

Use of Electronic Journals by the Postgraduate Students and Research Scholars of University of Agricultural Sciences, Dharwad

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ABSTRACT

The electronic journals are among most extensively used e-resources and its impact on academic community is much important. There are several managerial and technical prospects that affect usability of e-journals by postgraduate students and research scholars in an academic institution. The purpose of this study is to investigate the use of open access and subscribed e-journals by the postgraduate students and research scholars of University of Agricultural Sciences, Dharwad, Karnataka. The population of the study consists of responses from 205 postgraduate students and 54 research scholars. The survey method was adopted using questionnaire as a tool for data collections. It is clear from the study that large number of postgraduate students and research scholars are aware and use e-journals for their academic and research purpose.

KEYWORDS: Online Journals, E-Journals, Electronic Resources, Online resources.

1. INTRODUCTION

The advancement in Information and Communication Technology, the electronic journals have rapidly gained acceptance among university libraries and their users. The electronic journal is an emerging technology which is likely to have a large impact in teaching and learning over the next two-to-three year time horizon (Johnson, Levine, Smith, & Stone, 2010) electronic journals may be defined as the digital media equivalent of printed text journals, read on computers or other digital devices (Rickman, Von Holzen, Klute, & Tobin, 2009). Although electronic journals may be the electronic version of a printed Journal, some can exist without any printed equivalent. The electronic journals offer a range of benefits to both educators and students, including ease of accessibility and searching capabilities. The recent years various studies have been carried out which have demonstrated the importance, the increase in use and the progressive penetration electronic journals in the academic and scientific sectors. The reasons the progression are widely known immediacy of access, updating capacity, storage capacity,

low costs, connectivity, space saving, portability access anywhere, among other advantage. The present study is carried out to know the use of open access and subscribed e-journals by the postgraduate students and research scholars of University of Agricultural Sciences, Dharwad, Karnataka.

2. OBJECTIVES OF THE STUDY

The main objectives of the study are:

1. To determine the time spent frequency and purpose of use of electronic journals by the postgraduate students and research scholars.
2. To study the extent of satisfaction towards use of electronic journals.
3. To know the various types of devices used and file format preferred for accessing electronic Journals.
4. To know different access point of searching articles and reasons for using and not using electronic journals.
5. To know the use pattern of electronic journals by the postgraduate students and research scholars.

3. SCOPE, LIMITATIONS AND METHODOLOGY

The scope of the study is restricted to postgraduate students and research scholars of University of Agricultural Sciences, Dharwad. The questionnaire method was used for the present study to collect the necessary data, keeping in view the objectives of the study. A total of 282 questionnaires were distributed among postgraduate students and research scholars of University of Agricultural Sciences, Dharwad and 259 filled in questionnaires were received. The rate of response of 91.84%. In addition to questionnaire method, interview schedule methods were also used to collect required information as a supplement to the questionnaire method.

4. ANALYSIS AND INTERPRETATION OF DATA

The data collected by different methods were analysed, interpreted and same has been presented in the form of tables below.

4.1 Gender Wise Distribution

The gender wise distribution of the respondents has been shown in Table-1. The table-1 shows that out of 259 respondents. About 147(56.76%) of respondents are male and 112(43.24%) of respondents are female using open access and licensed electronic Journals.

Table-1: Gender Wise Distribution

Gender	Postgraduate Students (N=205)	Research Scholars (N=54)	Total (N=259)
Male	116(56.59)	31(57.41)	147(56.76)
Female	89(43.41)	23(42.59)	112(43.24)

The Table-1 also shows that, Out of 205 postgraduate students about 116 (56.59%) are Male and 89(43.41%) students are Female students using electronic journals. Out of 54 research scholars about 31 (57.41%) are Male and 23(42.59%) are Female.

4.2 Time Spent on Accessing E-Journals Per Week.

The time spent on accessing e-journals per week by postgraduate students and research scholars have been shown in Table-2. About 84(32.43%) of respondents spend '3-4 hours' on accessing e-journals in a week, followed by

82(31.66%) of respondents spend 'Less than 1 hour', 48(18.53%) of respondents '1-2 hours', 24(9.27%) of respondents spend 'More than 7 hours' and 21(8.11%) of respondents spend '5-6 hours' on accessing e-journals in a week.

Table-2: Time Spent on Accessing E-Journals Per Week.

