this age of information and communication technology (ICT), computers are being used in day-to-day activity of the library, which saves the time of the end users and library professionals and also at the same time to avoid duplication of work and make the library service smooth and effective.

Over the past few decades, the emergence of e-resources has completely changed the status of all libraries and information hubs around the world (Gautam and Sinha, 2017). Electronic resources are generally available in both platforms i.e. online and offline platforms. Such type of e-resources requires ICT devices like laptop, mobile phone, tablet and desktop (Kashyap, 2017). Now a days, e-resources are the most functional tools for most of the universities, colleges and schools. According to Sharma (2018), the electronic representation of information is referred to as an electronic resource. Electronic books, digital libraries, online periodical articles, e-learning tutors, and online assessments are just a few examples. Electronic resources are user-friendly and make research much easier. Because of the usage of computers, they make it possible to search for information more quickly.

The utilization of e-resources is very frequent in many college libraries in various technological disciplines. The students and researchers in the field of agricultural sciences uses a variety of e-resources, including CeRA, Krishikosh, Krishiprabha, Sodhganga, CABI, CD-ROM database (Agris, Agricola, Crop CD, Hort CD), WEL (World e-book Library), e-Krishishiksha, Agricultural Census of India, Agricultural Statistics, Agridaksh, etc.,. The traditional library system is increasingly moving towards e-library system because it consumes a lot of valuable time and e-library saves the time for everyone. These e-resources are easily accessible everywhere through ICT tools (Smart phone, Laptop, Tablet and Desktop). In the pandemic situation, due to Covid-19, e-resources played an important role as a useful medium for communicating the important information to students who could not attend the regular classes and did not had access to the libraries. A study by Ram et al. (2022) reported the constraints in utilization of e-resources by postgraduate students of Rajuvas, Bikaner were lack of subscription to more standard journals, lack of professional and skilled persons in the library, paid e-resources not feasible to access by students, lack of publicity of e-resource content by institute, lack of facility of expertise help and support. Shashikala and Srinivasaragavan (2019) in their study on the usage of e-resources by the faculty members and PG students of Kempegowda Institute of Medical Sciences Hospital and Research Centre (KIMS), Bangalore, Karnataka reported that a high percentage of the students and faculties (44.44%) had slow connectivity in using of e-resources. Another study on the use and awareness of e-resources among research scholars of literature subjects in Banaras Hindu

University revealed that majority (79.27%) of the respondents lacked in technical knowledge (Ansari, 2020). It was also found that the university library of Ibadan frequently conducts an orientation programme for students on how to disseminate information on the obtained e-resources because the information provided through e-resources could be used for the purposes of project writing, theses writing and assignments among others (Adeshina, 2021).

In this modern technological world where now everything is on the verge of being digitalized, it is very crucial for the students in India to have proper access and utilization of e-resources with the help of the ICT tools provided by their institutions to be at par with the students globally. Scanty research had focused studies on the usage, constraints experienced and suggestions perceived by the students in the state of Madhya Pradesh regarding the e-resources. Realizing the importance, the present study was undertaken to understand the utilization pattern of e-resources, problems faced and suggestions realized by the post-graduate students of RVSKVV, Gwalior, Madhya Pradesh.

## **2. Methodology**

The study was conducted in College of Agriculture, Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya (RVSKVV), Gwalior, Madhya Pradesh). There were total of 20 post-graduate disciplines (11 M.Sc. and 9 Ph.D. disciplines) in which the number of students in M.Sc. were 177 (95 previous year & 82 final year) and in Ph.D. there were 83 (38 first year, 26 second year and 19 third year) students respectively. From each year of post-graduate degree Programmes (M.Sc. & Ph.D.), only 40% of the students were taken from total number of the students in each discipline on the basis of proportionate random sampling method. Thus, a total of 104 respondents were selected for this study. To avoid gender bias, every third student in the list was selected from each department (enrolment number wise). The primary data was collected using a well-structured questionnaire prepared in accordance with the objectives of the study. The questionnaire was prepared and circulated to the respondents only via the online mode (Google forms) for the collection of data. The secondary data was collected from the Academic office and Library office of RVSKVV, Gwalior (M.P) and IT cell office JNKVV, Jabalpur (M.P). The research

study was investigated using an exploratory research design. Appropriate statistical tools like frequency, percentage, mean and standard deviation were subjected to analyse and interpret the obtained data.

