# Citation Analysis of Doctoral Theses in Legal Research Submitted to Selected Universities in Kerala

## S. Thanuskodi\*, Radha V. Nair\*\*

### Abstract

Studies relating to research in law are very essential to identify the modern research and progress of the subject. Moreover theses are unpublished documents, hence the analysis of this is very important to impart valuable information to other researchers for analyzing the progress made in this field. Citation Study and analysis may throw light on the extent of dependence of legal research on legal materials and various subjects in other disciplines. It is hoped that the outcome of the study will expose to researchers in law, the pattern of information use in their field and the total scenario of research going on in the concerned areas. All of us live under a legal environment and must confront the law in many aspects of our daily lives. One thing we cannot do, however, is to avoid the law. Like it or not, it is a pervasive feature of our lives and is likely to remain as such. So it is very relevant to conduct a citation analysis based on PhD Theses in Law.

Keywords: Citation Analysis; Theses; Legal Education; Bibliography and Authorship Pattern.

### Introduction

Citation analysis is a technique adopted to measure the extent of information sources based on citations in dissertations or journal articles. It is one of the important bibliometric techniques involving analysis of the references. Research is an indispensable component for any discipline for the generation of new knowledge, which coupled with skills lead to effective action.

Citation analysis denotes the statistical analysis or mathematical analysis of references or citations appended at the end of each article. Much useful information for location and identification of existing and emerging knowledge of a discipline comes to the limelight through analysis of both cited and citing papers. It can be used for identifying the core journals and the characteristic features of a discipline such as authorship pattern, bibliographical form, subject type, etc.

Citation is a universal practice. Citing or giving a

E-mail: thanuskodi\_s@yahoo.com

reference to a document in any learned presentation is the acknowledgement for intellectual debt received from the author or authors. Citation enables the readers to identify, locate, understand and decide whether the cited paper should be consulted or not. For this purpose, the references should contain all the necessary information for easy access and retrieval by the readers. They may be used to substantiate, explain or elaborate a particular point. They may also be referred to contradict or negate the conclusion of an already published work.

The results of high quality academic research written in the form of a report are usually termed as Theses or Dissertation. The main characteristics of these Theses are: they present details of Investigation/ Research; they offer findings and conclusions, and they are submitted to an overseeing Body.

The Doctoral theses which are products of research activity form an important source of information studies of the citations and may be useful in the decision making process of the library regarding acquisition of reading materials and provision of better services to the users. These doctoral theses are also important because apart from giving the experimental evidence, it also records a thorough review of works that have already been done in a particular field to show that the proposed work is not done elsewhere. In this process, the researchers cite large number of documents in the theses to establish their claim.

Author's Affiliation: \*Professor & Head, \*\*Research Scholar, Department of Library and Information Science, Alagappa University, Karaikudi, India-630 003.

**Reprint's Request: S. Thanuskodi,** Professor & Head, Department of Library and Information Science, Alagappa University, Karaikudi, India-630 003.

Studies of these citations may be useful in determining the acquisition of reading materials more effectively. Cito analytical studies of doctoral theses have been carried out in extensive numbers in India and abroad, in order to understand the pattern of materials used by the scientists for their research purposes in different disciplines. Citation analysis has been increasingly used in the study of scientific and technological theses to provide qualitative data on their utility and relationship that could be used in several ways. It is one of the important methods employed in the identification of core journals in a particular subject field or for particular scientific community. It is a technique of listing of references appended to articles in significant periodicals and counting the frequency with which the periodicals are cited. This method emphasizes the most profusely cited journals and it can be taken to be the most desirable one in a library collection, for they are likely to be frequently used.

Citation analysis provides a number of interesting and useful insights to the network of journals that functions as the formal communication medium. The citations appended to PhD theses submitted in any Institution of higher learning have been a subject of study for quiet long. A number of studies have been conducted in various disciplines, such as Agriculture, Chemistry, Physics, etc. Citation analysis helps to decide the appropriate collection for a library, weeding out the obsolete documents, etc. It can provide some evidence to the use of various library materials and this can help the librarian to reallocate the funds accordingly. 'Obsolescence' studies help to solve the space problem. 'Obsolescence' is' the condition of no longer being used or useful' - 'the process of becoming obsolete'.

