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# Electronic Theses: Why Pakistan is lagging behind

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#### Electronic Theses: Why Pakistan is lagging behind

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#### **Abstract**

## **Purpose**

The paper aimed to extract and analyze the work of Pakistan Research Repository (A theses portal of Higher Education Commission, Pakistan. Quantitative research has been carried out to describe the purpose and scope of the Pakistan Research Repository and its contribution to the research arena. A center measurement has also been brought into use to make it more effective and efficient to inquire about the contents being shown to the researchers of Pakistan and abroad.

## Design/methodology/approach

The article focuses on quantitative and critical analysis of Pakistan Research Repository. A multi-tier research design was used to know about PRR. The material for this paper was drawn from the official website of Higher Education Commission HEC, Pakistan and Pakistan Research Repository (PRR). Information was also gathered from the experts who contributed relevant papers to the subject.

# **Findings**

The result of the paper shows that Pakistan Research Repository has projected a total of 15279 Theses & Dissertations on its website from different institutions of Pakistan. The collected data was organized in one place, and free access has been granted to researchers in Pakistan and abroad. This study has further elaborated the valuable insight about the current status of PRR. It has been observed that the creation of this project was a landmark for the research community in Pakistan and abroad. The study also highlights that how researchers, faculty, and students benefited from the Pakistan Research Repository.

# Research limitations/implications

The researcher has only highlighted the research repository of Higher Education of Pakistan and has not been extended to other similar projects in the country. This study has encouraged researchers to highlight Repository projects throughout the country. The article is a case study and focuses on PRR only.

Researchers in the library field are encouraged to shed light on a similar project for projection in Pakistan. The study is generally helpful for the researchers in Pakistan and particularly for the stakeholders of HEC to further refurbish the project for the extension of scholarly works being produced in Pakistan.

#### **Social implications**

The paper will help manage PRR and enhance a better scope for the researchers in Pakistan to portray a better image of their research output in Pakistan.

### Originality/value

The paper provided a critical review on the research repository in Pakistan and will enhance a policy input among researchers in Pakistan and stakeholders of HEC to make it further refurbish by showcasing research in different institutions of Pakistan.

**Keywords:** Electronic Theses; Theses & dissertations; Scholarly works; Academia; Pakistan Research Repository

#### Introduction

Research repositories have gained much attention for the last few decades and have become a subject of interest for the Academia, research community, and

librarians (Crow (2002). Institutional repository is synonymously termed as digital archives. Its prime purpose is to collect, organize, and disseminate the scholarly electronic material, including Theses & dissertations, conference reports, research papers, and monographs created by the institutions, organizations, and communities to distribute it to those who conduct research. In other words, Research Repository is the academic records of scholars in academic institutions or research organizations. (Dhiman and Sharma, 2008).

The E-theses initiative took place in 1999 when Physicists introduced Arxive an open access contents. The purpose of this initiative was to showcase the scholarly works of physicist on a broader level. Since that time, numerous projects have been undertaken in different countries to research World Wide Web (WWW). Few other projects like the DART-Europe E-These portal, which offers 106,000 Electronic Theses at the doctoral level. Another excellent example of Online Theses is PQDT, known as Proquest theses and Dissertations, which covers research from Canada and the USA. MIT Digital Library offers an extensive collection of its electronic theses, which helps researchers to find their relevant material online.

The Higher Education Commission emerged as an independent, autonomous and constitutionally established institution of Pakistan. The purpose of HEC is to overseeing, regulating and accrediting the efforts of Higher Education in Pakistan. It Offers numerous services to the individual and organizations in Pakistan and supports them to attain educational goals in this country (ROAR, 2013).

HEC theses and dissertation have always been regarded as the bedrock of graduate education. Theses writing takes years to research and write. Rafiq, M. (2014). Theses are guiding by experts and proved by the panel for approval of Degrees. These are helpful written words and can be preserved for future research and these written words carry more weight and ideas tend to remain current longer. The concept of theses and dissertations in Pakistan were in mourning conditions before 2006. These scholarly works were locked in cupboards, and access to them was a difficult task. The best way to get benefits from these theses are to get them published electronically and to grant open access to these documents via World Wide Web (WWW).

Pakistan Research Repository (PRR) is a research repository project of HEC Pakistan, initiated in 2006. The prime purpose of PRR is to collect, organized, and disseminate the research work of the Pakistani organization. It is regarded as

a national multidisciplinary and aggregator online repository of research articles, conference papers, and, above all, the MPhil and Ph.D. dissertations produced in Pakistan (Hussain, A. 2021).