### **3. Result and discussion**

#### **3.1 Utilization pattern of e-resources by the respondents**

Table 1. represents the data in the categories of low, medium, and high. It reveals that majority number of respondents (68.27%) belonged to the category of medium utilization, followed by high utilization (17.31%) and low utilization (14.42%) of e-resources. Thus, it indicates that the maximum respondents (85.58%) were having medium to high utilization of e-resources. These findings are in support with the work of Yadav (2018), where it was found that most of the respondents 57.50 per cent had a medium use of e-resources. Furthermore, Mishra (2020) found in a study that most of the respondents (65.00 per cent) had a medium utilization followed by high (18.89 per cent), and low (16.11 per cent) utilization of e-resources. The students mostly utilize the e-resources for their access to learning, gain current information, teaching, academics as well as research purposes. As the educational institutions provides computers with internet access it is feasible for the students to have an increased usage of electronic resources.

Furthermore, a perusal of table 2. depicts that majority of the respondents mostly used online type of e-resources for gathering of knowledge. Mostly they preferred the usage of e-resources like CeRA resources (59.62%), Krishikosh (48.08%), e-Magazines (58.66%), ICAR library (56.73%) and Annals of Agricultural Research (46.16%). For the purpose of using e-resources, the respondents were found using e-resources mostly for writing subject assignments (80.77%), preparing for competitive examinations (78.85%) and for preparing the content for masters' research work (68.27%). PDF (Portable Document Format) format (89.42%) and Printed copies (75.00%) were mostly used for reading e-resources by the respondents. Also it was observed that the respondents mostly preferred Whatsapp application (70.19 %), Telegram application (66.35 %), University experts (63.46%) and Agricultural university website (50.00%) as source of information of e-resources. The respondents mostly used Text (88.46%) form for reading e-resources. These findings are similar to

the findings of Kashyap (2016) which revealed that university members in Chhattisgarh used e-resources such as e-book, e-journals, e-thesis substantially more than university faculty members in Madhya Pradesh. Arun Kumar and Anjaiah (2017) in their study found that majority of respondents (62.00%) used e-resources for project-reporting, followed by 18.00 per cent were using for self- improvement, 18.00 per cent respondents were using for subject knowledge, 17.00 per cent respondents were using for examination purposes, and 8.00 per cent were using for self-improvement. While, Sritharan (2018) observed that majority of respondents (98.60%) were using electronic tools for learning and reviewing their knowledge, 71.60 per cent were using electronic resources for their study work and 70.50 per cent of respondents were using for collecting general information.

**Table 1. Overall distribution of respondents according to their utilization pattern of e-resources (N=104)**

S. No.	Utilization pattern	Frequency	Percentage (%)
1.	Low (Below 87)	15	14.42
2.	Medium (87 to 106)	71	68.27
3.	High (Above 106)	18	17.31
Total		104	100.00

**Table 2. Distribution of respondents according to their utilization pattern of e-resources (N=104)**

S. No.	Utilization pattern of e-resources	Mostly		Sometime		Never	
		F	P (%)	F	P (%)	F	P (%)
<b>A.</b>	<b>Type of e-resources used for knowledge gathering</b>						
1.	Online	72	69.23	30	28.85	02	1.92
2.	Offline	41	39.42	56	53.85	07	6.73
<b>B.</b>	<b>Preference in use of e-resources</b>						
1.	CeRA resources	62	59.62	34	32.69	08	7.69
2.	Krishikosh	50	48.08	27	25.96	27	25.96
3.	Krishiprabha	36	34.62	26	25.00	42	40.38
4.	Sodhganga	30	28.84	37	35.58	37	35.58
5.	CABI e-books	31	29.81	33	31.73	40	38.46
6.	CD-ROM database	25	24.03	36	34.62	43	41.35
7.	e-Krishishiksha	27	25.96	21	20.19	56	53.85
8.	Springerlink	25	24.04	45	43.27	34	32.69

