

# USE PATTERN OF SCIENTIFIC PERIODICALS IN R T M NAGPUR UNIVERSITY: A CRITICAL STUDY

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**Abstract:** The periodical literature is an important source of current knowledge and indispensable source of latest developments in any area of human activity. Periodicals occupy the most significant place among the collection in the library and indeed, they are living organs for the transmission of nascent information. Periodicals provide most up-to-date information. The users who want to keep themselves up-to-date with the latest developments in their subject fields have to regularly scan the periodicals in those fields. The present study focuses the use pattern of Scientific periodicals in R T M Nagpur University, Nagpur.

**Keyword:** Periodicals, Journals, RTM Nagpur University.

## INTRODUCTION:

### Profile of Nagpur University

Nagpur University is the oldest University of central India. On 4th August 1923, in British period Nagpur University was established. That time Nagpur University affiliated with only 6 colleges and only 927 students enrolled. Now Nagpur University entitled the name of National Saint and named as Rashtrasant Tukadoji Maharaj Nagpur University (R.T.M.N.U.). Presently RTMNU known for its PGDT, LIT, Law College, M. Phil, Ph. D, Post Doctorate & thousands of Engineering, Pharmacy, Science, Arts, and Commerce colleges are affiliated with Nagpur University.

All courses like Medical, Education, Administration, Commerce, Art, Agricultural, Engineering run by RTM Nagpur University.

### OBJECTIVES OF THE STUDY

The present study was undertaken with the following objectives.

To understand the sources of information that the users in Sciences make use of in gathering information that is helpful in their studies.

To understand the extent of the use of services offered by the University library.

To know to what extent the users in Science departments use periodicals. (Faculty members, Research Scholars, M.Phil Students and Post-Graduate students)

To know the views of the users to improve the collection of periodicals and library services in order to promote the use of periodicals.

### SCOPE & LIMITATIONS

The scope of the present study is use of periodicals in Science departments and respondents are Students, Faculty Members, M.Phil Students and Ph. D. Scholars.

The Present study is limited to Science departments of RTM Nagpur University, Nagpur.

### METHODOLOGY

**Questionnaires:** - Questionnaires, interviews and observations different from the diary technique in that a second party is partially or fully involved in the role of observer. As one might suspect, the questionnaire method is the least well regarded of the three methods, because the role of observer is confined to choosing the questions and evaluating the answers.

**Interviews:** - Face-to-face interviews are capable of easing some of the shortcomings of questionnaires. Immediate feedback inheres, so that doubts about the meanings of either question or answers can be quickly cleared up.

### SAMPLING TECHNIQUE

Out of 13 departments in Science faculty all 13 departments were chosen for study. Even it was not possible to contact all the users from each department, so that random sampling technique was adopted and the care was taken so as to have representative sample of users, so that the data gathered should be the representative one.

**Table 1. Budget for Periodicals (2009-2011)**

Sl. no.	Departments	Periodicals: Budget (year wise)	
		2009-2010	2010-2011
1	Bio-chemistry	2,03,000	2,23,000
2	Bio-technology	Nil	Nil
3	Botany	1,86,000	2,05,000
4	Chemistry	2,03,000	2,23,000
5	Electronic	34,000	37,000
6	Geology	2,03,000	2,23,000
7	Home science	19,000	21,000
8	Mathematics	1,86,000	2,05,000
9	Micro biology	1,34,000	1,47,000
10	Pharmacy	4,17,000	6,24,000
11	Physics	2,17,000	2,39,000
12	Statistics	89,000	98,000
13	Zoology	2,03,000	2,23,000

Source : Periodical Section of RTMNU

**Table No. : 2 showing the amount allocated and spent for purchase of periodicals from 2002-2011.**

Sl. No.	Year	Budget Provision (Rs.)	Expenditure on Journals (Rs.)	Indian Journals Subscribed	Foreign Journals Subscribed	Total Journals Subscribed
1	2002-03	6,14,518/-	6,52,154/-	15	5	20
2	2003-04	14,34,871/-	11,86,054/-	246	66	312
3	2004-05	13,72,925/-	12,51,651/-	278	56	334
4	2005-06	17,22,142/-	15,75,766/-	273	75	348
5	2006-07	15,88,102/-	13,83,027/-	189	59	248
6	2007-08	38,86000	17,28,683	287	68	355
7	2008-09	38,86000	19,59,370	202	27	229
8	2009-10	44,57,000	15,42,973	163	45	208
9	2010-11	49,00,000	23,59,263 Approx.	405 Approx.	64 Approx.	469 Approx.

