

# CITATION ANALYSIS OF MALAYSIAN JOURNAL OF LIBRARY AND INFORMATION SCIENCE - 1996-2012

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**Abstract** *This paper presents a Bibliometric techniques were used to analyze the citation analysis and authorship trend in contributions of "Malaysian Journal of Library and Information Science" during 1996 - 2012. More than 6770 bibliographic references appearing at end of the contributions in the MJLIS. A total of 279 contributions and 6779 citations were examined the present study. The year wise growth of publications, authorship pattern, number of citations per contribution, type of publications cited and preparing of ranked list of cited journals in contribution of this journal is studied. The study reveals that journals are the most cited publication amongst the library and information scientists and the source journal i.e. Scientrometrics is the most cited journal in the contributions of this journal.*

**Keyword:** *Bibliometrics, Citation Analysis, Malaysian Journal of Library and Information Science, Publication Analysis, Authorship Pattern, Degree of Collaboration, MJLIS*

## INTRODUCTION

Citation analysis is one of the important and quite old branches of Bibliometrics study given by Eugene Garfield. It examines the different frequencies, their patterns and graphs of citations given in articles, review papers, technical communication, theses and books. Citations are used in scholarly works to establish links to other works and researchers, which forms a part of primary scientific communication in a geographical proximity. Citation analysis is used as research evaluation tool mostly used in library and information science.

The Malaysian Journal of Library and Information Science (MJLIS) is an international online journal. It is a scholarly journal in English devoted to the various fields of Library and Information Science was first published bi-annually in 1996. Professor Dr. Mashkuri Yaacob, Dean of the Faculty of Computer Science and Information Technology, University of Malaya, who was the first Editor-In-Chief. It is currently being published beginning 2009 three times a year in April, August and December by the Department of Library and Information Science, Faculty of Computer Science and Information Technology, University of Malaya. The journal publishes original research articles in the field of Library and Information Science (LIS) as well related domains that encapsulate information and knowledge. It also encourages contribution about professional policies, practices, principles and progress in the LIS fields. The journal aims to provide a forum for communications amongst LIS professionals especially within the Asia Pacific region, to introduce new concepts, methodologies, systems and technology. Between 1996 and 2008 the journal was published both in print and electronic. From 2009 onwards

only the electronic version will be made available. The electronic version is available at, <http://ejum.fsktm.um.edu.my>. The journal is being indexed and abstracted by Social Science Citation Index (ISI), SCOPUS, LISA (Library and Information Science Abstracts), Library Literature, LISTA and Journal of Academic librarianship. Based on JCR 2011: Impact Factor 0.381, Ranked 60/82, Quartile 3 during the study period.

## LITERATURE REVIEW

Neeraj Kumar Singh, Jyoti Sharma and Navneet Kaur (2011) in their study of Citation analysis of Journal of Documentation from 1996-2010 found out a total of 487 papers published during the period with 15587 citations at an average of 32 citations per paper.<sup>1</sup> Rosy Jan (2009) identified 15662 references 13783 were p-citations and 1879 were e-citations. Also examined 44.51% print books were consulted by the authors and 0% e-books were accessed. Findings indicated that authors consulted 44.04% p-journals and 11.82% e-journals. It was found that female contribution (52.34%) accounted more than male contribution (47.66%).<sup>2</sup> Swain and Panda (2012) found that due to absolute domination of solo contributions, the visibility of collaborative contribution was found remarkably less. The study further revealed that about one third of the total publications received citations, more than half of the cited articles carried just one citation, one fourth got 2 citations, and the rest received citations between 3 to 9 times.<sup>3</sup>

Prsahant P. Deshmukh. (2011) analyzed 4141 citations appended to articles in volume 44 to 57 of Annals of Library and Information Studies shows that the source journal in the most cited. The half life of LIS literature is found to be 9

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years for journals and 14 years for books respectively. The core periodicals as per the 4141 citations have been listed according to the productivity.<sup>4</sup> Verma, Neerja, Tamrakar, Rajnish and Sharma Priyanka. (2007) analysis of 1456 citations includes finding out average number of citations per contribution, types of publications cited and preparing of ranked list of cited journals in contributions of this journal. The journals are the most cited publication amongst the library and information scientists and the source journal i.e. *Annals of Library and Information Studies* is the most cited journal in the contributions of this journal.<sup>5</sup>

