

An Analysis of Contributed Theses in Library and Information Science by the State Universities of West Bengal: a study from Shodhganga repository

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Abstract

The study attempts to analyse the uploaded Library and Information Science (LIS) theses in the Shodhganga platform contributed by the state Universities of West Bengal. It is found that 30 Universities and 5 INIs (Institute of National Importance) from West Bengal signed MoU till 2022 with Shodhganga project. 199 LIS theses contributed by 6 state Universities are taken for study. Author analysed those theses from different points of view like year of uploading, completion year, core theme, language, etc. The result of the study shows that most of the theses were uploaded in the year 2021, whereas most Ph.D. was awarded in the year 2017. English was the most preferred language in which theses were written. Study on various aspects of different academic libraries was the main thrust area of research. The study is significant because this study is an intensive study of contributed theses in the LIS field by the state Universities from West Bengal. Similar types of study are conducted in other states of India, but this is probably the first attempt which is done on Universities from West Bengal.

Keywords: Electronic theses and dissertations (ETDs), Institutional repository (IR), Library and Information Science (LIS), Research, Shodhganga, State Universities of West Bengal

1. Introduction

Thesis and dissertation are important, unique forms of scholarly communication, and primary sources of information that mainly deal with untouched or evolving areas of research. There is a small opportunity of disseminating such information. Information Communication Technology (ICT) has changed the way of collecting, storing, disseminating and searching for information. Open Access Initiative started many years ago but gained momentum only with the increase of internet access facilities, i.e. after 1990s. It is a fact that the availability of theses and dissertations in open access platforms will surely help the higher education system,

particularly in teaching, learning and research activities. In 2006, University Grants Commission (UGC) of India planned for such a repository under INFLIBNET centre. This is called Shodhganga repository. Here the digital forms of research copies are kept in the database so that anyone across the globe can retrieve them for the benefit of research work.

The word 'Shodhganga' is an amalgamation of two words. One is 'Shodh' which is a Sanskrit word that means Research or Discovery and another is 'Ganga' which is the holiest and longest river in India. Shodhganga is developed using DSpace software. It provides the facility of collecting, indexing, storing, preserving and



disseminating the electronic thesis and dissertations. (Dhanavandan & Tamizchelvan, 2013). According to UGC notification on 1st June, 2009 every University of India has to submit their electronic version of theses to the World Wide Web using Shodhganga repository to make it available on online. (Esh, 2015; Sivakumaren, 2015).

This paper aims to analyse the Ph.D. theses in the field of Library and Information Science (LIS) from state Universities of West Bengal that contributed to Shodhganga repository and try to find out the current scenario.

2. Literature review

Kumar (2015) studied the status of submission of ETDs into Shodhganga repository by different categories of universities. He discussed problems like enormous growth, lack of access, non systematic acquisition, etc related to ETDs. How these problems were addressed and overcome in western countries that also discussed in his paper.

Sivakumaren (2015) analysed the contribution of ETDs by the top five universities in Shodhganga project. The study identified the top five departments and analysed their contributions. He suggested that every university must come forward to deposit their research content in the Shodhganga project.

RO and Varghese (2018) conducted an analytical study among Indian Universities based on quantitative measurement to find out major contributing institutions, language of different theses, department wise contribution, etc. for a certain period to Shodhganga repository.

Mir and Sevukhan (2021) examined the state wise as well as University contribution of

Ph.D. theses deposited to Shodhganga repository on Library and Information Science. This study focussed on analysis of data from the top five Universities on different facets. Contribution to Shodhganga repository by different Universities in India like Central Universities (Jhamb & Samim. 2017), different state Universities like Tamil Nadu state Universities (Sivasubramanian, 2018), Universities of Maharashtra (Sengupta, 2015), State Universities of West Bengal (Dey & Das, 2021) were analysed. Many studies were also analysed which were mainly focussed on Library and Information Science theses contributed by different Universities in India (Singh & Singh, 2018; Verma, Yadav, & Singh, 2020; Haminlun, 2021).

