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The Death of Review Articles in Humanities: A Case Study on World LIS Journals

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Abstract

This study reveals the current status of articles published in Library and Information Science (LIS) journals. Using the citation site "Scopus", the number of published articles in 32 LIS journals were extracted, illustrated, and analyzed.

Approximately 50.31 documents per year have been published in noted journals during 2007-2011. About 6 percent of these documents are devoted to review articles.

The findings also show Springer LIS journals has the 1st rank of publishing scholarly documents per year (mean=63.84 documents), and the 1st rank of impact factor (Mean=1.9) among studied groups. American LIS publications showed the best rank in publishing review articles (%11.34 of all published documents) and also in Scimago Journal Rank (SJR) (mean=0.63). ScienceDirect LIS journals was in 1st rank of H-Index scores (Mean=24).

In addition, the number of published documents in LIS journals has a positive significant relationship with SJR (R=0.45), IF (R=0.39), and H-Index (R=0.80). In addition, there is a positive significance between SJR and H-Index (R=0.46). Finally, some suggestions have been made to improve the current status of review articles publishing.

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Keywords: review Article; research article, death, Scientometrics; library and information science journals; publishing groups; Scopus

Introduction

The study of scientific publications in various scientific fields has long been of interest to researchers. Scholarly journals are among the important building blocks of scholarly publications. These journals have been in existence for over 340 years (Solomon 2007) and publish different types of articles including reviews, research, short communications, letters, etc. Before a new manuscript can be included in the body of knowledge of a discipline, it should be assessed by reviewers, and synthesized in the discipline.

The time limitation of individuals and the required skills for seeking of all previously published information are two important issues which impact the use of prior information. Review articles were shaped in order to solve these problems (Oxman et al. 1991).

The importance of the review article in science was a major discovery of Eugene Garfield. He stated that "One could, without too much exaggeration, say of review articles what Mark Twain is supposed to have said about the weather—everybody talks about it, but nobody does anything about it" (Garfield 1974, p. 170). In Garfield's theory (1987), the review article is intimately correlated with the impact factor (IF). By examining ISI's *Science Citation Index (SCI)*, he showed the ratio of review articles to total items in the index. Of the 625,432 articles indexed in the 1986 SCI, for example, approximately 30,000, or about 5 percent, were review articles. In addition, he considered the high impact factor of review journals. He believed "while not all reviews are highly cited, the relatively high impact of review journals is well known" (Garfield 1987).

Review articles are important sources of information (Roberts et al. 2006). A review article can be defined as an effort of one or more author(s) in a scientific field to bring together the building blocks, strengths, and weakness of that field. In fact, the author or authors search related materials, and then classify their findings so that they reveal an integrated and coherent view of the state of the considered scientific field. Review articles address those aspects of hands-on research which have been previously discussed, or presented in the results of pioneers. As new facts are presented, their relation to old ones should be pointed out (Chalmers et al. 2002; Egger et al. 2003). Review articles provide the opportunity for the current researcher to cite the pioneers' relevant research works (Kumar 2009).

Scopus database declare that Reviews typically have an extensive bibliography. Educational items that review specific issues within the literature are also considered to be Reviews. As non-original articles, Reviews lack the most characteristic sections of original articles, i.e. materials & methods and results (Scopus 2013). In Journal Citation Report (JCR) system, an item is classified as a review article if it meets any of the following criteria: a) it cites more than 100 references; b) it appears in a review

publication or a review section of a journal; c) the word review or overview appears in its title; and d) the abstract states that it is a review or survey (Web of Knowledge 2013).

Some scholars claim that review articles and literature reviews have close or the same function. Literature review is a "bridge" between hands-on research and relevant previous studies. Roberts et al. (2006) believes that the literature review (or the review article) is an established feature of many scientific journals, across a wide diversity of disciplines.

Arnquist and Wooster (1995) have considered the role of reviews in the analysis of different collection of studies, and the synthesis of individual data sets.

However, the majority of scholars have shown the importance of good reviews as valuable products (Roberts et al. 2006; Arnquist and Wooster 1995). Review articles can act as efficient tools to assist in knowledge transfer and scholarly communication, raising awareness of research findings (CRD 2001).

The present study deals with the study of publication rate of review articles in international LIS journals. Furthermore, the contribution of each journal in publishing review articles is mapped.

Problem Statement

Review articles can be considered an important tool in scientific communication, because these articles represent the thoughts and analyses of professionals about recent developments in their field. Review articles are very information-rich, because they provide, describe, and analyze the results of recent and previous studies. Each part of the current research must be linked with previous research, so that we achieve the goal of a scientific communication system. But, the value of a review (article) does not exist solely in the author's synthesis of previously published material (Garfield 1974, p. 171).

Given the importance of review articles previously mentioned (Oxman et al. 1991; Oxman and Guyatt 1991; Roberts et al. 2006), relatively few studies have considered the precise study of published review articles in different fields (for example, chemistry, physics, humanities, etc.). Many studies have been done with meta-analysis of articles, for example, the studies which are conducted using citation analysis and content analysis. These studies have considered the total number of published articles in a journal or subject field, published research articles in a field, highly cited authors, highly productive journals, and the analysis of collaboration network of authors (co-authorships) in a discipline, but little effort has been made to analyze the rate and share of review articles in different contexts of science.

The investigation and meta-analysis of review articles in scientific publications can reveal the status of review articles in the body of knowledge of scientific fields, and can identify the share of review articles in comparison with other papers. Regarding the importance of review articles in a particular field, we can

estimate the future scenario of review article publication in a discipline and recognize its influencing factors and barriers.

However, this study examines review articles in Library and Information Science (LIS) journals and has several important aspects:

- 1. A relatively large number of LIS journals are published worldwide, and their results are available to researchers in print and electronic form. Often authors of scientific manuscripts are faced with the question about whether the Journal will publish their manuscripts or not. Many authors, during the peer review process, are faced with statements such as "Your valuable article is not in the scope of this journal" or "This journal does not publish review articles". Perhaps the results of this study will help authors choose the proper journal for their review articles.
- 2. Since few studies have analyzed the publication and the comparative share of review articles in LIS journals, this study may be a new approach in analysis of scholarly journals in this field.
- 3. The clarification of the ratio of published review articles in LIS scientific journals can lead to the good understanding of the publishing system of these articles.