Thavamani, K. (2013) analyzed the average number of citations per contribution, types of publications cited and preparing of ranked list of cited journals in contributions of this journal. This study also reveals that *Annals of Library and Information Studies* is the most preferred journal used by authors in their citation.<sup>6</sup> Singh, Har. (2013) analyzed the various bibliometric components of the articles published in the *Chinese Librarianship: an International Electronic Journal* between 2009 and 2012.<sup>7</sup> Hussain, Akhtar; & Fatima, Nishat. (2011) studied the *Chinese Librarianship: an International Electronic Journal* for the period of 2006-2010 has been conducted.<sup>8</sup> Vimala, V and Pulla Reddy, V (2009) traced authorship pattern and collaborative research in zoology with a sample of 19,323 journal citations figured in the theses on zoology accepted for the award of the doctoral degree by Sri Venkateswara University, Tirupati, India.<sup>9</sup>

Zafrunnisha, N. and Pulla Reddy, V (2009) studied authorship trend and collaborative researches are considered as an important facet of modern science. The paper presents a study of the authorship pattern and collaborative research in the field of Psychology.<sup>10</sup> Ramakrishnan. J and Thavamani, K, (2013) traced the literature output in the field of Hepatitis C in the *Journal Viz., Gastroenterology*. The literature covered in the journal for the period 2006 – 2010.<sup>11</sup> Amsaveni. N and Vasanthi. R (2013) traces the trend in authorship pattern and collaborative research in network security with a sample of 8051 articles downloaded from the database of web of knowledge during 2002 to 2011 (one decade) with 5343 LCS and 44721 TGCS measured.<sup>12</sup> Karisiddappa, C.R, Maheswarappa. B.S, and Shirol M.V. (1990) studied the authorship pattern and collaborative research in psychology, based on the data collected from 'Psychological Abstracts' for the year 1988.<sup>13</sup> Thavamani, K. and Velmurugan, C. (2013) studied the publication trends of scholarly papers in *Annals of Library and Information Studies* published from New Delhi. The Bibliometric analysis has been conducted with 310 contributions published in the journal during the year 2002-2012.<sup>14</sup>

## OBJECTIVES OF THE STUDY

To study year wise contribution of papers;

- To study the authorship pattern of papers;
- To identify the citations per paper in the journal;
- To trace type of publications cited,
- To prepare ranked list from journals cited in the contributions of the journal,

## METHODOLOGY AND DATA COLLECTION

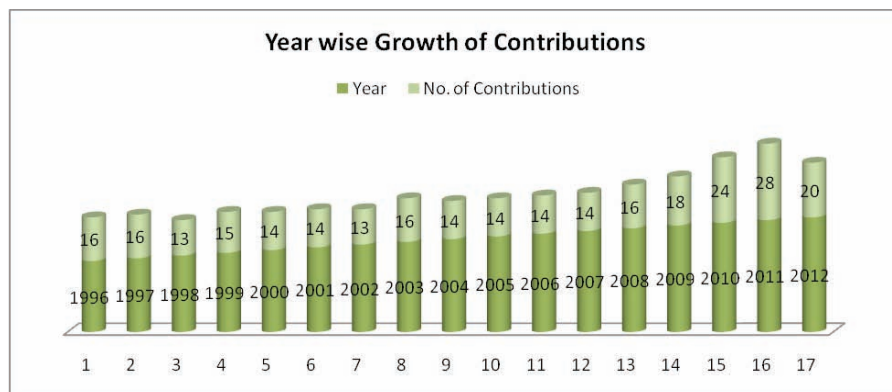
The data was collected from “Malaysian Journal of Library and Information Science” journal website (<http://ejum.fsktm.um.edu.my>) pertaining to period from 1996 - 2012. Thirty eight issues of seventeen volumes from 1996 - 2012 have been selected for the study (Vol.1 – 13 has 2 issues, Vol. 14 and onwards 3 issues per year). The journal has so far completed seventeen volumes. The study limited to 279 articles and 6779 citations published in last seventeen years. Citation analysis was used for this study. All bibliographic references appearing in articles published in the “Malaysian Journal of Library and Information Science” was examined. The data collected from the references includes type of materials like books, journals, web based sources, conferences, seminars, workshops, reports, newspapers, newsletters, thesis and reviews etc., And it used to create a ranked list of journals that had been cited in the articles of the “Malaysian Journal of Library and Information Science” from 1996-2012. These data were organized, calculated, tabulated, analyzed and presented by using simple arithmetic and statistical methods in order to arrive for its results.

