
CITATION OF OPEN ACCESS IN LITERATURE RESEARCH ARTICLES PUBLISHED IN THAI JOURNALS

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ABSTRACT

Aims to analyze the citation of open access in research articles in Library and Information Science journals. The three journals in the area of Library and Information Science which are published in Thai language were selected for the analysis - Journal of Library and Information Science, SWU (2008-2010), TLA Research Journal (2008-2010), a research journal of Thai Library Association, and Library and Information Science, KRU (2006-2009). The results of the study demonstrates some characteristics of open access citations.

KEYWORDS: Open Access Journal, Thai Journals, Citation Analysis

Introduction

Publishing of open access has been accepted widely that tend to publish faster and keep up to date more than a traditional journal, but with regard to the quality of the journal, it was worse than that. Research report found that articles published in open access journals are retrieved and downloaded more than traditional journal (Eysenbach, 2006) and are more likely to be cited in a variety of other disciplines, but it has no academic findings whether an article which was downloaded, would be cited? This study is an attempt to examine as to what extent open access resources are cited in research articles in the area of Library and Information Science.

Research Method

The three journals in the area of Library and Information Science published in Thai language were selected for the analysis. Since this analysis put focus on research articles, the only research journal in Library and Information Science, *TLA Research Journal*, could meet the criteria. The two more journals with the highest percentage of research articles were: *Journal of Library and Information Science, SWU*, published by Department of Library and Information Science, Faculty of Humanities Srinakharinwirot University; and *Library and Information Science, KKU*, published by Department of Information Science and Communications, Khon Kaen University. But after 2009 during the period of this study, Library and Information Science ceased to be published and changed to Information Science, KKU later. Unfortunately, during the limited period of study, Library and Information Science KKU was under major revision, therefore, the data was collected until 2009. Samples of the study included: Journal of Library and Information Science, SWU and TLA Research Journal published during 2008 – 2010 and Library and Information Science, KKU published during 2006-2009. The total of 13 issues, contained 100 articles. Seventy-nine of them were research articles of which bibliographic citations have been analyzed (Table 1).

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Table 1 : Numbers of Articles

Journal	Year	No. of Articles	No. of Research Articles
Journal of Library and Information Science, SWU	Vol.1, 2008	8	6
	Vol.2, 2009	10	6
	Vol.3, 2010	14	10
TLA Research Journal	Vol.1 No.1, Jan – June 2008	6	6
	Vol.1 No.2, Jul– Dec 2008	6	6
	Vol.2 No.1, Jan– Jun 2009	6	6
	Vol.2 No.2, Jul– Dec 2009	6	6
	Vol.3 No.1, Jan– Jun 2010	7	7
	Vol.3 No.2, July– Dec 2010	7	7
Library and Information Science, KKU	Vol.24 No.1 3, Jan– Dec 2006	7	2
	Vol.25 No.13, Jan– Dec 2007	7	5
	Vol.26 No.13, Jan– Dec 2008	8	5
	Vol.27 No.13, Jan– Dec 2009	8	7
Total		100 (100%)	79 (79%)

Discussions

Number of Open Access (OA) Citations

Journal of Library and Information Science, SWU published 22 research articles, 374 bibliographies with 75 items (20%) of OA citations. TLA research journal published 38 research articles, 914 bibliographies with 125 items (13.7%) of OA citations. Library and Information Science, KKU published 19 research articles, 364 bibliographies with 63 items (17.5%) of OA citations (Table 2).

Number of OA citations is increasing every year. In case of Journal of Library and Information Science, SWU increase was from 15.8% in 2008 to 27.7% in 2010. TLA Research Journal the increases was from 7.6% in 2008 to 19.3% in 2010. Even through, the OA citations of Library and Information Science KKU was analyzed until 2009 but it showed slightly increasing trend as well. This may be because Library and Information Science researchers prefer cited information from Internet as Namlin Tiamkaew (2008) reported that more than half of citations are from Internet. A study on group of Library and Information Science profession revealed their positive attitude toward publishing as open access will be faster and gain more citations (Thaotip, 2009).