Source: Annual Report (2002-2011), RTM Nagpur university, Nagpur

## RESPONSES OBTAINED

A total of 260 Questionnaires were distributed in 13 departments of science and 260 responses obtained from the users, which works out to be 100 % (a table is enclosed here with). The response was much better and the data collected and analyzed can represent the use pattern very well.

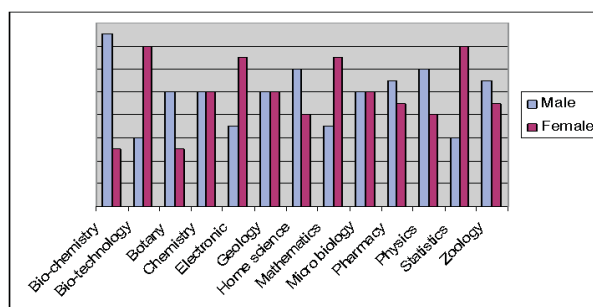
**Table 3: Distribution of Questionnaires to Science Departments of RTMNU**

Sr. no.	Name of Departments	Total Questionnaires Distributed	Total no. of Questionnaires Received	%
1	Bio-chemistry	20	20	100%
2	Bio-technology	20	20	100%
3	Botany	20	20	100%
4	Chemistry	20	20	100%
5	Electronic	20	20	100%
6	Geology	20	20	100%
7	Home science	20	20	100%
8	Mathematics	20	20	100%
9	Micro biology	20	20	100%
10	Pharmacy	20	20	100%
11	Physics	20	20	100%
12	Statistics	20	20	100%
13	Zoology	20	20	100%
		<b>260</b>	<b>260</b>	<b>100%</b>

Table No. 4.1 Shows the distribution of questionnaires. 260 questionnaires distributed in 13 science department of RTMNU. 20 questionnaires are equally distributed to each science departments out of 260 questionnaires, 260 questionnaires are received.

**Table 4.2 : Use of periodicals- Gender wise**

Sr. no.	Departments	Gender		Total no.
		Male	Female	
1	Bio-chemistry	15	5	20
2	Bio-technology	6	14	20
3	Botany	10	5	20
4	Chemistry	10	10	20
5	Electronic	7	13	20
6	Geology	10	10	20
7	Home science	12	8	20
8	Mathematics	7	13	20
9	Micro biology	10	10	20
10	Pharmacy	11	9	20
11	Physics	12	8	20
12	Statistics	6	14	20
13	Zoology	11	9	20
	<b>Total</b>	<b>117</b>	<b>143</b>	<b>260</b>

**Table No. 4.2 : Deals with use of periodical gender wise. Out of 260 users 177 are male users and 143 users are female.****Figure No. 1 Use of periodicals Gender wise.****Table No. 4.3 : Use of periodical - Media wise.**

Sr. no.	Medium	Total no.	%
1	Print	80	30.76%
2	Electronic	90	34.61%
3	Both	90	34.61%
	<b>Total</b>	<b>260</b>	

Table No. .4.3 Shows that out of 260 users, 90 (34.61%) uses electronic periodicals and both print and electronics periodicals followed by 80 (30.76%) users uses print medium of journals.

**Table No. 4.4 : Computer Experience of periodical users.**

Sr. no.	Departments	Computer experience				Total no.
		0-1 yrs	1-2 yrs	3-4 yrs	5 yrs and above	
1	Bio-chemistry	-	-	15	5	20
2	Bio-technology	2	3	8	7	20
3	Botany	-	3	2	10	20
4	Chemistry	-	4	8	8	20
5	Electronic	1	2	7	10	20
6	Geology	2	7	8	3	20
7	Home science	2	4	9	5	20
8	Mathematics	2	7	9	7	20
9	Micro biology	4	5	6	10	20
10	Pharmacy	2	7	7	9	20
11	Physics	2	3	5	5	20
12	Statistics	1	2	5	7	20
13	Zoology	2	5	10	3	20
	<b>Total</b>	<b>20</b>	<b>52</b>	<b>94</b>	<b>89</b>	<b>260</b>

Table No. 4.6 reveals the computer experience of periodical users of 13 Science departments of RTMNU. Out of 260 users maximum uses having 3 to 4 year of computer experience followed by 5 years and followed 1 to 2 years of computer experience.