Time Spent	Postgraduate Students (N=205)	Research Scholars (N=54)	Total (N=259)
Less than 1 hour	64(31.22)	18(33.33)	82(31.66)
1-2 hours	39(19.02)	09(16.67)	48(18.53)
3-4 hours	73(35.61)	11(20.37)	84(32.43)
5-6 hours	12(05.85)	09(16.67)	21(08.11)
More than 7 hours	17(08.29)	07(12.96)	24(09.27)
Note: Figures in parentheses indicate percentage			

The Table-2 also shows that 73(35.61%) of Postgraduate students spend '3-4 hours' in a week for accessing e-journals and 18(33.33%) of research scholars spend 'Less than 1 hour' for accessing e-journals per week.

4.3 Frequency of Use of E-Journals

The frequency of use of electronic journals by postgraduate students and Research scholars has been shown in Table-3. About 126 (48.65%) of respondents use e-journals 'Daily', followed by 55(21.24%) of respondents use '2-3 times in a week', about 44(16.99%) of respondents use 'Occasionally', 18(06.95%) of respondent use 'Fortnightly', 16 (06.18%) of respondents use e-journals 'Monthly'.

Table-3: Frequency of Use of E-Journals

Frequency	Postgraduate Students (N=205)	Research Scholars (N=54)	Total (N=259)
Daily	89(43.41)	37(68.52)	126(48.65)
2-3 times in a week	44(21.46)	11(20.37)	55(21.24)
Fortnightly	15(07.32)	03(05.56)	18(06.95)
Monthly	14(06.83)	02(03.70)	16(06.18)
Occasionally	43(20.98)	01(01.85)	44(16.99)
Note: Figures in parentheses indicate percentage			

The Table-3 also depicts that 89 (43.41%) of postgraduate students and 37(68.52%) of research scholars use e-journals 'Daily'.

4.4. Purpose of Use of E-Journals

The purpose of use of electronic journals by the postgraduate students and research scholars has been shown in Table-4. About 236 (91.12%) of respondents use e-journals for purpose 'To update knowledge in interested area', followed by 216 (83.40%) of respondents use 'For providing reference/ citations', 205 (79.15%) of respondents use 'For collecting general information', 185 (71.43%) of respondents use 'For writing articles / papers',

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139(53.67%) of respondents 'For doing research work', and 121(46.72%) of respondents use 'For preparing assignment'.

Table-4: Purpose of Use of E-Journals

Purpose	Postgraduate Students (N=205)	Research Scholars (N=54)	Total (N=259)
To update knowledge in interested area	189(92.90)	47(87.04)	236(91.12)
For writing articles / papers	137(66.83)	48(88.89)	185(71.43)
For preparing assignment	94(45.85)	27(50.00)	121(46.72)
For doing research work	88(42.93)	51(94.44)	139(53.67)
For collecting general information	167(81.46)	38(70.37)	205(79.15)
For providing reference/ citations	173(84.39)	43(79.63)	216(83.40)
Note: Figures in parentheses indicate percentage			

The Table-4 also depicts that 189(92.90%) of postgraduate students use e-journals 'To update knowledge in interested area' and 51(94.44%) of research scholars use e-journals 'For doing research work'.

4.5 Extent of Satisfaction towards Use of E-Journals

The extent of satisfaction towards use of e-journals by the postgraduate students and research scholar has been shown in Table-5. About 147(56.76%) of respondents opine as 'Satisfied' towards use of e-journals, followed by 65(25.10%) of respondents opine as 'Extremely Satisfied', 23(8.88%) of respondents opine as 'Moderately Satisfied', 15(5.79%) of respondents opine as 'Somewhat satisfied' and 09 (03.47%) of respondents opine as 'Un satisfied' towards the use of e-journals.

Table-5: Extent of Satisfaction towards Use of E-Journals

Extent of Satisfaction	Postgraduate Students (N=205)	Research Scholars (N=54)	Total (N=259)
Extremely Satisfied	56(27.32)	09(16.67)	65(25.10)
Satisfied	127(61.95)	20(37.04)	147(56.76)
Moderately Satisfied	12(05.85)	11(20.37)	23(08.88)
Somewhat satisfied	06(02.93)	09(16.67)	15(05.79)
Un satisfied	04(01.95)	05(09.26)	09(03.47)
Note: Figures in parentheses indicate percentage			
The chi-square statistic is 37.2503. The p-value is < 0.00001. The result is significant at p < .05.			

The Table-5 also depicts that 127(61.95) of postgraduate students and 20(37.04%) of research scholars opine as 'Satisfied' towards the extent of satisfaction towards use of e-journals.

