



Unlocking academic frontiers: A comprehensive study of Shodhganga's features

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Abstract

All these, however, have only been made possible with the advent of the digital era and the impact that platforms like Shodhganga are bringing into the academic research landscape. Significantly, Shodhganga adds to the visibility, preservation, and dissemination of scholarly works as it is the national repository for electronic theses and dissertations in India. Its objectives concerned the number of UGC-approved universities in India, the ranking of the top 20 universities across the number of theses deposited, subject-wise theses status, and language-wise contributions to Shodhganga. The websites of Shodhganga and UGC were used for collecting an extensive review of the literature and primary data. It has been identified 56 central and 486 state universities, 129 deemed universities, and 479 private universities are active stakeholders contributing to the repository. Just five of these are central universities, so the role played by the state universities in research dissemination is substantial.

Keywords: Shodhganga, electronic theses, academic research, comparative analysis, accessibility, collaboration, preservation

Introduction

In the ever-evolving landscape of academia, the accessibility and dissemination of research are paramount. In this digital age, platforms like Shodhganga have emerged as crucial facilitators, reshaping the traditional paradigms of academic research. Shodhganga, India's national repository for electronic theses and dissertations (ETDs), stands at the forefront of this revolution, offering a centralized repository for scholarly works from various disciplines.

The significance of Shodhganga lies in its role as an archive and its capacity to streamline the research process. Providing a platform for the submission, storage, and dissemination of ETDs, not only enhances accessibility but also fosters collaboration and innovation within the academic community. However, the extent to which Shodhganga fulfills its potential varies across different universities.

This review study endeavors to conduct a comprehensive comparative analysis of Shodhganga's features across universities. By examining the functionalities, accessibility, and usage patterns of Shodhganga in different academic settings, this study aims to shed light on its effectiveness in facilitating academic research. Through this comparative lens,

Furthermore, this comparative analysis will delve into the diverse institutional contexts shaping the utilization of Shodhganga. Factors such as institutional policies, technological infrastructure, and researcher demographics play a crucial role in influencing the adoption and effectiveness of Shodhganga within universities. By contextualizing these factors within the comparative framework, we aim to provide nuanced insights into the dynamics of academic research facilitation.

Aim of the Shodhganga Repository

Shodhganga was initiated to address concerns related to plagiarism, copyright infringement, and the declining quality of research by providing a platform for storage, preservation, and open access to electronic theses and

dissertations. The primary objective of Shodhganga is to facilitate open access to these research works, thereby promoting visibility, accessibility, and knowledge dissemination. By providing a centralized platform for ETDs, Shodhganga also aims to enhance the visibility of Indian research and scholarly output globally, fostering collaboration and innovation in academic circles.

Objectives of the Study

The purpose of this study is to determine:

1. To find out how many UGC-approved universities are currently in India,
2. To find the top 20 university-wise theses deposited to Shodhganga.
3. To find the subject-wise theses on the Shodhganga.
4. To find out a language-wise predominance that contributed to the Shodhganga.

Methodology

The author decided to write a review article on the Shodhganga database in May 2024. The author conducted literature searches using Science Direct, Cross Reference, Academia, Google Scholar, and Researchgate search engines in May 2024. Searches were conducted using the following individual and combined keywords: Shodhganga, electronic theses, academic research, comparative analysis, accessibility, collaboration, and preservation, published from 2003 to 2024. The author evaluated each article against our inclusion criteria solely based on the title. In order to meet inclusion criteria, studies were required to be in the English language. For the study, primary data were collected from the Shodhganga database (<https://shodhganga.inflibnet.ac.in/>) and UGC official website (<https://www.ugc.gov.in/>). The data sourced from Shodhganga was organized in tabular format to facilitate comprehension of the study objectives.

The study employed a survey research method, gathering data from the Shodhganga repository through observational techniques. Extensive surveying and analysis of the

Shodhganga repository (<http://shodhganga.inflibnet.ac.in/>) were conducted from May 5, 2024 onwards, aiming to map the contributions of theses. The APA seventh edition style is used for the citation and reference.

Results and Discussion

In Indian history, higher education has always held an essential status, from ancient Bharat to contemporary India. The universities of Nalanda, Taxila, and Vikramsila were esteemed centers of learning in antiquity, drawing students from distant nations such as Tibet, Nepal, China, Korea, Burma, and Sri Lanka. In 1944, the Central Advisory Board of Education for Post-War Educational Development in India published the Report of the Sargeant Report, the first attempt to create a national education system in India. A University Grants Committee was suggested, and it was established in 1945 to supervise the operations of the three Central Universities—Delhi, Banaras, and Aligarh.

