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Usage and Perception of E-Resources by Undergraduate Students: A Case Study of Government Degree College Baramulla- J&K

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Abstract

We have witnessed a drastic change in the organization and operations of Library and Information Centres from last three decades or so. From storehouses of books to Information Centres, from preserving philosophy to access orientation, printed materials to digital information, manual system of operations to automatic service delivery systems and from in-house services to advanced consortia based remote access to flood of information resources, libraries as service centres have traversed a long journey with revolutionary and evolutionary ramifications. Modern-day libraries are flooded with lots of information sources both in print as well as in digital format. A major chunk of information resource in today's libraries is in electronic and digital form which has tremendous advantages over their print counterparts. This study is an attempt to study the usage, preference and perception of undergraduate students at the college level. Survey method of data collection has been employed with a sample size of 350 students across the 5 streams of study in the institution. The major findings of the study reveal that students are more inclined towards E-Resources in comparison to print sources. College library needs to market its services particularly E-Services among the students as the large percentage of users are not fully aware about the E-Resources and services available in their library.

Keywords

E-Resources, Digital Media, E-Resources, E-Services, Academic Libraries, Undergraduate Students.

1. Introduction

Technological innovation has given rise to electronic form of information which subsequently has revitalized the information processing and access process. Electronic resources have numerous advantages over the traditional print resources, they can be accessed through electronic means like computers, tablets, Smartphone, e-book readers at any time anywhere and at any place. The easy handling, small size, customization, and anywhere anytime accesses of e-resources, are some of the features that users love to exercise and explore. Information resources in electronic form have significantly affected the information retrieval habits and perceptions of the users. E-resources now constitute the integral component of academic library collections (Kaur, 2013). The paradigm shift from print resources to electronic resources has meant significant change for libraries and their users. The integration of technology in higher education has an impact on academic libraries in two direct ways: changing material formats and the scholarly communication options; and changing how information is delivered, beyond the classroom experience (Wood & Walther, 2000).

Electronic resources include, web sites, online databases, e-journals, e-books, and physical carriers in all formats, whether free or fee-based, networked electronic resources have become an integral part of the academic library during the past decade (Bailin, 2008). Electronic resources carry the potential power to increase the learning opportunities offered to students in particular, the interactive and multimedia elements provided by the electronic medium can offer a great variety of learning experience than those offered by text on paper. Therefore, it is high time for the information professionals in Indian context to study the different key dimensions of electronic resources and to successfully channel them into the inquisitive minds of users by identifying and addressing some of the issues relating to the use of e-resources (Wilson, 2003).

2. Review of Literature

Kumbar, Mallinath & Lohar (2005) in a study focused on student attitudes toward digital resources and services at Bapuji Institute of Engineering and Technology, Davangere, Karnataka. The study revealed that the majority of the students are using the digital resources frequently. Joteen, K.Singh, A. & Chandel, A.S. (2009) carried out a study on use of internet-based e-resources at Manipur University to examine the use of e-information focusing on the internet services by post graduate students, research scholars, teachers and non-teaching staff members. The study showed that the students are using the internet mainly to download the information

from web-based resources and web-sites. Lack of power supply and the low speed internet access were general problems faced by users in accessing information from web-based resources. K. Natarajan, B. Suresh, et-al (2010) conducted a case study on Use and user perception of electronic resources in Annamalai University. The authors came with the findings that utilization of e-resources available in library indicates (58.97%) faculty members and (62.02%) research scholars were using E-resource while (41.03%) faculty members and (37.96 percent) research scholars were not using then. Hira Tariq and Muhammad Waseem Zia (2014) carried out a study on use of electronic Information Resources by the Students University of Karachi. The study reveals that the frequency of use of Electronic Information Resources, which is 67.83% respondents use daily, 11.74% student's uses occasionally, 8.26% uses once in a week, 6.96% use them thrice a week and 5.22% use twice a week.

3. Objectives of Study

The primary objective of the study is to understand and assess the utilization and perception of undergraduate students towards the E-Resources. However, the study was carried out with following specific objectives in focus:

I. To investigate the E-Resources and services available in the college libraries under study.
II. To understand and assess the perception of respondents towards the E-Resources.
III. To analyze the main reasons behind the usage of E-Resources by the undergraduates and the problems faced in using e-resources.
IV. To examine the satisfaction level of respondents vis-a-vis the utilization of E-Resources
V. To assess the gender disparity, if any, in use and perception of E-resources by the undergraduate students.