4.6 Use of Various Devices for Accessing E-Journals

The use of various devices for accessing e-journals by the postgraduate students and research scholars has been shown in Table-6. About 235 (90.73%) of respondents use 'Mobile' for accessing e-journals, followed by 147(56.76%) of respondents use 'Laptop', 122(47.10%) of respondents use 'Desktop' and 53(20.46) of respondents use 'Tab' for accessing e-journals.

Table-6: Use of Various Devices for Accessing E-Journals

Devices	Postgraduate Students (N=205)	Research Scholars (N=54)	Total (N=259)
Desktop	93(45.37)	29(53.70)	122(47.10)
Laptop	110(53.66)	37(68.52)	147(56.76)
Tab	34(16.59)	19(35.19)	53(20.46)
Mobile	188(91.71)	47(87.04)	235(90.73)
Note: Figures in parentheses indicate percentage			

The Table-6 also depicts that 188 (91.71%) of postgraduate students and 47(87.04%) research scholars use 'Mobile' for accessing e-journals.

4.7 Preferred File format for Using E-Journals

The use of various preferred file format for using e-journals by the postgraduate students and research scholars has been shown in Table-7. About 257 (99.23%) of respondents prefer 'PDF' file format for using e-journals and 106(40.93%) of respondents use 'HTML' file format for using e-journals.

Table-7: Preferred File format for Using E-Journals

Preferred File Format	Postgraduate Students (N=205)	Research Scholars (N=54)	Total (N=259)
PDF	203(99.02)	54(100.00)	257(99.23)
HTML	67(32.68)	39(72.22)	106(40.93)
Note: Figures in parentheses indicate percentage			

The Table-7 also depicts that 203 (99.02%) of postgraduate students and 54(100.00%) of research scholars prefer 'PDF' File format for using e-journals and 67(32.68%) of postgraduate students and 39 (72.22%) of research scholars prefer 'HTML' file format for using e-journals.

4.8 Access Point of Searching Articles

The use of various access points for searching article by the postgraduate students and research scholars has been shown in Table-8. The Table-8 that, 252 (97.30%) of respondents use 'Title' for searching articles, followed by 173(66.80%) of respondents use 'Author', 135(52.12%) of respondents use 'Keywords', 77(29.73%) of respondents use 'Subject Heading' and 20 (07.72%) of respondents use 'Others like Truncated Search, URL Based Search etc' for searching articles.

Table- 8: Access Point of Searching Articles

Access Point	Postgraduate Students (N=205)	Research Scholars (N=54)	Total (N=259)
Author	132(64.39)	41(75.93)	173(66.80)
Title	203(99.02)	49(90.74)	252(97.30)

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Keywords	97(47.32)	38(70.37)	135(52.12)
Subject Heading	63(30.73)	14(25.93)	77(29.73)
Others	14(06.82)	06(11.11)	20 (07.72)
Note: Figures in parentheses indicate percentage			

The Table-8 also depicts that 203 (99.02%) of postgraduate students and 49 (90.74%) of research scholars use 'Title' for searching articles.

4.9 Reasons for Using E-Journals

The reasons for using e-journals by the postgraduate students and research scholars has been shown in Table-9. About 219(84.56%) of respondents use e-journals because they are 'Available online', followed by 205 (79.15%) of respondents use e-journals because they 'Not require physical visit to the library', 189(72.97%) of respondents use e-journals because it is 'Easy to search', 174(67.18%) of respondents use e-journals because it is 'Faster and easy access to new titles', 106(40.93) of respondents use e-journals because they are 'Available around the clock', 84(32.43%) of respondents use e-journals because they 'Have user-friendly features', 72(27.80%) of respondents use e-journals because they are 'Convenient', 20 (07.72%) of respondents use e-journals because of 'Other reasons like easy to read, print, share etc.'

Table 9: Reasons for Using E-Journals

Reasons	Postgraduate Students (N=205)	Research Scholars (N=54)	Total (N=259)
Available online	168(81.95)	51(94.44)	219(84.56)
Faster and easy access to new titles	135(65.85)	39(72.22)	174(67.18)
Not require physical visit to the library	155(75.61)	50(92.59)	205(79.15)
Easy to search	143(69.76)	46(85.19)	189(72.97)
Available around the clock	89(43.41)	17(31.48)	106(40.93)
Convenient	55(26.83)	29(53.70)	72(27.80)
Have user-friendly features	67(32.68)	17(31.48)	84(32.43)
Other reasons	12(05.85)	08(14.81)	20(07.72)
Note: Figures in parentheses indicate percentage			

The Table-9 also depicts that the majority of 168(81.95%) of postgraduate students and 51 (94.44%) of research scholars use e-journals because they are 'Available online'.