9.	Wiley & Black	25	24.04	38	36.54	41	39.42
10.	Krishiworld	39	37.50	27	25.96	38	36.54
11.	agMOOCs	36	34.61	56	53.85	12	11.54
12.	e-Magazines	61	58.66	29	27.88	14	13.46
13.	Annals of Agricultural Research	48	46.16	27	25.96	29	27.88
14.	ICAR library	59	56.73	23	22.12	22	21.15
15.	e-Journals	32	30.77	55	52.88	17	16.35
16.	Digital Book Index	23	22.11	32	30.77	49	47.12
17.	Mahindra Kisan website	23	22.11	37	35.58	44	42.31
18.	Other	17	16.35	13	12.50	74	71.15
<b>C. Purpose of using e-resources</b>							
1.	To prepare the content for masters' research work	71	68.27	24	23.08	09	8.65
2.	For writing subject assignments	84	80.77	20	19.23	00	0.00
3.	To prepare for competitive examinations	82	78.85	15	14.42	07	6.73
4.	To prepare the notes for midterm, practical & final theory examinations	51	49.04	29	27.88	24	23.08
5.	To prepare the content for doctoral research work	57	54.81	39	37.50	08	7.69
<b>D. Format used for reading e-resources</b>							
1.	PDF (Portable Document Format)	93	89.42	11	10.58	00	0.00
2.	PPT (PowerPoint Presentation)	34	32.70	68	65.38	02	1.92
3.	HTML (Hypertext Markup Language)	12	11.53	36	34.62	56	53.85
4.	Printed copy	78	75.00	22	21.15	04	3.85
<b>E. Preference of information source for e-resources</b>							
1.	Agricultural university website	52	50.00	37	35.58	15	14.42
2.	Agri-publisher website	39	37.50	50	48.08	15	14.42
3.	International website	24	23.07	63	60.58	17	16.35
4.	University experts	66	63.46	25	24.04	13	12.50
5.	National website	40	38.46	52	50.00	12	11.54
6.	WhatsApp	73	70.19	27	25.96	04	3.85
7.	Blog	33	31.73	50	48.08	21	20.19
8.	Facebook	40	38.46	53	50.96	11	10.58
9.	Instagram	37	35.58	48	46.15	19	18.27
10.	Telegram	69	66.35	26	25.00	09	8.65
11.	Others	32	30.77	52	50.00	20	19.23
<b>F. Form used for reading e-resources</b>							
1.	Text	92	88.46	12	11.54	00	0.00
2.	Video	58	55.77	39	37.50	07	6.73
3.	Picture	34	32.69	60	57.69	10	9.62

(F=frequency, P=percentage)

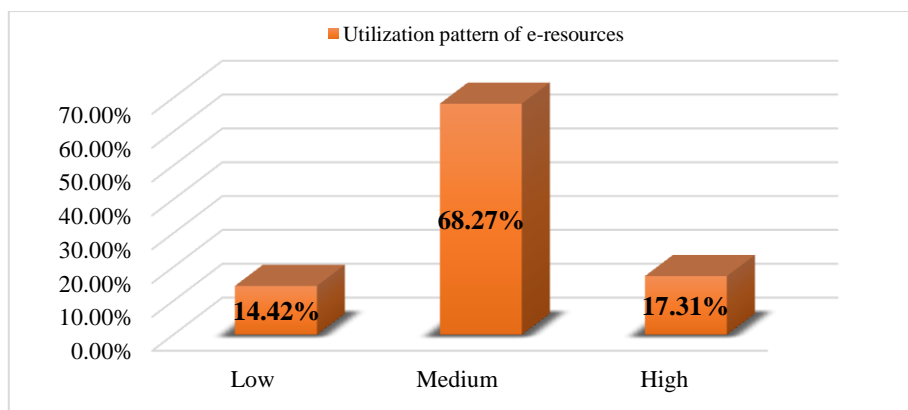


Fig. 1. Overall distribution of respondents according to their utilization pattern of e-resources.