## ANALYSIS AND FINDINGS

**Table 1. Year wise Distribution of Contributions**

Sl. No.	Year	No. of Contributions	Percentage (%)
1	1996	16	5.734
2	1997	16	5.734
3	1998	13	4.659
4	1999	15	5.376
5	2000	14	5.017
6	2001	14	5.017
7	2002	13	4.659
8	2003	16	5.734
9	2004	14	5.017
10	2005	14	5.017
11	2006	14	5.017
12	2007	14	5.017
13	2008	16	5.734
14	2009	18	6.451
15	2010	24	8.602
16	2011	28	10.035
17	2012	20	7.168
	Total	279	100.00

**Figure 1. Year wise Growth of Records**



The table and figure 1 shows the year-wise distribution of contributions. The highest number of contributions i.e., 28 (10.035 %) were published in the year 2011. The minimum number of 13 (4.659 %) was published in the years 1998 and 2002.

**Table 2. Authorship Pattern of Contributions**

Sl. No.	Author	Total	Percentage (%)
1	Single Author	99	35.483
2	Double Authors	110	39.426
3	Three Authors	47	16.845
4	Four Authors	15	5.376
5	Five Authors	3	1.075
6	Seven Authors	2	0.716
7	Eight Authors	1	0.358
8	Nine Authors	2	0.716
Total		279	100.00

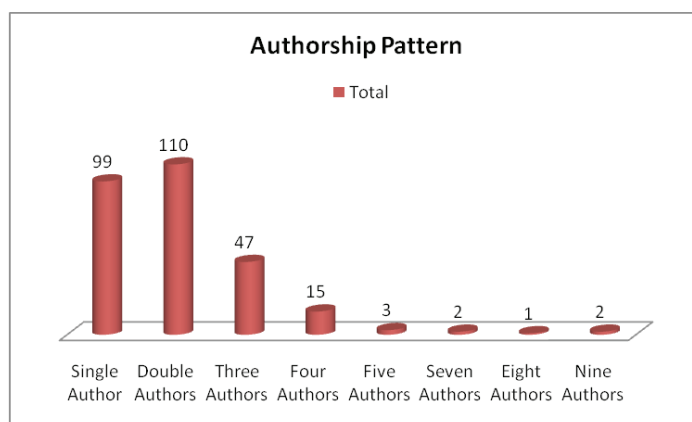
Authorship pattern of total cited documents a total number of 6779 citations were analyzed to determine the authorship pattern of cited documents by LIS researchers. Table 2 reveals that the majority 110 (39.426%) of double-authors work. This is followed by (99) 35.483% works authored by single authored, 47 (16.845%) by three authors, 15 (5.376%) by four authors, 3 (1.075%) by five authors, 2 (0.716%), by seven authors 1 (0.358) by eight authors and 2 (0.716%) contributed by nine authors. The authorship pattern in this study indicates that multi authored papers are most dominant in the Malaysian Journal of Library and Information Science.

**Degree of Collaboration**

To determine Degree of Collaboration in quantitative terms, the formula given by K. Subramanyam (1983)<sup>15</sup> was used, in the Malaysian Journal of Library and Information Science.

The formula is Where	C =	NM
C = Degree of collaboration		NM + NS
NM = Number of multi authored papers NS = Number of single authored papers		

**Figure 2. Authorship Pattern wise Distributions**



	C =	180 180+99=279
In the present study the average value of C is	C =	0.645

As a result, the Degree of Collaboration in the Malaysian Journal of Library and Information Science journal is 0.645, which clearly indicates its dominance upon multiple authored contributions.