Therefore, in this study using data gathered from 32 international journals in Library and Information Science, the following questions will be answered:

- Q1: What is the publication rate of documents and review articles in LIS journals?
- Q2: Which LIS journals publish more review articles?
- Q3: Is there any significant relationships between the number of published documents, the number of published review articles, impact factor (IF), Scimago Journal Rank and H-Index score of surveyed LIS journals?

Q4: Is there any difference between publishing behaviors of studied publishing groups?

Literature Review

Many researchers have examined scientific journals in general (e.g. Bergstrom 2007). Some of them studied the journals of a specific field (e.g. Wilkinson 1999), and some researchers have studied the LIS journals with different approaches (e.g. Tsay 2008; Hawkins 2001). Table 1 summarizes the results of previous studies on LIS journals.

As we see in Table 1, the previous researchers considered the share of review articles in LIS journals, including JASIST (%1.26), Journal of Documentation (%14), Pakistan Journal of Library and Information Science (%6.31), The Electronic Library (%40.83), Persian Library and Information Science Journal (%63), Malaysian Journal of Library and Information Science (%22.37), and Persian Library and Information Science Journal (%63).

Furthermore, the Table shows a significant increase in the number of published articles in LIS journals year by year. In addition, the LIS journals published more research articles than reviews. As we see from these previous studies (Table 1), the ISI journals have published a low percentage of reviews (3% of total).

	Table 1. Literature Revi	ew on Content Analysis of Scholarly Journals
Author(s)	Research Title	Findings / Considerations
(Year)		
Garfield (1987)	The Place of Reviews in the Scientific Literature	The share of review articles in science is about 5 percent of total published articles in ISI. Review journals are (often) highly cited, and have high impact factor. A ranking of journals by impact factor in the 1985 <i>Journal Citation Report (JCR)</i> demonstrates that 30 of the top 50 journals are review serials.
Kianmehr (2007)	Citation analysis of published articles in Iranian LIS journals (1996-2003)	The published articles in five Persian LIS journals were analyzed. Book Quarterly (فصلنامه كتاب with 235 articles) with 235 articles (%35.66 of total) was in the first rank; and The Message of Library Journal (پیام کتابخانه) with 129 articles (%21.09 of total); Library and Information Science (سانی آستان) with 106 articles (%16.08 of total); and Information Science Quarterly (فصلنامه اطلاعرسانی) with 104 articles (%15.78 of total); and Library Letter (فصلنامه اطلاعرسانی) with 75 articles (%11.8 of total) were in the next ranks. The average citation per paper in surveyed journals was 10.73. The highest citation rate was belonged to books (with 48.43 percent); and 54.65 percent of citations were to Persian sources.

Abdolmajid (2008)	The study of original articles in LIS fields in Persian humanities journals	The Rahyaft journal (مجله رهيافت) (with 28 articles) had the highest number of published original articles in Iranian LIS journals. Psychology and Education Journal (روانشناسی و علوم) (with 14 published articles) and Ahwaz Psychology and Education Journal (تربيتی اهواز) (with 10 published articles) were in the next ranks. In general, 110.6 original articles were published annually in Iranian LIS journals, and Book Quarterly (فصلنامه کتاب) was in
		the first rank of original articles production (38.88 percentage of total).
Ardalan- Eftekhari and Cheshme-	Qualitative and quantitative evaluation of Library and Information Science	During this study, a total number of 339 articles of 39 issues of Library and Information Science Journal (Ketabdari va ettela'resani) were surveyed.
Sohrabi (2010)	Journal (1998-2007)	LIS published 47 articles in 2007 (The highest publication rate), and 37 articles in 2006 (among the best years); and 20 articles in 1998 (The lowest publication rate). This journal has published 8.69 articles in each issue. From winter 2007 up now, at least 12 articles have been published in each issue of noted journal. In general, the publication rate of this journal is ascending.
Gazni and Binesh (2009)	Content Analysis of Top Scholarly Journals of World	This article reviewed the current state of world scientific periodicals. Thus, 6088 periodicals of JCR 2005 (which belongs to ISI) were analyzed. Findings showed the low rate of review articles (3% of total published articles) in these journals. 71 percent of published articles in there journals were research articles.
Mohammadi and Dadgar (2007)	Citation analysis of published articles in Library and Information Science Journal (1997- 2005)	The average publication rate of LIS journals was 7.3 articles per issue. Of 219 published articles in this journal during 1997 to 2005, 165 articles (75.3 %) were original articles, and 54 articles (24.7 %) were translated articles (from English to Persian). Of 165 original articles, 104 articles (63%) were theoretical (review) articles, and 61 articles (37%) were Survey articles.

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Katuzian (1998)	The study of Persian LIS journals during 1978 to 1993	The article reviewed published papers in Persian LIS journals during 1978 to 1993. The findings showed that 147 Persian LIS journals had published 942 articles (6.5 articles for each journal). From 1989 to 1993, the number of articles per issue in these journals was frequently increasing. The original papers were about 3 times of translations (translated articles which were published in noted journals).
Mahapatra (1994)	Indian Library and Information Science Journals: A Bibliometric Analysis of the Rate of Citations and Their Characteristics	The citation analysis of 1456 articles published in Indian LIS journals during 1975 to 1985 showed that the average citation rate to articles is very low in these journals but the overall article publication in them is increasing year by year.
Hussain et al. (2011)	analysis of the 'Electronic Library' journal	The study of 578 published research articles (during 2000 to 2010) in The Electronic Library (TEL) journal showed an annual increased rate of article publication in this journal. In addition, research articles was the superior type of published articles in this journal (with 40.83 percent); case studies was in the next stage (with 23.01 percent), and the review articles (with 3.81 percent) was the other type of published articles in this journal.
Warraich et al. (2011)	Pakistan Journal of Library and Information Science: A bibliometric analysis	A study of 111 documents which were published in 11 issues during 1995 to 2010 in Pakistan Journal of Library and Information Science showed that 6.31 percent of all published articles in this journal were review articles, which is very low. Research article has the share of 54 percent of all published articles in this journal.
Bakri and Willett (2008)	The Malaysian Journal Of Library And Information Science 2001-2006: a bibliometric study	From 85 published articles in Malaysian Journal of Library and Information Science, during 2001-2006, just 2 review articles were observed.
Tiew et al. (2002)	Malaysian Journal of Library and Information Science 1996-2000: A	A study on Malaysian Journal of Library and Information Science showed nearly 22.37 Percent for the publication of review articles, during 1996-2000.

