

# OCLC Systems & Services: A Bibliometric Study

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**Abstract-** Analyses the articles published during 2006-2010 in the journal 'OCLC Systems & Services', to find the most frequently cited periodicals by the library and information scientists. A list of 515 most common cited periodicals has been prepared. In addition to this, the study identifies the types of publication cited. Authorship pattern of contributions, country-wise, language-wise and subject-wise distribution of frequently cited periodicals are also included.

**Index Terms-** Bibliometric Study, Bibliometric, OCLC Systems and Services. Bradford's Law and Citation study

## I. INTRODUCTION

Library and Information Science being a dynamic research field had attracted information scientists all over the world; consequently, the flow of information in the field has been endless. The growth of scientific literature can be measured by counting the number of journals, papers or abstracts published per unit of time, normally one year.<sup>1</sup> the growth of literature in a particular subject can be studied either by quantitative or qualitative research. This quantitative approach commonly known as bibliometrics has been followed in the present study.

The OCLC Systems and Services started its publication in 1985 published by Emerald Group. Editor of Journal is Dr. Bradford Lee Eden. Journal has been published from U.K. Frequency of the journal is quarterly.

This journals coverage the following area

- Digital libraries
- Digital repositories
- Digital cultural content services
- Web metadata standards
- Web markup languages
- Digital preservation
- Imaging and digitization techniques
- Usability studies

## II. OBJECTIVES

1. The objectives of the present study include the identification of:
2. Major sources of information;
3. Core journals;
4. Language and country-wise distribution of papers;
5. Authorship pattern and subject-wise distribution of papers; and

6. The extent of applicability of Bradford's Law of Scattering to the pattern of journal use by Indian scientists in the field of Biological Sciences.

## III. METHODOLOGY

The present study is based on the analysis of citations drawn from the articles published in the journal *OCLC Systems and Services* for the period of 2006-2010.

## IV. ANALYSIS

### 4.1 Major Sources of Literature

From table 1 it is clear that the major channel of communication in the field of Library and Information Science comprises mostly by journal articles (515) accounting for 40.65% of the total citations. Websites (253) and books (189) contribute 19.95% and 14.95% respectively. While thesis and dissertations have negligible contributions with 8.9% and 8.55% respectively. Thus the library and information scientists depend more on journal articles.

**Table 1**  
**Major Sources of literature**

Sl.No.	Form of Documents	No. of citations	Cum. Citations	% of Citations	Cum. %
1	Journals	515	515	40.65	40.65
2	Website	253	768	19.95	60.60
3	Books	189	957	14.95	75.55
4	Conference proceedings	113	1070	08.90	84.45
5	Thesis & dissertations	109	1179	08.55	93.00
6	Others	89	1268	07.00	100.00
		1268		100.00	

### 4.2 Language, Subject and Country of Origin of Information Sources

Further, the citations were analyzed according to their language, country and subject. The language-wise scattering of cited documents showed that English was the predominant language and use of other foreign language materials was substantially lower. It is clear from the Table 2 that nearly 98.85% of journal articles were published in English followed by Portuguese language documents with only 0.58% of citations.

**Table 2**  
**Language-wise Distribution of Cited Library and Information Science journals**

Sl.No.	Language	No. Of Journals	No. of Citations	Cum. Citation	Percentage	Cum. %
01	English	214	509	509	98.85	98.85
02	Portuguese	03	03	512	00.58	99.43
03	French	01	01	513	00.19	99.62
04	German	01	01	514	00.19	99.81
05	Spanish	01	01	515	00.19	100.00
		220	515		100	

**4.3 Country-wise Distribution of Cited Library and Information Science Journals**

The cited documents were analysed according to their country of origin. Table 3 indicates that 64.56% of the cited documents were from USA and rest were from UK (23.65%) and remaining less than 13% were from other 13 countries. From this it can be inferred that the researchers in Library and Information Science depend much on literature emanating from USA and UK.