4. Scope and Limitations of the Study.

Present study is aimed at assessing the use and utilization of library services in electronic form by the Undergraduate Students of Government Degree College Baramulla. The study endeavors to examine the usage and perception among the Students vis-à-vis the E-Resources of the selected institution of higher learning. The scope of the study is limited to the Government Degree College Baramulla, encompassing all its faculties. The college has five faculties viz: Faculty of Science, Faculty of Social Science, Faculty of Commerce and Management Studies, Faculty of Arts and Faculty of Computer Science. Major limitations of the study are that the

study is based on sampling technique where chances of bias and wrong responses are always possible and also it is confined to one college only.

5. Methodology

Methodology adopted for any study is the real mechanism of that research. For present study descriptive survey method has been adopted. The total population of selected institution was 4741, comprising of Science, Social Science, Commerce and Management Studies, Arts and Computer Science Faculties of the College. Self structured questionnaire was used as tool for data collection. Stratified Random sampling design was followed wherein the entire population was divided into 6 strata on the basis of subject stream and in each stratum Simple Random Sampling Technique was followed. Descriptive statistic techniques like tables of frequency counts and percentages were used in the analysis. To improve the reliability and validity, statistical tests like Chi Square, ANOVA and Student's T- Tests were used in the study.

5.1 Design of the Questionnaire:

A self structured questionnaire was designed for carrying out the study. The questionnaire was designed after due consent with experts both online as well as offline. The reliability and internal consistency of the questions in the questionnaire was statistically determined by Chronbach's Alpha**:**

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N-1) \cdot \bar{c}}$$

Where;

N = no of items

C-bar = Average inter-item covariance between the items

V-bar = Average variance

The value of **α** was calculated as **0.73**

(The reliability coefficient of 0.70 or higher is considered "acceptable" in most social science research situations)

5.2 Sample Size

Sample size was statistically determined by using Krejcie and Morgan (1970) formula:

$$S = X^2 NP (1-P) / d^2 (N-1) + X^2 P (1-P)$$

Where,

S= required sample size

X^2 = the table value of chi square for 1 degree of freedom at the desired confidence level (1.96x1.96= 3.841)

N= polpualtion size

P= The populatioon proportion (assumed to be 0.5)

d= degree of accuracy expressed as proportion, (0.05)

The total population of the students under study was 3741. Further, to ensure an optimal sample size, the 95% confidence level was pre-assigned and a small sampling error (0.05) was fixed. The population distribution was assumed to be 50%, then:

S= 3.841x4741x0.5(1-0.5)/ 0.0025(4741-1)+3.841x0.5(1-0.5)

S = 356

Thus, the Samplwe size for the present stydy is **356.**

5.2. Administration of the Tool

As calculated statistically a total of 356 questionnaires were supposed to be administered, but we have 5 strata of users so, in order to make the proportionate distribution among the various strata, 350 questionnaires were administered among the target population, out of which the researchers were able to collect back 258 questionnaires which accounts for an overall response rate of 72.47%.

Table 1 Administration of the Tool among the target population

	Faculty					
	Faculty of Arts	Faculty of Science	Faculty of Social Science	Faculty of Commerce & Management	Faculty of Computer Science	N
No of questioners Distributed	70	70	70	70	70	350
No of questioners collected back	53	51	48	50	56	258
Response Rate	**75.71%**	**72.85%**	**68.57%**	**71.42%**	**80.00%**	**73.71%**

Table 2 Gender wise distribution of the questionnaires among the target population

Gender	Faculty					
	Faculty of Arts	Faculty of Science	Faculty of Social Science	Faculty of Commerce & Management	Faculty of Computer Science	N
No of questioners distributed						
Male	35	35	35	35	35	175
Female	35	35	35	35	35	175
Total	**70**	**70**	**70**	**70**	**70**	**350**
No of questioners collected back						
Male	26	26	23	24	29	132
Female	27	25	25	26	27	126
Total	**53**	**51**	**48**	**50**	**56**	**258**

6. Data Analysis and Interpretation.

The data collected by means of questionnaires was tabulated and analyzed using appropriate statistical techniques.

6.1 **Awareness of e-resources among students**

Respondents were asked about their awareness regarding the awareness of e-resources. Likert 5 point scale was used for assess the opinion of the respondents.