	bibliometric study						
Singh et al.	Citation analysis of Ar	analysis of 413 published articles in Journal of					
(2011)	Journal of Do	cumentation during 1996 to 2010 showed that the share of					
	Documentation re	review articles was 14 percent; and the share of research					
	pa	pers was 85 percent, which is very interesting.					
Mukherjee	Journal of the American Ar	An investigation of JASIST showed that just 17 articles (1.26					
(2009)	Society for Information pe	rcent) of 1345 published documents during 2000 to 2007					
	Science and Technology is	allocated to review articles.					
	(2000-2007): A						
	bibliometric study						

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Methodology

In order to gather the required data for this research, the database "Emerald" was searched, and using the classification "Library and Information Studies" 15 journals were identified of which 10 journals were randomly selected, because of data analysis limitation in Scopus.

In Elsevier databases, the previous process was repeated. Using the categorization provided by this database, under "library and information science program", 14 titles were identified, of which 10 titles were randomly selected, too.

In the Springer database, there were 5 journals in LIS field, all of which were selected and their data extracted.

In order to study the American publications in the LIS field, we used "Scopus" to identify the ALA journals which serve as a standard for the field, and 5 titles were identified. In addition, 2 American

journals entitled "Journal of American Society for Information Science and Technology" and "Library Trends" were added to this section to have a better understanding of American publishing behaviors.

Using the citation site "Scopus", the needed data concerning the number of published articles in these journals were extracted and analyzed. At this stage, the journals of each database were independently analyzed.

Findings

In this section, the findings of research are described based on the research questions. We start with the rate of article publishing in library and information science (LIS), then, we explore the percent of review articles out of the total number of articles published, and finally we show the statistical correlation test to explore the relationships.

The publication rate of LIS journals: the status of review articles

The total number of published articles, percentage of published review articles (of total), journal impact factors (IF) and H Index, and Scimago Journal Rank (SJR) are shown in table 2.

From Table 2 we see, the JASIST, Scientometrics, and IP&M have published (on average) the highest number of documents in LIS field, with 203, 190, and 92 documents in a year. Interlending & Document Supply (with %25.81), OCLC Systems & Services (with %20.18), and Reference and User Services Quarterly (with %20) have published the highest percentage of review articles per year.

Among LIS journals, the highest SJR belongs to JASIST (1.51), Reference and User Services Quarterly (0.81), and Information Technology and Libraries (0.65). The highest H-Index of LIS journals belongs to JASIST (68), IP&M (51), and Scientometrics (49).

	Table2. The publication rate of LIS journals												
#			Number of Published documents						% of review articles				
		2007	2008	2009	2010	2011	Mean	2007	2008	2009	2010	2011	Mean
	Journal Name												_
	Aslib Proceedings	37	30	45	40	30	36.4	2.7	0	2.22	7.5	10	4.48
	Interlending & Document Supply	34	32	34	35	22	31.4	5.88	12.5	23.53	37.14	50	25.81
	Journal of Documentation	41	43	42	42	36	40.8	0	13.95	2.38	4.76	16.67	7.55
ĒΥ	Library Hi Tech	49	51	48	47	39	46.8	26.5	9.8	0	4.26	17.95	11.70
merald	Library Management	49	50	47	48	29	44.6	0.03	0.032	0.03	0.03	0.03	0.03
	OCLC Systems & Services	46	31	31	30	22	32	34.7	22.58	16.13	3.33	27.27	20.81
	Online Information Review	53	56	65	51	32	51.4	11.3	5.36	0	0	0	3.33
	Program	27	24	25	27	27	26	14.8	0	4	3.7	35	11.50

