

KNOWLEDGE ECONOMY CORE JOURNALS: IDENTIFICATION THROUGH LISTA DATABASE ANALYSIS

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ABSTRACT

Background: Knowledge economy has become increasingly broad over the years and identification of core journals in this field can be useful for librarians in journal selection process and also for researchers to select their studies and finding Appropriate Journal for publishing their articles. Present research attempts to determine core journals of Knowledge Economy indexed in LISTA (Library and Information Science and Technology). **Methods:** The research method was bibliometric and research population include the journals indexed in LISTA (From the start until the beginning of 2011) with at least one article about "knowledge economy". For data collection, keywords about "knowledge

economy"—were extracted from the literature in this area—have searched in LISTA by using title, keyword and abstract fields and also taking advantage of LISTA thesaurus. By using this search strategy, 1608 articles from 390 journals were retrieved. The retrieved records import in to the excel sheet and after that the journals were grouped and the Bradford's coefficient was measured for each group. Finally the average of the Bradford's coefficients were calculated and core journals with subject area of "Knowledge economy" were determined by using Bradford's formula. **Findings:** By using Bradford's scattering law, 15 journals with the highest publication rates were identified as "Knowledge economy" core journals indexed in LISTA. In this list "Library and Information update" with 64 articles was

at the top. "ASLIB Proceedings" and "Serials" with 51 and 40 articles are next in rank. Also 41 journals were identified as beyond core that "Library Hi Tech" with 20 articles was at the top. **Conclusion:** Increased importance of knowledge economy has led to growth of production of articles in this subject area. So the evaluation of journals for ranking these journals becomes a very challenging task for librarians and generating core journal list can provide a useful tool for journal selection and also quick and easy access to information. Core journal list and beyond core journal list obtained from this study can be used by librarians and researchers in this field.

Key words: core journals, Knowledge Economy, Bradford's scattering law, Databases.

1. INTRODUCTION

The application of knowledge is now recognized to be one of the key sources of growth in the global economy (1).

The term Knowledge Economy (KE) has been coined to reflect this increased importance of knowledge (2). A knowledge economy is one where organizations and people acquire, create, disseminate, and use knowledge more effectively for greater economic and social development (3). Also the tremendous increase in the number of serial publications coupled with Growing up subscription costs and shrinking library budgets, made journal selection one of the important processes in libraries. One of the tools that help librarians for selection of journals and assessment of libraries' serials collections is using core journal list.

Also researchers in different subject areas can exert core journal list for their studies and finding Appropriate Journal for publishing their articles. Given the above discussion and regarding that the knowledge economy is one of the topics in recent years the researchers have paid special attention to it, present research attempts to determine core journals of Knowledge Economy indexed in LISTA (Library and Information Science and Technology).

It should be mentioned that LISTA is a free bibliographic database provided by EBSCO Information Services. Subject coverage includes librarianship, classification, cataloging, bibliometrics, online information retrieval, information management and more and Coverage in the database extends back as far as the mid-1960s.

2. LITERATURE REVIEW

Boroumand et al in their study entitled: "Determination of Isfahan University of Medical Sciences Environmental, Public & Occupational Health Core E- Journals and Compare with ISI List" survey the usage rate of Isfahan University of Medical Sciences users on public, environmental and occupational health journals to confirm core journals via Bradford. The findings showed that the core journals of this university in public & environmental health course were Social Science and Medicine, Patient Education and Consulting and Preventive Medicine journals. The most widely used journal by users of the university in this field, in 2008 was not in ISI journal citation reports and most prestigious journal in the ISI in this category was in 32nd place rank of using.

Ugaz et al presents the methods and results of a study designed to produce the third edition of the “Basic List of Veterinary Medical Serials. In this study a set of 238 titles were evaluated using a decision matrix in order to systematically assign points for both objective and subjective criteria and determine an overall score for each journal. Criteria included: coverage in four major indexes, scholarly impact rank as tracked in two sources, identification as a recommended journal in preparing for specialty board examinations, and a veterinary librarian survey rating. Of the 238 titles considered in this study, a minimum scoring threshold determined the 123 (52%) journals that constituted the final list (4).

Costa et al in their article entitled (1): “Core Journals That Publish Clinical Trials of Physical Therapy Interventions” identify core journals in physical therapy by identifying those that publish the most randomized controlled trials of physical therapy interventions, provide the highest-quality reports of randomized controlled trials, and have the highest journal impact factors. In this study all trials indexed in the Physiotherapy Evidence Database (PEDro) were analyzed. Journals that had published at least 80 trials were selected. The journals were ranked in 4 ways: number of trials published; mean total PEDro score of the trials published in the journal, regardless of publication year; mean total PEDro score of the trials published in the journal from 2000 to 2009; and 2008 journal impact factor. The top core journals in physical therapy, ranked by the total number of trials published, were 5 titles (5).

Ingold in a study entitled (4): “Women’s Studies Databases (6): A Critical Comparison of Three Databases for Core Journals in Women and Gender Studies” provides an in-depth analysis of three major fee-based databases: Women’s Studies International, Contemporary Women’s Issues, and GenderWatch. The author compares the databases by searching a core list of scholarly journals and feminist magazines to determine the coverage in each system including

frequency of Journal (s)	frequency of Articles(s)	Sum of articles	Cumulative frequency of Journal	Cumulative frequency of articles	Napieran logarithm of Cumulative frequency of Journals
1	64	64	1	64	0.00
1	51	51	2	115	0.69
1	40	40	3	155	1.10
1	39	39	4	194	1.39
1	37	37	5	231	1.61
1	36	36	6	267	1.79
1	33	33	7	300	1.95
2	28	56	9	356	2.20
2	27	54	11	410	2.40
1	26	26	12	436	2.48
1	21	21	13	457	2.56
2	20	40	15	497	2.71
1	19	19	16	516	2.77
1	18	18	17	534	2.83
1	17	17	18	551	2.89
3	16	48	21	599	3.04
4	15	60	25	659	3.22
1	14	14	26	673	3.26
1	13	13	27	686	3.30
6	12	72	33	758	3.50
1	11	11	34	769	3.53
3	10	30	37	799	3.61
5	9	45	42	844	3.74
8	8	64	50	908	3.91
7	7	49	57	957	4.04
13	6	78	70	1035	4.25
18	5	90	88	1125	4.48
25	4	100	113	1225	4.73
26	3	78	139	1303	4.93
54	2	108	193	1411	5.26
197	1	197	390	1608	5.97