**Table 3. Citation wise Contributions**

Sl. No.	No. of Citations Used	Total	Percentage (%)
1	Nil	2	0.716
2	1 – 10	72	25.806
3	11 – 20	84	30.107
4	21 – 30	61	21.863
5	31 – 40	27	9.677
6	41 – 50	11	3.942
7	51 – 60	8	2.867
8	61 – 70	3	1.075
9	71 – 80	2	0.716
10	81 – 90	3	1.075
11	91 – 100	3	1.075
12	191 – 200	1	0.358
13	201 – 210	1	0.358
14	211 – 220	1	0.358
Total		279	100.00

The table 3 reveals that the details about number of citations appearing at the end of contributions during 1996 - 2012. Two contributions have no citation. The highest number of

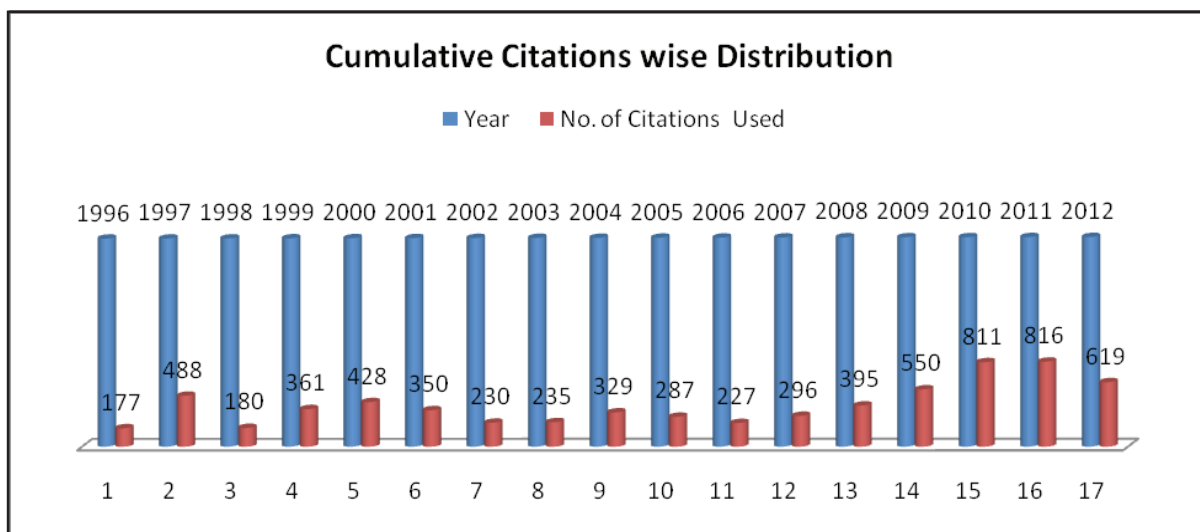
contribution with citations of 11 - 20 i.e., 84 (30.107%) and lowest number of contributions with citation of 191 - 200, 201 - 210 and 211 - 220 i.e. 1 (0.358%).

**Table 4. Time wise Cumulative Citations**

Sl. No.	Year	No. of Contributions	No. of Citations Used	Percentage (%)
1	1996	16	177	2.611
2	1997	16	488	7.198
3	1998	13	180	2.655
4	1999	15	361	5.325
5	2000	14	428	6.313
6	2001	14	350	5.163
7	2002	13	230	3.392
8	2003	16	235	3.466
9	2004	14	329	4.853
10	2005	14	287	4.233
11	2006	14	227	3.348
12	2007	14	296	4.366
13	2008	16	395	5.826
14	2009	18	550	8.113
15	2010	24	811	11.963
16	2011	28	816	12.037
17	2012	20	619	9.131
Total	17 Years	279 Contributions	6779 Citations	100.00