**Table 3**

**Country-wise Distribution of Cited Library and Information Science Journals**

Sl.No.	Country of origin	No. of Journals	Cumulative on of journals	%	Cum. %
1	USA	142	142	64.56	64.56
2	UK	52	194	23.65	88.21
3	Netherland	04	198	01.81	90.02
4	Canada	03	201	01.37	91.39
5	Spain	03	204	01.37	92.76
6	Brazil	03	207	01.37	94.13

7	Germany	03	210	01.37	95.50
8	Sweden	02	212	00.90	96.40
9	China	02	214	00.90	97.30
10	Australia	01	215	00.45	97.75
11	Iran	01	216	00.45	98.20
12	India	01	217	00.45	98.65
13	Austria	01	218	00.45	99.10
14	Japan	01	219	00.45	99.55
15	Maryland	01	220	00.45	100.00
		220		100.00	

**4.4 Subject classification of cited journals**

It is evident from the table 4 that total 515 citations are spread in 220 subject journals. Nearly 16.31% of cited documents were from the field of information technology and 13.03% were from the field of digital library. The journal articles devoted to other subjects like Library services, Library & Information Science, Academic Libraries, Computer science, Microbiology etc. accounted for nearly 70% of the total cited literature. This has an important implication for the provision of information services to the Library and Information scientists.

**Table 4**

**Subject classification of cited journals 2005-2010**

Sl.No	Subject Categorization of cited journals	No. of Journals	%	No. of Citations	%	Cum. %
1	Information Technology	22	10.00	84	16.31	16.31
2	Digital library	12	5.48	67	13.03	29.34
3	Library services	8	0.66	38	7.37	36.71
4	Library & Information Science	15	6.84	33	6.43	43.14
5	Academic Libraries	16	7.29	29	5.63	48.77
6	Computer Science	12	5.47	23	4.49	53.26
7	Microbiology	9	4.11	16	3.13	56.39
8	Higher Education	7	3.20	14	2.74	59.13
9	Library management	6	2.72	11	2.13	61.26
10	Communication	5	2.27	9	1.76	63.02
11	Scientometrics	1	0.45	7	1.37	64.39
12	Web libraries	5	2.27	5	0.97	65.36
13	Library Documentation	2	0.90	5	0.97	66.33
14	Medicine	3	1.36	4	0.77	67.10
15	Library administration	3	1.36	4	0.77	67.87

16	Research methods	4	1.81	4	0.77	68.64
17	Physics	4	1.81	4	0.77	69.41
18	Geographic Information Science	2	0.90	3	0.58	69.99
19	Library philosophy	1	0.45	2	0.38	70.37
20	Economics	2	0.90	2	0.38	70.75
21	Public Library	2	0.90	2	0.38	71.13
22	Genetics	2	0.90	2	0.38	71.51
23	Social Science	1	0.45	2	0.38	71.89
24	Health Care Management	1	0.45	1	0.19	72.08
25	Water Science & Technology	1	0.45	1	0.19	72.27
26	Nuclear	1	0.45	1	0.19	72.46
27	Mathematics	1	0.45	1	0.19	72.65
28	Law	1	0.45	1	0.19	72.84
29	Molecular	1	0.45	1	0.19	73.03
30	Neurology	1	0.45	1	0.19	73.22
31	Bacteriology	1	0.45	1	0.19	73.41
32	Library Collection	1	0.45	1	0.19	79.60
33	Phytopathology	1	0.45	1	0.19	73.79
34	Miscellaneous	66	30.00	135	26.21	100.00
		220	100.00	515	100.00	

#### 4.5 Distribution of Citations According to their Authorship

It is observed from the table 5 that most of the citations have single authors (60.19%) and the remaining citations are contributed by two authors (21.35%), three authors (9.33%), four authors (5.25%) and five or more than five authors (3.88%). The publications are in the descending order of single, double, three, four and five and more than five authors.