### Literature Review

Sinha & Sumit (2015) [1] In their study, 'Status of library use pattern among undergraduate students of Assam University, Silchar: A survey', on the basis of a questionnaire circulated randomly among 140 respondents revealed that students were using the library frequently for their academic purposes. It was found that majority of the respondents use the available printed resources. Other findings revealed that regarding access to e-resources, the problems encountered were frequent power failure, lack of training, etc. Suggestions were made to introduce open access system and also to procure more number of books for the library.

Vithal (2015) [2] Conducted a Study on

'Information use pattern of faculty members of agricultural sciences, Andhra Pradesh. Questionnaires were distributed to 235 faculty members. It was found that nearly 50% of the faculty members used the library once in a week for collecting information. The motivator, 'preparation for teaching' had received the highest rank, 34% spent 1-5 h per week for collecting the required information, 82.1% maintained personal libraries for their information requirements 77.5% responded to the awareness about e-portals.

Santhi & Radhakrishnan (2014) [3] Examined the Usage pattern of electronic resources by the research scholars from Engineering Institutions affiliated to Anna University of Technology, Coimbatore. The study was carried out for researchers who are doing Ph.D in Anna University, Coimbatore and its affiliated institutions to explore their usage pattern of electronic resources. Questionnaire method was used to examine and collect data from the research scholars. The collected data were analyzed with the help of Statistical Package for Social Science (SPSS). Statistical methods like percentage, Chi-Square and ANOVA were used. The Hypotheses framed were proved by this study. The results revealed that there was a significant difference among researchers in different age groups who were familiar with utilization of electronic resources. They concluded that course oriented web pages should be linked with library websites which in turn help the research scholars to use these resources easily and effectively.

Thavamani (2014) [4] Conducted a study on information use pattern of Connemara Public Library, Chennai. The findings indicated that majority of 88.50 respondents were satisfied with the availability of the information sources like newspapers and magazines section being situated separately in the library. The results also pointed out that 46% of the users were college students, and that the users had good opinion about the reference sources.

Choukhande (2013) [5] In the Thesis submitted for the Degree of Doctor of Philosophy in library and information science to Amravati University, found that 2.25% of users had their research topic inter disciplinary, 97.75% did not have any additional degree, 66.50% users had given 1<sup>st</sup> rank to text book/ handbook, 71.08% did not make use of indexes nor abstracts, 56.67% felt that existing materials in the library were sufficient for their requirements, and 82.25% of the users agreed with their library timings. Suggestions were made for developing the collection, keeping in view, the information needs of the faculty members and research scholars of various courses of the college/university.

Doraswamy (2013) [6] Carried out a study regarding the information use pattern of the students in engineering colleges and the role of libraries. Data was collected from undergraduate, postgraduate and research students through questionnaire. 35% of the responded passed students preferred low standard text books for their exam purposes, 15.31% preferred standard textbooks for their subject purposes and 14.06% preferred high standard text books for their research purposes. Thus the students of the engineering college had different requirements to meet their needs. Suggestions were made for arrangements and modifications to be implemented in the library to meet the information needs of the students

Pareek & Rana (2013) [7] In their study of information seeking behavior and library use pattern of researchers in the Banasthali University, found that guidance in the use of library resources and services were necessary to help the researchers meet some of their information requirements. Data were gathered from 100 researchers out of 150 through open and closed questionnaire.

Sakthivel & Subramaniayan (2013) [8] Attempted to analyze the information use pattern of the faculty members and research scholars in Muthayammal Institutions (Arts, Science and Engineering), Rasipuram, Tamil Nadu. The role of web based information services in these institutions were processed scientifically and tabulated as to the variables of the study, using the survey method to collect data from the library users.

Velmurugan & Thavamani (2013) [9] Investigated the information use pattern of library resources and related issues among undergraduate students of Rajalakshmi Institute of Technology at Chennai. Out of 150 questionnaires distributed, 120 were returned duly filled in. Findings indicated that 97.5% were using library for study activities, 65.83 % were using text books as the most consulted source, 95.0% were aware of search engines, 91.67 % were of the opinion that Google and Yahoo were the most sought after search engines.

Doraswamy (2012) [10] In this article, presented the findings of the study based on information use pattern of library services and facilities by the faculty members of Siddhartha Educational Institution in Vijayawada. Out of the 455 filled in questionnaires, which were analyzed, it was found that the senior faculty members were using the borrowing facility, reference service and internet searching facilities more in number than compared to junior faculty members.

