

Evaluating the Awareness and Usage of Ugc-Infonet Digital Library Consortium by the Faculty Members: A Case Study of Odisha State Universities

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Abstracts

UGC-Infonet consortium is one of the land mark achievement in the field of higher education in India. It is only the possible solution to the ever growing demand for information and ever decreasing the budget to the universities. UGC-Infonet is the E-journal consortium; the users can access the scientific and research articles on 7x24 hour basis on their desk top. Presently it includes 20 full text database, 10 bibliographic and open access databases. These databases covers all most all fields of higher learning i.e. Arts, Humanities and Social Sciences, Physical and Chemical Sciences, Life Sciences, Computer Science, Mathematics, Statistics etc. The present study evaluates the awareness and usage of UGC-Infonet by the faculty members of Odisha's state universities.

Keywords- UGC, UGC-Infonet, INFLIBNET, E-Journal Consortium, Odisha State University.

Introduction

Acting as the heart of the learning society, academic libraries or university libraries not only provide knowledge depository for the university, but also capture, organize and disseminate information for the university's community to conduct research. Thus, academic libraries play a vital role in ensuring the survival and growth of each university. Realizing the very importance of academic library to a university, the University Grants Commission (UGC), through its novel programme, 'UGC-Infonet' has come forward to help the university libraries, so that access to large number of scholarly online journals is made available to the user community. So far 200 universities in India covered under the scheme ^[1].

UGC-Infonet

Technology is a driving force in the contemporary education systems and the road of achieving success in the field of knowledge is a long way. So, UGC and ERNET India have set out on the journey of accomplishing the mission to provide relevant and quality education with

enhanced access and equity through UGC-Infonet programme. UGC-Infonet is an ambitious programme of UGC to interlink all the Universities in the country with state-of-art technology. It was formally inaugurated by the Hon'ble Prime Minister on 28th December 2002. The UGC-Infonet have overlay on ERNET infrastructure to provide assured quality of service and optimal utilization of bandwidth resources. The project is being funded by the UGC with 90% capital investment and 100% recurring cost during the 10th Five year Plan period. A joint Technical and Tariff Committee (JTCC), consisting of leading experts in the country has been set up to guide and monitor the entire project. INFLIBNET centre is the nodal agency for coordination of the UGC-Infonet and facilitates linkage between ERNET and the universities. UGC-Infonet has become a boon to the higher education system in several ways. And in the long run, each University will become a hub for the colleges affiliated to them ^[2].

Literature Review

Singh, Nizam and Singh ^[3] in their study, "Awareness and use of online journals by the faculty members, researchers and students in the faculty of natural sciences, Jamia Millia Islamia University: a survey" investigated that 85.71 per cent of the respondents were aware and rest 14.29 per cent were not aware with the availability of online journals. Majority of the respondents were using e-journals for their research purposes followed by study, subject development, publication, teaching respectively.

Veenapani, Singh and Devi ^[4] in their study investigated that 55 per cent respondents were aware with UGC-Infonet Digital Library Consortia where as 45 per cent were not aware. Major problems encountered by the respondents were includes ICT illiteracy, frequent power cuts, speed of internet, inadequate number of computers etc. Bhatta and Joshi ^[5] in their study access the impact of UGC-Infonet Digital Library Consortium on academic community revealed that the number of research degrees awarded in the field of social sciences, humanities, pure and applied sciences had increased significantly.

In a study to find out for making best use of the UGC-Infonet Digital Library Consortium, Kumbar and Hadagali ^[6] found that 64.29 per cent of the faculty needed regular training/ awareness/ orientation programmes. Patil and Parameshwar's ^[7] study revealed that 62.91 per cent of the faculty members expressed the need for more number of journals.

Aims & objective

We are living in the information age. The availability of online information and its effective use contributes to all round development of individuals and nations. Information is the most crucial input resource for development. At the higher education level everyone needs advanced and scholarly literature to improve the quality of study, teaching and research. The basic objective of the present study is: to make a study on the level of awareness and usage of UGC-Infonet E-journal Consortia resources. Some other objectives of the study are:

- To know the extent of awareness and use of the UGC-Infonet E-journal Consortium by the faculty member in Universities in Odisha.
- To find out the reason for using UGC-Infonet E-journal Consortium.
- To determine the frequency of use of UGC-Infonet E-journal Consortium.
- To unfold the impact of UGC-Infonet E-journal Consortium on study and research.
- To identify the problems incurred by the users community while using UGC-Infonet E-journal Consortium.