The data reveals that single authored papers accounted for 310 (60.19%) while 195 (39.81%) citations were multi-authored. The low incidence of multiple authorship is characteristic of social sciences rather than the physical and life sciences where the percentages of multi-authored papers is reported to be in the range from 67 to 83.<sup>2</sup>

**Table-5**

**Distribution of Citations According to their Authorship**

Sl.No.	Authorship	No. of Citations	Percentage	Cumulative percentages
1	Single	310	60.19	60.19
2	Two	110	21.35	81.54
3	Three	48	09.33	90.87
4	Four	27	05.25	96.12
5	Five and the more five	20	03.88	100.00
		515	100.00	

#### 4.6 Ranked list of cited periodicals

Table 7 presents ranked list of journals preferred by the Library and Information scientists for publications. Contributions of Library and Information scientists were scattered in as many as 220 journals. The first six journals in the rank list covered ¼ of the contributions (26.23%) while 50% and 75% respectively were covered by 28 and 93 journals. Among the cited journals D-Lib Magazine occupies the first rank, accounting for 53 (10.40%) of the total number of citations followed by OCLC Systems and Services (4.56%) and Ariadne (3.40%). The selection of periodicals for subscription may be based on the rank list for optimum utilization.

**Table 7**  
**Ranking of Periodicals**

Sl.No.	Rank	Name of the Journal	Country	Language	No. of Citations	Cum. Citations	%	Cum. %
1	1	D-Lib Magazine	USA	English	53	53	10.40	10.40
2	2	OCLC Systems & Services	UK	English	23	76	4.56	14.96
3	3	Ariadne	UK	English	17	93	3.40	18.36
4	4	Library Journal	USA	English	15	108	2.96	21.32

5	5	Library Hi Tech	UK	English	14	122	2.76	24.08
6	6	Information Technology & Libraries	USA	English	12	134	2.43	26.51
7	7	Library Trends	USA	English	9	143	1.84	28.35
8	8	First Monday	USA	English	8	151	1.65	30.00
9	9	Scientometrics	Netherland	English	7	158	1.40	31.40
10	9	Journal of the American Society for Information Science and Technology	USA	English	7	165	1.40	32.80
11	10	Serials Review	USA	English	6	171	1.18	33.98
12	10	New Review of Information Networking	USA	English	6	177	1.18	35.16
13	10	Learned Publishing	UK	English	6	183	1.18	36.34
14	10	Chronicle of Higher Education	USA	English	6	189	1.18	37.52
15	10	Annual review of information science and technology	USA	English	6	195	1.18	38.70
16	10	American Libraries	USA	English	6	201	1.18	39.88
17	11	Vishwasharat@TDIL	China	English	5	206	0.97	40.85
18	11	Reference Services Review	UK	English	5	211	0.97	41.82
19	11	Online	UK	English	5	216	0.97	42.79
20	11	Nature	UK	English	5	221	0.97	43.76
21	11	Library resources and technical services	USA	English	5	226	0.97	44.73
22	11	Journal of Web Librarianship	USA	English	5	231	0.97	45.70
23	11	Computers in Libraries	USA	English	5	236	0.97	46.67
24	11	Applied and Environmental Microbiology	USA	English	5	241	0.97	47.64
25	12	SPARC open access newsletter	USA	English	4	245	0.78	48.42
26	12	Program	UK	English	4	249	0.78	49.20
27	12	Portal: Libraries and the Academy	USA	English	4	253	0.78	49.98
28	12	Online Information Review	UK	English	4	257	0.78	50.76
29	12	New Library World	UK	English	4	261	0.78	51.54
30	12	Journal of Information Science	USA	English	4	265	0.78	52.32
31	12	Journal of Academic Librarianship	UK	English	4	269	0.78	53.10
32	12	Information Processing & Management	USA	English	4	273	0.78	53.88
33	12	E-Content	USA	English	4	277	0.78	54.66
34	12	College & Research Libraries	USA	English	4	281	0.78	55.44
35	13	ProQuest	UK	English	3	284	0.58	56.02
36	13	Journal of the American Society for Information Science	USA	English	3	287	0.58	56.60
37	13	Journal of the American Association for Information Science and Technology	USA	English	3	290	0.58	57.18
38	13	Journal of Documentation	UK	English	3	293	0.58	57.76
39	13	Information today	USA	English	3	296	0.58	58.34
40	13	FEMS Microbiology Ecology	USA	English	3	299	0.58	58.92
41	13	Communications of the ACM	USA	English	3	302	0.58	59.50
42	13	College & Research Libraries News	USA	English	3	305	0.58	60.08
43	13	Cataloging & Classification Quarterly	UK	English	3	308	0.58	60.66
44	13	Canadian Journal of Communication	Canada	English	3	311	0.58	61.24
45	14	VINE	UK	English	2	313	0.38	61.62
46	14	Transactions in GIS	UK	English	2	315	0.38	62.00
47	14	The Serials Librarian	UK	English	2	317	0.38	62.38
48	14	The Journal of Academic Librarianship	USA	English	2	319	0.38	62.76
49	14	The Chronicle of Higher Education	USA	English	2	321	0.38	63.14
50	14	Searcher	USA	English	2	323	0.38	63.52
51	14	Nihon Iji Shimpo	USA	English	2	325	0.38	63.90
52	14	Library Technology Reports	USA	English	2	327	0.38	64.28
53	14	Library Philosophy and Practice	Iran	English	2	329	0.38	64.66
54	14	Journal of Usability Studies	Canada	English	2	331	0.38	65.04
55	14	Journal of the Royal Society of Medicine	UK	English	2	333	0.38	65.42
56	14	Journal of Library Administration	USA	English	2	335	0.38	65.80