Kumar & Manjunath (2012) [11] In A comparative

study of information seeking behavior of faculty members of Sahyadri Science and Arts College in Shivamogga district of Karnataka, through 90 questionnaires, found that more number of science faculty visited the library to prepare themselves for classroom teaching and consulting periodicals than of arts faculty. Books were the most used library material by both categories of faculty. Most of the arts and science faculty were satisfied with the internet facility available in the library.

Sivaraman & Paramasivam (2012) [12] Studied the information use pattern of faculty members of Arts and Science Colleges in Dindigul district, Tamil Nadu. The methods adopted by the faculty for keeping themselves in tune with the latest developments, utilization of library services, amount spent in information gathering, and assessing the adequacy, availability and accessibility of the college library collection were analyzed.

Anyaogu (2014) [13] Studied the information needs and seeking behavior of the postgraduate students of the Nigerian Institute of Advanced Legal Studies, in Lagos state. The purpose of the study was to find out the various legal resources available to postgraduate law students, their information needs and seeking behavior, the services utilized by them and their level of satisfaction with the information obtained from the sources in the library. A population of 323 postgraduate law students registered at NIALS library since 2013 were selected and sampling technique was used for 204 data. The study revealed that law books were mostly available in NIALS library with a frequency score of (F=204), followed by law reports (F=200). It was also found that the major information need of the postgraduate law students was to obtain academic information in the library. The study revealed that the source of obtaining academic information by students included browsing on the shelves. Based on the findings, it was recommended that a frequent enquiry into the legal information needs of users should be adopted.

Thanuskodi (2010) [14] On analyzing the information needs and use pattern of the legal professionals of District Court of Salem and Erode in Tamil Nadu observed that practicing lawyers were using a variety of information sources to satisfy their information needs. Most of them preferred to first consult their personal library before resorting to other information providing agencies and sources. They were not comfortable while using digital law libraries. It was also found that majority of the respondents were not aware of the e-resources. They were of the opinion that the district bar collections, services and facilities were adequate to meet their information

needs effectively.

Thanuskodi (2009) [15] Observed and studied the information seeking behavior of law faculty at Central Law College, Salem. The population of the study consisted of the 64 full-time academic staff working in the Central Law College, Salem, including the guest faculty. The survey was divided into two sections, Section 1 contained the personal details and Section 2 contained information regarding information sources used by the respondents, use of Central Law College Library, adequacy of library collections, library use and computing skills of the respondents and the use of information technology based library sources and services. 87.5% filled-in questionnaires were returned within 2 weeks of distribution. The findings indicated that 33.92% had been teaching for five years or less. 51.78% of the respondents were male and 48.21% were female. They were also asked to provide a self -assessment of their library skills. It was assumed that respondents with better skills were expected to use library resources and facilities more effectively.

Ossai (2009) [16] Conducted a study on the library use patterns of undergraduate law students of University of Benin, Nigeria .The study population sample consisted of 230 undergraduate law students randomly selected from the 1<sup>st</sup> to 5<sup>th</sup> year of study. Their library used patterns were tested to find out how the undergraduate law students use the library in information seeking. The z-test statistic was used to test the stated hypotheses. The results highlighted the factors that influenced both female and male law student's library use pattern and the reactions when their information needs were not met .Recommendations based on the study were made for the improvement of library services for students in their use of the library for information seeking and use.

# Objective of the Study

For analyzing the objectives of study which is the most important and crusial part of any research work, the investigator has selected the 44,522 references taken from the 107 PhD theises in law, awarded by the Kerala Cochin University Sciences and Technology & Mahathma Gandhi University. The objectives of this study have been listed below.

- To determine the main thrust area in the field of legal research
- To determine the most productive University in the field of legal research in Kerala
- To examine the gender wise distribution of legal

research scholars and legal research guides

- To assess the guide ship pattern and productivity of the legal research guides
- To trace out the total number of references per thesis and thus identify the most productive legal research scholar
- To determine the various bibliographical forms used by the Legal Research Scholars
- To find out the year wise distribution of Ph. D thesis in legal research
- To study the authorship pattern of cited references in books

# Methodology

The study is based on the Citations of doctoral theses awarded from the Universities of Kerala, Mahatma Gandhi & Cochin University of Science and Technology. The Data for the present study has been collected from the One Hundred and Seven PhD Theses in Law, submitted to Cochin University of Science & Technology, Mahatma Gandhi University and University of Kerala. The details of the Research Scholar, Guide, Awarding University, Year of Submission, Gender ship and Title of all the One Hundred and Seven Theses were manually collected by physical verification of the Theses.