3. Objectives

- a) To identify year wise distribution of different Universities and Institutions of West Bengal that have signed MoU with Shodhganga project till 2022
- b) To check the present status of different state Universities of West Bengal as far as the overall contribution of Ph.D. theses and LIS theses are concerned and rank them accordingly
- c) To analyse the contributed theses in Library and Information Science considering the year of uploading and completion of research, language predominance, core theme, etc.
- d) To identify the core theme of research from uploaded theses in LIS
- e) To identify the five most productive research supervisors in LIS from the state Universities of West Bengal.



4. Scope and coverage

There are different types of Universities and Institutions in India, like Central Universities, State Universities, Deemed Universities and Private Universities, etc. Open University is not taken into consideration here. This study is mainly focused on 20 state Universities of West Bengal that have signed an MoU with Shodhganaga project till 2022. Among those 20 Universities, 16 have already contributed ETDs, but only six of them have contributed ETDs, but only six of them have contributed LIS theses. They are -The University of Burdwan (BU), University of Kalyani (KU), Rabindra Bharati University (RBU), Jadavpur University (JU), University of

Calcutta (CU) and Vidyasagar University (VU). A total of 199 LIS theses have been contributed. The main focus of the study is based on analysing those 199 theses in various facets.

5. Methodology

Keeping in mind the objectives the necessary data have been collected. Primary data is collected mainly from Shodhganga website (https://shodhganga.inflibnet.ac.in). Then the data were represented in tabular form or charts using Microsoft Excel and Microsoft Word. Ranking method was also used for analysis. This analysis and quantitative measurements helped the author to draw the findings.

6. Data analysis

Table 1: Year wise distribution of different universities and institutions of West Bengal signed MoU with Shodhganga

Sl No.	Year	Name of Universities	Type of Universities
1	2011	University of North Bengal	State
2	2011	The West Bengal National University of Juridical Sciences	State
3	2012	The University of Burdwan	State
4	2014	Visva Bharati University	Central
5	2015	University of Kalyani	State
6	2015	Rabindra Bharati University	State
7	2016	Jadavpur University	State
8	2016	University of Calcutta	State
9	2016	Indian Institute of Science Education and Research (IISER)	INI
10	2017	Presidency University	State
11	2017	Vidyasagar University	State
12	2017	The West Bengal University of Teachers' Training, Education,	State
		Planning and Administration	
13	2017	University of Gour Banga	State
14	2017	Sidho Kanho Birsha University	State
15	2018	Raiganj University	State
16	2018	Ramkrishna Mission Vivekananda Educational and Research Institute	Deemed
17	2019	Aliah University	State
18	2019	Brainware University	Private
19	2019	JIS University	Private
20	2020	Kazi Nazrul University	State
21	2020	Adamas University	Private
22	2020	University of Engineering and Management	Private
23	2020	Techno India University	Private
24	2021	Bankura University	State
25	2021	Maulana Abul Kalam Azad University of Technology	State
26	2021	Amity University	Private



Sl No.	Year	Name of Universities	Type of Universities
27	2021	Diamond Harbour Women's University	State
28	2021	West Bengal State University	State
29	2021	Cooch Behar Panchanan Barma University	State
30	2021	Seacom Skills University	Private
31	2022	The Neotia University	Private
32	2022	Indian Institute of Information Technology, Kalyani	INI
33	2022	National Institute of Pharmaceutical Education and Research	INI
34	2022	National Institute of Technology, Durgapur	INI
35	2022	Indian Institute of Engineering Science and Technology	INI

[Source: https://shodhganga.inflibnet.ac.in/#]

Table 1 shows the chronological distribution of different Universities and Institutions of West Bengal signed MoU with Shodhganga project of INFLIBNET contributing their research work. From the

data in table 1, it is clear that a total of 30 Universities and 5 INIs have signed MoU with Shodhganga project. Among those 30 Universities, 20 are State Universities, 8 are Private, 1 Central and 1 Deemed University.