57	14	Journal of Electronic Publishing	USA	English	2	337	0.38	66.18
58	14	International Journal of Digital Curation	UK	English	2	339	0.38	66.56
59	14	Information Research	Sweden	English	2	341	0.38	66.94
60	14	IEEE Data Engineering Bulletin	USA	English	2	343	0.38	67.32
61	14	Educause Review	USA	English	2	345	0.38	67.70
62	14	DttP: Documents to the People	USA	English	2	347	0.38	68.08
63	14	Current Contents	USA	English	2	349	0.38	68.46
64	14	Computers, Environment and Urban Systems	USA	English	2	351	0.38	68.84
65	14	Computer	USA	English	2	353	0.38	69.22
66	14	CalTech Library	USA	English	2	355	0.38	69.60
67	14	California Digital Library	USA	English	2	357	0.38	69.98
68	14	Australian Academic and Research Libraries	Australia	English	2	359	0.38	70.36
69	14	Archival Issues	USA	English	2	361	0.38	70.74
70	14	ARL bimonthly report	USA	English	2	363	0.38	71.12
71	14	Antimicrobial Agents and Chemotherapy	USA	English	2	365	0.38	71.50
72	14	American Archivist	USA	English	2	367	0.38	71.88
73	15	Technical services quarterly	USA	English	1	368	0.19	72.07
74	15	Information management journal	USA	English	1	369	0.19	72.26
75	15	Information services and use	USA	English	1	370	0.19	72.45
76	15	Proceedings of the American society for information science & technology	USA	English	1	371	0.19	72.64
77	15	Wired	USA	English	1	372	0.19	72.83
78	15	Water Science and Technology	UK	English	1	373	0.19	73.02
79	15	Washington center for improving the quality of undergraduate education newsletter	USA	English	1	374	0.19	73.21
80	15	Transinformação	Brazil	Portuguese	1	375	0.19	73.40
81	15	Time	USA	English	1	376	0.19	73.59
82	15	The open nuclear and particle journal	USA	English	1	377	0.19	73.78
83	15	The huffington post	USA	English	1	378	0.19	73.97
84	15	The Economic Journal	UK	English	1	379	0.19	74.16
85	15	The Computer Journal	UK	English	1	380	0.19	74.35
86	15	The Charleston Advisor	USA	English	1	381	0.19	74.54
87	15	The book paper group annual	USA	English	1	382	0.19	74.73
88	15	The Atlantic	USA	English	1	383	0.19	74.92
89	15	Tennessee libraries	USA	English	1	384	0.19	75.11
90	15	Technical Communication Quarterly	UK	English	1	385	0.19	75.30
91	15	Teacher Librarian	USA	English	1	386	0.19	75.49
92	15	Taxonomy	Maryland	English	1	387	0.19	75.68
93	15	Systems Research and Behavioral Science	UK	English	1	388	0.19	75.87
94	15	Studies in Higher Education	UK	English	1	389	0.19	76.06
95	15	Speculations in Science and Technology	USA	English	1	390	0.19	76.25
96	15	Sociological Inquiry	USA	English	1	391	0.19	76.44
97	15	ScieCom Info	USA	English	1	392	0.19	76.63
98	15	School Library Journal	USA	English	1	393	0.19	76.82
99	15	Saturday Review of Literature	USA	English	1	394	0.19	77.01
100	15	Revue Française d'Allergologie et d'Immunologie Clinique	USA	French	1	395	0.19	77.20
101	15	Revista de Pesquisa e Pós-Graduação, Erechim	Brazil	Portuguese	1	396	0.19	77.39
102	15	Review of the Royal Spanish Academy of Sciences, Series A, Mathematics I	Spain	English	1	397	0.19	77.58



