AWARENESS AND USE OF ELECTRONIC INFORMATION RESOURCES BY PG STUDENTS IN A UNIVERSITY ENVIRONMENT : A STUDY OF KARNATAKA STATE AKKAMAHADEVI WOMEN'S UNIVERSITY, VIJAYAPURA, KARNATAKA

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Abstract

The study has been conducted to know the awareness and use of electronic information resources by P.G. students of Karnataka State Akkamahadevi Women's University, Vijayapura. Survey method of study has been used as Research method with questionnaire as data collection tool. Based on the data elicited from 90 PG students it is found that there is low awareness of e-resources. It also finds that those who are aware are using them and satisfied rate is good. Study concludes that regular and rigorous awareness program have to be conduct and hands on training has to be provided to enhance the research skill.

Keywords: ***Higher education, E-resources, e-books, e-journals, Databases, e-newspaper, e-magazines***



1. Introduction

'Electronic resources' is a term used to describe all the information products found in the library that requires computers and network to access and use them. Electronic resources like e-books, e-journals, e-newspapers, e-magazines, e-thesis and online databases are available in a variety of formats and channels. Electronic resources have significant advantages compared to printed resources. It saves library space, staff and time. It is to easy access, require less storage, flexibility, handy, access from anywhere anytime, currency, quick retrieval make e-resources more attractive than print resources. E-resources have really changed the very face of libraries. Though libraries are print-dominated even now, a paradigm shift in collection development policy can be observed. This is particularly true in case of higher education system.

E-resources were emerged as the most needed during Covid-19 period, particularly during first wave lock downs, Second wave lockdowns were also no exception to this phenomenon. The higher education system in India becomes almost digital. Under graduate and Post graduate students, research scholars and teaching fraternity started depending on e-resources. Hence an effort is made in this article to investigate awareness and use of e-resources by PG students in a university environment. The Karnataka State Akkamahadevi Women's University has been participating in the UGC INFONET consortia since 2009. Seven databases namely Annual reviews; Economic & Political weekly; Emerald; ISID; JSTOR; are available in the library. The Karnataka State Akkamahadevi Women's University library has good e-books collection acquired from sage publications, McGrawHill publications, MintBooks library and EbscoHost. It is also includes e-journals besides e-newspaper, e-magazines.

2. Review literature

A number of studies have been reported on the use of e-resources few prominent. Indian studies have been reviewed here. **Jogan's (2015)**



research investigates graduate students' views on visits, awareness and use to promote their research and their satisfaction with the electronic resources and services currently provided by Gulbarga University. The findings shows that the majority (90.1%) of respondents acknowledged the important role of library in facilitating research and 72.5% of the respondents were satisfied with the current role being played by the libraries. **Singh(2020)** conducted a study at the University of Punjab Patiala . The research reveals problems in the use of resources and student satisfaction. **Veena (2016)** examined the awareness and use of open access electronic information resources by Mangalore university students. The findings reveals that 72(47.36%) of respondents frequently used e-books/ e-journals, 58(38.15%) of respondents acquired their open access e-resource usage skill through teachers/research supervisors, 98(64.4%) of the rspondents stated that they are satisfied with open access e-resources.

Kaur and Verma(2009) examined the awareness and use of electronic information resources by faculty, students and researchers at University for Tapal in Punjab. Results indicate that users in all these categories are using electronic resources; Since the decrease in the number of printed journals compared to the increase in the number of electronic journals, the impact of electronic resources is obvious. **Kaur and Katuria (2016)** in a study conducted at the Punjab Agricultural University Library, indicate that electronic resources have become an integral part of information with various functions, such as easy downloading and quick search functions. **Bhat & Mudhol's (2014)** survey on the use of e-resources by teachers and students of the Sher-E-Kashmir Institute of Medical Sciences (SKIMS).

Khan (2016) examined the awareness and use of digital resources and services in the IIT Delhi Library. The result of this study indicates that the interviewees knew about electronic resources as well as various types of electronic resources, electronic databases and virtual diaries. **Tyagi (2011)**



based on a study conducted on the use and knowledge of electronic information sources at IIT Roorkee, India, found that user's awareness of electronic gadgets as a substitute for printed materials to meet their information is largely 100%.

3. Methodology

Survey method of research has been employed using structured questionnaire as tool for data collection. The questionnaire comprised of questions that elicit basic information and also the needed data. It included open handed questions, closed handed questions, multiple choice questions will be used to collect data.