	I				1	1				1	ı		1
	Reference Services	42	35	38	45	31	38.2	28.5	28.57	5.26	4.44	0	13.36
	Review												
	The Electronic	55	61	71	57	24	53.6	23.6	8.2	8.45	1.75	4.17	9.24
	Library												
	Information and	10	13	15	11	11	12	0	0	0	0	0	0
	Organization												
	Information	118	120	53	59	114	92.8	0	0	0	0	0.88	0.17
	Processing &												
	Management (IPM)												
	International	26	30	34	35	21	29.2	0	0	0	0	0	0
	Information &												
	Library Review												
	International	39	64	57	66	81	61.4	0	0	0	1.52	0	0.30
	Journal of												
,,	Information												
Sci	Management												
ScienceDirect	Journal of Academic	82	66	66	76	79	73.8	0	0	0	0	0	0
]a	Librarianship	02		00	, ,	,,,	70.0		Ü	· ·	Ů		, and the second
) ir	Journal of	33	34	36	69	67	47.8	3.03	2.94	2.78	0	0	1.75
ect	Informetrics	33	34	30	05	07	47.0	3.03	2.54	2.70	U	0	1.75
		22	20	18	26	32	23.6	0	0	0	0	3.12	0.62
	Journal of Strategic	22	20	10	20	32	23.0	U	U	U	U	3.12	0.62
	Information												
	Systems	22	25	22	26	4.4	26	2.42	0	0.00			2.44
	Library and	32	35	33	36	44	36	3.12	0	9.09	0	0	2.44
	Information Science												
	Research							_	_	_	_		_
	Library Collections,	14	22	14	13	18	16.2	0	0	0	0	0	0
	Acquisitions &												
	Technical Services												
	Serials Review	38	36	49	51	49	44.6	0	0	0	0	0	0
	Scientometrics	129	132	193	235	261	190	2.33	1.52	0	0.43	4.98	1.85
	Archival Science	23	14	17	31	26	22.2	0	0	0	0	0	0
	Geo-Spatial	60	55	47	32	31	45	0	1.82	4.26	0	0	1.21
S	Information Science												
Springer	Science China	0	0	0	9	235	48.8	0	0	0	0	4.26	0.85
ge ge	Information												
12	Sciences												
	International	24	17	11	4	10	13.2	4.17	0	0	0	0	0.83
	Journal on Digital												
	Libraries												
	Library Trends	72	43	47	40	44	49.2	34	23	10	0	0	13.4
	Information												
		24	28	31	34	32	29.8	20	10	3	0	43	15.2
		24	28	31	34	32	29.8	20	10	3	0	43	15.2
	Technology and	24	28	31	34	32	29.8	20	10	3	0	43	15.2
	Technology and Libraries												
A	Technology and Libraries Journal of American	207	28 194	212	34 189	32	29.8	20	10	0.9	1	43	3.58
Ame	Technology and Libraries Journal of American Society for												
Americ	Technology and Libraries Journal of American Society for Information Science												
American	Technology and Libraries Journal of American Society for Information Science and Technology												
American LIS	Technology and Libraries Journal of American Society for Information Science and Technology (JASIST)	207	194	212	189	217	203.8	11	1	0.9	1	4	3.58
American LIS jo	Technology and Libraries Journal of American Society for Information Science and Technology (JASIST) Library Leadership												
American LIS jour	Technology and Libraries Journal of American Society for Information Science and Technology (JASIST) Library Leadership and Management	207	194	212	189	217	203.8	11	0	0.9	0	16	3.58
American LIS journal	Technology and Libraries Journal of American Society for Information Science and Technology (JASIST) Library Leadership and Management Library Resources	207	194	212	189	217	203.8	11	1	0.9	1	4	3.58
American LIS journals	Technology and Libraries Journal of American Society for Information Science and Technology (JASIST) Library Leadership and Management Library Resources and Technical	207	194	212	189	217	203.8	11	0	0.9	0	16	3.58
American LIS journals	Technology and Libraries Journal of American Society for Information Science and Technology (JASIST) Library Leadership and Management Library Resources and Technical Services	0 26	0 28	40	189	31 20	22.4	0 3	0 14	0.9	0 5	16	3.58
American LIS journals	Technology and Libraries Journal of American Society for Information Science and Technology (JASIST) Library Leadership and Management Library Resources and Technical Services Reference and User	207	194	212	189	217	203.8	11	0	0.9	0	16	3.58
American LIS journals	Technology and Libraries Journal of American Society for Information Science and Technology (JASIST) Library Leadership and Management Library Resources and Technical Services Reference and User Services Quarterly	207 0 26	194 0 28	212 40 27	189 41 20	217 31 20 29	203.8 22.4 24.2 38.2	0 3	0 14 29	0.9	0 5	16 30 6	3.58 3.2 11.8
American LIS journals	Technology and Libraries Journal of American Society for Information Science and Technology (JASIST) Library Leadership and Management Library Resources and Technical Services Reference and User	0 26	0 28	40	189	31 20	22.4	0 3	0 14	0.9	0 5	16	3.58

The highest impact factors (5-years) of LIS journals belong to Journal of Strategic Information Systems (3.79), Journal of Informetrics (3.58), and JASIST (2.08).

• The relationships among impact factor (IF), Scimago Journal Rank, and H-Index of LIS journals

In order to investigate the relationships among impact factor (IF), Scimago Journal Rank, and H-Index score of LIS journals, the needed data, such as SJR, H-Index and Impact Factor (5-years) of the included journals were gathered. This data is shown in Table3.

LIS Journals	The mean of published documents (2007- 2011)	The mean percent of review article publication (2007-2011)	Scimago Journal Rank (SJR)	H- Index	Impact Factor (IF)
Aslib Proceedings	36.4	4.484	0.034	17	0.6
Interlending & Document Supply	31.4	25.81	0.037	8	0.308
Journal of Documentation	40.8	7.552	0.046	36	1.447
Library Hi Tech	46.8	11.708	0.040	11	0.413
Library Management	44.6	0.0322	0.030	8	NA
OCLC Systems & Services	32	20.818	0.027	8	0.991
Online Information Review	51.4	3.336	0.038	19	0.991
Program	26	11.502	0.033	10	0.596
Reference Services Review	38.2	13.368	0.039	11	0.28
The Electronic Library	53.6	9.242	0.034	15	0.489
Information and Organization	12	0	0.039	21	0.66
Information Processing & Management	92.8	0.176	0.054	51	1.786
International Information & Library Review	29.2	0	0.031	10	NA
International Journal of Information Management	61.4	0.304	0.043	34	1.775
Journal of Academic Librarianship	73.8	0	0.045	26	0.909
Journal of Informetrics	47.8	1.75	0.091	18	3.586
Journal of Strategic Information Systems	23.6	0.624	0.046	33	3.795
Library and Information Science Research	36	2.442	0.044	24	1.248
Library Collections, Acquisitions & Technical Services	16.2	0	0.045	12	0.392
Serials Review	44.6	0	0.033	11	0.582
Scientometrics	190	1.852	0.066	49	1.905
Archival Science	22.2	0	0.027	11	NA

Geo-Spatial Information	45	1.216	0.028	5	NA
Science					
Science China Information	48.8	0.852	0.043	17	NA
Sciences					
International Journal on	13.2	0.834	0.038	13	NA
Digital Libraries					
Library Trends	49.2	13.4	0.653	26	0.55
Information Technology	29.8	15.2	0.655	17	0.25
and Libraries					
Journal of American Society	203.8	3.58	1.517	68	2.08
for Information Science and					
Technology					
Library Leadership and	22.4	3.2	0.104	5	NA
Management					
Library Resources and	24.2	11.8	0.544	13	0.64
Technical Services					
Reference and User Services	38.2	20	0.817	18	0.22
Quarterly					
School Library Media	7.4	12.2	0.180	6	NA
Research					

Then, in order to find the relationship between the IF, H index, and SJR, Review articles, and the number of published documents in LIS journals, we used Spearman Correlation Test (Table4).

