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## **Awareness about e-resources among postgraduate students of RAJUVAS, Bikaner**

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#### **Abstract**

The present study was an attempt to measure the awareness levels of postgraduate students about the e-resources in all the constituent veterinary colleges of the RAJUVAS, Bikaner *i.e.*, CVAS, Bikaner, CVAS, Navania, Udaipur and PGIVER, Jaipur. A total of 90 postgraduate students were randomly selected from these colleges of the university and the data were collected using a structured schedule. The study revealed that majority (71.00%) of veterinary postgraduate students of RAJUVAS, Bikaner were reported to have moderate level of awareness about the e-resources, followed by low level of awareness (17.78%) while, the rest 11.11 per cent of postgraduate students were found to have high level of awareness about the e-resources.

**Keywords:** awareness, e-resources, postgraduate students, veterinary college, RAJUVAS

#### **Introduction**

Today, computers and networked electronic resources have become an integral part of the academic institutions. This has been underscored by the phenomenon of knowledge or information common among the users at workstations in the institutions where PCs are networked and other e-resources are made available to the students. In the time of digitalization, the users specially, the students may search the online catalogue, use a subject guide or database to access pinpoint information from the internet, access full text articles from web-based journals, browse electronic journals, e-mail reference questions or read e-books (Quadri, 2012) [4]. Considering the importance of e-resources most of the universities in India liberally investing to provide access to these resources to support learning, teaching and research. Universities are the higher intellectual hubs to transfer the knowledge and understanding of ideas and values to students and research scholars through various intellectual means and library is an important agent in this process. Libraries are now moved from traditional resources to more dynamic and flexible e-resources. The role of academic libraries is to provide accessible information resources to the entire academic fraternity (Oak, 2016) [10]. Effective exploitation of e-resources goes hand in hand with computer competency skills. Moreover, basic computer skills are important assets to students to exploit desired information in their learning and research processes (Madhusudhan, 2007) [5].

“Awareness is the state or ability to perceive, to feel, or to be conscious of events, objects or sensory patterns”. More broadly, it is the state or quality of being aware of something. In biological psychology, awareness is defined as humans or an animal’s perception and cognitive reaction to a condition or event. The objective of the study was to determine the awareness about the e-resources among the postgraduate students of RAJUVAS, Bikaner.

#### **Materials and Methods**

The study was conducted in purposely selected all the constituent veterinary colleges of Rajasthan University of Veterinary and Animal Sciences, Bikaner *i.e.*, College of Veterinary and Animal Science, Bikaner, College of Veterinary and Animal Science, Navania, Udaipur and Post Graduate Institute for Veterinary Education and Research, Jaipur. Rajasthan state comprises of single veterinary university namely Rajasthan University of Veterinary and Animal Sciences (RAJUVAS) and has its headquarters in Bikaner district. For selection of colleges, all the constituent veterinary colleges of RAJUVAS were selected purposely based on the postgraduate programmes running in the campuses. For the selection of respondents, a comprehensive list of all the postgraduate students who were engaged in masters’ degree

programme in various disciplines was prepared from the selected veterinary colleges. From the list so prepared, 30 postgraduate students were selected from each identified college with the help of disproportionate stratified random sampling technique. Thus, a total of 90 postgraduate students were included in the sample of the study.

To determine the level of awareness about e-resources among the postgraduate students, a separate interview schedule was developed. The schedule consists of 30 items of e-resources which were found more appropriate and relevant in the present context to the university students involved in higher education. The responses of the respondents were recorded against the e-resources on a three-point continuum i.e., highly aware, aware and least aware with scores of 3, 2 and 1, respectively. Based on the scores, the respondents were grouped into the three categories i.e., low, medium and high level of awareness of e-resources with the help of mean and

standard deviation as a measure of check.

## Results and Discussion

### Distribution of postgraduate students according to their awareness about e-resources

The data presented in the Table 1 indicates that a fair majority (83.33, 60.00 and 73.33 per cent) of the veterinary postgraduate students of RAJUVAS, Bikaner were having moderate level of awareness about the e-resources in CVAS, Bikaner, CVAS, Navania, Udaipur and PGIVER, Jaipur, respectively. Further, 10.00, 23.33 and 20.00 per cent of the respondents had low level of awareness about the e-resources in CVAS, Bikaner, CVAS, Navania and PGIVER, Jaipur, respectively. While, the rest (6.67%, 16.67% and 6.67 per cent) of the respondents were reported to have high level of awareness about the e-resources in CVAS, Bikaner, CVAS, Navania and PGIVER, Jaipur, respectively.