The collected data were entered into Microsoft Excel for further analysis. The bibliographical references or citations appended to each thesis, under the study, have been collected using a predefined worksheet in Microsoft Excel and analyzed them according to the objectives as stated above. A Total Number of 44,522 Citations or References listed in the 107 PhD Theses, were collected from the Theses available in the University Library, Department of Law, Kariavattom, Kerala Law Academy Law College, TVM, CUSAT, and Mahatma Gandhi Universities.

The collected references were thoroughly analyzed and segregated into the different categories of documents such as books, journals, articles, statutes, reports, conference proceedings, international documents, conventions, newspapers, websites, etc.

Each reference made at one time has been counted as one citation. If the same reference was repeated, it has been counted again. The information relating to each citation, i.e., number of authors, bibliographic form, name of the journal, subject, country of origin, and the availability of references in the library concerned data was compiled and analysed using Microsoft Excel Software. Names of the cited authors were classified into Indian/ Foreign citations, which were identified by the name of the authors and a list of journals was also prepared with the variables like name of the journal, year and nationality,(Indian/ Foreign) which were analyzed.

An important fact observed during the study,

#### Analysis and Interpretation

Sl. No.	Main Thrust Area	Thesis Count
1	Constitutional Law	17
2	Criminal Law	15
3	Industrial Law	8
4	Women Law	6
5	Medical Law	5
6	Health Law	5
7	Tax Law	4
8	Intellectual Property	4
9	Press Law	3
10	Child Law	3
11	Entertainment Law	2
12	Narcotics And Drugs	2
13	Motor Accidents	2
14	Labour Law	2
15	Police Law	2
16	Consumer Protection	2
17	Banking Law	2
18	Law Of The Sea	2
19	Genetics	2
20	Trade Law	1
21	Prison Law	1
22	Highcourt	1
23	Election Law	1
24	Disaster Management	1
25	Credit Law	1
26	Patent Law	1
27	Land Laws	1
28	Customary Law	1
29	Environmental Law	1
30	Service Law	1
31	Estoppel Law	1
32	Tort Law	1
33	Forest Law	1
34	Company Law	1
35	Christian Law	1
36	Insider Trading	1
37	Agricultural Law	1
38	Information Technology	1
	Grand Total	107

Table 1: Main thrust area

revealed that out of the 62 Theses submitted to CUSAT, 35 Theses have been deposited in the Shodhganga Repository, which is a Digital Repository of Indian Electronic Theses and Dissertations, set up by the INFLIBNET Centre. Also out of the 20 theses submitted to the Mahatma Gandhi University, 14 Theses have been deposited in the Shodhganga Repository.

From this table, it is evident that out of the 107 theses analyzed, for finding the main thrust area, 39 main thrust areas were identified, out of which Constitutional Law is the most preferred area among the legal research scholars, with 17theses, followed by Criminal Law, with 15theses. The next preferred areas are Industrial Law, with 8 Theses, Women Law with 6 Theses, Health Law & Medical Law, both having 5 Theses each, Intellectual Property Law & Tax Law with 4 Theses each, Child Law, & Press Law, with 3 Theses each. Subjects having 2 Theses each are Banking Law, Consumer Protection Law, Entertainment Law, Genetics, Labor law, Law of the Sea, Motor Accidents, Narcotics & Drugs, Police Law, Unique Subject Areas like Customary Law, Credit Law, Estoppels Law, and Insider Trading Law with only 1 thesis have been noted in this study.

 Table 2: Most productive university

SI. No	University	Thesis Count	Percentage
1	CUSAT	51	47.66
2	Kerala	36	33.64
3	MG	20	18.69
(	Grand Total	107	100

Table 3: Gender wise distribution of legal research scholars

Sl. No.	Research Scholar	Thesis Count	Percentage	
1	Male	60	56.07	
2	Female	47	43.93	
	Grand Total	107	100	
		-	100	
	ler wise distribution of lega Research Guide	-	Percentage	
able 4: Genc	ler wise distribution of lega	l research guides		
able 4: Genc	ler wise distribution of lega Research Guide	l research guides Thesis Count	Percentage	

It can be observed from the table that the highest number of PhD degrees (51) (47.66%) were awarded by the Cochin University of Science & Technology (CUSAT), followed by Kerala, with 36 PhD degrees (33.64%) and then Mahatma Gandhi University (MG), with 20 PhD degrees.(18.69%).