**Table 4.5 : Internet Services for use of periodicals**

Sr. no.	Departments	Internet services		%
		Yes	no	
1	Bio-chemistry	20	-	100%
2	Bio-technology	20	-	100%
3	Botany	20	-	100%
4	Chemistry	20	-	100%
5	Electronic	20	-	100%
6	Geology	20	-	100%
7	Home science	20	-	100%
8	Mathematics	20	-	100%
9	Micro biology	20	-	100%
10	Pharmacy	20	-	100%
11	Physics	20	-	100%
12	Statistics	20	-	100%
13	Zoology	20	-	100%
	<b>Total</b>	<b>260</b>	<b>-</b>	<b>100%</b>

Table No. 4.5 Deals with internet services for use of periodicals. Out of 260 users almost all 260 (100%) users using internet service for periodicals.

**Table 4.6 : No. of Library hours consulted by users.**

Sr. no.	Department	Library hours				Total no.
		Less than 1 hr	1-2 hr	2-3 hr	3-4 hr	
1	Bio-chemistry	2	5	8	5	20
2	Bio-technology	1	7	5	7	20
3	Botany	2	6	4	3	20
4	Chemistry	1	3	6	10	20
5	Electronic	1	4	5	10	20
6	Geology	1	6	6	7	20
7	Home science	1	5	8	6	20
8	Mathematics	2	10	5	8	20
9	Micro biology	2	8	10	5	20
10	Pharmacy	3	5	10	7	20
11	Physics	1	7	3	4	20
12	Statistics	-	5	5	5	20
13	Zoology	-	4	10	6	20
	<b>Total</b>	<b>17</b>	<b>75</b>	<b>85</b>	<b>88</b>	<b>260</b>

Table No. 4.6 Reveals the no. of library hours consulted by users. Out of 260 users 88 (33.84%) of users consulted less than 3-4 hours followed by 85 (32.69%) users consulted than 2-3 hours followed by 75 (28.85%) who consulted 1-2 hours library hours.

**Table 4.7 : Collection of periodicals in departmental libraries and Campus library.**

Sl. no.	Department	periodicals collection		Total no.
		Department	Campus library	
1	Bio-chemistry	5	15	20
2	Bio-technology	4	16	20
3	Botany	3	17	20
4	Chemistry	2	18	20
5	Electronic	6	14	20
6	Geology	-	20	20
7	Home science	-	20	20
8	Mathematics	4	21	20
9	Micro biology	5	220	20
10	Pharmacy	6	19	20
11	Physics	4	11	20
12	Statistics	6	9	20
13	Zoology	-	20	20
	<b>Total</b>	<b>46</b>	<b>214</b>	<b>260</b>

Table No. 4.7 Shows periodical collection in departmental library and campus library. From table it reveals that campus library having the maximum no. of periodicals as compare to departmental library.

**Table 4.8 : Department wise analysis of searching for information.**

Sl. no.	Department	Search for information				Total no.
		Review work	Research work	To keep abreast with current information on a sub.	For other purpose	
1	Bio-chemistry	5	9	4	2	20
2	Bio-technology	9	4	5	2	20
3	Botany	5	5	4	1	20
4	Chemistry	6	6	6	2	20
5	Electronic	4	7	8	1	20
6	Geology	5	7	8	-	20
7	Home science	5	5	5	5	20
8	Mathematics	6	6	10	3	20
9	Micro biology	4	3	16	2	20
10	Pharmacy	3	3	17	2	20
11	Physics	5	5	5	-	20
12	Statistics	3	4	8	-	20
13	Zoology	4	5	11	-	20
	<b>Total</b>	<b>64</b>	<b>69</b>	<b>107</b>	<b>20</b>	<b>260</b>

Table No. 4.8 : Shows that maximum users (107) search the information to keep the abreast with current information on a subject followed by research work 69 followed by reviewed work (64)

**Table 4.9: Use of periodicals in Science departments of RTMNU**

Sr. no.	department	Periodicals		Total no.
		National	International	
1	Bio-chemistry	15	5	20
2	Bio-technology	14	6	20
3	Botany	13	2	20
4	Chemistry	15	5	20
5	Electronic	16	4	20
6	Geology	4	16	20
7	Home science	10	10	20
8	Mathematics	15	10	20
9	Micro biology	9	16	20
10	Pharmacy	19	6	20
11	Physics	11	4	20
12	Statistics	12	3	20
13	Zoology	8	12	20
	<b>Total</b>	<b>161</b>	<b>99</b>	<b>260</b>