4. Objectives of the study

a) To know the awareness about information e-resources among the users of Karnataka State Akkamahadevi Women's University, Vijayapura.
b) To know the use of the information e-resources by the users of Karnataka State Akkamahadevi Women's University, Vijayapura
c) To know the satisfaction level of the availability of information e-resources
d) To identify the barriers users facing while information e-resources

5. Sample population

Karnataka State Akkamahadevi Women's University is the only women's university in Karnataka State, established in 2003. It is recognized under 2(f) and 12(B) of the UGC Act. It offers 2 UG courses and 32 PG courses and several and certificate courses in the Faculties of Arts, Commerce and Management, Social Sciences, Science and Technology and Education. It is accredited by NAAC with 'B' grade. The courses are run on 4 campuses: Jnanashakti main campus Vijayapura, Sindhanur, Mandya and Udutadi. There are 1770 PG students on the main campus.



110 questionnaires were randomly issued personally to those P.G. students who have visited library at least once during July 2021 after the second wave lockdown was released. 90 duly filled in questionnaires were received back.

6. Scope and Limitations :

The study is restricted to Jnanashakti main campus of KSAWU. The inherited limitations of the method of research also applied to the study. The scope extends to the awareness, use and satisfaction of e-resources which conclude access at KSAWU library.

7. Data Analysis

Table-1 Age wise distribution of Respondents

Age of the respondents	Frequency	Percent
Below 21	25	27.8%
Greater than 21-less than 25	59	65.6%
Above 25	6	6.7%
Total	90	100.0%

Table 1 shows that slightly less than two third of the respondents (65.6%, N=59) belongs to the age group of 21-25 years. More than one fourth (27.8%, N=25) of respondents are below 21 years and very few respondents (6.7%, N=6) are from above 25 years age.

Table-2 Faculty wise distributions of respondents

Faculty	Frequency	Percent
Social science	31	34.4%
Science	21	23.3%
Arts	23	25.6%
Education	6	6.7%
Commerce	9	10.0%
Total	90	100.0%



Table 2 describes faculty wise distribution of the population. It is observed that more than one third of students (34.4%, N=31) are from social science faculty. More than one fourth (25.6%, N=23) are from science faculty. Less than one fourth (23.3%, N=21) are from Arts faculty. Very few of the students belongs to Education (6.7%, N=6) and Commerce (10%, N=9) faculties.

Table -3 Year of study wise distribution of respondents

Year wise	Frequency	Percent
1st Year	48	53.3%
2nd Year	42	46.7%
Total	90	100.0%

Table 3 shows the year wise distribution of study population, It is observed that majority of the students are (53.3%, N=45) from 1st Year P.G. program while the remaining (46.7%, N=42) students are from 2nd Year P.G. program.

Table-4 Category wise distribution of respondents

Category	Frequency	Percent
GM	20	22.2%
OBC	50	55.6%
SC/ST	20	22.2%
Total	90	100.0%

Table 4 indicates the class composition of the study population. It is found that more than half (55.6%, N=50) belongs to OBC group, and more than one fifth of study population (22.2%, N=20) belongs to GM and SC/ ST category respectively.

Table-5 Stay of respondents

Stay of respondents	Frequency	Percent
Hostel	59	65.6%
PG/Separate room	10	11.1%
Own house	14	15.6%
Travel from village everyday	7	7.8%
Total	90	100.0%

Table 5 reveals where the respondents live. It is observed that out 90 respondents, nearly two third of respondents stay (65.6%, N=59) at Hostel. More than fifteen percentage of (N=14) study population stay at their own house and more than one tenth (11.1%, N=10) stay at PG/Separate rooms. A small group of population travel from village every day (7.8%, N=7).

Table-6 Awareness about e-books in different publishers N=90

Awareness	Number (percentage)
Sage publications	5(5.6%)
McGrawHill publications	8(8.9%)
MintBook library	3(3.3%)
EbscoHost	5(5.6%)
Free e-books	48(53.3%)

A question was asked to know how many are aware of e-books acquired by different publishers includes free e-books. Table 7 shows familiarity of students with electronic books of various publishers. More than half (53.3%, N=48) of students are aware about free e-books. However awareness



about e-books of different publishers is very low. Hardly a small percentage of users are aware of Sage publications (5.6%, N=5), McGrawHill e-book publications (8.9%, N=8), EbscoHost publications (5.6%, N=5), Mint Book Library (3.3%, N=3) publications. This clearly indicates that awareness of e-books of specific publisher is quite low necessitating rigors awareness program.