Table 1. Frequency distribution of article related to “Knowledge economy” in LISTA database From the start until the beginning of 2011

dates, number of citations for each periodical title, and whether full text is available for each title. This analysis will provide libraries with a means to determine which of these databases will be most beneficial to their clientele, and it will encourage librarians with responsibility for selecting women’s studies online resources to advocate for more comprehensive inclusion of women’s studies journals in key databases (6).

Ghazi-mirsaeed in the study entitled (2): “Core Dental Journals according to Production and Citation rates” determine the core dental journals by employing the article publication rate (production) and citation variables. In this study Using Bradford’s law and conducting further analyses, 5 journals with the highest publication and citation rates were identified (7).

3. METHODS

The research method was bibliometric and research population include the journals indexed in LISTA (From the start until the beginning of 2011) with at least one article about “knowledge economy”. For data collection, keywords about “knowledge economy”–were extracted from the literature in this area–have searched in LISTA by using title, keyword and abstract fields and also taking advantage of LISTA thesaurus. It would be mentioned that the search was limited to peer reviewed journals. By using the above search strategy, 1608 articles from 390 journals were retrieved. The retrieved records import in to the excel sheet and then sorted by journal title and it is distinguished the number of articles. After that journal were sorted based on the number of articles published.

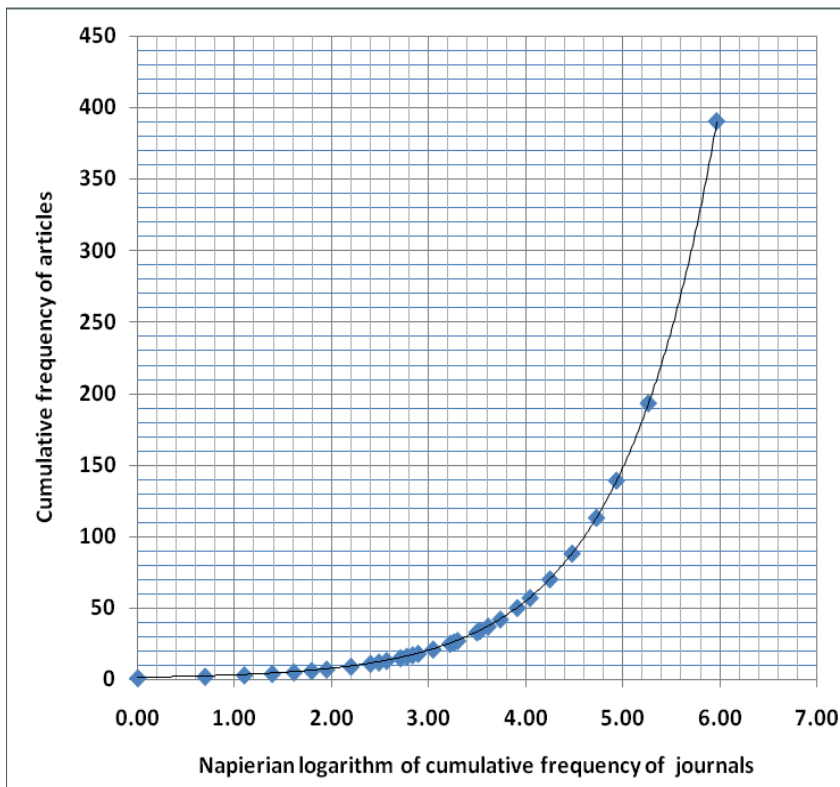


Figure 1. Scatter diagram of of article related to "Knowledge economy" in LISTA database From the start until the beginning of 2011

Then the journals were grouped and the Bradford's coefficient was measured for each group. Finally the average of the Bradford's coefficients were calculated and core journals with subject area of "Knowledge economy" were determined by using Bradford's formula.

4. FINDINGS

After the searching keywords related "knowledge economy" in LISTA by using title, keyword and abstract fields and also taking advantage of LISTA thesaurus, 1608 articles from 390 journals were retrieved (Table 1).

For calculation the number of core journals Bradford's scattering law formula were used as follows:

$$R(n)=an^b$$

In this study, Bradford's coefficient was 1.18 and 15 journals with the highest publication rates were identified as "Knowledge economy" core journals indexed in LISTA. In

this list "Library and Information update" with 64 articles was at the top. "ASLIB Proceedings" and "Serials" with 51 and 40 articles are next in rank. Also 41 journals were identified as beyond core that "Library Hi Tech" with 20 articles was at the top and "OCLC system and services" with 18 articles and "information society" with 17 articles respectively, are in second place and third place. Figure 1 shows the core and beyond core journals area.

5. DISCUSSION AND CONCLUSION

Increased importance of knowledge economy has led to growth of production of articles in this subject area. So the evaluation of journals for ranking these journals becomes a very challenging task for librarians and generating core journal list can provide a useful tool for journal selection and also quick and easy access to information. Core journal list and beyond core journal list ob-

tained from this study can be useful for librarians and researchers in this field (6, 7, 9).

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