The first objective of the present study was to find out how many UGC-approved universities are currently in India. The above objective is essential because only universities are members of Shodhganga and have the right to upload the thesis. To accomplish the objective, the author visited the official UGC website. In this search, the author found 56 central universities presently functioning. The highest seven central universities are in Delhi, Six in Uttar Pradesh, and four functional central universities are in Bihar. In this order, Andhra Pradesh, Manipur, and Telangana have three; Assam, Gujrat, Jammu and Kashmir, Madhya Pradesh, and Tamil Nadu have two, and other remaining 20 states each have a single central university.

India has 28 states and eight union territories. Presently, 486 state universities are functional colleges under section 2(f) and 12(B) of the UGC Act 1956 (University Grants Commission, n.d.). Karnataka has a maximum of 43, West Bengal 38, and Uttar Pradesh has 36 state universities.

In India, 129 Deemed universities. Tamil Nadu has a maximum of 28, Maharashtra 22, and Karnataka has 15 deemed universities. Sikkim Manipal is the first private university. Currently, 479 private universities are functioning all over India. Gujarat has a maximum of 65, Madhya Pradesh 54, and Rajasthan has 53 private universities (University Grants Commission, (n.d.)).

Table 1: Indian Functional University by University Grants Commission

Type of University	No. of University
Central University	56
State University	486
Deemed University	129
State Private University	479

Note: University Grand Commission. (n.d.). Universities. Retrieved May 8, 2024, from

<https://www.ugc.gov.in/universitydetails/university?type=ddmCMsxJZgXH2S/m0uMOKQ>== Copyright © 2023 University Grants Commission New Delhi, India

Vijay Kumar and Vijay Kumar (2003) state that there are over 275 universities and similar establishments, comprising 162 general universities, 54 deemed universities, ten open universities, 40 agricultural universities, five women’s universities, 18 medical universities, 33 technological universities, Three IT universities, and 6 law universities. The above result shows that the government has made a special contribution to establishing higher education institutions in India during the last 21 years.

The second study objective was to find the top 20 university-wise Ph.D. theses deposited to Shodhganga. To conclude the second objective of the research, the author surfs <https://shodhganga.inflibnet.ac.in/>. The dataset underwent analysis to expedite the scholarly investigation and was presented in tabular format. Among the top 20 universities that have uploaded the maximum number of PhD theses to the Shodh Ganga repository, only five universities are Aligarh Muslim University, Babasaheb Bhimrao Ambedkar Bihar University, Banaras Hindu University, Jawaharlal Nehru University, and the University of Kerala central universities; the rest fall under the category of state universities. The research in Latte (2024) [5] was founded upon data up to December 2023. Upon comparative analysis, it was revealed that over the preceding five months, Mumbai University has ascended to the top 10 universities contributing to Shodhganga.

According to Sivakumaren and Swaminathan (2020) [9], 16 Tamil Nadu State Universities uploaded 41870 electronic theses and dissertations.in INFLIBNET-Shodhganga project Khode (2020) [4] noted that the University of Calcutta was placed first because it made the most outstanding contribution to Shodhganga, totaling 11914 theses. Savitribai Phule Pune University came in second with 9837 theses.

According to Jhamb and Samim’s (2017) [3] research, Aligarh Muslim University was placed first, with 6458 theses donated to Shodhganga, followed by Jawaharlal University, with 4693 theses contributed. With the addition of 1659 theses, Dr. Hari Singh Gour University comes in third place.

Moreover, it was discovered that Anna University contributed 8,000 theses, V. B. S. Purvanchal University placed fourth with 8040 theses, and Aligarh Muslim University ranked third with 8,047 theses. Muniyandi (2016) [6] found that Aligarh Muslim University has contributed more theses than any other university in the nation. Six thousand fifty-four theses from this university have been uploaded to the project. Anna University is ranked third, with 3,917 theses posted to the Shodhganga repository.

Table 2: Top 20 Universities’ Contribution to the Shodhganga

Name of university	State	No. of thesis
Anna University	Tamil Nadu	15,906
University of Madras	Tamil Nadu	15,006
University of Calcutta	Kolkata	14,244
Savitribai Phule Pune University	Maharashtra	12,754
University of Mumbai	Maharashtra	11,589
Aligarh Muslim University	Uttar Pradesh	10,237
Chhatrapati Sahuji Maharaj University	Uttar Pradesh	10,180
Andhra University	Visakhapatnam	10,079

Babasaheb Bhimrao Ambedkar Bihar University	Bihar	9,675
Panjab University	Panjab	9,388
V. B. S. Purvanchal University	Uttar Pradesh	9,095
Bharathidasan University	Tamil Nadu	8,300
Banaras Hindu University	Uttar Pradesh	7,985
Manonmaniam Sundaranar University	Tamil Nadu	7,400
Bharathiar University	Telangana	7,394
Jawaharlal Nehru University	Delhi	7,270
Lalit Narayan Mithila University	Bihar	6,859
University of Kerala	Kerala	6,793
Gauhati University	Assam	6,327
University of Lucknow	Uttar Pradesh	6,074

Note. The data for Shodhganga are from About Shodhganga, by Shodhganga, n.d. (<https://shodhganga.inflibnet.ac.in/>).