It was adopted as an open-access research repository project to project the scholarly activities of researchers, students and staff at the university level. Though few studies were conducted by the scholar earlier, this study will provide valuable insight into the current status of PRR. The present study will be helpful for Academician, stakeholders, and scholars further reshape the project to plan an effective collection and organization of content from the institution across Pakistan.

The initiative of Open Access journal, open-archives, and Open-source software has given birth to display the research work of universities and organizations in order to bring charms in research activities and help scholars to access plethora of information in their concerned field. Pakistan Research Repository (PRR) has succeeded in collecting, organizing, and disseminating its research work. This study sheds light on the level of success and the more minor attention areas that need to be addressed during its implementation process. PRR has maximized the research output of all universities in Pakistan and has geared up to enhance researcher's access to the research output of all higher educational institutions across the country.

# **Research Objective:**

The study deals with the following objectives:

- To explore the PRR Project and its record
- To critically analyse the present record and prospect of PRR
- To quantify the present collection of the repository on the basis of subject, year, type and institutional-wise
- To identify measures and improvised the performance of PRR.
- To identify the challenges being faced by HEC and PRR to gather theses.

### **Research Questions**

- What are the problems faced by the PRR currently increasing the E-Thesis number?
- Why universities are not willing to give access to their E-Theses?

# Research Methodology:

Information for this study was drawn from HEC and PRR Website, respectively (2021). The data between the Years 1933 to 2020 was extracted and analysed

accordingly. A descriptive approach was adopted to analyse the purpose and characteristics of this project. A quantitative approach was also adopted to scrutinized the available data via an excel sheet. A statistical analysis approach was also carried out to retrieve subject, type, year, and institutional-wise data from the PRR.

#### **Literature Review:**

Theses and Dissertation are regarded as research monographs of a student completing an educational qualification at Master or Doctorate level (Wallace 2016). After spending a considerable amount, time and energy by students and supervisor to attain an educational degree are regarded as thesis and Dissertation. Lariviera et al. (2008) and Wolhuter (2015). Theses and Dissertation are electronic documents that present research outcomes of graduate students. Theses always deal with previous studies on the topic, data collection, research methods, analysis, results, discussion, and outcome. There are two types of Electronic theses and dissertations. The first type of theses are paper original produced from digital version and the second type of theses are born-digital" those documents produced at universities where students have been granted a chance to submit his/her theses electronically rather than in printed form. The theses had high societal impacts on researchers assumed from the London School of Economics (LSE). Bennett and Flannagan (2016). Theses are rich sources of information for prospective graduate students, policymakers, practitioners, and researchers (Alan and Pandey, 2012).

Theses and dissertations are not usually available for scholars while conducting research for a routine scholarly publication Han (2014). He further elaborated that traditional libraries are either partially catalogues theses or thus making them difficult to access. The non-Publishing status of theses and Dissertation made it languish as grey literature in university libraries and access them was a difficult task, Alan and Pandey (2012).

Research repositories have gained much attention for the last few decades and have become a subject of interest for the academician, research community, and librarians, Crow (2002). The E-thsese initiative took place in 1999 when Physicists introduced Arxive an open access contents. The purpose of this initiative was to showcase the scholarly works of physicists on a broader level. Since that time, numerous projects have been carried out in different countries to research World Wide Web (WWW). An institutional repository is synonymously termed a digital archives. Its prime purpose is to collect, organize, and disseminate the scholarly electronic material, including Theses & dissertations,

conference reports, research papers, and monographs created by the institutions, organizations, and communities to distribute it to those who conduct research. In other words, Research Repository is the academic records of scholars in academic institutions or research organizations. (Dhiman and Sharma, 2008).

Pakistan is still lagging in adopting new trends regarding e these dissertations. HEC Pakistan has launched a project, Pakistan Research Repository, but it needs to be extended, initiated in 2006. The prime purpose of PRR is to collect, organized, and disseminate the research work of the Pakistani organization. It is regarded as a national multidisciplinary and aggregator online repository of research articles, conference papers, the MPhil and Ph.D. dissertations produced in Pakistan (Hussain, A. 2021).

# **Analysis**

Table 1 shows the available contents on Pakistan Research Repository Websites. There were a total of 15328, of them 15279 were Theses and Dissertations and 35 were monographs. However, on the other side, there were 11 Textbooks and 3 Journals shown on the website until the date of this research.