**Table 1:** Distribution of postgraduate students according to their awareness about e-resources

S.N.	Awareness category	Mean±S.D.	CVAS Bikaner (n=30)		CVAS Navania (n=30)		PGIVER Jaipur (n=30)		Total (n=90)	
			F	%	F	%	F	%	F	%
1.	Least aware (<68)	74.6±8.02	3	10.00	7	23.33	6	20.00	16	17.78
2.	Aware (68 to 83)		25	83.33	18	60.00	22	73.33	64	71.11
3.	Highly aware (> 83)		2	6.67	5	16.67	6	6.67	10	11.11

f= frequency, %= per cent

The pooled analysis of data regarding the awareness about e-resources among the veterinary postgraduate students of RAJUVAS, Bikaner revealed that majority of the students (71.11%) were in the medium category of awareness about e-resources, followed by 17.78 per cent in the least aware category of awareness and the rest (11.11 per cent) of respondents were in the highly aware category of awareness about e-resources. With the results in hand, it is concluded that majority of the veterinary postgraduate students of RAJUVAS, Bikaner were having moderate level of awareness about the various e-resources, the probable reason might be that majority of the students in all the three campuses of RAJUVAS, Bikaner possessed medium skills in accessing and utilization of ICTs. The present findings of the study are similar with the findings of Yadav (2018)<sup>[11]</sup> and Mani *et al.* (2019)<sup>[6]</sup>.

### Item-wise awareness of e-resources among postgraduate students

The data presented in the Table 2 reveals that the postgraduate students of CVAS, Bikaner were aware about the e-resources namely offline portable computer database, e-mail, search engine, e-payment, e-map, e-shopping, RAJUVAS e-bulletin, RAJUVAS LIKES Cell, RAJUVAS e-pashupalak choupal, e-chat, mobile apps, FTP, e-conference/workshop/webinar, WhatsApp web, e-ticket and Wikipedia with the extent of 97.78, 96.67, 95.55, 95.55, 95.55, 95.55, 94.44, 93.33, 93.33, 93.33, 92.22, 92.22, 92.22, 91.11, 91.11 and 91.11 MPS, respectively. Further, the awareness of e-resources against the animal husbandry websites, e-banking, e-book, e-library, e-newspaper, e-magazine and e-journals was recorded to be 87.78, 86.67, 83.33, 81.11, 74.44, 73.33 and 73.33 MPS, respectively. However, the awareness of e-resources viz., e-patents, ETD, e-analysis of data, anti-plagiarism, information kiosk, RFID and e-reprints was reported to be 66.67, 65.55, 64.44, 63.33, 58.88, 50 and 44.44 MPS, respectively.

In case of the postgraduate students of CVAS, Navania, Udaipur, it was found that the awareness about the e-

resources namely e-mail, e-map, e-ticket, e-banking, e-shopping,

e-payment, Wikipedia, e-newspaper, e-chat, search engine and animal husbandry websites with 98.89, 98.89, 98.89, 96.67, 96.67, 94.44, 94.44, 92.22, 91.11, 90 MPS, respectively. Further, the awareness of e-resources i.e., e-book, offline portable computer database, e-conference/workshop/webinar, WhatsApp web, mobile apps, RAJUVAS LIKES Cell, FTP, e-library, e-magazine and e-pashupalak choupal was recorded to be 87.78, 87.78, 87.78, 86.67, 83.33, 83.33, 83.33, 82.22, 81.11 and 75.55 MPS, respectively. Whereas, the awareness about e-resources viz., e-journals, ETD, information kiosk, anti-plagiarism, e-patents, e-reprint and RFID was reported to be 74.44, 70, 65.55, 63.33, 61.11, 56.67 and 45.55 MPS, respectively.

In case of the postgraduate students of PGIVER, Jaipur, it was observed that the awareness about e-resources namely e-payment, e-mail, e-chat, e-shopping, search engine, offline portable computer database, Wikipedia, RAJUVAS e-bulletin, e-conference/workshop/webinar, e-map, FTP, mobile apps and e-ticket with 96.67, 96.67, 96.67, 96.67, 95.55, 95.55, 95.55, 94.44, 93.33, 93.33, 92.22, 91.11 and 91.11 MPS, respectively. Further, the awareness of e-resources i.e., e-book, WhatsApp web, animal husbandry websites, e-newspaper, ETD, RAJUVAS LIKES Cell, e-pashupalak choupal, e-banking, e-library, e-journal and e-magazine was recorded to be 88.89, 87.78, 86.67, 86.67, 86.67, 85.55, 85.55, 83.33, 76.67, 73.33 and 73.33 MPS, respectively. While, the extent of awareness of e-resources viz., e-patents, e-analysis of data, anti-plagiarism, information kiosk, e-reprint and RFID was recorded to be 65.55, 63.33, 61.11, 54.44, 50 and 48.89 MPS, respectively.