On examining the table for finding out the gender wise distribution of the legal research scholars, it is observed that most of the theses in law are contributions of the male legal research scholars, with 60 theses (56.07%), while the contributions of female researchers constitute only 47 Theses( 43.93%), showing male dominance over female. From this it is evident that females are not showing much interest in research.

The Gender wise study of the Legal Research Guides clearly indicates that male legal research guides have guided the maximum number of 97 research scholars (90.65%), whereas the female legal research guides have guided only 10 research scholars ((9.35%), again showing the reluctance of female legal research guides to take up guide ship in law.

Table 5: Gender wise distribution of research scholars across various universities

Sl. No.	University	Female Scholar	Female Scholar %	Male Scholar	Male Scholar %	Total
1	CUSAT	16	31.37	35	68.63	51
2	KERALA	20	55.56	16	44.44	36
3	MG	11	55.00	9	45.00	20
Gra	and Total	47.00	43.93	60.00	56.07	107.00

On observing the Table 5, it can be seen that Kerala University has the maximum number (20) of female legal research scholars, with 55.56% and CUSAT has the maximum number of male legal research scholars (35), with 68.63%.

From Table 6 it can be seen that Dr, Jayakumar NK and Dr. Sunny K C, both have guided the maximum number of legal research scholars,10 each, followed by Dr. Sebastian V D , having guided 9 research scholars; Dr. Sadasivan Nair G with 7 Research Scholars; Dr .Chandrasekharan Pillai K N, Dr. Leelakrishnan P, and Dr. Vikraman Nair K, each having guided 6 scholars, While Dr.Chandrasekhaan N S, Dr. George Joseph, Dr. Parameswaran K, Dr. Sukumari Antherjanam D and Dr. Varkey A M have guided 5 Research scholars each, Dr. Bismi Gopalakrishnan has guided 4 scholars; Dr. Markose A T, Dr. Rajeev D. and Dr. Ravikumar have guided 3 scholars each. The remaining seven guides have guided only one scholar each.

The Guide ship Pattern also reveals that majority of the scholars are guided only by single guides, and only two scholars are guided by joint guides.

Table 7 shows the most productive legal research scholar, based on the total number of references, and it is seen that Dr. Kailasanatha Pillai K P, having the maximum number of I, 324 References, is the most productive Legal Research Scholar Dr. Parameswaran K, with 1167 References , is ranked Second and Dr. Balakrishnan K, with 1160 References is ranked Third. Dr. N Narayanan Nair, with 1148 references occupies the Fourth place, Dr. Jayakumar N K, with 978 references is in the Fifth position, Dr Sivakumar S, with 968 references is in the Sixth position, Dr. Mercy I Thekkekara, with 867 references is in the Seventh place, Dr. Arul K. with 864 references, in the Eighth position, Dr. Sindhu Thulasidharan, with

\_

852 references is in the Ninth place and Dr. Rajeesh A P, with 811 references is in the Tenth position

It is clear from Table 8 that on observing the Range

Table 6: G	uide ship	pattern &	& most	productive	legal	guide
------------	-----------	-----------	--------	------------	-------	-------

Sl. No.	Research Guide	Thesis count
1	Sunny K C	10
2	Jayakumar N K	10
3	Sebastian V D	9
4	Sadasivan Nair G	7
5	Chandrasekharan Pillai K N	6
6	Leelakrishnan P	6
7	Vikraman Nair K	6
8	George Joseph	5
9	Sukumari Antherjanam D	5
10	Chandrasekharan N S	5
11	Parameswaran K	5
12	Varkey A M	5
13	Bismi Gopalakrishnan	4
14	Ravikumar R	3
15	Markose A T	3
16	Rajeev D	3
17	Soman N S	2
18	Prasannan R	2
19	Gopalakrishnan N S	2
20	Self	2
21	Sankaradasan Thampi R	1
22	Nayar P K B   & Sankaradasan Thampi R	1
23	Sebastian V S	1
24	Krishnan Nair M	1
25	Pramodan M C	1
26	Prasanna A	1
27	Prasanna A & James Vadackumchaery	1
	GRAND TOTAL	107