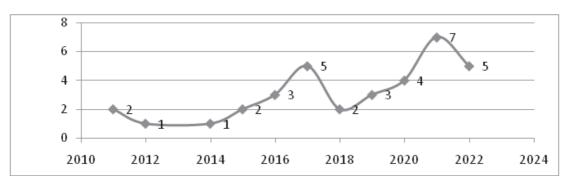


Figure 1: Graphical representation of number of universities and institutions vs year that have signed MoU

Figure 1 represents the graphical presentation of the total number of universities and institutions versus year-wise data who have signed MoU. It is clear from graph and table 1 that in the year 2021 maximum number

of universities signed MoU.

For further analysis, the author has chosen only the State Universities, especially those who have contributed LIS theses in Shodhganga platform.



Table 2: Distribution of different state universities as far as the total number of theses and LIS theses contributed in Shodhganga

Sl No.	Name of Universities	Total theses	Rank	LIS theses	Rank
	77.1	Contributed	(A)	contributed	(B)
1	University of North Bengal	2031	5	0	-
2	The West Bengal National University of Juridical Sciences	32	11	0	-
3	The University of Burdwan (BU)	2686	3	34	3
4	University of Kalyani (KU)	2601	4	24	4
5	Rabindra Bharati University (RBU)	187	7	7	6
6	Jadavpur University(JU)	3379	2	79	1
7	University of Calcutta (CU)	12869	1	38	2
8	Presidency University	56	10	0	
9	Vidyasagar University (VU)	732	6	17	5
10	The West Bengal University of Teachers' Training,	0	-	0	-
	Education, Planning and Administration				
11	University of GourBanga	12	13	0	-
12	Sidho Kanho Birsha University	86	9	0	-
13	Raiganj University	91	8	0	-
14	Aliah University	0	-	0	-
15	Kazi Nazrul University	9	14	0	-
16	Bankura University	8	15	0	-
17	Maulana Abul Kalam Azad University of Technology	14	12	0	-
18	Diamond Harbour Women's University	1	16	0	-
19	West Bengal State University	0	-	0	-
20	Cooch Behar Panchanan Barma University	0	-	0	-
	Total	24794		199	

Table 2 illustrates the total number of theses contributed by each state university of West Bengal as well as LIS theses in Shodhganga platform. 20 state universities contributed 24794 theses. In the Rank (A) column, rank is given according to the total number of theses contributed. From that table, it is seen that 4 out of 20 universities have yet not contributed any theses to the Shodhganga platform. University of Calcutta contributed the maximum number of theses (12869). In the second rank there is Jadavpur University, which contributed 3379 theses. In third place is the University of Burdwan, which

contributed 2686 theses. Out of those 20 universities, only 6 universities contributed LIS theses. In the Rank (B) column rank is given according to the number of LIS theses contributed. Jadavpur University contributed the highest number of LIS theses (79), followed by University of Calcutta (38) and The University of Burdwan (34). A total of 199 LIS theses were contributed by those six state universities.

The main focus of further analysis is only those 199 LIS theses contributed by 6 state universities.



Table 3: Year wise distribution of uploaded LIS theses

	**	Name of Universities						
SI No.	Year	BU	CU	JU	KU	RBU	VU	Total (%)
1	2022	-	6	33	-	-	1	40(20.1%)
2	2021	-	13	20	10	-	1	44(22.2%)
3	2020	-	-	-	1	-	15	16(8%)
4	2019	3	4	-	2	2	-	11(5.5%)
5	2018	6	1	11	8	5	-	31(15.6%)
6	2017	-	14	14	-	-	-	28(14.1%)
7	2016	14	-	-	2	-	-	16(8%)
8	2015	10	-	-	1	-	-	11(5.5%)
19	2014	1	-	1	-	-	-	2(1%)
	Total	34	38	79	24	7	17	199
	(%)	(17.1%)	(19.1%)	(39.7%)	(12.1%)	(3.5%)	(8.5%)	(100%)

Table 3 shows the year wise distribution of uploaded theses in LIS by 6 state universities in West Bengal. Those 199 theses

were uploaded between 2014 to 2022. This table shows, in 2021 a maximum number of theses was uploaded in Shodhganga.