Scope of the study

There are 12 universities in Odisha state out of which only 5 universities are covered under UGC-Infonet Digital Library Consortium facilities [8]. However, Central university of Odisha has yet to be commissioned to avail the facility and due to some internal problem of the university the investigator does not permitted to collect data from Shri Jagannath Sanskrit Visvadyalaya, Puri. Therefore, the present study is restricted to three major universities of the state i.e. Berhampur University, Berhampur; Sambalpur University, Sambalpur and Utkal University, Bhubaneswar.

Methodology

To fulfill the stated objectives of the present study, a structured questionnaire covering the relevant aspect of the study were distributed among the faculty members of the universities. Though it is not possible to cover all the faculty members due to their day to day busy schedule, thus, random sampling technique was used for distribution of questionnaire as it was not possible to collect data from all the target respondents. The questionnaires were distributed to the faculty members who were present at their concerned departments and library. Besides, in some case personal interaction and verification of library and other relevant records related to the study were made to get first hand information on the topic. Over all 266 questionnaires were distributed among the faculty members and 191 filled-in all aspect questionnaires were returned by the respondents with the response rate of being 71.8 per cent. The collected data were analyzed, classified and tabulated by employing statistical techniques such as percentage, arithmetic mean, mean deviation and standard deviation etc. The mean and standard deviation are calculated to ascertain the level of variations amongst the variables by using the following formula:

$$\text{Mean Deviation } (\delta) = x - \bar{X}$$

Where, x= number of response

\bar{X} = number of responses

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum (x - \bar{X})^2}{N}}$$

Where, $\sum (x - \bar{X})^2$ = sum of the squares of mean deviation

Analysis & discussion

Classified data on respondents

Out of 266 faculty members, 191 filled-in all aspect questionnaires were returned by the respondents with the response rate of being 71.8 per cent Table-1 gives a detailed distribution of the distributed and collected questionnaires from the respondents again it categories the respondents into 3 categories as listed in the table.

Table-1 Classified data on respondents

Category		Distributed	Collected	Total Distributed	Total Collected
Berhampur University	Prof.	37	26	79 (100)	57 (72.16)
	Readers	29	21		
	Lecturer	13	10		
Sambalpur University	Prof.	33	21	72 (100)	51 (70.84)
	Readers	15	11		
	Lecturer	24	19		
Utkal University	Prof.	48	35	115 (100)	83 (72.18)
	Readers	33	22		
	Lecturer	34	26		
Grand Total	Prof.	118	82	266 (100)	191 (71.81)
	Readers	77	54		
	Lecturer	71	55		

Note: Figures in parenthesis denote percentage.

Internet specification

Internet specifications available in the university libraries under the study are presented in Table-2. Besides this the services can also be accessed at various departments through e-governance project of the universities.

Table-2 Internet specification of the universities

Sl. No.	Name of the University	Net Specification
1.	Berhampur university	Broad Band VSAT 256 Kbps
2.	Sambalpur University	Broad Band VSAT 256 Kbps
3.	Utkal University	Leased Line -2 Mbps

2. Level of Knowledge on Computer & IT

Out of 191 faculty members, 73 (38.22 per cent) have manageable knowledge on computer & IT where as 63 (32.98 per cent) have strong knowledge, 28 (14.16 per cent) have average knowledge; 24 (12.57 per cent) have poor knowledge respectively (table-3).

Table-3 Level of knowledge on computer & IT

Level of knowledge	Strong	Manageable	Average	Poor	Can't say	Total
Professors	21 (25.61)	36 (43.9)	11 (13.41)	14 (17.08)	--	82 (100)
Readers	12 (22.22)	22 (40.74)	10 (18.52)	7 (12.96)	3 (5.56)	54 (100)
Lecturers	30 (54.55)	15 (27.27)	7 (12.73)	3 (5.45)	--	55 (100)
Total	63 (32.98)	73 (38.22)	28 (14.16)	24 (12.57)	3 (1.57)	191 (100)

Note: Figures in parenthesis denote percentage.

Frequency of use of UGC-Infonet E-Journal Consortium

Table-4 shows that a majority of the faculty members, i.e. 77 (40.31 per cent) used UGC-Infonet e-journal consortium almost thrice in a week, followed by 54 (28.27 per cent) on daily basis, 34 (17.81 per cent) twice in a week, 21 (10.99 per cent) once in a week, and 5 (2.62 per cent) when feel necessary, respectively.

