Bibliometric Analysis on MA Thesis Submitted to the Department of Library and Information Studies, Yadanabon University (2013-2017)

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Abstract

This study focuses on a bibliometric analysis of the MA thesis submitted to the Department of Library and Information Studies, Yadanabon University. It covers 81 items submitted to the Department during the period 2013-2017. The major focus of this study is to analyse the research performance of post-graduate students in library and information studies specialization, Yadanabon University through bibliometric analysis. It analyses the bibliographic features of the items and citation of references in detail. Bibliometric analysis is a research method used in library and information studies. In this study, data are collected from 81 items and 1853 citations of MA thesis. The collected data are tabulated and analysed for making observations. This study shows authorship pattern of items, year-wise distribution of items, subject-wise distribution of items, forms of document cited, etc. It will be useful to researchers, scholars and supervisors who pursue research activities in their specific fields.
Key words: bibliometric analysis, citation analysis, library and information studies, authorship pattern, year-wise distribution , subject-wise distribution

Introduction

Bibliometrics is a special type of documentary research used in library and information studies, formerly called statistical bibliography. It is a quantitative study of various aspects of literature on a topic. Bibliometric study is one of the very common research areas in the field of library and information studies for mapping research growth, research collaboration, citations analysis, authorship pattern, authors' productivity etc. in the universe of knowledge.

It is a relatively new branch of information science and has now become a standard tool of science policy and research management in the last decades. Pritchard explained the term bibliometrics as "the application of mathematical and statistical methods to books and other media of communication." Communication media comprises of books, papers in serials, periodicals, monographs, reports, thesis, e-books and ejournals. Regarding the scope of bibliometrics, O'Connor and Voos states that "its scope includes the study of the relationship among documents e.g. citation studies or describing a literature.[1]

The main aim of this research has already based on the existing information sources and is to discover new facts, new techniques and to develop the future. Bibliometric analysis is based on the two major units that are content analysis and citation analysis. Content analysis is the scientific publication as an indicator of research output and citation analysis examines the bibliographic data from articles, monographs, published bibliographies, theses and electronic indexes in order to understand the researchers' specific information needs and explain their trend in the library use.[2] It uses to gauge the importance of an author's work. Today, many research fields use widely bibliometric method to explore their fields.

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1. Manishs Gogoi, Pronab Kumar Brooah, "Bibliometric Analysis of Indian Journal of Chemistry, Section B to Study the Usage Pattern of Informationin the Field of Material Science, " *Library Philosophy and Practice* (2016), [e-Journal], available from http:// digitalcommons. unl.edu./libphlip/; Internet; accessed 27 August 2017. (hereafter cited as Gogoi and Brooah)

2 Pretti Mahajan, Anil Kumar, "Citation Analysis of doctoral Dissertations of Public Administration: A Study of Panjab University, Chandigarh, *Library Philosophy and Practice* (2016), [e-Journal], available from http:// digitalcommons. unl.edu./libphlip/; Internet; accessed 27 August 2017.

Master thesis is a formal written or thesis especially an account of scholarly investigation or original research on a specialized topic, submitted to a university in partial fulfillment of the requirements for a Master Degree.

At Yadanabon University, MA Programme of Library and Information Studies has started since 2013. This study is an attempt to evaluate MA thesis submitted to the Department of Library and Information Studies, Yadanabon University during the period 2013-2017. In this study various subject areas, such as bibliometrics, biography, citation analysis, different types of libraries, collection development, reference sources, such as dictionaries, encyclopedias, information seeking behavior, quality service, use of internet and online e-resources, and reading habits, etc. are analysed in subject-wise distribution.

Bibliometrics

Information has grown out of an exponential rate which is often referred to as information explosion. It needs to handle, store and transfer information for effective and efficient use. Bibliometric has been found to be very useful in solving diverse issues of information sources.

The earlier twentieth century, documentalists gave the idea of bibliometric technique. This technique is used to categorize, investigate, interpret and identify the information sources. In 1917, F. J. Cole and Nellie B. Ealse made by counting book and journal titles and grouping them by countries of origin and periods. The name of research was "Statistical Analysis of Writing on Anatomy (1543-1860).[3]

The word "bibliometrics" first appeared in 1969 in Alan Pritchard's articles (National Computing Centre, Manchester). It means a statistical bibliography or bibliometrics. He defined bibliometrics as 'all studies which seek to quantify the process of written communication'.[4]

The term 'Bibliometrics' derived from two Latin and Greek words 'Biblio' and 'metrics'. 'Biblio' means 'books' and 'metrics' means 'measurement'. So, bibliometrics means application of mathematical and statistical method of books.