### 3.2 Problems faced by the respondents in utilization of e-resources

The perusal of table 3. reveals the distribution of respondents according to their problems faced in the utilization pattern of e-resources. It is observed that majority of the respondents had reported the problems of the lack of proper training (88.46%), followed by unawareness about software & website (83.65%), poor internet speed (77.88%), unavailability of latest data (75.96%), irrelevant information (71.15%), lack of finance for taking foreign subscription (25.00%), electricity problem (19.23%) and language problem (17.31%). Similar findings were reported by Sethi and Panda (2012), Alagu and Thanuskodi (2018). From the above findings it can be inferred that students generally face problems like lack of training and less knowledge regarding the usage of software and websites. Proper training facilities in the educational institutes along with their course curriculum would be beneficial for them in proper understanding and utilization of e-resources. There should be provision of proper electricity facilities and fast internet connectivity for uninterrupted usage and interest among the students. The available data must be revised regularly for the students to be updated regarding any new information.

**Table 3. Distribution of respondents according to their problems faced in utilization of e-resources (N=104)**

S. No.	Problems	Frequency	Percentage (%)	Rank

1.	Lack of proper training	92	88.46	I
2.	Unawareness about software & website	87	83.65	II
3.	Poor internet speed	81	77.88	III
4.	Unavailability of latest data	79	75.96	IV
5.	Irrelevant information	74	71.15	V
6.	Lack of finance for taking foreign subscription	26	25.00	VI
7.	Electricity problem	20	19.23	VII
8.	Language problem	18	17.31	VIII

### 3.3 Suggestions given by the respondents to overcome the problems in the utilization pattern of e-resources

Table 4. reveals the suggestions given by respondents to overcome the problems in utilization of e-resources. Majority of the respondents (82.69%) had suggested that college institution must ensure that the training staff should be made available for the students, followed by conduction of awareness programmes by the institution (75.96%), improvement in the network speed (73.08%), regular updation in the recent e-resources (67.31%), provision of Wi-Fi facility from the institution (59.62%), availability of subscription of e-resources for students at reasonable price (18.27%), constant power supply (17.31%), provision of downloadable e-resources (15.38%). This finding is in line with the findings of Mishra (2020) where it was found that the majority (mean per cent score 96.77) of the respondents suggested strengthening the library by employing the professional and technical staff by the university.

**Table 4. Distribution of respondents according to their suggestions given by respondents (N=104)**

S. No.	Suggestions	Frequency	Percentage (%)	Rank
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1.	Network speed should be improved	76	73.08	III
2.	Provision of downloadable e-resources	16	15.38	VIII
3.	Subscription of e-resources should be made available for students at reasonable price.	19	18.27	VI
4.	Awareness programme must be conducted by the institution	79	75.96	II
5.	Wi-fi facility must be provided by college institution	62	59.62	V
6.	College institution must ensure that training staff should be made available for students	86	82.69	I
7.	Constant power supply should be maintained	18	17.31	VII
8.	Recent e-resources data should be regularly updated	70	67.31	IV

#### 4. Conclusions

From this study it can be concluded that majority of the respondents (85.58%) belonged to the category of medium to high utilization of e-resources. Among the problems faced by the respondents, lack of proper training, unawareness about software & website and poor internet speed were the top three crucial problems faced by the respondents while utilization of e-resources. It was found that the least reported problem was the language problem. Further, it was reported in the present study, that the respondents had suggested that the college institution must ensure the availability of the training staffs for the students and awareness programme must be conducted by the institution regarding the utilization of e-resources. In overall, it may be concluded from this research that as per the utilization pattern, constraints and suggestion by the post-graduate students of RVSKVV, Gwalior, there should be provision of training

and availability of training staffs for the students regarding utilization of e-resources in the institution, awareness programmes should be conducted and internet connectivity speed should be improved.

### **Recommendations**

This research indicated that e-resources has a medium to high utilization pattern by the post-graduate students which determines its utmost importance in their academics and research related work. Provision of proper e-resources facility is a basic requirement in any higher educational institution. It was observed that the post-graduate students felt the need for training facilities and awareness programmes regarding utilization of e-resources. It is recommended that RVSKVV, Gwalior and the other government as well as private higher educational institutes in Madhya Pradesh must be well equipped with the e-resources facilities in order to improve the utilization of e-resources by the students.

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