Table 1 shows total collections available on Pakistan Research Repository

Theses & Dissertations	Monographs	Journals	Textbooks	Grand total
15279	35	03	11	15328

Table 2 shows the total collection available in the Pakistan Repository Year by Year. From 1933 to 2020. As per the recorded information, only three theses were uploaded during the year 1933-39. During the Year 1940-49, only 17 theses were uploaded, whereas the year 1950-59 was slightly good, and 16 theses were uploaded during this period. Between 2010-2020, more than 10,000 theses were uploaded on the website, which is a good sign for the research community. It shows the keen interest of higher authority for increasing more theses in coming years.

**Table 2: Number of Theses Yearly wise** 

Year from	Year To	Total
		Theses/Dissertations
2010	2020	10810
2000	2009	2948
1990	1999	964
1980	1989	327
1970	1979	141
1960	1969	43
1950	1959	16
1940	1949	27
1933	1939	03
<b>Grand Total</b>		15279

Table 3 shows the subject-wise collection of all theses and dissertations. It has been observed that 3530 theses were extracted on Natural sciences, followed by the applied sciences 1995. The collection of Social Science is slightly weak and only 810 theses were uploaded out of the total collections, it seems that more improvement is required by noticing the public sector universities which offers degrees in social sciences. Theses on diverse subject were more than 4000.

**Table 3: Shows Subject-wise collection** 

S.No	Subject-wise Collections	Total
1.	Natural Sciences	3530
2.	Applied Sciences	1995
3.	Chemistry & Allied Sciences	1207
4.	Biology	1167
5.	Chemistry	957
6.	Agriculture and related Technologies	905
7.	Social Sciences	810
8.	Education	788
9.	Other subjects	3920
Grand Total		15279

Table 4 shows the institution-wise collaboration of theses in PRR. Government College University has uploaded a 1517 followed by Pir Mehr Ali Shah University which has contributed total 1494 followed by Quaid-e-Azam and Islamic International University Islamabad, who contributed 1487 theses respectively. The University of Peshawar has contributed only 1484 theses, the lowest record being contributed in PRR was Bahauddin Zakria University Multan which has contributed only 166 theses. Many other universities in Pakistan needs further improvement to enhance their research over this project.

Table 4: contribution of different institutions in Pakistan

Serial	Institutions Name	Total
No		Theses/Dissertations
1	University of Peshawar, Peshawar	1484
2.	Punjab University, Lahore	1486
3	Quaid-e-Azam University, Islamabad	1487
4	International Islamic University Islamabad (IIUI)	1487
5	Pir Mehr Ali Shah University Rawalpindi	1488
6	Fatima Jinnah Women University, Rawalpindi	1488
7	Allama Iqbal Open University, Islamabad	1490
8	University of Agriculture, Faisalabad	1494
9	Government College University, Lahore	1517
10	Bahauddin Zakariya University Multan	166
11	Islamia University, Bahawalpur.	696
12	Other Universities	996
Grand Total		15279

#### **Conclusion and Recommendations**

The Higher Education Commission emerged as an independent, autonomous and constitutionally established institution of Pakistan. The purpose of HEC is to overseeing, regulating and accrediting the efforts of Higher Education in Pakistan. It offers tremendous services to the individual and organizations in order to put this country on right direction to attain the educational goals with its robust approach. Keeping in view the trend of Open access initiative, it has launched a programme for scholarly works in 2006 named Pakistan Research Repository (PRR). The purpose of this project was to showcase the theses and dissertation of scholars around the country. So far, 15279 theses have been uploaded and can be accessed online by visiting Pakistan Research Repository website via HEC link. Since 2010, the record of theses were increased but due to

lack of interest of institutions, stakeholder and authority of HEC the project is steadily becomes slower. As the number of Public and Private sector Universities are increasing but their Theses are not increasing with same speed. A comprehensive policy ought to be devised by HEC to further expand the theses project by launching a robust technology in order to facilitate researchers of Pakistan. Universities in Pakistan should fully support this project by uploading their latest research. Stakeholders, education ministry, academia and institutions should join hand to provide fresh theses and dissertation in order to equip our scholars with modern research. Keeping in mind the aforementioned policy following recommendation has been made to further elaborate this project:

- PRR should make its website more user-friendly.
- They have to take measures to ensure the copyrights and appropriate use.
- They have to provide information to the authors regarding views of their theses etc.
- Institutional repositories should include value-added services such as scholarly workflow facilitator and networking hub.
- HEC Pakistan should also update their present software or develop new user-friendly software to preserve the E Theses of MPhil and PhDs.
- HEC should grant a login passwords to the universities/Institutions and directs them to upload latest theses on HEC portal.
- HEC should extend the Pakistan Research Repository project at provisional level to make it more convenient.
- A central monitoring check policy may be devised to address the issues being faced by universities while uploading their theses.

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