Literature Review

There are various research studies highlighting the importance of bibliometric analysis and their application to library management and administration. This type of analysis enables the researcher to identify research gaps in previous studies. Deo, et al. analysed (4066) references cited to doctoral dissertations in English Language and literature submitted to Marathawda University.[5]

Mote and Deshumkh studied on Annual of Library Science and Documentation. It was found that journals are most cited from communication amongst the library and information scientists and the source journal is the most cited publication.[6]

Shokeen and Kaushik studied on Indian Journal of Plant Physiology and found that journal articles are predominant with 81% of total citation.[7]

Rahman studied citation frequency of doctoral theses in Zoology and it was found that research is, now a team work rather than a work in isolation. It was found from his analysis

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[3] F.J Cole, B. Ealse Nellie,"Statistical Analysis of Writing on Anatomy," *Journal of Documentation* (1543-1860).

[4] A. Pritchard, "Statistical Bibliography or Bibliometric?", *Journal of Documentation*. 25, (1969):348-3491.

[5] Deo, et al, "Bibliometric Study of doctoral dissertation on English Language and Literature", *Annual of Library Science and Documentation,* 42, (1995)

[6] M.V. Mote and P.P Deshmukh, "Citation Analysis of Library Science and Documentation", *Annual of Library Science and Documentation ,* 43(1)(1996):11-25.

[7] A.S Shokeen and S.K.Kaushik, "Indian Journal of Plant Physiology", Annual of Library Science and Documentation,(2004):108-115.

that USA is the leading country with 24.49% of the total journals cited, U.K. has a contribution with 17.52% of journals and India with 14.55%.[8]

Aim and Objectives of the Study

The major focus of the present study is to apply bibliometric study by analysing the performance of research output of LIS research students in Yadanabon University under the Ministry of Education. The objectives of the study are:

- to make an analysis of MA thesis submitted to the Department of Library and Information Studies,Yadanabon University
- to identify the status of M.A Thesis
- to encourage the students and faculty members to embark on research project

Scope of the Study

This study covers 81 MA Thesis submitted to the Department of Library and Information Studies, Yadanabon University during the period of 2013-2017. It includes 81 items and 1853 citations. They were analysed to ascertain year-wise distribution of submitted items, authorship patterns, subject-wise distribution, forms of document cited, etc.

Method of the Study

This study uses bibliometric analysis which is used to study in detail the bibliographic feature of the items and citation analysis of references appended at the end of each items. For this, the relevant data were collected and recorded. They are tabulated and analysed for making observations.

Data Analysis and Interpretation

Data analysis is a practice in which raw data is ordered and organized so that useful information can be extracted from it. The process of organizing and thinking about data is a key to understand what the data does and does not contain. In this study, MA thesis in library and information studies were analysed in two parts; content analysis and citation analysis.

Content Analysis

In content analysis, the data collection techniques and research topics were analysed. Author(s), subject(s), etc. of all items were recorded as follow:

Year-wise distribution of Items

Year-wise measure of items is one of the very important indicators to assess the year-wise degree of growth of publications and to find out the most productive year of publication. A total of 81 items submitted during the period 2013-2017 have been recorded by year-wise distribution as follow:

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[8]Rahman, Md Ziaur. "An Analysis of Citation Frequency of Doctoral These in Zoology: Case Study of North Bengal University". *IASLIC Bulletin*. 58.2 (2013). 115-128.

Table. 1 Year-wise Distribution of Items

Year	No. of items	Percentage
2013	14	17.28%
2014	17	20.98%
2015	15	18.51%
2016	20	24.69%
2017	15	18.51%
Total	81	100.00%

Source: MA (LIS) Thesis

The above table shows that maximum number of items were submitted in the year 2016 (20) (24.69%) and minimum is found in 2013 (14) (17.28%) items. During five years of the MA Programme, the MA thesis were submitted on an average of 16 items per year.

Year-wise Authorship Pattern by Gender

The following table shows year-wise authorship pattern submitted by gender. The total number of male authors is (5) and female authors (76).

Table 2. Year-wise Authorship Pattern by Gender

Year	Male	Female	Total
2013	1	13	14
2014	0	17	17
2015	1	14	15
2016	1	19	20
2017	2	13	15
Total	5	76	81
Percentage	6.17%	93.82%	100%

Sources: MA LIS Thesis

Table 2 shows that there was no male author submitted in 2014.The maximum number of female author is found in 2016 (19) and minimum number of female author is found in 2013 (13). Therefore, it can be said that female author is submitted MA thesis more than male authors.