**Table 4.10 : Services Provided by the Library.**

Sr. no.	Department	Services			Total no.
		Reprography services	Current awareness services	Indexing & abstracting services	
1	Bio-chemistry	4	6	10	20
2	Bio-technology	5	6	9	20
3	Botany	6	6	3	20
4	Chemistry	3	7	10	20
5	Electronic	7	8	5	20
6	Geology	2	5	13	20
7	Home science	8	4	8	20
8	Mathematics	6	7	12	20
9	Micro biology	9	6	10	20
10	Pharmacy	10	5	10	20
11	Physics	4	3	8	20
12	Statistics	4	4	7	20
13	Zoology	7	2	11	20
	<b>Total</b>	<b>75</b>	<b>69</b>	<b>116</b>	<b>260</b>

Table No. 4.10 : Users avail the maximum facility of indexing and abstracting services 116 (44.61%) followed by reprography services 75 (28.84%) followed by current awareness service 69 (26.53%)

**Table 4.11 : Use of Search Engine for Research / Study.**

Sr. no.	Department	Search engine								Total
		yahoo	Google	Info seek	MSN	Excite	Alta Vista	Rediffamil	Wikipedia	
1	Bio-chemistry	5	10	1	1	1	-	-	2	20
2	Bio-technology	4	9	1	-	-	-	-	5	20
3	Botany	5	5	1	-	-	-	1	3	20
4	Chemistry	6	9	1	1	1	1	1	-	20
5	Electronic	5	10	1	1	-	-	1	3	20
6	Geology	10	12	1	1	1	1	-	1	20
7	Home science	5	10	-	-	-	-	1	-	20
8	Mathematics	3	5	3	2	1	1	2	5	20
9	Micro biology	4	5	1	1	3	1	-	5	20
10	Pharmacy	4	15	2	1	1	1	-	4	20
11	Physics	2	10	1	1	-	-	-	3	20
12	Statistics	5	9	1	1	1	1	1	-	20
13	Zoology	2	12	1	1	1	1	1	1	20
	<b>Total</b>	<b>60</b>	<b>121</b>	<b>15</b>	<b>10</b>	<b>10</b>	<b>7</b>	<b>8</b>	<b>32</b>	<b>260</b>

**Table No. 4.11 :** Shows the various types of search engine for research and study. Maximum No users 121 use the google search engine for searching the information followed by yahoo (60) followed by 32 wikipedia. Alta Vista search engine is used by lowest no. of users (7)

**Table 4.12 : Use of component of electronics / Online Journals**

Sr. no.	Electronic / online journals	Total no.	%
1	Table of contents	10	3.84%
2	Journals abstract	150	57.69%
3	Articles reference	20	7.69%
4	Alerting services	10	3.84%
5	Full text	70	26.92%
	<b>Total</b>	<b>260</b>	

**Table : 4.13 : Analysis of learning of use of e-resource.**

Sr. no.	E-resources	Total no.	%
1	Trial and error	50	19.23%
2	Self thoughts	100	38.46%
3	e-mail notification from library	30	11.53%
4	Guidance from friends	20	7.69%
5	Guidance from library staff	30	11.53%
6	Through library induction	30	11.53%
	<b>Total</b>	<b>260</b>	

**Table 4.14: Purpose of using any other E-resources**

Sr. no.	Purpose of using a E-resources	Total no.	%
1	Research needs	80	30.76%
2	Education	40	15.38%
3	Professional achievement	10	3.84%
4	Recreational	10	3.84%
5	Writing research articles	30	11.53%
6	Current information	90	34.64%
	<b>Total</b>	<b>260</b>	

Table No. 4.14 Shows that total 13 department of science faculty various purpose of using E-resources. Current information 90 (34.76%) than followed by research need 86 (30.76%) then followed by education 40 (15.38%) and followed by using other E-resources.

**Table 4.15 : Format wise analysis of e-resources**

Sr. no.	Format of e-resources	Total no.	%
1	PDF	90	34.61%
2	HTML	20	7.69%
3	SGML	20	7.69%
4	Latex	10	3.84%
5	ASCII	20	7.69%
6	MS word	90	34.61%
7	Post script	10	3.84%
	<b>Total</b>	<b>260</b>	

Table No. 4.15 : Total 13 departments of science faculty uses the highest no. of (90) format of PDF and MS-Word 90 (34.61%) then followed by HTML and SGML 20 (7.69%) than followed by other format using to analysis of E-resources.

**Table 4.16 : Opinion wise analysis of E-resources**

Sr. no.	view on e-resources	Total no.	%
1	e- resources is useful for study	120	46.15%
2	Prefer e- resources than print materials	30	11.53%
3	e- resources improve academic carrier	80	30.76%
4	e-resources increase the level of study	30	11.53%
	<b>Total</b>	<b>260</b>	

Table No. 4.16 Out of total 13 department of science faculty 50 various types of user using the library and various types of opinion giving the users so that highest E-resources is useful for studies. 120 (46.60%) users' opinion. Followed by E-resources improved academic carrier 80 (30.76%) then followed by other opinion giving users.