As shown in the table 4, the number of published documents in LIS journals has a positive significant relationship with their SJR (R=0.45), IF (R=0.39), and H-Index (R=0.80). In addition, there is a positive significance between SJR and H-Index (R=0.46). Therefore, this table shows a direct relationship between the number of published documents in each journal and its score (and consequently, its rank) in international quality metrics.

Table 4. Correlat	ions among numbe	er of published d	ocuments in LI	S journals a	nd their SJ	R, H-Index, and IF
		Percent of Review Articles	Number of Published Documents	Scimago Journal Rank	H- Index	Impact Factor
Percent of Review Articles	Spearman Correlation	1	180	.271	264	234
	Sig. (1-tailed)		.163	.066	.072	.098
	N	32	32	32	32	32
Number of Published	Spearman Correlation	180	1	.459**	.808**	.394*
Documents	Sig. (1-tailed)	.163		.004	.000	.013
	N	32	32	32	32	32
Scimago Journal	Spearman	.271	.459**	1	.463**	.086

Rank (SJR)	Correlation					
	Sig. (1-tailed)	.066	.004		.004	.320
	N	32	32	32	32	32
H-Index	Spearman	264	.808**	.463**	1	.626**
	Correlation					
	Sig. (1-tailed)	.072	.000	.004		.000
	N	32	32	32	32	32
Impact Factor	Spearman	234	.394*	.086	.626**	1
(IF)	Correlation					
	Sig. (1-tailed)	.098	.013	.320	.000	
	N	32	32	32	32	32

^{**.} Correlation is significant at the 0.01 level (1-tailed).

The publishing behavior of LIS publishers

❖ Emerald LIS journals

Of 15 LIS journals of Emerald (http://www.emeraldinsight.com/products/collections/library-and-information-studies.htm) the following journals where chosen, because of the limitation in Scopus data analysis and mapping software. One symbol was assigned to each journal in order to be identified in the following figures (Box 1).

Box 1. Emerald LIS Journals and Their Symbol					
Journal Title	Symbol				
Aslib Proceedings					
Interlending & Document Supply	A				
Journal of Documentation					
Library Hi Tech					
Library Management					
OCLC Systems & Services	A				
Online Information Review	+				
Program	•				
Reference Services Review	•				
The Electronic Library	•				

These symbols are compulsory in the Scopus database, and we cannot change them. Thus, these symbols are applicable just under this publisher section.

The number of published articles in Emerald journals from 1996 to 2011 is shown in Figure 1. From 2003 onwards, the article publication rate in Emerald journals has been almost stable between 20 and 60

^{*.} Correlation is significant at the 0.05 level (1-tailed).

articles in a year. Between 2000 and 2003, Online Information Review has a great leap in article publication and it seems that Special Issues of the noted journal has not been without effect.

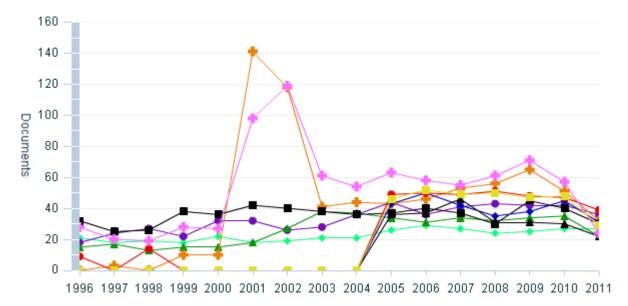


Figure 1. Number of published documents in Emerald LIS journals during 1996-2011

As we see in figure 1, From 1996 to 2000, the number of published documents in Emerald journals has some rise and fall. From 2003 to 2010, Emerald LIS journals published between 20-60 articles per year. Some journals such as Program have a relatively fixed approach to article publication (about 20 articles in each issue) and the journal rarely deviate from this rule.

In figure 2, published review articles in these journals are depicted. As shown, the publication of review articles in Emerald journals shows a lot of variation. In addition, the publication rate of published review articles in journals of this database over time tends towards lower rates.

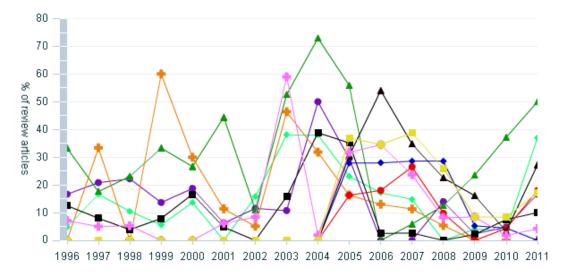


Fig. 2 Percent of published review articles in Emerald LIS journals during 1996-2011

* Elsevier LIS Journals

Of 14 periodicals in LIS provided in the "Elsevier", http://www.elsevier.com/wps/find/S06 347.cws home/main.

Box 2. Elsevier LIS Journals and Their Symbols	
Journal Title	Symbol
Information and Organization	•
Information Processing & Management	•
International Information & Library Review	A
International Journal of Information Management	+
Journal of Academic Librarianship	
Journal of Informetrics	•
Journal of Strategic Information Systems	•
Library and Information Science Research	À
Library Collections, Acquisitions & Technical Services	1
Serials Review	

Ten journals which were devoted specifically to the LIS field were selected. Symbols of each journal are shown in Box 2. These symbols are applicable just under this publisher section.

Total Number of published articles in LIS journals of Elsevier database between 1996 to 2011 is plotted in Figure 3. As we see, the publication rate of articles in Information Processing and Management (IP&M) journal from 1996 to 2004 is consistent. From 2004 to 2008, this journal experienced an extraordinary increase in article publication in comparison to other LIS journals available on the Elsevier list, and reached a total of 120 papers in 2008. After 2008, the number of published articles in this journal decreased, and about 50 articles have been published in it since 2009.

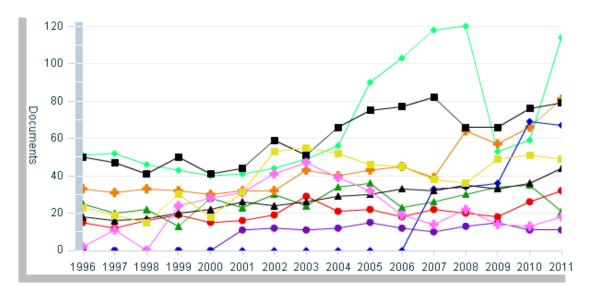


Figure 3. Number of Published documents in Elsevier LIS journals during 1996-2011

The article publication rate in *Journal of Academic Librarianship* has been increased almost annually. Totally, the annual article publication in Elsevier LIS journals has been varied.