Overall analysis of the data reveals the extent of awareness possessed by the veterinary postgraduate students of RAJUVAS, Bikaner about the e-mail was 97.40 MPS and ranked first in the rank hierarchy. The extent of awareness about the e-shopping and e-payment was 96.29 and 95.55 MPS and ranked second and third, respectively. Further, the

awareness of e-resources *i.e.*, Wikipedia, e-map, e-chat, e-ticket, offline portable computer database, RAJUVAS e-bulletin and e-conference/workshop/webinar, was recorded to be 95.18, 95.18, 94.07, 93.70, 93.70, 91.95 and 91.11 MPS and as such were assigned ranks from fourth to eighth in the rank order, respectively. Further, analysis of the data speaks that the respondents were aware about FTP, e-banking, mobile apps, WhatsApp web, animal husbandry websites, RAJUVAS LIKES Cell, e-books, e-newspaper with the extent of 89.25, 88.89, 88.89, 88.51, 88.14, 87.40, 87.03 and 84.81 MPS and were accorded ranks from ninth to fifteenth, respectively. Likewise, the extent of awareness about ETD, e-library, e-magazine, e-journals were recorded to be 82.59, 80, 76.29 and 73.70 MPS with 16<sup>th</sup>, 17<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup> ranks, respectively. Surprisingly, it was noted that the respondents reported comparatively low level of awareness about the e-resources *viz.*, e-patents, e-analysis of data, anti-plagiarism, information kiosk, e-reprints and RFID with 64.81, 64.07, 62.96, 59.62, 51.11 and 48.14 MPS and as such were placed at last ranks from twenty to twenty-five, respectively. After having in length discussion of the results pertaining to extent of awareness of veterinary postgraduate students of

RAJUVAS Bikaner, it can be concluded that the extent of awareness of e-resources in postgraduate students of CVAS, Bikaner was from 97.78 to 44.44 per cent. Whereas, in case of postgraduate students of CVAS, Navania, Udaipur, the extent of awareness was ranged in between 98.88 to 45.55 per cent and the extent of awareness of PGIVER, Jaipur was recorded to be in between 96.67 to 48.89 per cent against all the listed e-resources. Therefore, it is inferred that majority of the postgraduate students of all the three-constituent college of RAJUVAS, Bikaner possessed an overall good awareness about most of the e-resources. The reflection of good level of awareness about most of the e-resources by the postgraduate students was not unexpected because of increasing interest, exposure, access and availability of research students towards various e-resources. In addition to this having good skills in using ICTs among the research scholars might have contributed in good level of awareness about various e-resources. The above findings of the study are similar with the findings of the Meena (2013) [7], Beniwal (2016) [3], Natarajan (2017) [9], Ankrash and Atuase (2018) [1], Bano (2019) [2] and Mishra (2020) [8].

**Table 2:** Item-wise distribution of postgraduate students according to their awareness about e-resources

S.N.	e-resources	CVAS Bikaner (n=30)		CVAS Navania (n=30)		PGIVER Jaipur (n=30)		Total (n=90)	
		MPS	Rank	MPS	Rank	MPS	Rank	MPS	Rank
1.	Websites related to veterinary science and animal husbandry	87.78	VIII	90.00	VI	86.67	IX	88.14	XII
2.	E-journals <i>i.e.</i> CeRa	73.33	XIII	74.44	XIII	73.33	XIII	73.70	XIX
3.	E-books	83.33	X	87.78	VII	88.89	VII	87.03	XIV
4.	E-newspaper	74.44	XII	92.22	IV	86.67	IX	84.81	XV
5.	E-reprints	44.44	XX	56.67	XIX	50.00	XVIII	51.11	XXIV
6.	ETD's (Electronic Thesis and Dissertation) <i>i.e.</i> , Krishikosh, Krishiprabha, Sodhganga, etc.	65.55	XV	70.00	XIV	86.67	IX	82.59	XVI
7.	E-patents	66.67	XIV	61.11	XVIII	65.55	XIV	64.81	XX
8.	E-magazine	73.33	XIII	81.11	XI	73.33	XIV	76.29	XVIII
9.	Information kiosk	58.89	XVIII	65.55	XV	54.44	XVII	59.62	XXIII
10.	Offline portable computer database (CD/DVD, pen drive, hard disk)	97.78	I	87.78	VII	95.55	II	93.70	VI
11.	E-analysis of data	64.44	XVI	64.44	XVI	63.33	XV	64.07	XXI
12.	E-payment	95.55	III	94.44	III	96.67	I	95.55	III
13.	E-chat	93.33	V	91.11	V	96.67	I	94.07	V
14.	Wikipedia	91.11	VII	94.44	III	95.55	II	95.18	IV
15.	E-map	95.55	III	98.89	I	93.33	IV	95.18	IV
16.	E-ticket	91.11	VII	98.89	I	91.11	VI	93.70	VI
17.	E-shopping	95.55	III	96.67	II	96.67	I	96.29	II
18.	E-banking	86.67	IX	96.67	II	83.33	XI	88.89	X
19.	E-library	81.11	XI	82.22	X	76.67	XII	80.00	XVII
20.	Anti-plagiarism	63.33	XVII	63.33	XVI	61.11	XVI	62.96	XXII
21.	RFID technology	50.00	XIX	45.55	XIX	48.89	XIX	48.14	XXV
22.	RAJUVAS e-Bulletin	94.44	IV	86.67	VIII	94.44	III	91.85	VII
23.	Mobile Apps <i>i.e.</i> M-RAJUVAS, Easy vet, Vet care etc.	92.22	VI	83.33	IX	91.11	VI	88.89	X
24.	RAJUVAS LIKES Cell	93.33	V	83.33	IX	85.55	X	87.40	XIII
25.	RAJUVAS e-Pashupalak choupal	93.33	V	75.55	XII	85.55	X	84.81	XV
26.	WhatsApp Web	91.11	VII	86.67	VIII	87.78	VIII	88.51	XI
27.	Search engine: Google scholar, Sci-hub, Research gate, etc.	95.55	III	91.11	V	95.55	II	94.07	V
28.	E-mail	96.67	II	98.89	I	96.67	I	97.40	I
29.	FTP (file transfer protocol)	92.22	VI	83.33	IX	92.22	V	89.25	IX
30.	e-conference/ workshop/ webinar	92.22	VI	87.78	VII	93.33	IV	91.11	VIII