103	15	Public Library of Science Biology	UK	English	1	398	0.19	77.77
104	15	Public libraries	USA	English	1	399	0.19	77.96
105	15	Progressive Librarian	USA	English	1	400	0.19	78.15
106	15	Program: Electronic Library & Information Systems	UK	English	1	401	0.19	78.34
107	15	Profession	USA	English	1	402	0.19	78.53
108	15	PC World	USA	English	1	403	0.19	78.72
109	15	Papers from Portico	USA	English	1	404	0.19	78.91
110	15	Otolaryngology – Head and Neck Surgery	USA	English	1	405	0.19	79.10
111	15	Organizational Research Methods	USA	English	1	406	0.19	79.29
112	15	Online & CD-ROM Review	UK	English	1	407	0.19	78.48
113	15	On the Horizon	UK	English	1	408	0.19	79.67
114	15	North Carolina Libraries	USA	English	1	409	0.19	79.86
115	15	Nippon Ganka Gakkai Zasshi	Japan	English	1	410	0.19	80.05
116	15	New journal of physics	USA	English	1	411	0.19	80.24
117	15	Nature Reviews Genetics	UK	English	1	412	0.19	80.43
118	15	Mycotaxon	USA	English	1	413	0.19	80.62
119	15	Mississippi Libraries	USA	English	1	414	0.19	80.81
120	15	Microform & Imaging Review	USA	English	1	415	0.19	81.00
121	15	Microbial Drug Resistance: Mechanisms, Epidemiology and Disease	USA	English	1	416	0.19	81.19
122	15	Long range planning	Austria	English	1	417	0.19	81.38
123	15	Libri	USA	English	1	418	0.19	81.57
124	15	Library Serials	USA	English	1	419	0.19	81.76
125	15	Library Review	UK	English	1	420	0.19	81.95
126	15	Library quarterly	USA	English	1	421	0.19	82.14
127	15	Library of Congress, Washington, DC	USA	English	1	422	0.19	82.33
128	15	Library of Congress Information Bulletin	USA	English	1	423	0.19	82.52
129	15	Library Management	UK	English	1	424	0.19	82.71
130	15	Library Journal Net Connect	USA	English	1	425	0.19	82.90
131	15	Libraries & Culture	USA	English	1	426	0.19	83.09
132	15	Lecture notes in computer science	UK	English	1	427	0.19	83.28
133	15	Law & Social Inquiry	USA	English	1	428	0.19	83.47
134	15	Knowledge Quest	USA	English	1	429	0.19	83.66
135	15	Journal of digital information	USA	English	1	430	0.19	83.85
136	15	Journal of Zhehjian University Science	China	English	1	431	0.19	84.04
137	15	Journal of Women in Culture and Society	USA	English	1	432	0.19	84.23
138	15	Journal of Theoretical Biology	USA	English	1	433	0.19	84.42
139	15	Journal of the American Planning Association	USA	English	1	434	0.19	84.61
140	15	Journal of the American Medical Association	USA	English	1	435	0.19	84.80
141	15	Journal of Molecular Evolution	Germany	English	1	436	0.19	84.99
142	15	Journal of management information systems	USA	English	1	437	0.19	85.18
143	15	Journal of High Energy Physics	USA	English	1	438	0.19	85.37
144	15	Journal of Education for Library and Information Science	USA	English	1	439	0.19	85.56
145	15	Journal of Digital Libraries	UK	English	1	440	0.19	85.75
146	15	Journal of Computer-Mediated Communication	USA	English	1	441	0.19	85.94
147	15	Journal of Child Neurology	UK	English	1	442	0.19	86.13
148	15	Journal of business and finance librarianship	USA	English	1	443	0.19	86.32
149	15	Journal of Bacteriology	USA	English	1	444	0.19	86.51
150	15	Journal of Archival Organization	USA	English	1	445	0.19	86.70
151	15	IT Professional	UK	English	1	446	0.19	86.89