Table 7: Top 20 productive legal research scholars

Sl. No	Thesis Code	Research Scholar	Reference count
1	TH29	Kailasanatha Pillay K P	1324
2	TH11	Parameswaran K	1167
3	TH27	Balakrishnan K	1160
4	TH107	N Narayanan Nair	1148
5	TH81	Jayakumar N K	978
6	TH84	Sivakumar S	968
7	TH67	Mercy I Tekkekara	867
8	TH17	Arul K	864
9	TH90	Sindhu Thulasidharan	852
10	TH54	Rajeesh A P	811
11	TH86	Úsha K M	791
12	TH34	Gopakumaran Nair S	784
13	TH61	Dinkar V R	722
14	TH23	Saleena K B	715
15	TH44	Pauly Mathew	676
16	TH78	Lekshmi P	671
17	TH07	Pradeep K P	668
18	TH79	K C Sunny	618
19	TH42	Venugopala B S	608
20	TH106	GiriSankar S S	607

of References listed, it is seen that the Range, between 301-400, has the maximum number of 25 Theses and the Range between 201-300, and has 19 Theses. Ranges between 401- 500 and 101-200, both have 17 Theses each. This shows that most Legal research

Scholars prefer the range between 301-400, thus depicting a uniform pattern of collecting references for their research study. Only two researches have less than 100 references. Four Researchers have reference range above 1000, and it is to be noted that

The Researchers having more than 1000 references are mostly all in the older age group, i.e. .they had

carried out their research, at a time when it was very difficult to trace out the references, for their study.

Table 8: Thesis	reference	range
-----------------	-----------	-------

Sl. No.	Reference Range	Thesis Count
1	>1000	4
2	901-1000	2
3	801-900	4
4	701-800	4
5	601-700	6
6	501-600	7
7	401-500	17
8	301-400	25
9	201-300	19
10	101-200	17
11	< 100	2
	Grand Total	107

Table 9: Bibliographical Forms used by the Legal Scholars

Sl. No.	<b>Bibliographical Forms</b>	<b>Reference</b> Count	Percentage
1	Books	8308	18.66
2	Table Of Cases	23840	53.55
3	Statutes	2784	6.25
4	Articles	6055	13.60
5	Reports	1445	3.25
6	International doc / Conv / Conf	810	1.82
7	Newspapers	246	0.55
8	Websites	1034	2.32
	TOTAL	44522	100.00

Table 10: Reference	Range of Books,	Table of Cases	(Journals)	& Statutes
---------------------	-----------------	----------------	------------	------------

Sl. No.	Thesis Code	<b>Research Scholar</b>	Book	Journal	Statute	Grand Total
1	TH29	Kailasanatha Pillay K P	99	1184	9	1292
2	Th11	Parameswaran K	97	931	139	1167
3	Th27	Balakrishnan K	168	919		1087
4	TH107	N Narayanan Nair	73	1002		1075
5	Th81	Jayakumar N K	125	620	105	850
6	TH67	Mercy I Tekkekara	22	754	59	835
7	Th90	Sindhu Thulasidharan	91	677	27	795
8	Th84	Sivakumar S	173	495	106	774
9	TH17	Arul K	340	350	36	726
10	Th34	Gopakumaran Nair S	72	649		721
11	Th54	Rajeesh A P	127	537	37	701
12	Th86	Úsha K M	59	586		645
13	TH07	Pradeep K P	87	494	56	637
14	TH79	K C Sunny	163	406	16	585
15	Th42	Venugopala B S	63	456	32	551
16	TH32	Sankar Jee V N	22	483	37	542
17	TH78	Lekshmi P	193	305	31	529
18	TH02	Varkey A M	117	410		527
19	TH05	Valsamma Paul	67	434	11	512
20	TH93	Lalitha S	45	415	4	464
21	TH103	Balasankaran Nair K	50	384	18	452
22	Th50	Radhakrishnan Nair K	51	399		450
23	TH63	John P C	92	303	35	430
24	th56	Kalam Pasha B	101	326		427
25	TH39	Sebastian V D	46	233	147	426

From the Table 9, it is evident that Table of Cases (Journals) among the Bibliographical forms, constitutes the highest number of 23, 840 references

(53.55%), followed by Books, with 8308 references (18.66%), Articles, with 6055 references (13.60%) and Statutes, with 2784 references (6.25%) It is interesting

to note that Legal researchers are using only 2.32% websites out of the total references.