Table-4 Frequency of use of UGC-Infonet e-journal consortium

Frequency of use	Almost daily	Thrice in a week	Twice in a week	Once in a week	When feel necessity	Total
Professors	24 (29.27)	31 (37.8)	10 (12.2)	13 (15.85)	4 (4.88)	82 (100)

Readers	14 (25.93)	21 (38.89)	13 (24.07)	5 (9.26)	1 (1.85)	54 (100)
Lecturers	16 (29.1)	25 (45.45)	11 (20)	3 (5.45)	--	55 (100)
Total	54 (28.27)	77 (40.31)	34 (17.81)	21 (10.99)	5 (2.62)	191 (100)

Note: Figures in parenthesis denote percentage.

Weekly distribution of time spent on UGC-infonet

Out of 191 faculty members who are using the UGC-Infonet resources for various purposes, 73 (38.22 per cent) use it 6-8 hours per week followed by 43 (22.51 per cent) more than 8 hours per week; 37 (19.37 per cent) 4-6 hours per week; 25 (13.09 per cent) 2-4 hours per week; 13 (6.81 per cent) 0-2 hours per week respectively (table-5).

Table-5 Weekly distribution of time spent on UGC-Infonet

Time spent/ week	0-2 hrs	2-4 hrs	4-6 hrs	6-8 hrs	More than 8 hrs	Total
Professors	7 (8.54)	13 (15.85)	17 (20.73)	39 (47.56)	6 (7.32)	82 (100)
Readers	4 (7.41)	7 (12.96)	11 (20.37)	19 (35.19)	13 (24.07)	54 (100)
Lecturers	2 (3.64)	5 (9.09)	9 (16.36)	15 (27.27)	24 (43.64)	55 (100)
Total	13 (6.81)	25 (13.09)	37 (19.37)	73 (38.22)	43 (22.51)	191 (100)

Note: Figures in parenthesis denote percentage.

Purpose of using UGC-Infonet DL Consortium

Data in table-6 reveals that out of 82 professors 77 (93.91%) professor use the UGC-Infonet resources for the purpose of publication of paper followed by 73 (89.03%) for guiding research, 62 (75.61%) for seminars/ conferences etc. Again it shows majority of readers i.e. 42 (76.37%) use for guiding research followed by 36 (65.46%) for publication and 31 (56.37%) for seminars/conferences. Similarly, most of the resources used by lecturers for teaching purposes (85.46%), for publication (70.91%) and for seminars/ conferences (60%) respectively.

Table-6 Purpose of use of UGC-Infonet DL Consortium

Purpose of use	Professors		Readers		Lecturers	
	Response	Deviation	Response	Deviation	Response	Deviation
For self improvement	29 (35.37)	-24.5	22 (40)	-7.5	28 (50.91)	-2
For teaching	38 (46.35)	-15.5	27 (49.1)	-2.5	47 (85.46)	17
For publication	77 (93.91)	23.5	36 (65.46)	6.5	39 (70.91)	9
For guiding research	73 (89.03)	19.5	42 (76.37)	12.5	9 (16.37)	-21
For seminars/ conferences	62 (75.61)	8.5	31 (56.37)	1.5	33 (60)	3
Others	42 (51.22)	-11.5	19 (34.54)	-10.5	24 (43.64)	-6

Note: Figures in parenthesis denote percentage.

For Professors

$$\bar{X}_1 = 53.5$$

$$\sigma_1 = 18.15$$

For Readers

$$\bar{X}_2 = 29.5$$

$$\sigma_2 = 7.89$$

For Lecturers

$$\bar{X}_3 = 30$$

$$\sigma_3 = 11.97$$

Place of Use of UGC-Infonet DL Consortium

Table-7 gives a brief sketch of the place of use of UGC-Infonet digital library consortium. The study reveals that most of the Professors were using UGC-Infonet e-journal consortium at department (87.37 per cent), followed by 37.81 per cent at computer lab, 35.37 per cent at library and 26.83 per cent at other places. Among the Readers, their concerned department is the most convenient place of use of UGC-Infonet e-journal consortium with 72.23 per cent, followed by library (61.12 per cent), computer lab (50 per cent) and other places (20 per cent). Similarly, among the Lecturers 76.37 per cent preferred to library, followed by 67.28 per cent (computer lab), 54.55 per cent (other places) and only 38.19 percent (at their concerned department) respectively.