152	15	IT business Edge	USA	English	1	447	0.19	87.08
153	15	Issues in science and technology librarianship	USA	English	1	448	0.19	87.27
154	15	IRS interoperable repository statistics	UK	English	1	449	0.19	87.46
155	15	Inter-research ethics in science and environmental politics	Germany	English	1	450	0.19	87.65
156	15	Internet Reference Services Quarterly,	USA	English	1	451	0.19	87.84
157	15	International Journal on Digital Libraries	Netherlands	English	1	452	0.19	88.03
158	15	International Journal of Geographic Information Science	UK	English	1	453	0.19	88.22
159	15	International Economic Papers	UK	English	1	454	0.19	88.41
160	15	International Digital Library Perspectives	UK	English	1	455	0.19	88.60
161	15	Interest research	USA	English	1	456	0.19	88.79
162	15	Interactions	USA	English	1	457	0.19	88.98
163	15	INSPEL	Germany	German	1	458	0.19	89.17
164	15	Innovations in Education and Teaching International	UK	English	1	459	0.19	89.36
165	15	Information Searcher	USA	English	1	460	0.19	89.55
166	15	Information review	UK	English	1	461	0.19	89.74
167	15	Information Retrieval and Library Automation	USA	English	1	462	0.19	89.93
168	15	Information research: An International Electronic journal	Sweden	English	1	463	0.19	90.12
169	15	Information Communication & Society	USA	English	1	464	0.19	90.31
170	15	Infection and Immunity	USA	English	1	465	0.19	90.50
171	15	Illinois Libraries	USA	English	1	466	0.19	90.69
172	15	IFLS Journal	Netherlands	English	1	467	0.19	90.88
173	15	ICPSR Bulletin	USA	English	1	468	0.19	91.07
174	15	IBM Journal of Research and Development	USA	English	1	469	0.19	91.26
175	15	IASSIST Quarterly	UK	English	1	470	0.19	91.45
176	15	High Energy Physics Libraries Webzine	USA	English	1	471	0.19	91.64
177	15	Health Information and Libraries Journal	USA	English	1	472	0.19	91.83
178	15	Health Care Management Review	USA	English	1	473	0.19	92.02
179	15	GSLIS Alumni newsletter	USA	English	1	474	0.19	92.21
180	15	Government Information quarterly	USA	English	1	475	0.19	92.40
181	15	Expert Systems	USA	English	1	476	0.19	92.59
182	15	ETD-educacao tematica digital	Brazil	Portuguese	1	477	0.19	92.78
183	15	EMedia Professional	USA	English	1	478	0.19	92.97
184	15	Electronic Journal of Academic and Special Librarianship	Canada	English	1	479	0.19	93.16
185	15	Educause Quarterly	USA	English	1	480	0.19	93.35
186	15	Digital web magazine	USA	English	1	481	0.19	93.54
187	15	Current Opinion in Genetics & Development	USA	English	1	482	0.19	93.73
188	15	Computers in Physics	USA	English	1	483	0.19	93.92
189	15	Computers and Education	UK	English	1	484	0.19	94.11
190	15	Colorado Libraries	USA	English	1	485	0.19	94.30
191	15	Collection Building	UK	English	1	486	0.19	94.49
192	15	CNET news	Spain	English	1	487	0.19	94.68
193	15	CLIR report	USA	English	1	488	0.19	94.87
194	15	Campus-Wide Information Systems	UK	English	1	489	0.19	95.06
195	15	Business Week	USA	English	1	490	0.19	95.25
196	15	Bulletin of the Medical Library	USA	English	1	491	0.19	95.44