Table 4: Year wise distribution of theses awarded in LIS:

Sl No.	Year			Name of U	niversities			Total (%)
		BU	CU	JU	KU	RBU	VU	
1	2022	-	-	1	-	-	-	1(0.5%)
2	2021	-	-	4	-	-	1	5(2.5%)
3	2020	0	1	2	-	-	1	4(2%)
4	2019	-	11	9	-	-	4	24(12.1%)
5	2018	-	5	7	3	2	4	21(10.6%)
6	2017	3	5	6	6	3	2	25(12.6%)
7	2016	2	2	6	4	1	2	17(8.6%)
8	2015	-	1	7	1	-	1	10(5.1%)
9	2014	1	-	3	2	-	1	7(3.5%)
10	2013	1	2	1	1	-	1	6(3%)
11	2012	2	-	4	1	-	-	7(3.5%)
12	2011	3	3	1	1	-	-	8(4%)
13	2010	1	2	2	1	-	-	6(3%)
14	2009	2	-	2	1	-	-	5(2.5%)
15	2008	4	-	2	1	-	-	7(3.5%)
16	2007	-	1	2	2	-	-	5(2.5%)
17	2006	2	-	4	-	-	-	6(3%)
18	2005	-	-	3	-	-	-	3(1.5%)
19	2003	1	1	-	-	-	-	2(1%)
20	2002	-	1	3	-	-	-	4(2%)
21	2001	1	-	3	-	-	-	4(2%)
22	2000	-	-	2	-	-	-	2(1%)
23	1999	-	-	1	-	-	-	1(0.5%)
24	1996	-	1	1	-	-	-	2(1%)



Sl No.	Year		Name of Universities							
		BU	CU	JU	KU	RBU	VU			
25	1995	-	2	1	-	-	-	3(1.5%)		
26	1994	-	-	1	-	-	-	1(0.5%)		
27	1993	1	-	-	-	-	-	1(0.5%)		
28	1991	2	-	-	-	-	-	2(1%)		
29	1990	1	-	-	-	-	-	1(0.5%)		
30	1989	1	-	1	-	-	-	2(1%)		
31	1987	1	-	-	-	-	-	1(0.5%)		
32	n.d.	5	-	-	-	1	-	6(3%)		
	Total	34	38	79	24	7	17	199		
	(%)	(17.1%)	(19.1%)	(39.7%)	(12.1%)	(3.5%)	(8.5%)	(100%)		

199 theses were uploaded from 2014 to 2022, but many of those theses were awarded long back, which is represented in table 4. For 6 theses no award date (n.d.) was mentioned.

Rest of theses were awarded between 1987 to 2022. Maximum numbers of theses were awarded in 2017.

Table 5: Language wise distribution of uploaded LIS theses:

Sl No.	Name of		Name of Universities						
	Language	BU	CU	JU	KU	RBU	VU		
1.	English	32	38	67	21	6	17	181 (91%)	
2	Bengali	2	0	12	3	1	0	18 (9%)	
	Total	34	38	79	24	7	17	199	
		(17.1%)	(19.1%)	(39.7%)	(12.1%)	(3.5%)	(8.5%)	(100%)	

Table 5 depicts the language wise distribution of uploaded theses. Among 199 theses, 181 (91%) were written in English language and only 1(8%) were written in

Bengali. Majority of the Bengali theses were contributed by Jadavpur University compared to other universities.