Year-wise Distribution of Authorship Pattern by Categories

The MA researchers include two categories, such as students and government staff. So, the following table shows that year-wise distribution of authorship pattern by categories. It can be seen that the total number of student is (57) and office staff (24).

Table 3. Year-wise Distribution of Authorship Pattern by Rank

Year	Student	Government Staff Staff	Total
2013	7	7	14
2014	12	5	17
2015	12	3	15
2016	16	4	20
2017	10	5	15
Total	57	24	81
Percentage	70.37%	29.62%	100%

Sources: MA LIS Thesis

The above table shows that maximum number of student is found in 2016 (16) and minimum number in 2013(7). The maximum number of government staff is found in 2013 (7) and minimum number in 2015 (3). It was generally found that students attended MA course more than government staff. So, the submitted items of the students are more than of the government staff.

Subject-wise Distribution of items

The following table shows that subject-wise distribution of items. All MA thesis deal with 10 subject fields. These cover information sources: bibliographies, indexes, dictionaries, encyclopedias, biography, bibliometric study, citation analysis, collection development, Information seeking behavior, quality services of library, use of the Internet and online e-resources, reading habits, and development of different types of libraries.

Table 4. Subject-wise Distribution of Items

Subject	2013	2014	2015	2016	2017	Total	Percentage
Bibliographies	5	4	2	3	1	15	18.51%
Bibliometric study	2	2	4	4	4	16	19.75%
Biography	2	-	1	1	-	4	6.06%
Citation analysis	-	1	1	2	-	4	6.06%
Collection development	3	4	5	6	6	24	29.62%
Dictionaries	-	-	-	1	-	1	1.51%
Encyclopedias	-	-	-	1	-	1	1.51%
Indexes	-	-	-	1	-	1	1.51%
Information seeking behaviour	1	1	-	-	1	3	3.7%
Quality services of libraries	-	3	-	-	1	4	4.93%
Use of Internet and online e-resources	1	1	1	-	2	5	6.17%
Reading habits	-	1	1	1	-	3	4.54%
Total	14	17	15	20	15	81	100%

Sources: MA LIS Thesis

Table 4 shows that the contribution of the items covers 10 subject fields. The majority of contribution appeared collection development in 24 (29.62%), followed by bibliometric analysis (16) (19.75%) and bibliographies (15) (18.51%).

So, it can be seen that during 2013-2017, collection development is the most submitted subject field and very less students did research in dictionaries, encyclopedias and Indexes.

Institution's Library-wise Contribution of items

The topic of most of the MA thesis were based on university libraries and its servies. So, this study analysed which university libraries have been studied for the contribution of research purposes. The following table shows institution's library-wise contribution of items.

Table 5. Institution's library-wise Contribution of items

Name of institution's Library	2013	2014	2015	2016	2017	Total	Percentage
Yadanabon University Library	6	4	7	4	4	25	37.31%
University of Mandalay Library	3	3	3	3	4	16	23.88%
University of Yangon Library	-	-	-	1	-	1	1.92%
University of Magway Library	-	1	-	-	-	1	1.92%
Sagaing University of Education Library	-	1	1	1	-	3	5.76%
Meiktila University Library	-	-	1	-	1	2	3.84%
Mandalay Technological University Library	-	-	1	-	-	1	1.92%
University of Medicine, Mandalay	1	-	-	-	-	1	1.92%
University of Traditional Medicine	-	-	-	-	1	1	1.92%
University of Nursing Library, Mandalay	-	-	-	-	1	1	1.92%
University of Computer Studies Mandalay Library	-	-	-	-	1	1	1.92%
Yezin Agricultural University Library	-	-	-	-	1	1	1.92%
Monywa University Library	-	-	1	-		1	1.92%
Shwebo University Library	-	-	-	1		1	1.92%
Monastic Libraries	1	1	-	-	1	3	5.76%
School Libraries	1	1	1	1	1	5	7.46%
Public Libraries	-	-	-	2		2	3.84%
Community Libraries	-	-	1	-		1	1.92%
Total	12	11	16	13	15	67	100%

Sources: MA LIS Thesis

Table 5 shows institution library–wise contribution of item. The maximum number of University Library is Yadanabon University Library which is 25 (37.31%) and Mandalay University Library 16 (23.88%).