Table -7 Use of e-books of different publishers

Awareness	Very frequently	Frequen-tly	Occasio-nally	Rarely	Never	Mean (Rank)
Sage publications (5)	2(40%)	3(60%)	00	00	00	3.4(1)
Mc Graw Hill Publications (8)	1(12.5%)	4(50%)	3(37.5%)	00	00	2.75(5)
MintBook Library (3)	2(66.66%)	00	1(33.3%)	00	00	3.3(2)
EbscoHost (5)	2(40%)	1(20%)	2(40%)	00	00	3(3)
Free e-books (48)	25(52.02%)	11(22.91%)	3(6.25%)	2(4.1%)	7(14.5%)	2.93(4)

Use of e-books was measured on a 5-point likert scale with weighted (4-very frequently, 3-frequently, 2-occassionally, 1-rarely, 0-never). The mean was calculated, From table 7, it can be observed that mean use rate is good ranging between 2.75 and 3.4 sage publications usage rate is better (mean:3.4) among ll followed by MintBook(mean:3.3) and EbscoHost (mean:3). Free e-books have a mean usage rate of 2.93 McGrawHill publications have a mean usage of 2.75. This indicates that those who are aware have used the source quite frequently.



Table-8 Satisfaction with e-books

Satisfaction	Highly satisfied	Satisfied	Unsatisfied	Highly unsatisfied	Mean (Rank)
Sage publications (5)	2(40%)	2(40%)	1(20%)	00	2.2(3)
McGrawHill Publications(8)	5(62.5%)	2(25%)	1(12.5%)	00	2.5(2)
MintBook library(3)	3(100%)	00	00	00	3(1)
EbscoHost(5)	2(40%)	2(40%)	1(20%)	00	2.2(3)
Free e-books(41)	29(70.7%)	8(19.5)%	00	4(9.7%)	2.2(3)

E-books usage satisfied was measured on a 4-point likert scale with following weightage 3- highly satisfied , 2- satisfied, 1-unsatisfied, 0-highly unsatisfied. The calculated mean value indicates a satisfactory picture. Mintbook (Mean: 3) shows highly satisfied usage. Those who are using other resources have expressed their satisfaction with McGrawHill publications (Mean: 2.5), Sage publications (mean: 2.2), EbscoHost (Mean: 2.2) and free e-books (mean: 2.2).

Table-9 Awareness about INFLIBNET e-journals

Awareness	Frequency	Percentage
Yes	27	30%
No	63	70%
Total	90	100.0%

Table 8 indicates that over two-third of respondents (70%, N=63) were unfamiliar with Inflibnet electronic journals and one-third (30%, N=27) of respondents knew about Inflibnet electronic journals. Though e-journals



are not very much required by P.G. students, it is quite good that a significant number of students are aware of e-journals.

Table-10 Use of INFLIBNET e-journals

Use	Frequency	Percent Very
frequently	7	25.9%
Frequently	7	25.9%
Occasionally	1	3.7%
Rarely	2	7.4%
Never	10	37.03%
Total	27	100%

More than one third (37.3%, N=10) of students have never used e-journals and more than one fourth (25.9%, N=7) students use Inflibnet electronic journals quite frequently and frequently respectively; While a small group students use (7.4%, N=2) rarely, and (3.7%, N=1) used occasionally. Weightage points 4-very frequently, 3- frequently, 2-occasionally, 1-rarely and 0-never were considered the mean was calculated and It is found to be 1.96 which is not satisfactory.

Table-11 Satisfaction of INFLBNET e-journals

Satisfaction	Frequency	Percent
Highly satisfied	12	70.5%
Satisfied	3	17.6%
Unsatisfied	00	00
Highly unsatisfied	2	11.7%
Total	17	100%

Table 11 reveals about satisfaction level of Inflibnet e-journals. It is observed that more than two third (70.5%, N=12) were highly satisfied with Inflibnet e-journals. While (17.6%, N=3) of respondents are satisfied and (3.3%,



N=3) highly unsatisfied with Inflibnet e-journals. By applying weightage points 3-highly satisfied, 2-satisfied, 1-unsatisfied and 0-highly unsatisfied the mean was calculated. It is found to be 2.47 which is quite good. Though use rate quite low, satisfaction rate is quite satisfactory. It can be interpreted that those who are using e-journals are quite happy.

Table-12 Awareness about different Databases

(N=90)

Awareness	Percent
Annual reviews	7(7.8%)
Economic & Political weekly	5(5.6%)
Oxford university press	5(5.6%)
Emerald	5(5.6%)
ISID	5(5.6%)
JSTOR	5(5.6%)
JCCC	5(5.6%)

Table 12 reveals students awareness about different databases. It also shows that awareness level among post graduate students with regard to databases accessible through INFLIBNET e-shodhsindu is very poor as very few countable are aware of annual reviews (7.8%, N=7), economic & political weekly, Oxford university press, ISID and JSTOR (5.6%, N=5) respectively.