Table 3 Awareness of e-resources among respondents

Faculty	Fully Aware	Partially Aware	Not Sure	Partially Unaware	Fully Unaware	N
Arts	09 (16.98)	12 (22.64)	08 (15.09)	14 (26.41)	10 (17.85)	53 (100)
Science	12 (23.52)	16 (31.37)	03 (05.88)	11 (21.56)	09 (17.64)	51 (100)
Social Science	10 (20.83)	09 (18.75)	04 (08.33)	13 (27.08)	12 (25.00)	48 (100)
Commerce &	13	12	03	08	14	50

Management	(26.00)	(24.00)	(06.00)	(16.00)	(28.00)	(100)
Computer Science	21	24	02	05	04	56
	(37.50)	(42.85)	(03.57)	(08.92)	(07.14)	(100)
Total	**65**	**73**	**20**	**51**	**49**	**258**
	(25.19)	**(28.29)**	**(07.75)**	**(19.76)**	**(18.99)**	**(100)**
Chi Square Test						
Chi-square=0.014						
d. f. = 1						
Table Value ($\chi^2\alpha$) = 3.84						

(Figures in the parenthesis represent percentages)

Chi square test was applied to the likert scale to test the results statistically. Two groups were taken for the test, excluding the 'Neutral' option. The calculated value 0.014 is less than the table value 3.84 at 5% significance level with degree of freedom 1. The results indicate that there is no significant difference in the various categories of users in their opinion about the use of e-resources.

ANOVA Two Factor without Replication test was used to determine the significance of the results statistically among various groups of the respondents.

Source of Variation	SS	df	MS	F	P-value	F- crit
Rows	7.44	4.00	1.86	**0.08**	**0.99**	**3.01**
Columns	328.64	4.00	82.16	**3.74**	**0.02**	**3.01**
Error	351.36	16.00	21.96			
Total	687.44	24.00				

Results of ANOVA indicate that the calculated value of F is 0.08 which is significantly lesser than the critical value 3.01 and also the P-value is 0.99 which is significantly greater compared to the critical value of 0.05, both these factors give us enough statistical evidence to accept the Null Hypothesis and as such we conclude that there is no significant difference in the opinion of the students regarding the awareness of e-resources among respondents.

6.2. Use of E- Resources by the students

Respondents were asked about the use of e-resources. The responses were tabulated as under:

Table 5 Use of E- Resources by the respondents

Faculty	E-Books	E-Journals	E-Newspapers	Online Databases	None	N
Arts	04 (07.55)	00 (00)	05 (09.43)	06 (11.32)	38 (71.69)	53 (100)
Science	05 (09.80)	04 07.84)	09 (17.64)	04 (07.84)	29 (56.86)	51 (100)
Social Science	03 (06.25)	06 (12.50)	13 (27.08)	02 (04.16)	24 (50.00)	48 (100)
Commerce & Management	09 (18.00)	07 (14.00)	16 (32.00)	04 (08.00)	14 (28.00)	50 (100)
Computer Science	12 (21.42)	11 (19.64)	18 (32.14)	10 (17.85)	05 (08.92)	56 (100)
Total	**33 (12.79)**	**28 (10.85)**	**61 (23.64)**	**26 (10.07)**	**110 (42.63)**	**258 (100)**

(Figures in the parenthesis represent percentages)

ANOVA Two Factor without Replication test was used to determine the significance of the results statistically.

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	7.44	4	1.86	**0.03**	**0.99**	**3.00**
Columns	1011.44	4	252.86	**4.37**	**0.01**	**3.00**
Error	924.56	16	57.785			
Total	1943.44	24				

Results of ANOVA indicate that the calculated value of F is 0.03 which is significantly lesser than the critical value 3.01 and also the P-value is 0.99 which is significantly greater compared to the critical value of 0.05, both these factors give us enough statistical evidence to accept the Null Hypothesis and as such we conclude that there is no significant difference in use of E- Resources by the respondents

6.3. Reasons for not using E-Resources

Respondents were asked about the use of e-resources. The responses were tabulated as under:

Table 6 Reasons for not using E-Resources by the students

Faculty	Non-familiarity with E-Resources	Lack of training	Lack of infrastructure	Poor Internet Connectivity	Lack of time	N
Arts	21 (39.62)	18 (33.96)	02 (03.77)	05 (09.43)	07 (13.20)	53 (100)
Science	23 (45.09)	16 (31.37)	05 (09.80)	06 (11.76)	01 (01.96)	51 (100)
Social Science	20 (41.66)	15 (31.25)	05 10.41)	05 10.41)	03 (06.25)	48 (100)
Commerce & Management	10 (20.00)	12 (24.00)	08 (16.00)	09 (18.00)	11 (22.00)	50 (100)
Computer Science	08 (14.28)	07 (21.50)	12 (21.42)	14 (25.00)	15 (26.78)	56 (100)
Total	**82 (31.78)**	**68 (26.35)**	**32 (12.40)**	**39 (15.11)**	**37 (14.34)**	**258 (100)**

(Figures in the parenthesis represent percentages)

ANOVA Two Factor without Replication test was used to determine the significance of the results statistically.