Table 2 : Numbers of Open Access (OA) Citations

Journals	Year	Citations	OA Citations
Journal of Library and Information Science, SWU	Vol.1, 2008	126 (100%)	20 (15.8%)
	Vol.2, 2009	85 (100%)	13 (15.3%)
	Vol.3, 2010	163 (100%)	42 (25.7%)
Total		374 (100%)	75 (20%)
TLA Research Journal	Vol.1 No.1, Jan – June 2008	187	14
	Vol.1 No.2, Jul – Dec 2008	154	12
	Total	341 (100%)	26 (7.6%)
	Vol.2 No.1, Jan – Jun 2009	135	21
	Vol.2 No.2, Jul – Dec 2009	148	22
	Total	283 (100%)	43 (15.2%)
	Vol.3 No.1, Jan – Jun 2010	128	17
	Vol.3 No.2, July – Dec 2010	162	39
	Total	290 (100%)	56 (19.3%)
Total		914 (100%)	125 (13.7%)
Library and Information Science, KKU	Vol.24 No.1 -3, Jan – Dec 2006	50 (100%)	15 (30%)
	Vol.25 No.1 -3 Jan – Dec 2007	78 (100%)	9 (11.5%)
	Vol.26 No.1 -3 Jan – Dec 2008	97 (100%)	16 (16.5%)
	Vol.27 No.1 -3 Jan – Dec 2009	139 (100%)	23 (16.5%)
Total		364 (100%)	63 (17.5%)

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Age of Citations

Most articles published during 2006-2007 cited OA resource of the past 0-5 years and 6-10 years, respectively; but in 2008, the trend was reverse. In 2009 the numbers is equivalent, but in 2010, citation of open access resource of the past 0-5 years is maximum (Table 3). Interestingly, the numbers below shows older cited open access year by year.

Table 3 : Age of OA Citations

Citation (Year)	2006	2007	2008	2009	2010	Total
0-5	8	6	22	33	47	116
6-10	7	3	33	33	36	112
11-15	0	0	6	9	11	26
16-20	0	0	0	2	3	5
Older than 20	0	0	1	2	1	4
Total	15	9	62	79	98	263

OA Citations and Age by Year

Research/scholarly articles in E-journals (Open access journals) are the most cited resources. Similar to the reports of De Beer (2005) and Thaotip (2009), which revealed the most favorite open access resources among group of Library and Information Science professionals is open access journals. Heycock (2004) and Glynn (1996) revealed the same trend in theses in the same area of subject. Herring (2002) indicated that more than half of bibliographic citations in articles are electronics and most of them are electronic journals.

Other than journals, articles on institutional websites and E-thesis are frequently cited as well. Government publications are cited instantly, this is may be because of changes in government publication service which slowly become digital information on web.

Number of citations of open access by year not only shows the more variation in terms of category or open access resources but age of cited resources in variety as well. Noticeably, numbers of older open access resources are increasing, especially, research / scholarly articles in E-journals (open access journals) and other information on websites such as statistics, data etc. (Table 4-8).

Table 4 : Open Access Citations in 2006

OA Resources	Citation (Year)		Total (N=15)
	0-5	6-10	
Research reports	1	0	1
Research/scholarly articles in e-Journals	3	4	7
Technical reports and manuals	1	0	1
E-theses	2	4	6
Total	7 (46.6%)	8 (53.4%)	15 (100%)

Table 5 : Open Access Citations in 2007

OA Resources	Citation (Year)		Total (N=9)
	0-5	6-10	
E-books	4	0	4
Research/scholarly articles in e-Journals	1	1	2
Proceedings	1	1	2
CAIs and web-based instructions	0	1	1
Total	6 (66.6%)	3 (33.4%)	9 (100%)

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Table 6 : Open Access Citations in 2008

OA Resources	Citation (Year)				Total (N=62)
	0-5	6-10	11-15	> 20	
E-books	1	0	1	0	2
Research reports	1	1	0	0	2
Research/scholarly articles in E-journals	2	11	0	1	14
Proceedings	1	4	0	0	5
E-theses	1	1	0	0	2
Articles on institutional websites	8	1	1	0	10
Government publications	3	3	0	0	6
Other information on websites (statistics, data)	5	12	4	0	21
Total	22 (35.5%)	33 (53.2%)	6 (9.7%)	1 (1.6%)	62 (100%)

Table 7 : Open Access Citation in 2009

OA Resources	Citation (Year)					Total (N=79)
	0-5	6-10	11-15	16-20	> 20	
E-books	1	0	0	0	0	1
Research reports	5	1	0	0	0	6
Research/scholarly articles in E-journals	14	10	3	0	2	29
Proceedings	0	2	0	0	0	2
Technical reports and manuals	1	0	0	0	0	1
E-theses	1	1	1	1	0	4
Presentations	0	0	1	0	0	1
CAIs and web-based instructions	6	4	0	0	0	10
Articles on institutional websites	1	0	0	0	0	1
Government publications	1	8	0	0	0	9
Other information on websites (statistics, data)	3	7	4	1	0	15
Total	33 (41.8%)	33 (41.8%)	9 (11.4%)	2 (2.5%)	2 (2.5%)	79 (100%)