Interestingly, Elsevier LIS journals have experienced an annual loss in review article publication. As shown in Figure 4 no review article has been published in these journals from 2006 to 2011.

Also, from 1996 to 2006, the publication of review articles in LIS journals of Elsevier has shown high variation.

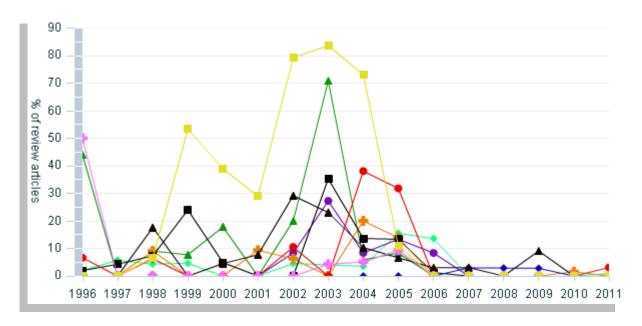


Fig. 4 Percentage of Published review articles in Elsevier LIS journals during 1996-2011

❖ Springer LIS journals

Five LIS journals were identified in the Springer database, and all were included in this research. These journals are provided in Box 3. The symbols used in this table are represented in Box 3. The noted symbols are applicable just under this heading.

Box 3. Springer LIS Journals and Their Symbols							
Journal Title	Symbol						
Scientometrics	•						
Archival Science	•						
Geo-Spatial Information Science	A						
Science China Information Sciences	+						
International Journal of Digital Libraries							

In Figure 5, the total number of published articles in LIS journals of Springer is illustrated.

As shown in Figure 5, LIS journals in the Springer database have a relatively stable rate of annual article publication (except for Scientometrics).

The annual article publication rate in Scientometrics is continuous and ever-increasing from 80 articles per year (in year 1996) to 240 articles per year (in 2010).

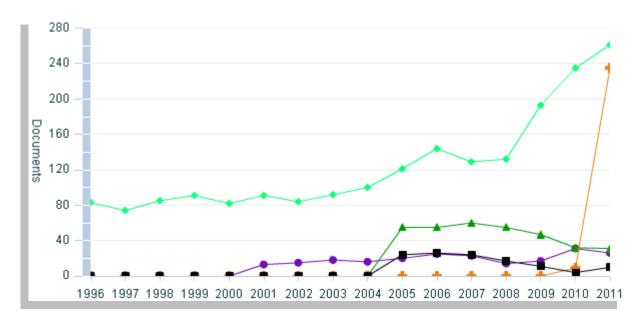


Figure 5. Number of Published documents (as general) in Springer LIS journals during 1996-2011

The number of published review articles in Springer LIS journals is shown in Figure 6 (and Table 2). As we see, the publication of review articles in these journals from 2000 to 2007 has decreased, and this rate tends towards zero. We mean that the publication of review articles in Springer in noted journals in recent years is almost zero.

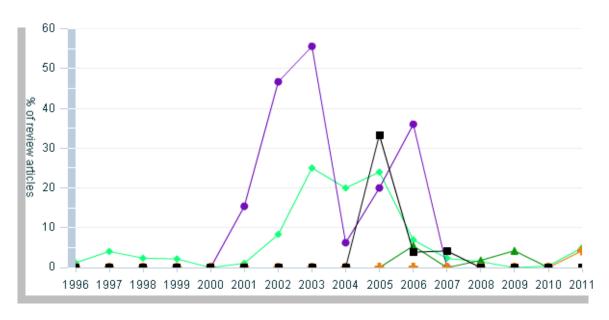


Figure 6. Percent of Published review articles in Springer LIS journals during 1996-2011

❖ American LIS Publications

We found seven journals in "Scopus" which are published by American institutions, and they were included in this study (Box 4). Each journal is identified via a symbol, and these symbols are applicable just under this section.

Box 4. American LIS Journals and Their Symbols							
Journal Title	Symbol						
Library Trends	•						
Information Technology and Libraries							
Journal of American Society for Information Science and Technology	A						
Library Leadership and Management	+						
Library Resources and Technical Services							
Reference and User Services Quarterly	•						
School Library Media Research							

As we see in Figure 7, the publication system in American LIS journals is the same as the previously mentioned groups. Journal of American Society for Information Science and Technology (JASIST) is in the first rank of article publication and has published the highest number of documents. Nearly all American LIS journals have published a fixed number of documents in each issue, with the exception of JASIST, which show a rise and fall. After JASIST, Library Trends is in the 2nd place, and has published about 40 articles per year during 1996 to 2012. Reference and User Services Quarterly is in the 3rd position, which has published about 20-30 articles during the noted years.

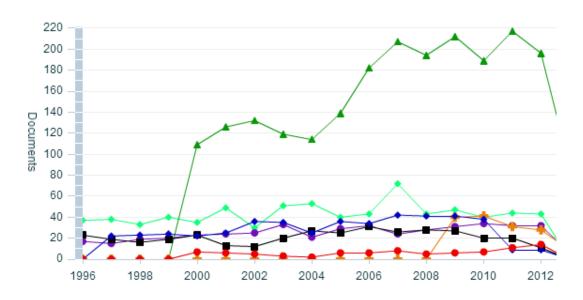


Figure 7. Number of Published documents in American LIS journals during 1996-2011

The percent of published review articles in American LIS journals is illustrated in Figure 8. As we see, the publication rate of review articles in American LIS journals increased during 1996 to 2005. Then, this rate decreased during 2006 to 2012.