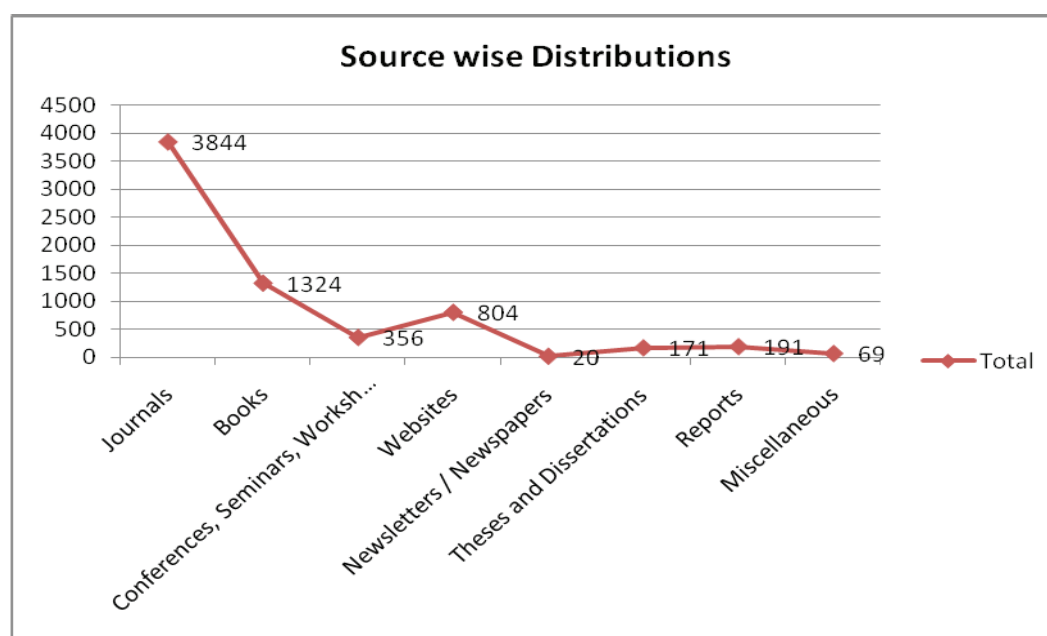
Table 4 and figure 3 show citation wise contribution of papers, which shows the number of citations, have been increased from 1996 - 2012. Out of 6779 citations, vol. 16 has the highest number of contributors i.e., 28 are cited in 816 (12.037%) citations in the year 2011. The second highest number of authors i.e., 24 are cited 811 (11.963) citations in the year 2010. The minimum number of contributors i.e., 16 used 177 (2.611%) citations in the year 1996.

**Figure 3. Citation wise Distribution of Records**



**Table 5. Source wise Distributions**

Sl. No.	Source	Total	Percentage (%)	Cumulative	Percentage (%)
1	Journals	3844	56.704	3844	56.704
2	Books	1324	19.575	5168	76.235
3	Conferences, Seminars, Workshops and Proceedings	356	5.251	5524	81.486
4	Websites	804	11.860	6328	93.347
5	Newsletters / Newspapers	20	0.295	6348	93.642
6	Theses and Dissertations	171	2.522	6519	96.164
7	Reports	191	2.817	6710	98.982
8	Miscellaneous	69	1.003	6779	100.00
	Total	6779	100.00		

**Figure 5. Forms wise Distribution of Record****Table 6. Ranked with Cited Journals wise Distribution**

Sl. No.	Journals	Rank	No. of Citations	Percentage (%)	Cumulative	Percentage (%)
1	Scientometrics	1	333	8.662	333	8.662
2	Malaysian Journal of Library and Information Science	2	168	4.370	501	13.033
3	Journal of the American Society for Information Science	3	119	3.095	620	16.129
4	College and Research Libraries	4	106	2.757	726	18.886
5	Information Processing and Management	5	77	2.003	803	20.889
6	Annals of Library and Information Studies	6	75	1.951	878	22.840
7	Journal of the Malayan Branch of the Royal Asiatic Society	7	71	1.847	949	24.687