Table 10 shows the Reference range of books, journals and statutes referred and the research scholar with the maximum number of books, journals and statutes. It can be seen from the Figure 4 that Kailasanatha Pillai K P has the highest number of 1184 journal citations, Arul K has the maximum number of 340 book citations, and Sebastian V D has the maximum number of 147 Statute citations. PhD theses, submitted to the Universities of CUSAT, MG and Kerala, It is observed that maximum number of 11 Theses were submitted during the Year, 2012 and in the Years, 2009 and 2011, 9 Theses were seen submitted, and during the Year 2013, 8 Theses were seen submitted, 7 Theses were submitted during the Year 1995, 6 Theses were seen submitted during the Year 1999, and 5 Theses each were seen submitted during the Years, 1998, 2004, 2006 and 2007. It is clear that maximum number of theses were seen to be submitted, between the Years 2000-2013.

The Table 11 shows the year wise distribution of

Sl. No.	Thesis Year	Count of the Code		
1	1973	1		
2	1976	2		
3	1982	1		
4	1983	1		
5	1984	3		
6	1985	3		
7	1988	2		
8	1991	1		
9	1992	1		
10	1993	3		
11	1994	1		
12	1995	7		
13	1996	3		
14	1997	1		
15	1998	5		
16	1999	6		
17	2001	1		
18	2002	3		
19	2003	2		
20	2004	5		
21	2005	3		
22	2006	5		
23	2007	5		
24	2009	9		
25	2010	2		
26	2011	9		
27	2012	11		
28	2013	8		
29	2014	3		
	GRAND TOTAL	107		

Table 11: Year wise distribution of PhD Thesis in Legal research

Table 12: Authorship pattern of cited references in books

Sl. No.	Authorship Pattern	Book count	Percentage
1	Single	6330	76.19
2	Joint	1174	14.13
3	Multi	260	3.13
4	Corporate	226	2.72
5	Not Available	318	3.83
	TOTAL	8308	100.00

It is obvious from the Table 12, that in the authorship pattern in Books, Single Authored Books (6330) are the maximum, with 76.19% of the total citations. Joint Authored Books (1174) constitute 14.13% of the total citations. Corporate Authored

Books (226) contain only 2.72% of the total citations. Hence the dominance of Single Authored Books is evident in this study. Only very few Legal researchers are using the corporate authored books for their study.

Sl. No.	Thesis Code	Research Scholar	Single	Joint	Multi	Corporate	Grand Total
1	TH17	Arul K	280	40	10	1	331
2	TH83	Sheeba Pillai	160	27	14	31	232
3	TH99	Abhilash V	119	42	16	7	184
4	TH78	Lekshmi P	168	14	1		183
5	TH94	Sonia K Das	136	36	7	1	180
6	TH102	Shymol S	136	20	10	4	170
7	Th27	Balakrishnan K	151	15		2	168
8	Th25	Prasanna A	115	14	19	15	163
9	Th84	Sivakumar S	138	15	7	2	162
10	TH79	K C Sunny	133	20	4	1	158
11	TH52	Saroja AS	131	8	1	1	141
12	Th44	Pauly Mathew	94	21	18		133
13	Th85	Ravi kumar R	115	16		1	132
14	TH104	Sini T N	80	35	11		126
15	Th54	Rajeesh A P	96	30			126
16	TH75	Bismi Gopalakrishnan	90	33	2		125
17	TH13	Vikraman Nair K	103	18	1		122
18	TH92	James	97	14	11		122
		vadackumchery					
19	TH02	Varkey A M	68	27	3	17	115
20	Th48	Shankar D	103	9	2		114

Table 13: References of authorship pattern thesis wise

The Table 13 shows the usage pattern of single authored books, joint authored, multi authored, and corporate authored books among the legal researchers. It is evident that, Arul K, has the maximum number of 280 Single Authored Book citations, Abhilash has the maximum number of 42 Joint authored book citations, Prasanna A has the maximum number of 19 multi authored book citations and Sheeba Pillai has the maximum number of 31 corporate authored book citations.

### Suggestions

- Topics covered under the Legal educational couses should be revisited to include possibilities forewer areas which will favour the research scholars to explore these areas.
- To promote the entry of more women into the legal profession, the government can adopt various measures, which will attract more women into this profession.
- It is recommended that the legal institutions should take effective steps in updating their periodical collections and subscribing to online repositories to enhance the quality of research
- Hence legal libraries must at least have a reasonable collection of foreign materials, especially books in their holdings.
- It is suggested that legal researchers should adopt a uniform pattern of citing references which will provide the relevant information including the relevant details like the place of publication, etc. which will aid in faster retrieval of information.

