

Research Article

# Use of Shodhganga by Social Science Research Scholars of Karnatak University, Dharwad: A Study

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## I N F O

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## A B S T R A C T

**Introduction:** The present study ascertained the usage of the Shodhganga ETD repository among the social science research scholars of Karnatak University Dharwad.

**Methodology:** The study employed the survey method and based on the objectives, a questionnaire was prepared and distributed to collect primary data from the respondents.

**Results:** The study found significant results in terms of the usage of Shodhganga and revealed that most of the respondents are aware of the Shodhganga and its benefits. The study also determined the major issues encountered by the respondents while accessing Shodhganga like non-availability of recent theses, slow internet speed, and so on.

**Conclusion:** The study concludes with some important suggestions for enhancing the usability of Shodhganga and also major recommendations to the INFLIBNET centre for providing better services by improving the collection of ETDs and satisfying the needs of users.

**Keywords:** Information and Communication Technology, Electronic Theses and Dissertations, University, Inflation, National ETD Repository, Shodhganga

## Introduction

Higher education plays a prominent role in the development of the nation and hence many universities have been established for easy access to university education. Universities are supposed to be the highest seat of learning, thus having a great responsibility for promoting innovative research in studies, so that new thoughts and theories keep on developing all around the world. Teaching and research are two important aspects of the university education system and these research findings are communicated in the form of theses and dissertations. They are the constituents of primary information resources and the scholarly output of any research.<sup>1</sup> Theses and dissertations

form the foundations of all scientific research and also mould the research paradigms, practises, and styles of research scholars/ scientists. Earlier, research scholars were submitting their original research findings in print form and these print theses have a very limited reach and are rarely visible to other academic communities.

The growth of ICT has added new dimensions to scholarly communication. Scholarly publishing has been changed tremendously with the ability to publish, access, and store scholarly works in digital formats, which were known as ETDs. "ETDs" are defined as those Theses and Dissertations submitted, archived, and accessible in electronic formats where documents expressed in a form simultaneously

suitable for archiving in electronic formats and worldwide retrieval. They empower researchers to convey a richer message by permitting colour images, sound, and video to be integrated into their work and also offer an effective channel to increase the visibility and usage of research work. The first concept of ETD was initiated in the United States of America by the University of Microfilms International (UMI) in 1987. In 1996, Virginia Tech spread the concept around the United States. Later, this concept spread to other countries like Canada, the UK, Germany, and other countries.<sup>3</sup> Considering the importance of ETDs, the Government of India initiated the project i.e., Shodhganga. It is a centralised ETD Repository which is maintained by INFLIBNET, an Inter-University Centre of the UGC at Gandhinagar, Gujarat.<sup>4</sup> The word "Shodh" comes from the Sanskrit language, which means discovery. The "Ganga" is the longest and holiest of all rivers in India. This river is the symbol of India's old-age civilisation and culture, which flows across all 12 months and is ever worshipped by the people of India.<sup>5</sup> The Shodhganga project in INFLIBNET is hosted by using open-source repository software called DSpace, which is developed by the Massachusetts Institute of Technology (MIT) in collaboration with Hewlett-Packard (HP).

### Significance of The Study

The present study is an attempt to examine the awareness and usage of the Shodhganga ETD repository among social science research scholars of Karnatak University, Dharwad. The academic community has produced the original research output through their research findings during their PhD. It is essential to archive, preserve, and transform such intellectual creations for the upcoming generations. The study will have an important impact on promoting and improving the usage of Shodhganga, which helps to enhance the research visibility of the academic community; increase the dissemination of intellectual property, and avoid the duplication of research work in the academic environment. The results of the thesis will help the academic community to know the new area of research; the method adopted by the researcher; to conduct a critical study of such literature and so on. The results of such studies will help in terms of solving the socio-economic issues through suggestions and recommendations of the research work. In the present scenario, it is most significant to promote good research work in the university and other higher education institutes setups which are emerging on the basis of shared values and norms of behaviour.