Table 6: Distribution of different subareas/themes of uploaded theses in LIS research

Sl No.	Subareas/Theme of Research	Number of theses	Percentage (%)
1	Bibliometric Study	14	7%
2	Citation Analysis	4	2%
3	Collection Development Policy	5	2.5%
4	Community Information	10	5%
5	ICT application in Libraries	20	10.1%
6	Indexing	2	1%
7	Information Literacy	5	2.5%
8	Information Management	20	10.1%
9	Information Need and Information Seeking Behaviour	21	10.6%
10	Information Sources Systems and Services	19	9.6%
11	Intellectual Property Right	4	2%
12	LIS Education	4	2%
13	Preservation	3	1.5%
14	Study on Academic Libraries	23	11.6%
15	Study on Bibliographic Information Resources	14	7%
16	Study on Public Libraries	16	8%
17	Study on Rabindranath Tagore's work	3	1.5%
18	Study on Special Libraries	8	4%
19	User study and User Satisfaction	4	2%
	Total	199	100%

After going through the titles and analysing the core theme of research in LIS, author has identified 19 different subareas. Table 6 reveals that a maximum number of studies was done on different aspects of Academic Libraries (23, 11.6%). Other important areas of research were Information

Need and Information Seeking Behaviour (21, 10.6%), Information Management (20, 10.1%), ICT application in Libraries (20, 10.1%). Information Sources, Systems and services were also another coretheme of study where 19 (9.6%) theses were found.

Table 7: Distribution of most productive research supervisor in LIS

Sl No.	Name of Supervisor (Professor)	Number of Research Work	Rank
		Supervised	
1	Biplab Chakrabarti	15	1
2	Tridib Tripathi	13	2
3	Udayan Bhattacharya	13	2
4	Juran Krishna Sarkhel	12	3
5	Subarna Kumar Das	12	3
6	Chaitali Dutta	11	4
7	Krishnapada Majumdar	10	5
8	Subal Chandra Biswas	10	5

Table 7 represents the most productive research supervisor in LIS field. It was found that there are a total of 55 different research

guides; under their guidance,199 theses were submitted. It is observed that few research guides are associated with more than one



University. To find the top 5 most productive research guides ranking was done. It is seen from the table that, there are 8 supervisors in the top 5 list.

7. Findings

- A total of 35 universities and INIs from West Bengal signed MoU till 2022 to contribute their research work in Shodhganga.
- A total of 24794 theses were contributed by different state universities of West Bengal in Shodhganga. University of Calcutta contributed the highest number of theses.
- Six state universities from West Bengal contributed 199 LIS theses to Shodhganga repository. Jadavpur University contributed the maximum number in the LIS field.
- This study depicts that the largest number of theses (22.2%) in the LIS field were uploaded in 2021.
- It is revealed from the study that 91% of theses were written in English language.
- Maximum number of theses was found in studies on different aspects of academic libraries.
- Prof. Biplab Chakrabarti is found as the most prolific supervisor with rank 1.

8. Problems faced during the study and some suggestions

 During data collection, it was found that the same thesis has been uploaded more than once with different dates in Shodhganga

- platform. INFLIBNET and concerned universities must track down those problems and solve them otherwise it will increase the total number and its associated data. Author has carefully counted each thesis to overcome such a problem.
- Sometimes the keywords presented in the uploaded thesis do not represent the core area of research. This problem must be solved to help future researchers.
- It is also found that the uploaded date, date of completion, number of pages, etc. are not mentioned in a few theses. These things need to be taken care of for proper searching.

9. Conclusion

Shodhganga repository makes it possible to access theses of Indian universities online. ETDs are valuable sources to help the researcher to avoid repetition of work in a particular area. It is a blessing for scholars. From this study, it is seen that some state universities from West Bengal are doing well but it is found that after signing the MoU few universities still have not submitted their research work, and some of them have contributed only a few. The picture is the same in the LIS discipline. It is expected and recommended that universities must come forward voluntarily and submit their research work following particular standards in the Shodhganga project. Librarians must take some initiative to overcome those problems. This study will help to identify the current picture of contribution in the LIS field by the state universities from West Bengal in the Shodhganga project. But to get the complete idea across the country future study is required.



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