#### Conclusion

Citations play a vital role in identification and retrieval of earlier works. During the study it was found that citations are not in standard format. Some researchers have not used any uniform pattern / sequence while citing the research materials. It is observed that, in some cases, the year is missing, in some cases, publisher's name, & place are missing. On examining the year wise distribution, out of the 107 theses, the maximum number of theses shown, i.e.11 were produced during the year 2012, followed by 2011 and 2009 with 9 theses, showing that the period 2000 onwards is showing an increasing trend for legal research. The study also established that the highest number of research citations appended per thesis may be due to their in depth review of literature by the research scholars. It is evident from the total references, collected by the researchers that many of them have taken tedious efforts to formulate the research findings with the timely help and guidance of the teachers and information professionals. Another fact observed is that the male research scholars are more dominant in the production of research output, as well as in contributing more number of citations in the study.

#### References

 Sinha, M. K., & Paul, S. Status of Library Use Pattern among Undergraduate Students of Assam University Silchar: A Survey. Professional Journal of Library and Information Technology (PJOLAIT), 2015; 5(2):1+

- Vithal, K. S. R. Information Use Pattern of Faculty Members of Agricultural Sciences: A Study. Pearl: A Journal of Library and Information Science. 2015; 9(3): 195-198.
- Santhi, L., & Radhakrishnan, N. Usage Pattern of Electronic Resources among the Research Scholars in Anna University of Technology, Coimbatore and Its Affiliated Colleges.
- Thavamani,, K., & Salai, A. Information Use Pattern of Connemara Public Library, Chennai, Tamil Nadu: A Case Study. International Research: Journal of Library and Information Science. 2014; 4(1): 182-196.
- Choukhande, V. G. Analytical study of information needs and use pattern of faculty members and research scholars of Amravati University. 2013.
- Doraswamy Naick, B. R. Information use pattern of the students in Engineering Colleges: Role of Libraries. Research Journal of Library Sciences. 2013; 1(2): 1-7
- Pareek, A. K., & Rana, M. S. Study of information seeking behavior and library use pattern of researchers in the Banasthali University. 2013.
- T. Sakthivel, Dr. N. Subramaniayan Information Use Pattern by the Faculty Members and Research Scholars in Muthayammal Institutions (Arts & Science and Engineering), Rasipuram, Tamilnadu: a Study International Journal of Scientific Research. 2013 May; 2(5). – Available at http:// theglobaljournals.com/ijsr/articles.php?val =OTcy&b1=465&k Accessed on November 7, 2014.
- 9. Velmurugan, C., & Thavamani, K. Information Use Pattern of Library Resources among Under Graduate

Students of Rajalakshmi Institute of Technology, Chennai, Tamil Nadu: A Case Study. Indian Journal of Information Sources & Services (IJISS). 2013; 3(2).

- Doraswamy, M. Information Use Pattern towards Library Services and Facilities by the Faculty Members of Siddhartha Educational Institutions Vijayawada, Andhra Pradesh: A Study. International Journal of Information Dissemination and Technology. 2012; 2(3): 176-181.
- Kumar, D. V., & Manjunath, P. Information Use Pattern by Arts and Science Teachers of Sahyadri Science and Arts College: A Comparative Study. Library Herald. 2012; 50(4): 324-334.
- 12. Sivaraman P, Paramasivam S, "Information use pattern of faculty Members of Arts and Science Colleges in dindigul District, TamilNadu.", Asian Journal of Information Science and technology. 2012 Dec; 2(2): 40-44.
- Anyaogu, U. Postgraduate Law Students Information Needs and Seeking Behaviour: Implications for Improved Provision of Resources and Services in Nigerian Institute of Advanced Legal Studies Library in Lagos State. Library Philosophy and Practice. 2014.
- Thanuskodi, S. Information needs and use pattern of district court lawyers of Salem and Erode in Tamilnadu. *DESIDOC* Journal of Library & Information Technology. 2010; 30(2): 59-69.
- 15. Thanuskodi, S. Library Use and Information Seeking Behaviour of Law Faculty Members of Central Law College, Salem. *SRELS* Journal of Information Management. 2010; 47(6): 689-698.
- Ossai, N. B. Library use patterns of law students at the University of Benin, Benin City, Nigeria. Simbiosis. 2009; 6(1): 2.