Table-13 Use of Databases

Use	Very Frequently	frequently	Occasionally	Rarely	Never	Mean (Bank)
Annual reviews(7)	1(14.28%)	1(14.28%)	00	00	5(71.42%)	1(7)
Economic & Political weekly(5)	2(40%)	2(40%)	00	1(20%)	00	3(5)
Oxford university press(5)	3(60%)	1(20%)	1(20%)	00	00	3.4(3)
Emerald(5)	1(20%)	4(80%)	00	00	00	3.2(4)
ISID(5)	2(40%)	2(40%)	1(20%)	00	00	3.6(1)
JSTOR(5)	3(60%)	2(40%)	00	00	00	3.6(1)
JCCC(5)	1(20%)	1(20%)	2(40%)	1(20%)	00	2.4(6)

Online databases use was measured using 5-point likert scale with following weightage 4-very frequently, 3-frequently, 2-Occassionally, 1-rarely, and 0-never. The mean was calculated. It is found that the mean use among P.G. students is 1.36 JSTOR and ISID have the best usage among those who are aware with a mean of 3.6 followed by OUP (Mean: 3.4), Emerald (Mean: 3.2) and EPW (Mean: 2.4). JCCC (Mean: 2.4) stands at number six indicating that these are occasionally used. Annual Reviews (Mean: 1) are rarely used.

Table- 14 Satisfaction with Databases

Satisfaction	Highly satisfied	Satisfied	Unsatisfied	Highly satisfied	Mean (Rank)
Annual reviews (2)	2(100%)	00	00	00	3(1)
Economic & Political weekly (5)	2(40%)	1(20%)	2(40%)	00	2(6)
Oxford university press (5)	3(60%)	2(40%)	00	00	2..6(2)
Emerald (5)	2(40%)	3(60%)	00	00	2.4(3)
ISID (5)	2(40%)	2(40%)	1(20%)	00	2.4(3)
JSTOR (5)	3(60%)	00	1(20%)	1(20%)	2(6)
JCCC (5)	2(40%)	2(40%)	1(20%)	00	2.2(5)

Use satisfaction with online databases is measured on four point likert scale with weightage points 3-Highly satisfied, 2-satisfied, 1-Unsatisfied, 0-highly unsatisfied. The mean was calculated it is once again found that the satisfaction rate is quite satisfactory among those who have used it. Those who have used annual reviews are highly satisfied.

Table-15 Awareness about E-thesis and dissertations

Awareness	Frequency	Percent
Yes	27	30%
No	63	70%
Total	90	100%

Table 15 shows that two third of the respondents were (70%, N=63) not aware of E-thesis and dissertations and the remaining on third (30%, N=27) respondents were aware about E-thesis and dissertations.

Table-16 Use of E-thesis and dissertations

Use	Frequency	Percent
Very frequently	5	18.5%
Frequently	5	18.5%
Occasionally	00	00
Rarely	4	14.8%
Never	13	48.1%
Total	27	100%

Table 16 reveals that use of E-thesis and Dissertations, More than two third (48.1%, N=13) of the respondents have never used the e-thesis and dissertations. A few P.G. students have use them (18.5%, N=5) very frequently and frequently respectively; (14.8%, N=4) respondents use rarely utilized E-thesis and dissertations. The use rate was measured on a 5-point likert scale having weightage points 4-very frequently, 3-frequently, 2-occassionally, 1-rarely, o-never. The calculated mean value is 1.44 which indicated rare usage e-thesis and dissertations by P.G. students.

Table-17 Satisfaction with E-thesis and dissertations

Satisfaction	Frequency	Percent
Highly satisfied	8	57.1%
Satisfied	6	42.8%
Unsatisfied	00	00
Highly unsatisfied	00	00
Total	14	100%

Table 17 shows satisfaction level of E-thesis and dissertations. It observed that more than half (57.1%, N=8) of the respondents were highly satisfaction and more than one third (42.8%, N=6) of respondents were satisfied with E-thesis and Dissertations. The satisfaction rate was measured in a 4- point

likert scale with the weightage points 3-highly satisfied, 2-satisfied, 1-unsatisfied, 0-highly unsatisfied. The calculated mean value is 2.57 which indicate that fact those who have used are quite satisfied.

Table-18 Awareness about E-Newspaper

Awareness	Frequency	Percent
Yes	81	90%
No	9	10%
Total	90	100%

Table 18 reveals that a greater majority were (90%, N=81) aware of E-newspaper and (10%, N=9) of the respondents are unaware of E-Newspapers.