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	7.44	4.00	1.86	**0.06**	**0.99**	**3.01**
Columns	389.84	4.00	97.46	**3.11**	**0.05**	**3.01**
Error	502.16	16.00	31.39			
Total	899.44	24.00				

Results of ANOVA indicate that the calculated value of F is 0.06 which is significantly lesser than the critical value 3.01 and also the P-value is 0.99 which is significantly greater compared to the critical value of 0.05, both these factors give us enough statistical evidence to accept the Null

Hypothesis and as such we conclude that there is no significant difference in the opinion of the students regarding reasons for not using E-Resources by the students.

6.4. Satisfaction of users with the E-Resources

Respondents were asked about their awareness regarding the awareness of e-resources. Likert 5 point scale was used for assess the opinion of the respondents. The responses were tabulated as under:

Table 7 Satisfaction of respondents with the E-Resources

Faculty	Fully Satisfied	Partially Satisfied	Not sure	Partially dissatisfied	Fully Dissatisfied	N
Arts	11 (20.75)	14 (26.41)	08 (15.09)	15 (28.30)	05 (09.43)	53 (100)
Science	09 (17064)	07 (13.72)	04 (07.84)	21 (41.17)	10 (19.60)	51 (100)
Social Science	12 (25.00)	08 (16.86)	03 (06.25)	13 (27.08)	12 (25.00)	48 (100)
Commerce & Management	09 (18.00)	16 (32.00)	04 (08.00)	10 (20.00)	11 (22.00)	50 (100)
Computer Science	15 (26.78)	18 (32.14)	01 (01.78)	13 (23.21)	09 (16.07)	56 (100)
Total	**56 (21.70)**	**63 (24.41)**	**20 (07.75)**	**72 (27.90)**	**47 (18.21)**	**258 (100)**
Chi Square Test *Chi-square=1.00* *d. f. = 1* *Table Value ($\chi^2\alpha$) = 3.84*						

(Figures in the parenthesis represent percentages)

Chi square test was applied to the likert scale to test the results statistically. Two groups were taken for the test, excluding the 'Neutral' option. The calculated value 1.00 is less than the table value 3.84 at 5% significance level with degree of freedom 1. The results indicate that there is no significant difference in the various categories of users in their opinion about the satisfaction with the use of e-resources.

ANOVA Two Factor without Replication test was used to determine the significance of the results statistically.

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	7.44	4.00	1.86	**0.13**	**0.97**	**3.01**
Columns	317.04	4.00	79.26	**5.40**	**0.01**	**3.01**
Error	234.96	16.00	14.69			
Total	559.44	24.00				

Results of ANOVA indicate that the calculated value of F is 0.13 which is significantly lesser than the critical value 3.01 and also the P-value is 0.97 which is significantly greater compared to the critical value of 0.05, both these factors give us enough statistical evidence to accept the Null Hypothesis and as such we conclude that there is no significant difference in the opinion of the students regarding their satisfaction of respondents with the E-Resources.

6.5. Need of training for use of E-Resources

Table 8 Opinion of students about the need of training for use of E-Resources

Faculty	Yes	No	N
Arts	49 (92.45)	04 (07.54)	53 (100)
Science	50 (98.03)	01 (01.96)	51 (100)
Social Science	41 (85.41)	07 (14.58)	48 (100)
Commerce & Management	45 (90.00)	05 (05.00)	50 (100)
Computer Science	56 (100)	00 (00)	56 (100)
Total	**241 (93.41)**	**17 (06.58)**	**258 (100)**

6.6 Gender disparity in use and perception of E-Resources

T-test for gender disparity in use and perception of E- Resources by the respondents

Use of E-Resources	Male	Female	Perception about E-Resources	Male	Female
Mean	26.4	25.2	Mean	26.40	25.20
Variance	133.30	129.70	Variance	1608.30	1214.70
Observations	5.00	5.00	Observations	5.00	5.00
Hypothesized Mean Difference	0.00		Hypothesized Mean Difference	0.00	
df	8.00		df	8.00	
t Stat	**0.17**		**t Stat**	**0.05**	
P(T<=t) two-tail	**0.87**		**P(T<=t) two-tail**	**0.96**	
t Critical two-tail	**2.31**		**t Critical two-tail**	**2.31**	

The results of the T test signify that the t-stat is 0.17 and 0.05 which is significantly less than the Critical Value 2.31 in use and perception of e-resources respectively at Degree of Freedom 8. These figures give us enough statistical evidence to accept the null hypothesis as such we may conclude that there is no significant difference in the use and perception of e-resources across the genders.