		Association						
197	15	British Journal of Educational Technology	USA	English	1	492	0.19	95.63
198	15	Boston Globe	USA	English	1	493	0.19	95.82
199	15	BMC Evolutionary Biology	UK	English	1	494	0.19	96.01
200	15	Black enterprise	USA	English	1	495	0.19	96.20
201	15	Biological Journal of the Linnean Society	USA	English	1	496	0.19	96.39
202	15	Belo Horizonte	India	English	1	497	0.19	96.58
203	15	Behavioral & Social Sciences Librarian	UK	English	1	498	0.19	96.77
204	15	Aslib	UK	English	1	499	0.19	96.96
205	15	Artificial Intelligence Review	Netherlands	English	1	500	0.19	97.15
206	15	Archivos de Bronconeumologia	Spain	Spain	1	501	0.19	97.34
207	15	Archival science	UK	English	1	502	0.19	97.53
208	15	Annual Review of Phytopathology	USA	English	1	503	0.19	97.72
209	15	Annual Review of Microbiology	USA	English	1	504	0.19	97.91
210	15	American Journal of Botany	USA	English	1	505	0.19	98.10
211	15	American Antiquity	USA	English	1	506	0.19	98.29
212	15	ALISS Quarterly	UK	English	1	507	0.19	98.48
213	15	Against the Grain	UK	English	1	508	0.19	98.67
214	15	Acta Anaesthesiologica Scandinavica	USA	English	1	509	0.19	98.86
215	15	Acquisitions and technical services	USA	English	1	510	0.19	99.05
216	15	ACM Transactions on Computer Systems	USA	English	1	511	0.19	99.24
217	15	ACM SIGSOFT software engineering notes	USA	English	1	512	0.19	99.43
218	15	Abbey newsletter	USA	English	1	513	0.19	99.62
219	15	ACM SIGOPS Operating Systems Review	USA	English	1	514	0.19	99.81
220	15	ACM Computing Surveys	USA	English	1	515	0.19	100.00
						515		100.00