8	Journal of Information Science	8	68	1.768	1017	26.456
9	Library and Information Science Research	8	68	1.768	1085	28.225
10	Journal of Documentation	9	57	1.482	1142	29.708
11	Journal of Academic Librarianship	10	55	1.430	1197	31.139
12	Library Review	11	47	1.222	1244	32.362
13	Library Quarterly	12	43	1.118	1287	33.480
14	Library Trends	13	42	1.092	1329	34.573
15	Journal of the American Society for Information Science and Technology	14	40	1.040	1369	35.613
16	IASLIC Bulletin	15	37	0.962	1406	36.576
17	Science	16	32	0.832	1438	37.408
18	Library Management	17	29	0.754	1467	38.163
19	Bulletin of the Medical Library Association	18	27	0.702	1494	38.865
20	ASLIB Proceeding	19	24	0.624	1518	39.490
21	Research Policy	19	24	0.624	1542	40.114
22	The Electronic Library	19	24	0.624	1566	40.738
23	American Sociological Review	20	23	0.958	1589	41.337
24	Reference Service Review	20	23	0.598	1612	41.935
25	MIS Quarterly	21	22	0.572	1634	42.507
26	Journal of Marketing	22	21	0.546	1655	43.054
27	Library Science with a Slant to Documentation and Information Studies	22	21	0.546	1676	43.600
28	Libri	22	21	0.546	1697	44.146
29	Higher Education	23	19	0.494	1716	44.640
30	Malayan Law Journal	23	19	0.494	1735	45.135
31	Journal of Education for Library and Information Science	24	18	0.468	1753	45.603
32	Journal of Retailing	24	18	0.468	1771	46.071
33	Annals of Japan Society of Library Science	25	17	0.442	1788	46.514
34	Information Technologies and Libraries	26	16	0.416	1804	46.930
35	Performance Measurement and Metrics	26	16	0.416	1820	47.346
36	Social Studies of Science	26	16	0.416	1836	47.762
37	Journal of the Medical Library Association	26	16	0.286	1852	48.178
38	African Journal of Library Archives and Information Sciences	27	15	0.390	1867	48.569
39	Journal of Applied Psychology	27	15	0.390	1882	48.959
40	Journal of Informetrics	27	15	0.390	1897	49.349
41	Journal of Library Administration	27	15	0.390	1912	49.739
42	Online Information Review	27	15	0.390	1927	50.130
43	Collection Management	28	14	0.364	1941	50.494
44	DESIDOC Bulletin of Information Technology	28	14	0.364	1955	50.858
45	Information and Management	28	14	0.364	1969	51.222
46	Program: Electronic Library and Information System	28	14	0.364	1983	51.586
47	SRELS Journal of Information Management	28	14	0.364	1997	51.951
48	Annual Review of Information Science and Technology	29	13	0.338	2010	52.289
49	Collection Building	29	13	0.338	2023	52.627

50	Current Science	29	13	0.338	2036	52.965
51	Education for Information	29	13	0.338	2049	53.303
52	Journal of Higher Education	29	13	0.338	2062	53.642
53	New Library World	29	13	0.338	2075	53.980
54	Research Evaluation	29	13	0.338	2088	54.318
55	Research in Higher Education	29	13	0.338	2101	54.656
56	Sociology of Education	29	13	0.338	2114	54.994
57	IFLA Journal	30	12	0.312	2126	55.306
58	ILA Bulletin	30	12	0.312	2138	55.619
59	Journal of Library and Information Science (India)	30	12	0.312	2150	55.931
60	Journal of Personality and Social Psychology	30	12	0.312	2162	56.243
61	Proceedings of the National Academy of Sciences of the United States of America	30	12	0.312	2174	56.555
62	American Journal of Roentgenology	31	11	0.286	2185	56.841
63	Communication of the ACM	31	11	0.286	2196	57.127
64	Journal of the Washington Academy of Science	31	11	0.286	2207	57.414
65	Australian Academic and Research Libraries	32	10	0.260	2217	57.674
66	Information Development	32	10	0.260	2227	57.934
67	Internet Research: Electronic Networking Application and Policy	32	10	0.260	2237	58.194
68	Journal of Business Research	32	10	0.260	2247	58.457
69	Library Hi Tech	32	10	0.260	2257	58.714
70	Library Resources and Technical Services	32	10	0.260	2267	58.975
71	Personality and Individual Differences	32	10	0.260	2277	59.235
72	American Journal of Sociology	33	9	0.234	2286	59.469
73	American Psychologist	33	9	0.234	2295	59.703
74	Nauchno Tekhniches-kaya Informatsiya Series	33	9	0.234	2304	59.937
75	Science and Technical Libraries	33	9	0.234	2313	60.171
76	Academy of Management Journal	34	8	0.208	2321	60.379
77	Administrative Science Quarterly	34	8	0.208	2329	60.587
78	Asian Libraries	34	8	0.208	2337	60.796
79	Indian Journal of Information Library and Society	34	8	0.208	2345	61.004
80	Information Systems Research	34	8	0.208	2353	61.212
81	Library Acquisition: Practice and Theory	34	8	0.208	2361	61.420
82	Library Collections, Acquisitions, and Technical Services	34	8	0.208	2369	61.628
83	Nature	34	8	0.208	2377	61.836
84	Online	34	8	0.208	2385	62.044
85	Psychological Bulletin	34	8	0.208	2393	62.252
86	Research Strategies	34	8	0.208	2401	62.460
87	The Reference Librarian	34	8	0.208	2409	62.669
88	IEEE Transactions on Engineering Management	35	7	0.182	2416	62.851
89	IEEE Transactions on Reliability	35	7	0.182	2423	63.033
90	Journal of Librarianship and Information Science	35	7	0.182	2430	63.215
91	Managing Information	35	7	0.182	2437	63.397
92	School Library Media Quarterly	35	7	0.182	2444	63.579