The third objective was to find the subject-wise theses on the Shodhganga. Table 3 provides an overview of theses produced in various academic subjects. The data highlights the volume of research output across different fields. The table illustrates a diverse range of research activities, with the highest number of theses in Engineering, Chemistry, and Education. In contrast, political science and psychology fields have relatively few theses. This data underscores the varied academic interests and research emphases across different disciplines. English contains 14,877 theses, showing a rich literary and linguistic research field. Hindi includes 14,053 theses, indicating solid academic interest in the Hindi language and literature. Sivakumaren and Swaminathan (2020) [9] found that the subject area Information and Communication received the most significant number of theses, 2,787 were deposited. Having received 1,168 theses, the discipline of Commerce is ranked second. Numerous theses were also deposited in the Tamil discipline 1135, ranking third. Ghosh (2009) [1] noted that 1,50,000 theses were uploaded to the subject.

Table 3: Subject-Wise Theses Updates in Shodhganga

Subject	No. of thesis
Arts	9,365
Biotechnology	8,106
Botany	13,417
Chemistry	34,951
Commerce	20,405
Computer Science	11,608
Economics	14,591
Education	22,876
Engineering	40,433
English	14,877
Hindi	14,053
History	10,879
Management	18,563
Mathematics	12,877
Physis	24,111
Political Science	6,712
Psychology	6,327
Sanskrit	7,620
Sociology	7,316
Zoology	12,746

Note. The data for Shodhganga are from About Shodhganga, by Shodhganga, n.d. (<https://shodhganga.inflibnet.ac.in/>).

The fourth objective was focused on language. Table 4 shows the number of theses written in various languages. English has the highest count at 59,178, followed by Hindi

with 42,138 theses. Noteworthy is the diverse linguistic landscape reflected, with languages like Bengali, Marathi, and Tamil also making substantial academic contributions. In all, 6,233 theses from North East India’s state institutions were posted. 169 of the 5,695 theses from Gauhati University are authored in English, 368 in Assamese, and 428 in another language. Other languages include Arabic, Manipuri, Bodo, Bengali, Hindi, Sanskrit, Persian, and Linguistic alone (Haloi and Das, 2021) [2]. Singh *et al.* (2018) [8] noted that during the years 215-2018, 91 of these were uploaded in the shodhganga, of which 89 were in English and the rest were in Hindi medium. It is revealed that 97.80% of the thesis is in English medium.

Table 4: Language-wise, Theses Uplode in Shodhganga

Language	No. of thesis
Arabic	15
Assamese	353
Bangali	1,952
Dogri	23
English	59,178
French	38
German	14
Gujarati	2,587
Hindi	42,138
Kannada	1,327
Kashmiri	48
Maithili	120
Malayalam	752
Marathi	3,638
Nepali	31
Oria	282
Panjabi	735
Sanskrit	2,325
Santhali	17
Tamil	4,392
Telugu	688

Note. The data for Shodhganga are from About Shodhganga, by Shodhganga, n.d. (<https://shodhganga.inflibnet.ac.in/>).

Others Findings

1. Shodhganga uploaded 5,37,688 theses and 13,949 Synopses till the June 4, 2024.
2. From January 2023 to December 2023, shodhganga uploaded the highest 95,175 theses.
3. Parul University has given 100% of theses (196) to the Shodhganga as of May 29, 2024.
4. For the research, the researcher used the maximum English medium.

Conclusion

In conclusion, “Unlocking Academic Frontiers: A Comprehensive Study of Shodhganga’s Features” illustrates the profound impact of Shodhganga in democratizing access to academic research in India. By providing a centralized repository for doctoral theses and dissertations, Shodhganga has significantly enhanced the visibility and accessibility of scholarly work, fostering a culture of knowledge sharing and academic collaboration. Its user-friendly interface, extensive search capabilities, and commitment to open access have positioned Shodhganga as an invaluable resource for researchers, students, and academicians. This comprehensive study underscores the platform’s role in bridging the gap between knowledge creation and dissemination, promoting academic integrity, and supporting the pursuit of excellence in higher education. As Shodhganga continues to evolve and expand its repository, it promises to further unlock academic frontiers, contributing to the global body of knowledge and fostering innovation across diverse disciplines.

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Author Contribution

The author attests to having sole responsibility for the following: Draft design, gathering data, analyzing and interpreting the findings, and preparing the report.

Conflict of Interest

There is no conflict of interest in the current study.

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