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Table 8 : Open Access Citation in 2010

OA Resources	Citation (Year)					Total (N=98)
	0-5	6-10	11-15	16-20	> 20	
Research reports	3	1	0	0	0	4
Research/scholarly articles in E-Journals	10	5	2	0	0	17
Proceedings	1	1	1	0	0	3
Technical reports and manuals	4	4	1	0	0	9
CAIs and web-based instructions	1	0	0	0	0	1
Articles on institutional websites	9	4	0	0	0	13
Articles on personal websites	1	0	0	0	0	1
Government publications	4	3	1	0	0	8
Other information on websites (statistics, data)	14	18	6	3	1	42
Total	47 (47.9%)	36 (36.7%)	11 (11.2%)	3 (3.1%)	1 (1.1%)	98 (100%)

Languages of Cited OA Resources

Bibliographic citations in Thai research articles were in both Thai and English; but most of them cited English language (Table 9). Since most of open access resources are published in main language such as English, bibliographic citations in Library and Information Science literature tends to be the same. Other studies of citation analysis in Library and Information Science also showed the same trend (Namlin Tiamkaew, 2008; Thanat Boonchan, 2005). Additionally, the number of open access resources in Thai language is still limited and yet popular among its users.

Table 9 : Languages

Year	Languages		Total (N=263)
	Thai	English	
2006	8 (53.3%)	7 (46.7%)	15
2007	1 (11.1%)	8 (88.9%)	9
2008	16 (25.8%)	46 (74.2%)	62
2009	32 (40.5%)	47 (59.5%)	79
2010	37 (37.8%)	61 (62.2%)	98

Frequently Cited OA Resources

The most frequently cited OA resource is open access articles which are accessible both in the journal level and article level. The most popular journal among Library and Information Science research are: College & Research Libraries; Information Research; Domtud (Thai language) and Issues in Science and Technology Librarianship, respectively (Table 10).

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College & Research Libraries published by the Association of College & Research Libraries (American Library Association) which became open access journal in 1997. *Information Research* by Lund University Libraries (Sweden) is an open access journal since 1995. *Issues in Science and Technology Librarianship*, an open access journal by Association of College and Research Libraries is one of the most well-known journal in Library and Information Science since 1991. Domtud is a Thai open access journal published by Thammasat University Library, its content is openly accessible from 1980 to date.

Table 10: Frequently Cited OA Resources

No.	Resources
1	College & Research Libraries
2	Information Research
3	Domtud (Thai Language); Issues in Science and Technology Librarianship
4	Bulletin of the Medical Library Association
5	Information Technology and Libraries ; D-Lib Magazine
6	Academic Services Journal (Thai Language); Journal of the Medical Library Association; The Electronic Library; Journal of Digital Information; Journal of Interactive Online Learning
7	Library Hi Tech; Journal of Knowledge Management Practice; Turkish Online Journal of Distance Education; Malaysian Journal of Library & Information Science; College & Research Libraries News; Journal of the American Society for Information Science and Technology; Library Student Journal; ARL Bimonthly Report; Virginia Libraries; Annals of Software Engineering; Australian Academic Research & Libraries; The Electronic Journal of Academic and Special Librarianship; Ariadne; Rangsit Journal (Thai Language)

Conclusion

The first point that crosses one's mind in this study, that can be applied in conclusion, is that most of the open access in this field were written in English. More than half of citations presented in the findings are in English, literature that the sources cited were in English more than in Thai language. It stands to reason that the most available resources are still in English. The next point appears to be that the most popular resource for bibliographic citations was the open access articles. Researchers seem to prefer citing of open access articles more than other resources. But in fact, the sources are not only open access journals but the partial open access journals, the journals with open access choice that authors can opt to pay for open, a sample issue of journal, or even sample articles.

According to the characteristics of cited open access, it shows slightly increasing trend in terms of numbers, categories, and citation age. One may assume that when researchers come to open access choices that are available on the Internet without any charge, they may face with the language barrier and the scarcity number of up-to-date journal articles and other resources. Therefore, it reflects increase in number of older citations in this study.

The result displays some impact of open access on the researchers in aspect of information behaviour. Such trend seems to grow steady. In the near future scholars may rely on open access resources more than library traditional resources. The open access resources even has impact on the future of information services.

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