Citation Analysis

The reference provided by the author at the end of their items is the basis of citation analysis. Citation analysis is one of the popular methods applied to derive the following benefit.

Year- wise Distribution of Citation

The following table shows that year-wise distribution of citations. The total number of citation is (1853).The average number of citation is (370) per year.

Table-6. Year- wise Distribution of Citation

Year	No. of cited	Percentage
2013	315	16.99%
2014	338	18.24%
2015	346	18.67%
2016	477	25.14%
2017	377	20.34%
Total	1853	100%

Sources: MA LIS Thesis

Table 6 shows year-wise distribution of citation. The highest number of citation is found in 2016 (447) (25.14%) and the lowest number of citation is found in 2013 (315) (16.99%).

Forms of Document Cited

The following table shows form of documents cited. In this table, various researchers took documents from journals, magazines, books, seminar, term papers and internet website.

Table-7 Forms of Documents Cited

Forms of Document Cited	2013	2014	2015	2016	2017	Total	Percentage
Journals	34	28	26	45	9	142	7.66%
Magazines	-	13	12	25	-	50	3.38%
Books	55	48	42	54	195	394	21.26%
Reference Books	48	62	62	76	-	248	16.80%
Seminars	12	17	15	20	-	64	4.20%
Thesis, Dissertations and Term papers	80	76	98	143	46	443	23.91%
Interviews	18	22	35	32	-	107	7.24%
Internet Websites	68	72	56	82	127	405	21.85%
Total	315	338	346	477	337	1853	100%

Sources: MA LIS Thesis

Table 7 shows form of document cited. The highest number of the forms of document cited is theses, dissertations and term papers (443) (23.91%), following the Internet websites (405) (21.85%). reference books 248 (16.80%) and books 394 (21.26%). The less number of document cited is seminar 64 (4.20%) and magazine 50 (3.38%).The average number of documents cited is 232.

Language-wise Distribution of Cited Items

The following table shows language-wise distribution of cited items. In this table, there are two kinds of language cited. They are Myanmar Language and English Language. The total number of language cited item is (1853).

Table 8. Language-wise Distribution of Cited Items

Language	2013	2014	2015	2016	2017	Total	Percentage
Myanmar	92	86	105	157	170	610	32.91%
English	223	252	241	320	207	1243	67.08%
Total	315	338	346	477	377	1853	100%

Sources: MA LIS Thesis

The above table shows that the documents cited in English Language is 1243 (67.08%) and Myanmar Language cited is 610 (32.91%).

Findings

The present study has been undertaken to assess the research performance of Master students from the Department of Library and Information Studies, Yadanabon University. The findings of present study lead to the following observations.

- The study reveals that the MA (LIS) theses were submitted to Yadanabon University during the period of 2013-2017.
- During the period of 2013-2017, 81 items were submitted by 81 students and 1853 citations were cited for their research.
- This study identifies that MA thesis were submitted by (5) males and (76) females among the graduate students. In addition, among them, (57) candidates were students and 24 were government staff.
- The largest number of submitted item is 20 items and 477 citations were used in the year 2016. The less number of submitted items is 14 items using 315 citations in the year 2013.
- The highest number of submitted items have appeared in the area of collection development, followed by bibliography and bibliometrics.
- The maximum number of institution's library was Yadanabon University Library. It can be seen that monastic libraries, such as Myasakkyar Library and Masoeyein library was studied. The community libraries, such as Ludu library and Pakoku U Ohn Pe Library were also studied.
- Theses, dissertations and term papers are found to be most frequently cited materials followed by the Internet website, reference books and books.
- The language of the document most cited is English language which is 1243.
- It was found that librarians should be stocked with relevant and current literature to support their research. Librarians should manage to acquire current scholar's thesis, dissertations and research process.

Conclusion

Bibliometric study of post-graduate theses in library and information studies provides a portrait of the concerned theses by indicating the quality, maturity and productivity of the thesis. It informs about the research orientation that the theses support to disseminate and its influence on author's choice as a channel to communicate or retrieve information for their research need. In this regard, MA thesis from 2013 to 2017 were analysed with requisite bibliometric measures. The findings indicate that MA theses play a significant role among the researchers. It is one of the most leading research works in higher learning. In this short period, 2013-2017, MA theses has been tried to keep up its main aim of acting as a medium for communication of all sorts of information to researchers, supervisors, librarians, scientists, and scholars. It is hoped that post-graduate students and supervisors in library and information studies will solicit more scholarly contributions from more number of researchers from various theses in higher intitutions.

Acknowledgements

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