Table-19 Use of E-Newspaper

(N=90)

Use	Frequency	Percent
Very frequently	46	56.7%
Frequently	16	19.7%
Occasionally	3	3.7%
Rarely	4	4.9%
Never	12	14.8%
Total	81	100%

Table 19 reveals about use of E-newspaper. More than half of the respondents use E-newspaper (56.7%, N=46) very frequently and nearly one fourth have used them (19.7%, N=16) frequently; and few (4.9%, N=4) used them rarely, and fewer (3.7%, N=3) used occasionally. The use was measured on a 5-point likert scale having weightage points 4-very frequently, 3-frequently, 2-occassionaly, 1-rarely, 0-never. The calculated

mean value is 2.99 which indicate that e-newspapers are used quite frequently.

Table-20 Satisfaction with E-Newspaper

Satisfaction	Frequency	Percent
Highly satisfied	54	78.2%
Satisfied	11	15.9%
Unsatisfied	4	5.7%
Highly unsatisfied	00	00
Total	69	100%

From Table 20, it can be observed that a greater majority of P.G. students were highly satisfied with e-newspapers (78.2%, N=54). More than fifteen percent of P.G. students were satisfied. The mean value was calculated with the weightage points 3-highly satisfied, 2-satisfied, 1-unsatisfied, and 0-highly unsatisfied. The calculated mean value of 2.72 indicates a good satisfaction rate.

Table-21 Awareness about E-magazines

Awareness	Number	Percentage
Yes	81	90%
No	9	10%
Total	90	100%

Table 21 reveals that greater majority (90%, N=81) aware of E-magazines and (10%, N=9) of the respondents are unaware of E-magazines.



Table-22 Use of E-magazines

Use	Frequency	percent
Very frequently	45	55.5%
Frequently	15	18.5%
Occasionally	4	4.9%
Rarely	5	6.1%
Never	12	14.81%
Total	81	100%

The table 22 describes the use of e-magazines. More than half of the respondents use of E-magazines (55.5%, N=45) very frequently and a significant (18.5%, N=15) used frequently; A small number (4.9%, N=4) respondents use e-magazines occasionally, and (6.1%, N=5) of P.G. students rarely used and nearly one fifth (14.81%, N=14) never used E-magazines. The use rate was measured on a 5-point likert scales having weightage points 4-very frequently, 3-frequently, 2- occasionally, 1-rarely, 0-never. The calculated mean value is 2.93 which indicates frequent usage rate.

Table-23 Satisfaction with E-magazines

E-magazines	Frequency	Percent
Highly satisfied	49	71.01%
Satisfied	15	21.7%
Unsatisfied	5	7.2%
Highly unsatisfied	00	00
Total	69	100%

It is observed from table 23 that more than two third (71.01%, N=49) of the respondents were highly satisfied. More than one fifth (21.7%, N=15) of P.G. students under study were satisfied and a small number of P.G.



students are unsatisfied (7.2%, N=5). Applying weightage points 3-highly satisfied, 2-satisfied, 1-unsatisfied, 0-highly unsatisfied, the calculated average is 2.64, which is quite good. This indicates that P.G. students are satisfied with e-magazines usage.

Table-24 Problems encountered while using e-resources (N=90)

Problems	Number (Percentage)
Connectivity	61(67.8%)
Deciding on relevancy	71(78.9%)
Lack of searching skills	63(70%)
Unawareness	81(90%)
Non-availability	79(87.9%)

P.G. students under study were asked to indicate the problems while using e-resources. It can be observed from table 24 that user have more than one problem. In fact, they have multiple problems, unawareness of e-resources is a major problem for greater majority of respondents (90%, N=81) followed by non-availability of full text documents (87.9%, N=71). More than three fourth of P.G. students faced problem in deciding on relevancy of articles (78.9%, N=71).

Lack of searching skills (70%, N=63) is another problem being faced by P.G. students. More than two third did face the problem of connectivity (67%, N=61).

Conclusion :

The study has thrown open interesting facts on the awareness, use and satisfaction among P.G. students. They are unaware of many e-resources that the library has access to. But those who are aware have used them quite frequently and satisfactory rate is also quite good. It is interesting to note that their awareness level is high with regard to e-newspapers and e-magazines. There is a dire necessity to increase the awareness by organizing workshops or user education programs. In addition to this the problem of low connectivity should be resolved the other problems like information searching skills, deciding on relevancy requires in-depth IL training. This is an opportunity for the library authorities to go for a digital drive to attract the users so that the resources available at the library could be optimally utilized.

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