Table-7 Place of use of UGC-Infonet DL Consortium

Place of use	Professors		Readers		Lecturers	
	Response	Deviation	Response	Deviation	Response	Deviation
Library	29 (35.37)	-9	33 (61.12)	1.5	42 (76.37)	9.5
Computer Lab	31 (37.81)	-7	27 (50)	-4.5	37 (67.28)	4.5
Department	70 (85.37)	32	39 (72.23)	7.5	21 (38.19)	-11.5
Other place	22 (26.83)	-16	27 (20)	-4.5	30 (54.55)	-2.5

Note: Figures in parenthesis denote percentage.

For Professors

$$\bar{X}_1=38$$

$$\sigma_1 = 5.61$$

For Readers

$$\bar{X}_2=31.5$$

$$\sigma_2 = 4.97$$

For Lecturers

$$\bar{X}_3= 32.5$$

$$\sigma_3 = 7.89$$

Impact of UGC-Infonet DL Consortium on study and research

One among the basic objectives of the study was to determine the extent to which the faculty members were satisfied with the UGC-Infonet e-journal consortium services and its impact on their study and research. The elicited response are shown in Table-8, which shows that 38.74 per cent of the faculty members considered the impact as good, while 49 (25.66 per cent) have rated it as excellent, 47 (24.61 per cent) faculty members opined average, 15 (7.85 per cent) expressed poor opinion and 6 (3.14 per cent) did not had any view about the impact of UGC-Infonet e-journal consortium services (table-8).

Table-8 Impact of UGC-Infonet DL Consortium on study & research

Impact on study & research	Excellent	Good	Average	Poor	Can't say	Total
Professors	15 (18.29)	37 (45.12)	22 (26.83)	8 (9.76)	--	82 (100)
Readers	11 (20.37)	20 (37.04)	13 (24.08)	7 (12.97)	3 (5.56)	54 (100)
Lecturers	23 (41.82)	17 (30.91)	12 (21.82)	--	3 (5.45)	55 (100)
Total	49 (25.66)	74 (38.74)	47 (24.61)	15 (7.85)	6 (3.14)	191 (100)

Note: Figures in parenthesis denote percentage.

Satisfaction level of access to UGC-Infonet

Table-9 gives a clear picture of satisfaction level of faculty members in using UGC-Infonet Digital Library consortium, which shows that majority of faculty members are moderately satisfied (38.22 per cent) with the UGC-Infonet Digital library consortium services followed by 46 (24.08 per cent) satisfied, 34 (17.8 per cent) dissatisfied, 28 (14.66 per cent) highly satisfied and 10 (5.24 per cent) highly dissatisfied respectively.

Table- 9 shows the satisfaction level of the respondents.

Level of satisfaction	Highly Satisfied	Satisfied	Moderately Satisfied	Dissatisfied	Highly Dissatisfied	Total
Professors	13 (15.85)	27 (32.93)	16 (19.51)	21 (25.61)	5 (6.1)	82 (100)
Readers	7 (12.96)	21 (38.89)	16 (29.63)	8 (14.82)	2 (3.7)	54 (100)
Lecturers	8 (14.55)	25 (45.45)	14 (25.45)	5 (9.1)	3 (5.45)	55 (100)
Total	28 (14.66)	73 (38.22)	46 (24.08)	34 (17.8)	10 (5.24)	191 (100)

Note: Figures in parenthesis denote percentage.

Problems encountered in using UGC-Infonet DL Consortium

Table-10 shows the problems encountered by the deferent category of faculty members while using UGC-Infoent Digital library consortium, which shows 93.91 per cent professors low internet bandwidth is the stumbling block in using the UGC-Infonet resources followed by poor infrastructure at library (86.59 per cent), poor infrastructure at department (80.49 per cent), frequent power failures (67.08 per cent) etc. Whereas, 92.6 per cent readers have encountered the same problem as low internet bandwidth, followed by 46 (85.19 per cent) poor infrastructure at library, 38 (70.38 per cent) poor infrastructure at department, 37 (68.52 per cent) found other problems, 33 (61.12 per cent) frequent power failures. Similarly, most of the lecturers are also pointed low internet bandwidth (92.73 per cent) as the major problem followed by poor infrastructure at library (90.91 per cent), poor infrastructure at department (76.37 per cent), frequent power failures (69.1 per cent) respectively.