4.10 Reasons for Not Using E-Journals

The reasons for not using e-journals by the postgraduate students and research scholars has been shown in Table-10. About 231 (89.19%) of respondents gave reasons for not using e-journals as 'Inconvenient' to access, followed by 215 (83.01%) of respondents gave reasons for not using e-journals because they 'Prefer paper Journals', 206 (79.54%) of respondents gave reasons for not using e-journals because it is 'Difficult to browse and read', 193 (74.52%) of respondents gave the reasons for not using e-journals because they have 'Little knowledge on how to use or access e-journals', 181(69.88%) of respondents gave reasons for not using e-journals because they 'Does not has Internet connection', 131 (50.58%) of respondents gave reasons for not using e-journals because they are 'No interested', 81 (31.27%) of respondents gave reasons for not using e-journals because 'Need special software' and

22 (08.49%) of respondents gave reasons for not using e-journals because 'Other reasons like lack of authenticity, reliability, format, awareness etc'.

Table- 10: Reasons for Not Using E-Journals

Reasons	Postgraduate Students (N=205)	Research Scholars (N=54)	Total (N=259)
Prefer paper Journals	178(86.83)	37(68.52)	215(83.01)
Little knowledge on how to use or access E-Journals	154(75.12)	39(72.22)	193(74.52)
Inconvenient	193(94.15)	38(70.37)	231(89.19)
Does not has Internet connection	139(67.80)	42(77.78)	181(69.88)
Difficult to browse and read	155(75.61)	51(94.44)	206(79.54)
No interest	112(54.63)	19(35.19)	131(50.58)
Need special software	67(32.68)	14(25.93)	81(31.27)
Other reasons	13(06.34)	09(16.67)	22(08.49)
Note: Figures in parentheses indicate percentage			

The Table-10 also depicts that the majority of the 193 (94.15%) of postgraduate students gave reasons for not using e-journals because it is 'Inconvenient' to access. About 51 (94.44%) of research scholars gave reasons for not using e-journals because it is 'Difficult to browse and read' to access.

4.11 Use Pattern of E-Journals

The use pattern of e-journals by the postgraduate students and research scholars has been shown in Table-11. About 249 (96.14%) of respondents use e-journals after 'Downloading it in a storage devices', followed by 232 (89.58%) of respondents use e-journals 'On computer screen' and 220 (84.94%) of respondents use e-journals after 'Taking Printout'.

Table- 11: Use Pattern of E-Journals

Use Pattern	Postgraduate Students (N=205)	Research Scholars (N=54)	Total (N=259)
On computer screen	193(94.15)	39(72.22)	232(89.58)
Download in storage devices	203(99.02)	46(85.19)	249(96.14)
Take Printout	169(82.44)	51(94.44)	220(84.94)
Note: Figures in parentheses indicate percentage			

The Table-11 also depicts that the majority of the 203 (99.02%) of postgraduate students use e-journals after 'Downloading it in a storage devices' and 51 (94.44%) of research scholars use e-journals after 'Taking Printout'.

SUGGESTIONS

Based on the results the following suggestions are made for further improvements in utilisation of open access and subscribed e-journals by the postgraduate students and research scholars of University of Agricultural Sciences, Dharwad.

- The postgraduate students and research scholars should further improve their e-journals searching skills to make better use of largely available e-journals.
- Publishers and distributors should provide user manual for better utilization of e-journals.
- University library should subscribe large number of e-journals and e-books for users and do necessary activities to improvise utilisation these subscribed resources.

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- University library should organize seminar, workshops and training for postgraduate student and research scholars at regular interval of time to keep them in phase with emerging techniques in electronic publishing.
- The university/ college library authorities should provide e-mail alert to users regarding newly available electronic resources. The library website should provide electronic resources user manual for effective utilisation of e-journals, e-books and other electronic resources.

CONCLUSION

The emergence of electronic resources that to e-journals has drastically revamped the status of all the libraries across the world during the last few decades. There has been a rapid urge of the user community to get more and more information online which has been reflected poor attendance of library users in the libraries. They want desired information instantly on their finger tip without physically visiting to the libraries. To provide un-interrupted access to e-journals the university and its college libraries should have good ICT infrastructure and high speed internet facility. Access to journals via consortium mode always saves lot of budget to individual institution. The users have also pointed that they are facing problem while accessing e-journals and databases due to limited users access at a time. Hence, these sort of limitations to be removed for providing better services. The library should create awareness at regular interval of time about open and subscribed electronic resources made available at the university.

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