**Table 4.17 : Quality wise analysis of information acquires from e-resources**

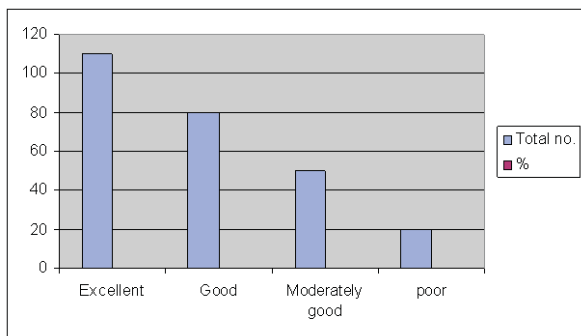


Table No. 4.17 Shows quality of information as per the users opinion 110 (42.30%) users are opinion that excellent followed by good quality 80 (30.76%) followed by moderately good 50 (19.23%).

**Table 4.18: Satisfaction level of e-resource available in library**

Sr. no.	satisfied with e-resources available in your library	Total no.	%
1	Very satisfies	120	46.15%
2	Moderately satisfies	60	23.07%
3	Somewhat dissatisfied	30	11.53%
4	Not satisfies	50	19.23%
	<b>Total</b>	<b>260</b>	

Table No. 4.19 : The table described the satisfaction of the level of E-resources. Maximum no. of users are very satisfied 120 (46.15%) followed by moderately satisfied 60(23.07%) followed by somewhat dissatisfied 30(11.53%) and not satisfied 50 (19.23%)

**Table 4.20:-- Training required for use of E-resources**

Sr. no.	Training is required	Total no.	%
1	Yes	170	65.38%
2	No	90	34.61%
	<b>Total</b>	<b>260</b>	

Table No. 4.20 Described the training is required on how to use E-resource 170 (65.35%) users are agreed for requirement of training and 90(34.61%) users are not agreed for training requirement.

**PROBLEMS FACED BY USERS**

- 1.No Internet connectivity in departmental library.
- 2.No maintenance of library collection.
- 3.Campus library is not fully computerized.
- 4.Need of discussion room.
- 5.Reading room is to be extend.

**SUGGESTIONS**

Some worth suggestions given by the users in their own words :

- 1.It is suggested by one lecturer that atleast minimum recommended number of periodicals should be regularly subscribed by the library.
- 2.It would be nice if the periodicals are circulated amongst the teachers before it finally goes to the library.
- 3.the journals section and the seating arrangement should be made convenient for the students and for reference purpose.
- 4.Xeroxing facility should be made at concessional rates.
- 5.Updating of back volume.
- 6.All the important periodicals should be available in the library. More funds should be allocated for this.
- 7.Back issues / bound vols. should be kept along with the current issues so that they would be used together simultaneously with convenience.
- 8.Some steps should be taken to ensure to promoter acquisition of journals from the publishers. In many cases current issues of journals are not available when they are needed.

**CONCLUSION**

After going through the survey and contacting the different categories of users and having analysed the questionnaires filled in by the users, it can be concluded that the library is not at all functioning quite satisfactorily in most of the areas and the areas where certain problems exist or users having problem in the use of library and its resources.

In this survey of study of the use of periodicals while contacting the students it has revealed that most of them do not even know where actually the periodicals are maintained and what actually the periodical does means.

How they will come to know what is available in the library and what kind of periodicals actually contain 70% - 80% of the amount is spent on periodical subscription and these periodicals are not used by the users, it is just a wastage of money and country like India can never afford such wastage. Each and every pai spent must prove to be fruitful.

The use of library catalogue could be explained for searching a source of information in it and of course the display methods could be improve. Display of current issues in the library is one way of making the periodicals accessible to more readers in the library.

260 questionnaire are distributed in total 13 departments. Each readers are good response of pay the questionnaires. Every reader are helpful and teacher staff are also helpful total 260 questionnaires are distributed and

received a questionnaires are total no. of 260. Good suggestions are how to could your library maintain, good responds to the distributed the questionnaires. Many have also suggested that qualified staff is also a must consideration in periodical section, having atleast one attendant with good knowledge. This would ease the work of the librarian and also facilitate a better service to the users.

It is also suggested if the periodicals are maintained in respective departments, it would prove very fruitful because many do not visit the campus library regularly.

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