Table-10 Problems encountered un using UGC-infonet DL Consortium

Problems	Professors		Readers		Lecturers	
	Response	Deviation	Response	Deviation	Response	Deviation
Poor infrastructure at library	71 (86.59)	14	46 (85.19)	7.5	50 (90.91)	10
Poor infrastructure at department	66 (80.49)	9	38 (70.38)	-0.5	42 (76.37)	2
Poor personal assistant by the library staff	27 (32.93)	-30	27 (50)	-11.5	30 (54.55)	-10
Frequent power failures	55 (67.08)	-2	33 (61.12)	-5.5	38 (69.1)	-2
Low internet bandwidth	77 (93.91)	20	50 (92.6)	11.5	51 (92.73)	11
Others	46 (56.1)	-11	37 (68.52)	-1.5	29 (52.73)	-11

Note: Figures in parenthesis denote percentage.

For Professors

$$\bar{X}_1 = 57$$

$$\sigma_1 = 16.84$$

For Readers

$$\bar{X}_2 = 38.5$$

$$\sigma_2 = 7.68$$

For Lecturers

$$\bar{X}_3 = 40$$

$$\sigma_3 = 8.66$$

Findings

Indian universities are fourunate to have access to large number of scholarly publications under the UGC-Infonet Digital Library Consortium without any financial burden on them, because the UGC pays on behalf of the universities. The present study explores the usage of UGC-Infonet among the academic community of Odisha State. The major findings of the study are:-

- Majority of the faculty members have a healthy knowledge on computer & IT.
- More than 40 per cent of the faculty members are accessing UGC-Infonet thrice in a week in state universities of Odisha.

- Most of faculty members spend 6-8 hours in a week to access UGC-Infonet DL resources.
- UGC-Infonet Digital Library Consortium is mostly used by the professors for publication of paper and guiding research, while most of the readers uses for guiding research and publication and mostly the lecturers used it for imparting education & teaching and for seminar and conferences.
- Library is the most convenient place of accessing UGC-Infonet digital library consortium services among the lecturers while professors and readers are more comfortable in their department.
- More numbers of faculty members were opined that UGC-Infonet have a good impact on study and research followed by excellent.
- The present study reveals that UGC-Infonet satisfies nearly 40 per cent of the faculty members of the State Universities.
- Low internet bandwidth, poor infrastructure at library, poor infrastructure at department and frequent power failures are the major problems encountered by the faculty members in accessing UGC-Infonet DL Consortium resource.

References

1. UGC-Infonet, available at <http://www.inflibnet.ac.in/infonet/index.php> (accessed 15 May 2012).
2. Murthy, T.A.V. (2006). "UGC-Infonet E-journal consortium for universities and colleges: an Indian experience". *Library Herald*, Vol. 44, No.1, pp 1-13.
3. Singh, P. K., Nazim and Singh, S. N. (2008). "Awareness and use of online journals by the faculty members, researchers and students in the faculty of natural sciences, Jamia Millia Islamia University: a survey", in *CALIBER 2008proceedings of the international conference in From Automation to Transformation, INFLIBNET Centre, Ahmedabad, 2008*. pp. 541-550.
4. Veenapani, S, Singh, K. and Devi, R. (2008), "Use of e-resources and UGC-Infonet consortium by the teachers and research scholars in Manipur University" in *CALIBER 2008proceedings of the international conference in From Automation to Transformation, INFLIBNET Centre, Ahmedabad, 2008*. pp. 563-568.

5. Bhatt, J. and Joshi, N. (2009). "Impact of UGC-Infonet Digital Library Consortium to academic community: a case study of the Maharaja Sayajirao University of Baroda" in *CALIBER 2008 proceedings of the international conference in From Automation to Transformation, INFLIBNET Centre, Ahmedabad, 2009*. P. 565-571.
6. Kumbar, B.D. and Hadagali, G. S. (2009). "Use of UGC-infonet E-Journals consortium by faculty members and research scholars of Karnataka University, Dharwad". *SRELS Journal of Information Management*, Vol. 46, No. 1, pp 41- 50.
7. Patil, D.B. and Parameshwar, S. (2009). "Use of electronic resources by faculty members and research scholars in Gulabarga University, Gulbarga: a survey". *SRELS Journal of Information Management*, Vol. 46, No. 1, pp. 51-60.

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