93	Serials Librarian	35	7	0.182	2451	63.761
94	Behavior and Information Technology	36	6	0.156	2457	63.917
95	Cataloging and Classification Quarterly	36	6	0.156	2463	64.073
96	Computers and Education	36	6	0.156	2469	64.229
97	Computers in Human Behavior	36	6	0.156	2475	64.386
98	Information Services and Use	36	6	0.156	2481	64.542
99	Information Today and Tomorrow	36	6	0.156	2487	64.698
100	International Information and Library Review	36	6	0.156	2493	64.854
101	Internet Research	36	6	0.156	2499	65.010
102	Journal of Educational Media and Library Resources	36	6	0.156	2505	65.166
103	Journal of Marketing Research	36	6	0.156	2511	65.322
104	Library Journal	36	6	0.156	2517	65.478
105	Management Science	36	6	0.156	2523	65.634
106	PC Magazine (Chinese Edition)	36	6	0.156	2529	65.790
107	RQ	36	6	0.156	2535	65.946
108	Strategic Management Journal	36	6	0.156	2541	66.103
109	Advances in Consumer Research	37	5	0.130	2546	66.233
110	CLIS Observer	37	5	0.130	2551	66.363
111	Communication Research	37	5	0.130	2556	66.493
112	Economics of Education Review	37	5	0.130	2561	66.623
113	Health Information and Libraries Journal	37	5	0.130	2566	66.753
114	Herald of Library Science	37	5	0.130	2571	66.883
115	Information Research	37	5	0.130	2576	67.135
116	International Forum on Information and Documentation	37	5	0.130	2581	67.143
117	Journal of Research on Computer in Education	37	5	0.130	2586	67.273
118	KELPRO Bulletin	37	5	0.130	2591	67.403
119	Library Association Record	37	5	0.130	2596	67.533
120	Library Software Review	37	5	0.130	2601	67.663
121	Malayan Library Journal	37	5	0.130	2606	67.793
122	Managing Service Quality	37	5	0.130	2611	67.924
123	Portal: Libraries and Academy	37	5	0.130	2616	68.054
124	Serials Review	37	5	0.130	2621	68.184
125	Special Libraries	37	5	0.130	2626	68.314
126	University News	37	5	0.130	2631	68.444
127	547 Title with Single Citations	38	547	14.229	3178	82.674
128	141 Titles with Double Citations	39	282	7.336	3460	90.010
129	68 Titles with Three Citations	40	204	5.306	3664	95.317
130	45 Title with Four Citations	41	180	4.682	3844	100.00
	Total		3844	100.00	3844	100.00

The entire 6779 citations were identified based on bibliographic form in the table and figure 5 shows the distributions of the cited document based on eight identified bibliographic forms. It is revealed that journals, books and electronics media are the most used literature in Malaysian Journal of Library and Information Science in the last

seventeen years. These three formats of information resources make up almost 74.650% of the total citations. Most of the citations 3844 (56.704%) are of journal articles, followed by books 1324 (19.575%), electronic media i.e. web based sources 804 (11.860%), conferences, seminars, workshops and proceedings, 356 (5.251%), newsletter/newspaper 20

(0.295%), theses and dissertations 171 (2.522%), reports 191 (2.817%), and miscellaneous 69 (1.003%).