MPS= Mean Percent Score

**Conclusions**

The awareness of students regarding e-resources and their usage was found to be moderate among majority of the respondents in the study area. It indicates that there is a substantial gap about awareness of e-resources among respondents which needs to be bridged on priority basis. Therefore, it is recommended that the faculty and other

concern staff members of the university should step forward and make efforts to enhance the awareness and knowledge level of students by educating and motivating them about the importance of e-resource along with knowledge of new and advance e-resources in acquiring the needed information. Further, awareness deficit areas of the respondents regarding e-resources is a matter of serious concern and requires

organization of awareness and orientation programmes at institute/university level regularly.

### References

1. Ankrah E, Atuase D. The use of electronic resources postgraduate students of the University of Cape Coast. *Library philosophy and practice*, 2018, 1632.
2. Bano N. Awareness and utilization pattern of information and communication technologies (ICTs) by the teachers and students of CCS HAU, Hisar. Unpublished M.Sc. thesis. Department of Extension Education and Communication Management, I. C. College of Home Science, CCS HAU, Hisar, Haryana, 2019.
3. Beniwal SD. Information and communication technology utilization behaviour of the post graduate students of SKN college of agriculture, Jobner, Jaipur (Rajasthan). Unpublished M.Sc. (Ag.) thesis. Department of Statistics, Mathematics and Computer Science SKN College of Agriculture Sri Karan Narendra Agriculture University, Jobner. Rajasthan, 2016.
4. Ganiyu Oluwaseyi Quadri. Impact of ICT Skills on the Use of E-Resources by Information Professionals: A Review of Related Literature, *Library Philosophy and Practice*, 2012.  
<http://www.webpages.uidaho.edu/~mbolin/quadri.htm>. accessed on 9/3/2015.
5. Madhusudhan M. Internet use by research scholars in University of Delhi, India. *Library Hi Tech News*. 2007;8:36-42.
6. Mani M, Thirumagal A, Vijayalakshmi B, Priyadharshini E. Usage of e-resources among the students of South Tamil Nadu with the special reference of manonmaniam Sundaranar University, Tirunelveli. *Library Philosophy and Practice (e-journal)*, 2019.
7. Meena RS. A Study on e-resources among the students of extension education I.A.S. BHU. Unpublished M.Sc. thesis Department of Extension Education, Institute of Agricultural Sciences, Banaras Hindu University Varanasi, 2013.
8. Mishra S. Awareness and access to e-resources among the postgraduate students of agriculture universities of Rajasthan. Unpublished Ph.D. thesis, Department of extension education, Rajasthan College of Agriculture, MPU, Udaipur, 2020.
9. Natarajan M. Use and impact of electronic resources by information science students at Jimma University, Jimma, Ethiopia, 2017. <https://doi.org/10.1108/CB-12-2016-0036>.
10. Oak M. Assessing the Library Users Expectations: A Select study of management Institutions in Savitribai Phule Pune University (SPPU), Pune, India. *International Journal of Library and Information Science*. 2016;5(3):149-158.
11. Yadav H. Utilization pattern of e-resources among the agriculture students of SKN College of agriculture (Jobner), Jaipur. Unpublished M.Sc. thesis, Department of Extension Education, SKN College of Agriculture, Jobner, Sri Karan Narendra Agriculture University, Jobner, 2018.