### Related Literature Review

Sheeja, in 2011, described the impact of ETDs on a scholarly community; the hurdles in building ETDs and emphasised the development of Indian ETD Repositories.<sup>1</sup> Dhanavandan explained in 2013 that ETDs are an important part of information resources, briefly mentioned the different

ETD Repositories in India and discussed the benefits of ETDs.<sup>6</sup> Fox, in 2021, described about the building and use of ETDs and highlights the Electronic theses and dissertations impact on the user community.<sup>7</sup> Saka and associates, in 2021, explained the challenges of university libraries in Nigeria such as digitisation, digital preservation, digital resources, and access which affected the effective utilisation of ETDs among the academic community.<sup>8</sup> Gupta and Gupta critically analysed the ETD repositories of the nation and stated that still most of the libraries have not taken the necessary steps to accept current ETDs and there is vagueness among controllers of examination, academic branch, and also library staff in owing the responsibility of ETDs.<sup>9</sup> Mishra, in 2016, made an attempt to study the various characteristics of PhD theses uploaded to the Shodhganga repository by conducting both qualitative and quantitative analysis.<sup>10</sup> Suber, in 2008, critically examined the various issues involved in providing open access to electronic theses and dissertations, various policy formulations, storage, formats, selection, acquisition, bibliographical control, manpower requirement, and finance.<sup>11</sup> Veer and Khiste, in 2016, described how the emergence of Shodhganga impacted the Indian academic community in the university environment.<sup>12</sup> Panda, in 2016, discussed the current status of Shodhganga.<sup>13</sup> Manjunatha emphasised in 2019 that the universities need to show their active participation to run Shodhganga Project successfully in India.<sup>14</sup> Fox, in 2021, described the history, role, open access initiatives, and user experiences of ETDs and highlighted the advantages of advanced digital libraries.<sup>7</sup> Abdelrahman and Fox mentioned in 2022 that browsability and accessibility of ETDs can be enhanced by providing automatic subject classification and also by using machine learning and deep learning techniques.<sup>15</sup> Katagi and Kumbar mentioned that every day Shodhganga receives a huge number of ETDs and it has made a huge impact on Indian research scholars.<sup>16</sup> Hickey and associates described regarding electronic Theses and Dissertations' project using the OAI-PMH standard, which was initiated with the goal of making XTCat searchable for the general public.<sup>17</sup>

### Scope and Limitations of The Study

The present study is confined to the full-time research scholars of the Social Science department of Karnatak University's main campus.

### Objectives of The Study

1. To know the level of awareness and perception of Shodhganga among Social Science research scholars
2. To determine the purposes of using Shodhganga by Social Science research scholars
3. To identify the frequency of usage of Shodhganga by Social Science research scholars
4. To know the problems faced by Social Science Research Scholars while accessing Shodhganga

## Methodology

The present study employed a survey method along with simple random sampling. The questionnaire was administered to regular PhD scholars of the Social Science discipline at Karnatak University Dharwad from December 2021 to February 2022. Cochran's formula was used to determine the sample size.<sup>3</sup> Among the total size of 138 respondents, 79 respondents were selected for the study. Based on the objectives, the questionnaire was prepared and distributed by visiting each department and collecting primary data from the research scholars of the Karnatak University main campus. Permission was obtained from the Heads of the Department before data collection and consent was taken from the respondents.

## Results and Discussion

### General Details of the Respondents

**Table 1. Gender-wise Distribution of Respondents**

S. No.	Gender	No. of Respondents	Percentage
1	Male	64	81.01
2	Female	15	18.99
Total		79	100.00

Table 1 presents the gender-wise distribution of respondents and it is observed from the table that out of 79 respondents, 64 (81.01%) were male, and 15 (27.91%) were female. It can be noticed from the table that male respondents were dominant as compared to female respondents.