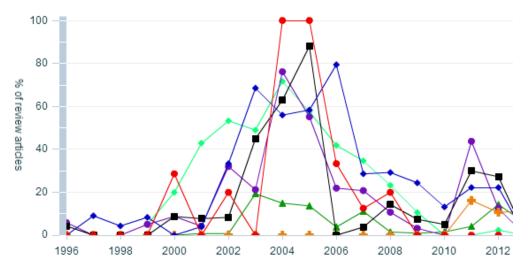


Figure 8. Percent of Published review articles in American LIS journals during 1996-2011

Concluding Remarks

This study reveals the current status of article publishing in LIS journals. Approximately 50.31 articles per year have been published in LIS journals (during 2007-2011). About 6% of these published documents

are devoted to review articles, which confirms the findings of Warraich et al. (2011). He found that the percent of review articles in Pakistan Library and Information Science Journal was just 6.31%.

An interesting finding in this study is the rate of review articles (5-6 percent of all published documents) in top scholarly journals, which seems unchanged since Garfield's study. You can compare this finding with the Garfield (1987),and Gazni and Binesh (2009) studies, which have found the same rate for review articles in science.

The publication of scholarly articles in LIS journals is annually increased. This finding confirms the results of Ardalan Eftekhari and Cheshme-Sohrabi (2010), Katuzian (1998), Mahapatra (1994), which show an increase in article publishing during the studied years.

The overall publishing behavior of LIS publishers is shown in Table 3. As we see, the average publication rate in LIS journals is 50.31 articles per year (during 2007-2011). About 6% of published articles are devoted to review articles. The mean SJR of studied journals is 0.18. The mean H-Index of LIS journals is 19.78 and the average 5-year impact factor of these 32 journals is 1.23.

Table5. The publishing behavior of LIS publishers															
	No. of Published documents per year						Percent of review articles						Journal Quality Factors		
LIS Journals	2007	2008	2009	2010	2011	Mean	2007	2008	2009	2010	2011	Mean	SJR	H Index	IF 5 years
Emerald LIS Journals	43.3	41.3	44.6	42.2	29.2	40.12	14.8	10.09	6.2	6.69	16.10	10.78	0.03	14.3	0.67
ScienceDire ct LIS journals	41.4	44	37.5	44.2	51.6	43.74	0.61	0.29	1.18	0.15	0.4	0.52	0.04	24	1.63
Springer LIS journals	47.2	43.6	53.6	62.2	112.6	63.84	1.3	0.66	0.85	0.08	1.84	0.95	0.04	19	1.9
American LIS journals	54.14	48.42	57.71	52.71	54.85	53.57	17.28	13.85	8.7	2.71	14.14	11.34	0.63	21.85	0.74
Total	46.51	44.33	48.35	50.32	62.06	50.31	8.49	6.22	4.23	2.40	8.12	5.89	0.18	19.78	1.23

As shown in Table 5, Springer LIS journals are in the 1st rank of scholarly documents publication per year (63.84 documents), and 1st rank of impact factor (Mean=1.9), but it should be noted that just one LIS journal of Springer has impact factor, and this result is not so real. American publications have better

performance in publishing review articles (11.34 percent of all published documents), and also, in 1st rank of SJR score (mean=0.63). ScienceDirect LIS journals have the best score of H-Index (Mean=24).

The better picture of the gap between published documents and reviews in LIS journals is illustrated in Figure 9. As we see, this gap is high, and review articles comprise a low share of total published articles in LIS journals.

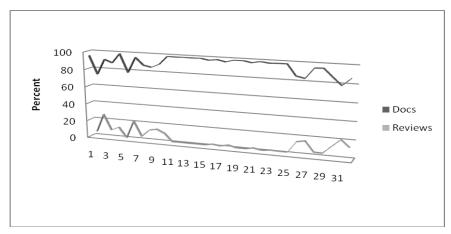


Figure 9. The fluctuation of published documents and review articles in LIS journals

In general, American journals have a better rank in the studied indicators. For example, JASIST is 1st in document publication, 1st in SJR, 1st in H-Index, and 3rd in Impact factor. Reference and User Services Quarterly is in 3rd rank of publishing review articles, and 2nd rank in SJR score among studied LIS journals. Information Technology and Libraries has the 3rd rank of SJR among the studied LIS journals (32 journals). The three top journals in SJR are all from American publishers including *JASIST*, *Reference and User Services Quarterly*, and *Information Technology and Libraries*. However from the 15 top seats (three for each indicator) seven seats are of American LIS journals (about 50 percent of all).

As previously stated, the number of published documents in LIS journals has a positive significant relationship with SJR (R=0.45), IF (R=0.39), and H-Index (R=0.80). In addition, there is a positive significance between SJR and H-Index (R=0.46).

This means that the higher the number of published articles in a journal, the higher the H index, IF, and SJR of it, which seems logical. In fact, as the number of published articles of a journal rises, the chance of citation to them increases too, and consequently the IF increases. But, it should be noted that in first rank journals, the competition to get into them is substantially greater, and in fact a much smaller percentage of the journal manuscripts received would indeed find their way in to these journals.

I think the difficulty of accepting review articles may be a reason in the low publication rate of these types of articles in different contexts. Many scholarly journals have strict criteria for acceptance of such articles. For example, in many scientific journals, it has been explicitly stated that they only consider review articles that are written by leading experts in related fields in their peer review system.

In addition, many journals have their rule to choose this article type for publication, for example, some say such articles should have at least 100 references (cited materials) and must be presented in a detailed framework and with comprehensive evaluations of previous literature.

The difficulty of writing a review article is another reason for low publication of review articles in the LIS field. On the one hand, a scholar should spend a lot of time to write an ordinary review article. Furthermore, in these articles, the authors should collect and assess nearly all works which have been written so far, to draw a good and integrated framework for the subject under review. On the other hand, quantity-oriented approach in science has forced the authors to more focus on experimental and empirical researches.

I also think that in new emerging academic disciplines, such as entrepreneurship or future studies, the rate of review articles may be more than the findings of current study, because of the low age of these disciplines. But, this claim needs to be tested. We are studying some other fields of humanities, such as entrepreneurship, management, etc. to test this hypothesis that "review articles are dying".