**4.7 Bradford’s Law of Scattering and pattern of Journal use by Library and Information Scientists**

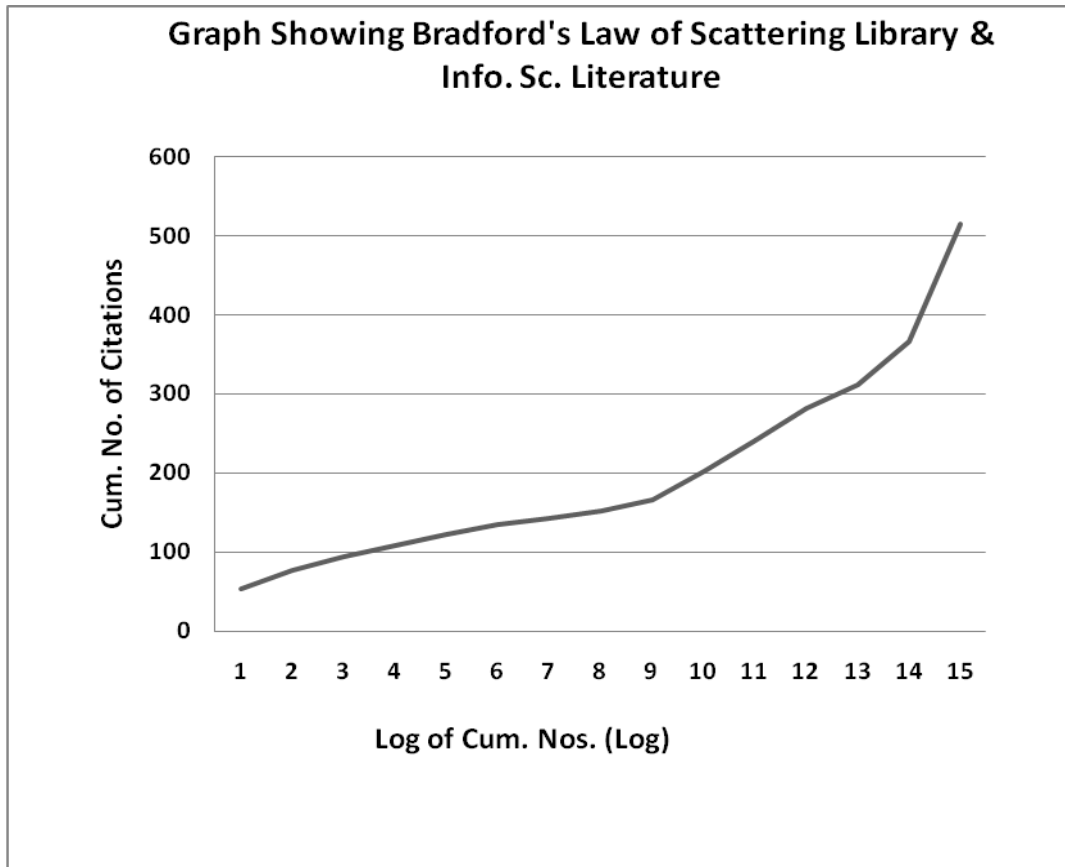
The graphical and verbal interpretation of Bradford’s Law of Scattering is being applied to the literature of the journal *OCLC Systems and Services*. Table 8 shows journals arranged in decreasing frequency of citations. To testify the applicability of Bradford’s Law of Scattering, a graph is plotted by taking the cumulative number of citations R(n) on the ordinate against the logarithm of cumulative journals log(n) on the abscissa. (Fig.1). It is observed that the resulting bibliography, initially starts with the rising as an exponential nature and then follows into a linear curve indicating the observance of Bradford’s Law of Scattering.

**Table 8**  
**Distribution of Cited Journals by Decreasing Frequency of Citation OCLC Systems and Services**

Cum. No. of Journals	Log of Cum. No.s log(n)	No. of Citations	Total No. of Citations	Cum. No. of Citations R(n)	% of Cum. No. of Citations	% of Cum. Journals
1	0	53	53	53	10.29	0.40
2	0.30	23	23	76	14.76	0.80
3	0.48	17	17	93	18.06	1.20
4	0.60	15	15	108	20.97	1.59
5	0.70	14	14	122	23.69	1.99
6	0.78	12	12	134	26.02	2.39
7	0.85	9	9	143	27.77	2.79
8	0.90	8	8	151	29.32	3.19
9	0.95	14	14	165	32.04	3.59
11	1.04	36	36	201	39.03	4.38



17	1.23	40	40	241	46.80	6.77
25	1.40	40	40	281	54.56	9.96
35	1.54	30	30	311	60.39	13.94
45	1.65	56	56	367	71.26	17.93
73	1.86	148	148	515	100.00	29.08
251	2.40	515	515			100.00



### V. CONCLUSION

Following are some of the important findings of the study:

- a) Periodical articles are the major sources of information;
- b) The publications in English language are used maximum;
- c) Maximum number of citations are the publications from USA(64.56%).
- d) Among cited journals the journal D-Lib Magazine occupies the first rank; and
- e) Sole research is favored than that of collaborative research in the field of Library and Information Science.

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