### Awareness of Shodhganga

**Table 2. Awareness of Shodhganga Among the Respondents**

S. No.	Parameters	Frequency
1	Yes	79 (100.00)
2	No	0 (0.00)
Total		79 (100.00)

Table 2 shows the awareness of the Shodhganga among the respondents. It is found from the table that all the respondents i.e., 79 (100%) were aware of the Shodhganga ETD repository, which indicates respondents' positive attitude towards Shodhganga.

### Perception of Shodhganga Among Respondents

**Table 3. Respondents' Perception of Shodhganga**

S. No.	Statement	SD n (%)	DA n (%)	DK n (%)	AG n (%)	SA n (%)
1	Shodhganga provides doctoral students' final research reports that are published electronically.	0 (0.0)	0 (0.0)	2 (2.5)	30 (38.0)	47 (59.5)
2	Shodhganga is helpful for research work.	0 (0.0)	0 (0.0)	1 (1.3)	39 (49.4)	39 (49.4)
3	Shodhganga cannot be accessible without the internet.	1 (1.3)	2 (2.5)	1 (1.3)	41 (51.9)	34 (43.0)
4	My knowledge of Shodhganga is adequate.	0 (0.0)	1 (1.3)	7 (8.9)	48 (60.8)	23 (29.1)

SD: Strongly Disagree, DA: Disagree, DK: Don't Know, AG: Agree, SA: Strongly Agree

**Figures in parentheses indicate percentages.**

One of the main objectives of the study is to know the perception of respondents regarding Shodhganga and the data is presented in Table 3. The majority of the respondents i.e. 48 (60.8%) agreed to the statement that 'my knowledge of Shodhganga is adequate' and 47 (59.5%) of them strongly agreed that 'Shodhganga provides doctoral students' final reports that are published electronically' which indicate that most of the respondents are aware of the importance of Shodhganga. 41 (51.9%) of them agreed that Shodhganga cannot be accessible without the Internet' and an equal number of respondents strongly agreed and agreed that 'Shodhganga is helpful for research work'

**Table 4(a). Results of ANOVA**

Com-parison	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.073	3	2.358	6.127	0.000
Within Groups	120.051	312	0.385	-	-
Total	127.123	315	-	-	-

Table 4(a).Presents one-way Analysis of Variance (Anova) for Several Means and it is Found Significant at a 5% Level of Significance.

**Table 4(b). Results of Post Hoc Test**

Factors	N	Tukey HSD	
		Subset for alpha = 0.05	
		1	2
My knowledge of Shodhganga is adequate	79	4.1772	-
Shodhganga cannot be accessible without the internet	79	4.3291	4.3291
Shodhganga is helpful for research work	79	-	4.4810
Shodhganga provides doctoral students' final research reports that are published electronically	79	-	4.5696
Sig.	-	0.415	0.072

Means for groups in homogeneous subsets are displayed.  
 Harmonic Mean Sample Size = 79.000

To understand the exact behaviour of all the variables, it is tested the post hoc test. From the post hoc test, it is found two homogeneous subsets with p values of 0.415 and 0.072. In Table 4(b), factors within the subset are non-significant and between the subsets differ significantly. The study found that all the respondents agree that the knowledge of Shodhganga is adequate.

### Purpose of Using Shodhganga by the Respondents

**Table 5. Purpose of Using Shodhganga by the Respondents**

S. No.	Purposes of Using Shodhganga	Total Respondents	Percentage
1	Research/ project work	38	48.1
2	Preparation of review of literature	42	53.2
3	Publishing articles/ books	40	50.6
4	Getting information on recent research areas	40	50.6
5	Find full-text theses	57	72.2
6	Find abstracts of theses	49	62.0
7	For a retrospective search of the literature	11	13.9
8	Find contents in theses on areas of my interest	12	15.2

Table 5 reveals the purpose of using the Shodhganga by the respondents. It is found from the table that, the majority of the respondents i.e., 57 (72.2%) use Shodhganga to 'find full-text Theses', followed by 49 (62.0%) of them use 'to find abstracts of Thesis', 42 (53.2%) of them for 'preparation of a review of the literature and an equal number of respondents i.e., 40 (50.6%) of them use Shodhganga 'to publish articles/ books and get information on recent research areas. It is observed from the results that most of the respondents are aware of the benefits of Shodhganga.