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References

- Abdolmajid, A. 2008. The study of published original articles in LIS field in Persian Humanities and Social Science journals. *Faslnameye Ketab (Book Quarterly)* 75(3): 45-56.
- Ardalan Eftekhari, S., Cheshme-Sohrabi, M. 2010. Qualitative and quantitative evaluation of Ketabdari Va ettela'resani during 1998-2008. *Ketabdari Va ettela'resani*, 13(3): 53-84.
- Arnquist, G. & Wooster, D. 1995. Meta-analysis: synthesizing research findings in ecology and evolution. *Trends in Ecology and Evolution* 10, 236–240.
- Bakri, A. & Willett, P. 2008. The Malaysian Journal Of Library And Information Science 2001-2006: a bibliometric study. *Malaysian Journal of Library & Information Science* 13 (1). pp. 103-116. http://ejum.fsktm.um.edu.my/ArticleInformation.aspx?ArticleID=638.
- Bergstrom, C. 2007. Eigenfactor: Measuring the value and prestige of scholarly journals. *College and Research Libraries News* (May), 314-316.

- Chalmers, I., Hedges, L.V., & Cooper, H. 2002. A brief history or research synthesis. *Evaluation of the Health Profession* 25, 12–37.
- CRD. 2001. *Undertaking systematic reviews of research on effectiveness* (CRD Report 4). 2nd ed. National Health Service Centre for Research and Dissemination, University of York, York, UK.
- Egger, M., Smith, G.D. & Altman, D.G. 2003. *Systematic Reviews in Health Care: Meta-analysis in Context.* BMJ Publishing Group, London, UK.
- Garfield, E. 1974. So you wanted more review articles ISI's new index to scientific reviews (ISR) will help you find them. *Essays of an Information Scientist*, 2, 170-171.
- Garfield, E. 1987. Reviewing Review Literature. Part 2. The Place of Reviews in the Scientific Literature. *Essays of an Information Scientist*, 10, 117-122. www.garfield.library.upenn.edu/essays/v10p117y1987.pdf (accessed 2013-04-08).
- Garfield, E. 1972. Citation frequency and citation impacts; and the role they play in journal selection for current contents and other ISI services. *Science* 178, 471-479.
- Gazni, A., & Binesh, M. 2010. Content analysis of world top scholarly journals. *Faslnameye Ketab* (*Book Quarterly*), 21 (2). http://journals.nlai.ir/faslname/browse.php?a_id=1273&slc_lang=fa&sid=1.
- Hawkins, D. T. 2001 .Bibliometrics of electronic journals in information science. *Information Research*, 7(1). http://InformationR.net/ir/7-1/paper120.html (accessed 2013-08-28)
- Hussain, A., Nishat, F. & Kumar, D. 2011. Bibliometric analysis of the 'Electronic Library' journal (2000-2010). *Webology* 8(1). http://www.webology.org/2011/v8n1/a87.html (accessed 2013-08-28).
- Katuzian, A. 1998. A review of LIS articles of Persian periodicals, 1978-1993. *Faslnameye Ketab (Book Quarterly)* 10 (3): 59-67.
- Kianmehr, E. 2007. Citation analysis of published articles in Persian LIS journals (1996-2003). *Faslnameye Ketab (Book Quarterly)* 70, 101-122.
- Kumar, V. 2009. *Importance of review of related literature in a research paper*. <a href="http://www.helium.com/items/1591883-review-of-literature-literature-research-college-research-planning-research-plannin
- Mahapatra, G. 1994. Indian Library and Information Science Journals: A Bibliometric Analysis of the Rate of Citations and Their Characteristics. *Library Review* 43(3): 41 46.
- Mohammadi, M., & Motaghi-Dadgar, A. 2007. Citation analysis of published articles in 30 issues of Ketabdari va Ettela'resani during 1997-2005. *Ketabdari Va ettela'resani* 38(2). http://www.aqlibrary.ir/index.php?module=TWArticles&file=index&func=view pubarticles&did=135&pid=10 (accessed 2013-08-28).
- Mukherjee, Bhaskar. 2009. Journal of the American Society for Information Science and Technology (2000-2007): A bibliometric study. *IFLA Journal* 35 (4): 341-358.

- Oxman, A., Guyatt, G. H., Singer, J., Goldsmith, C. H., Hutchison, B. G., Milner, R. A., & Streiner, D. L. 1991. Agreement among reviewers of review articles. Journal of Clinical Epidemiology, 44(1): 91-98.
- Roberts, P. D., Stewart, G. B. & Pullin, A. S. 2006. Are review articles a reliable source of evidence to support conservation and environmental management? A comparison with medicine. B Biological Conservation 32, 4 0 9 –4 2 3.
- Scopus. 2013. *Definition of Reviews*. http://www.info.sciverse.com/scopus/scopus-in-detail/content-coverage-guide/metadata (accessed 2013-08-28).
- Singh, N. K., Sharma, J. & Kaur, N. 2011. Citation analysis of Journal of Documentation. *Webology* 8(1), Article 86, http://www.webology.org/2011/v8n1/a86.html (accessed 2013-08-28).
- Solomon, David J. 2007. The Role of Peer Review for Scholarly Journals in the Information Age. *Journal of Electronic Publishing* 10(1), http://dx.doi.org/10.3998/3336451.0010.107 (accessed 2013-08-28).
- Tiew, W. S., Abrizah, A. & Kiran, K. 2002. Malaysian Journal of Library and Information Science 1996-2000: A bibliometric study. *Malaysian Journal of Library & Information Science* 6 (2): 43-56. http://eprints.rclis.org/handle/10760/5914(accessed 2013-08-28).
- Tsay, Ming-yueh. 2008. Journal Bibliometric Analysis: A Case Study on the JASIST. *Malaysian Journal of Library Information Science* 13(2): 121-139.
- Warraich, N. F. & Ahmad, S. 2011. Pakistan Journal of Library and Information Science: A bibliometric analysis. *Pakistan Journal of Library & Information Science* Vol. 12. http://pu.edu.pk/home/journal/8 (accessed 2013-08-28).
- Web of Knowledge. 2013. *The Thomson Reuters Impact Factor*. http://wokinfo.com/essays/impact-factor/ (accessed 2013-08-28).
- Wilkinson, Leland. 1999. Statistical methods in psychology journals: Guidelines and explanations. *American Psychologist* 54(8): 594-604. DOI: <u>10.1037/0003-066X.54.8.594</u> (Accessed 2012-11-27).