Above table 6 shows the journal citation wise distribution of contributions. There are 126 titles of journals in arranged according to their ranks. Scientometrics occupied first rank with 333 citations (8.662%), second rank occupied by Malaysian Journal of Library and Information Science with 168 citations (4.370%). This is followed by Journal of the American Society for Information Science with 119 citations (3.095%).

## CONCLUSION

The present study has analyzed research contributions of the past seventeen years during 1996 - 2012. The analysis shows that the highest number of contributions i.e., 28 (10.035%) were published in the year 2011. Majority of the contributions in the journal is multi authors. The highest number of citations appeared in vol. 16 i.e., 816 (12.037%). Out of 6779 citations, 3844 (56.704%) are the journal citations. Study of citations showed that the Scientometrics occupied first rank with 333 citations (8.662%) received the highest number of citations, followed by Malaysian Journal of Library and Information Science with 168 citations (4.370%). The authorship pattern reveals a remarkable difference between the number of single author and multiple authors. The study concludes that multiple-authorship research is predominant as compare to single authored contributions in case of Malaysian Journal of Library and Information Science. Journals are the most cited sources of the study.

## REFERENCES

- Singh, N. K., Sharma, J., & Kaur, N. (2011). Citation analysis of Journal of Documentation. *Webology*, 8(1). Retrieved from <http://www.webology.org/2011/v8n1/a86.html>
- Jan, R. (2009). Citation Analysis of Library Trends. *Webology*, 6(1). Retrieved from <http://www.webology.org/2009/v6n1/a67.html>
- Swain, D. K., & Panda, K. C. (2012). Journal of Intellectual Property Rights, 2002-2010: A Bibliometric Study. *Chinese Librarianship: An International Electronic Journal*, 33 (1). Retrieved from <http://www.iclc.us/cliej/cl133SP.pdf>
- Deshmukh, P. P. (2011). *Citation analysis of annals of library and information studies during 1997 to 2010: A study*, 58(4), 355-361.
- Verma, N., Tamrakar, R., & Sharma, P. (2007). Analysis of contributions in Annals of Library and Information Studies. *Annals of Library and Information Studies*, 54(2), 106-111.
- Thavamani, K. (2013) Citation analysis of annals of library and information studies: During 2002-2012. *IALA Journal*, 1(2).
- Singh, H. (2013). A bibliometric analysis of the Chinese Librarianship: an International Electronic Journal, 2009-2012. *Chinese Librarianship: An International Electronic Journal*, 35. Retrieved from <http://www.iclc.us/cliej/cl35singh.pdf>.
- Hussain, A., & Fatima, N. (2011). A bibliometric analysis of the 'Chinese Librarianship: an International Electronic Journal, (2006-2010). *Chinese Librarianship: an International Electronic Journal*, 31. Retrieved from <http://www.iclc.us/cliej/cl31HF.pdf>.
- Vimala, V., & Reddy, V. P. (2009). Authorship pattern and collaborative research in the field of zoology. *Malaysian Journal of Library & Information Science*, 1(2), December, 43-50.
- Zafrunnisha, N., & Reddy, V. P. (2009). Authorship pattern and degree of collaboration in psychology. *Annals of Library and Information Studies*, 17(1), 255-261.
- Ramakrishnan, J., & Thavamani, K. (2013). Growth of literature in the field of Hepatitis-C. *Library philosophy and Practice*.
- Amsaveni, N., & Vasanthi, R. (2013). Authorship Pattern and collaborative research in the field of network security. *Indian Journal of Applied Research*, 3(1), 52-54.
- Karisiddappa, C. R., Maheswarappa, B. S., & Shirol M. V. (1990). Authorship pattern and collaborative research in psychology. *IASLIC Bulletin*, 35(2), 73-78.
- Thavamani, K., & Velmurugan, C. (2013). Authorship Pattern and collaborative research work in Annals of Library and Information Studies, Proceedings of the National Conference on Next Generation Library Services, SALIS 2013 – NGLIS August 16-17, 2013, Chennai.
- Subramanyam, K. (1982). Bibliometric study of research collaboration: A review. *Journal of Information Science*, 6, 33-38.
- Webology. Retrieved from <http://www.webology.org/about.html>