### Frequency of Using Shodhganga by the Respondents

**Table 6. Respondents' Frequency of Using Shodhganga**

S. No.	Particulars	Frequency	Percentage
1	Daily	5	6.3
2	Once in two days	4	5.1
3	Weekly	22	27.8

4	Fortnightly	7	8.9
5	Occasionally	41	51.9
6	Any other	00	00
Total		79	100

Table 6 shows the frequency usage of Shodhganga among the respondents. It can be seen that the majority i.e., 41 (51.9%) respondents use 'occasionally', whereas a moderate number of respondents 'weekly', 22 (27.8%) 'fortnightly'. It is observed that most of the respondents do not use the Shodhganga on a regular basis instead, they use it as and when required.

### Time Spent on Shodhganga by the Respondents

**Table 7. Time Spent by the Respondents on Shodhganga**

S. No.	Time Spent (Hours)	Frequency	Percentage
1	1	44	55.7
2	2	23	29.1
3	3	10	12.7
4	> 3	2	2.5
Total		79	100

Table 7 shows the time spent by the respondents on Shodhganga usage. It can be observed from the table that a good number of respondents i.e. 44 (55.7%) used Shodhganga for '1 hour', followed by 23 (29.1) for '2 hours', and 10 (12.7%) who spent '3 hours' on Shodhganga.

### Problems Faced by the Respondents While Accessing Shodhganga

**Table 8. Problems Encountered by the Respondents While Accessing Shodhganga**

Particulars	Frequency	Percentage
Lack of availability of suitable personal computers	26	32.9
Slow internet speed	27	34.2
Lack of training programme	21	26.6
Recent theses are not available	63	79.7
Lack of support from the library staff	13	16.5
Discomfort with reading text on a computer screen	20	25.3
Lack of information about how to use Shodhganga	9	11.4
Any other	1	1.3

Table 8 shows the problems faced while accessing Shodhganga by the respondents. It can be seen that 63 (79.7%) respondents said that they were not getting the recent theses, while a moderate number of respondents 27 (34.2%) mentioned 'slow internet speed' and 26 (32.9%) quoted lack of suitable personal computers to be the problem.

## Conclusion

Change is the law of nature and so holds true about publishing research results through non-print channels. It is a fact that rapidly developing networking and digital library initiatives are also the reason for gaining ETD momentum around the world. Electronic Theses and Dissertations provide an outstanding opportunity for research scholars to communicate their research in an open-access platform. The open-access platform provides worldwide visibility and helps in getting more citations. Prior to the Shodhganga repository, India did not have a central repository in which electronic copies of the Theses are stored from universities across the country. Shodhganga is one such channel which is designed and developed by the INFLIBNET Centre and can be harnessed to publish doctoral research results through open access platform.

The study has found significant results in terms of awareness of the Shodhganga. It is found that, although the highest number of respondents is aware of the Shodhganga, it is also noticed that a moderate number of respondents have adequate knowledge of getting information from Shodhganga. The study also revealed that most of the respondents use Shodhganga to find full-text Theses, find abstracts of Theses, preparation of a review of literature, and so on. The study found that most of the respondents use Shodhganga as per their requirement not on a regular basis. Although usage of Shodhganga has many benefits, the respondents found some issues while accessing the Shodhganga such as the non-availability of recent Theses, slow internet speed, and non-availability of suitable personnel computers. The study suggests to the concerned authority of the university to initiate some measures for the effective utilisation of Shodhganga among research and academic communities by conducting special lectures, hands-on workshops, etc.