7. Findings and Discussion

The major findings of the study can be summed up as follows:

i. With regard to response rate, Faculty of Social Science shows the lowest level which is 68.57% while the Faculty of Computer Science shows highest rate of response with 80.00%.

ii. The awareness of E-resources among the respondents indicates that majority of the students i.e. 53.49% are aware about the e-resources available in their library across the all faculties. However, 38.76% respondents across the all faculties are not aware about the E-resources in their library.

iii. With regard to probable reasons for not using the E-Resources, majority 31.78% respondents quote Non-Familiarity of e-resources as a reason. Lack of Training in using the E-Resources is another major factor as opined by 26.35% respondents. The Poor

Internet Connectivity and Lack of Time are also two main reasons quoted by the 15.11% and 14.34% respondents which are and respectively.

iv. About the User Satisfaction Level of E-resources among the undergraduate students, 46.13% respondents are satisfied while as equal no of respondents 46.13% are dissatisfied.

v. Another important finding of the study reveals that majority of the respondents (93.41) feel the need for training vis-à-vis use of e-resources across the all faculties while only (06.58%) respondents do not feel need for such a training.

The results of the study show that both the genders have shown a good response rate vis-à-vis the questionnaire. The students are well aware about the availability of e-resources in their library but major portion of the students across all the faculties did not benefit from E-Resources in their library. The need of the hour arises for marketing and awareness of e-resources among the students. Library management can utilize the marketing power of modern day social media such as WhatsApp, Facebook, Twitter and similar programs and applications to market their e-resources and E-Services available in the library. Necessary information literacy programs and on-hand experience of gadgets in using and availing the E-Resources and E-Services by the students can be incorporated into the library extension and orientation programs. Library tours and extension programs should also be organized by the library authorities to familiarize the student community about E-Resources.

8. Conclusion

Under the digital scenario, the library and information centres have witnessed the biggest change in the history of the discipline. E-publishing and evolution of digital resources coupled with digitization, major portion of the library collections comprise of e- resources in the form of e-books, e-journals, CD-ROM, e-magazines etc are some of the fields that have been revolutionized by the electronic media. With the e-resource collections, libraries of all hues have gone a tremendous transformation with revolutionary service orientation and delivery of library services and products to the users. Lack of awareness with regard to availability and use of e-resources at college level, information literacy levels among the students and internet facilities are some issues that need to be addressed at priority by the library policy makers. User orientation and awareness programs also need to be carried out by library management for better understanding and utilization of e-resources by the students.

References

1. Appleton, L. (2006). Perceptions of electronic library resources in further education. *The Electronic Library.* 24(5), 619-23. Retrieved on 20 March 2019 from www.emeraldinsight.com

2. Bailin A. and Grafstein A.(2005).The evolution of academic libraries: the networked environment. *Journal of Academic Librarianship.* Retrieved on 15th March 2019 from http://www.sciencedirect.com

3. Ibrahim, A E.(2004). Use and user perception of electronic resources in the United Arab Emirates University. *Libri.* 54 (3), 18-29.

4. Joteen, K.; Singh, A. & Chandel, A.S.(2009) Use of internet based e-resources at Manipur University. *DESIDOC Journal of Library and Information Technology.* 29(6), 13-2.

5. Kulveen Kaur (2013). Electronic age Information: An evaluation perspective. In emerging trends in library and information science, edited by Praveen Kumar, Ess Ess Publications, New Delhi, 252-257.

6. Kumbar Mallinath and Lohar M S, (2005). Student's attitudes towards digital resources and services in B.I.E.T., Davanagere: A survey. Paper presented at Third International CALIBER held at CUSAT, Cochin, on 2-4 Feb.

7. K. Natarajan, B. Suresh, P. Sivaraman and R.Sevukan. (2010). Use and user perception of electronic resources in Annamalai University: A case study. *Annals of Library and Information Studies,* 57 (March), 59-64.

8. Hira Tariq and Muhammd Waseem Zia (2014). Use of electronic information resources by the students of faculty of science, University of Karachi. *International Journal of Digital Library Services.* 4(3), 80-91.

9. Wilson, R. (2003). E-education in the UK. *Journal of Digital Information. 3(4), 162-75.*

10. Wood P. A. and Walther. H. (2000). The future of academic libraries: changing formats and changing delivery. *The Bottom Line: Managing Library Finances*, 13(4). Retrieved on 10th March 2019 from http://www.emeraldinsight.com