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**Conflict of Interest:** None

## References

1. Sheeja NK. The development of an Indian electronic theses and dissertations repository: an overview. *J Acad Lib.* 2011 Dec 1;37(6):546-7.
2. Campbell-Meier J. Case studies on institutional repository development: creating narratives for project management and assessment [dissertation]. University of Hawaii: ScholarSpace; 2008.
3. Cayabyab TA. A review of emerging ETD initiatives, challenges and future developments. *Int J Inf Educ Technol.* 2015 Oct 1;5(10):772-7.
4. Pandita R, Singh S. Changing dimensions of publishing doctoral research results: an introspection of Shodhganga electronic theses and dissertations' database. *Univ News.* 2017;55(48):53-62.
5. Kumar M, Arora J. Deterring plagiarism in research outputs in Indian universities under Shodhganga. *Proceedings of 10th International CALIBBER;* 2015. p. 524-33.
6. Dhanavandan S. Development of Shodhganga repository for electronic theses and dissertations in Tamil Nadu: a study. *J Lib Inf Sci.* 2013 Dec 1;3(4):648-58.
7. Fox E. Building and using digital libraries for ETDs. *J Elec Theses Disser [Internet].* 2021 [cited 2024 Mar 23];1(1):1-30. Available from: <https://doi.org/10.52407/ljqf5826>
8. Saka K, Yusufu A, Mommoh R. Digital preservation, accessibility, and use of electronic theses and dissertations in university libraries in Nigeria. *J Elec Theses Disser [Internet].* 2021 [cited 2024 Mar 25];1(4):1-18. Available from: <https://doi.org/10.52407/WBNW2510>
9. Gupta DK, Gupta N. Analytical study of the ETD repositories and government initiatives for depositing ETDs in India. *Lib Manag [Internet].* 2014 Jun 1 [cited 2024 Mar 24];35(4/5):308-19. Available from: <https://doi.org/10.1108/lm-09-2013-0092>
10. Mishra KG. A study of some characteristics of PhD theses uploaded on Shodhganga [Internet]. *Proceedings of iETD 2016 National Conference;* 2016 [cited 2024 Mar 25]. Available from: <http://ir.inflibnet.ac.in/handle/1944/2062>
11. Suber P. Open access to electronic theses and dissertations. *DESIDOC J Lib Inf Technol [Internet].* 2008 Jan 1 [cited 2024 Mar 19];28(1):25-34. Available from: <https://doi.org/10.14429/djlit.28.1.149>
12. Veer DK, Khiste GP. Shodhganga repository: a comparative study with special reference to Dr Babasaheb Ambedkar Marathwada University Aurangabad. *Proceedings of iETD National Conference;* 2016.
13. Panda SK. Shodhganga – a national level open access ETD repository of Indian electronic theses: current status and discussions. *Lib Hi Tech News [Internet].* 2016 Mar 7 [cited 2024 Mar 19];33(1):23-6. Available from: <https://doi.org/10.1108/LHTN-09-2015-0062>

14. Manjunatha KS. Contribution to Shodhganga by the LIS Departments of Karnataka State Universities. *Int J Next Gen Lib Technol.* 2019;5(1):1-18.
  15. Abdelrahman E, Fox E. Improving accessibility to Arabic ETDs using automatic classification [Internet]. *Proceedings of International Conference on Theory and Practice of Digital Libraries (TPDL)*. Cham: Springer International Publishing; 2022 [cited 2024 Mar 22]. p. 230-42. Available from: [https://doi.org/10.1007/978-3-031-16802-4\\_18](https://doi.org/10.1007/978-3-031-16802-4_18)
  16. Katagi S, Kumbar BD. Contribution to National Repository of Electronic Theses and Dissertations by the Universities of Karnataka: a case study of Shodhganga. *J Indian Lib Assoc.* 2022 Apr 26;58(1):44-60.
  17. Hickey T, Jeff Y, Tom D [Internet]. Electronic theses and dissertations. *The NDLTD Union Catalog*; 2023 Jan 3 [cited 2024 Mar 25]. Available from: <https://www.oclc.org/research/areas/data-science/ndltd.html>
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