

## Editorial

### Hot Papers in Library and Information Science from the Point of View of Research Methods

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#### Abstract

A hot paper is an article that has received more citations than usual, soon after its publication, with respect to other works included in the same field and age. The purpose of this bibliometric study was to examine the research methods of hot papers published in the subject area of library and information science (LIS). The data were collected from the Web of Science (WoS) citation database. Bibliometric techniques were applied in this study to gather hot papers in the LIS subject area. Then, the research methods of these papers were examined. The results show six hot papers for the LIS subject area. The results of the analysis of research methods indicates that two papers out of six were conducted based on *bibliometric*, two papers have been done by using *survey* method, one paper used the *content analysis* method, and one of them was an *empirical analysis* in the field of bibliometrics.

#### Keywords

Hot papers; Library and information science; Research methods

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#### Introduction

Hot papers are defined as regular scientific articles, recognized very soon after publication relative to other papers of the same field and age, and characterized by rapid and significant numbers of citations in two-month periods. The Essential Science Indicators database of Clarivate Analytics scans only those papers published in the last

two years to see if they are receiving more citations than the norm based on the citation-frequency threshold determined for each field (Clarivate Analytics, 2017a).

Hot Paper is defined by Clarivate Analytics' *Essential Science Indicators*, as "A paper published in the past two years that received a number of citations in the most recent two-month period that places it in the top 0.1% of papers in the same field." (Clarivate Analytics, 2017c).

Every two months, *Essential Science Indicators* from Clarivate Analytics (formerly known as Thomson Reuters) lists a new crop of what it calls hot papers in science. Hot papers are selected by virtue of being cited among the top one-tenth of one percent (0.1%) in a current bimonthly period. Papers are selected in each of 22 fields of science and must be published within the last two years. Because the hot papers are updated every two months, new papers are added with every update, and *ScienceWatch.com* tracks these new additions. *ScienceWatch.com* highlights the most-cited of these new entries, one from each field, which are, in addition, not more than one year old. Since new hot papers are very recent scientific contributions that are receiving recognition during a current period, they may signal important new trends in research and serve as leading indicators of scientific advancement (Clarivate Analytics, 2017b).

Sometimes if a published work is hot, it becomes recognized rapidly, especially when it has significance for a critical mass of active researchers in a growth topic, such as the fields of bibliometric and scientometric. It is largely these papers that drive the impact factor of a journal. It is also interesting for researchers to see what areas of library and information science are "hot" and what new opportunities might be found in those developing areas.

This study investigates the hot papers published in the subject area of library and information science during 2016-2017. By searching for the hot papers from 2016 to 2017, we can get an indication of what directions in LIS have been actively developed over recent years. However, the purpose of this study is to examine the research method of hot papers in the LIS subject area.

## Materials and Methods

We used Web of Science (WoS) to search for the hot papers published in the LIS *subject area*. First, bibliometric techniques were applied in this study to gather hot papers. Second, the research methods of these papers were examined. An advanced search was conducted on December 10, 2017, in the WoS citation database for hot papers. We conducted a search in the advanced search for: SU="Information Science" and refined it

by: ESI Top Papers: (Hot Papers in Field). The results show six hot papers for this subject area (see Table 1).

## Results

Hot papers published in the subject area of LIS are compiled in Table 1.

**Table 1. Hot papers Published in the subject area of LIS**

Article bibliographic information	Research method	No. of Citations
Hamari, Juho; Sjolint, Mimmi; Ukkonen, Antti (2016). The sharing economy: Why people participate in collaborative consumption. <i>Journal of the Association for Information Science and Technology</i> .	Survey	76
Waltman, Ludo (2016). A review of the literature on citation impact indicators. <i>Journal of Informetrics</i> .	Bibliometric	63
Harzing, Anne-Wil; Alakangas, Satu (2016). Google Scholar, Scopus and the Web of Science: a longitudinal and cross-disciplinary comparison. <i>Scientometrics</i> .	Bibliometric	51
Park, Hyojung; Reber, Bryan H.; Chon, Myoung-Gi (2016). Tweeting as Health Communication: Health Organizations' Use of Twitter for Health Promotion and Public Engagement. <i>Journal of Health Communication</i> .	Content analysis	10
Casero-Ripolles, Andreu (2017). Producing Political Content for Web 2.0: Empowering Citizens and Vulnerable Populations. <i>Profesional de la Informacion</i> .	Survey	7
Casnici, Niccolo; Grimaldo, Francisco; Gilbert, Nigel; et al. (2017). Attitudes of Referees in a Multidisciplinary Journal: An Empirical Analysis. <i>Journal of the Association for Information Science and Technology</i> .	Empirical analysis (Bibliometric)	5

As can be seen in Table 1, the subject area of bibliometric, also known as scientometric, appears as foci of high interest. Bibliometric has been for a long time one of the areas receiving extensive coverage in the field of library and information science.

Table 2 shows that two papers out of six were conducted based on *bibliometric*, two papers have been done by using *survey* method, one paper used the *content analysis* method, and one of them was an *empirical analysis* in the field of bibliometrics.

**Table 2. Research methods**

Research methods	No. of papers	Percentage
Bibliometric	2	33
Survey	2	33
Content analysis	1	17
Empirical analysis (in Bibliometric)	1	17

Table 3 presents that five out of six hot papers are research article and one of the six hot papers is review.

**Table 3. Document type**

Document type	No. of papers
Article	5
Review	1

Table 4 indicates the source titles of hot papers. It is interesting that two out of six hot papers have been published in the *Journal of the Association for Information Science and Technology*.

**Table 4. Source Titles**

Source title	Number of hot papers
Journal of the Association for Information Science and Technology	2
Journal of Health Communication	1
Journal of Informetrics	1
Profesional de la Informacion	1
Scientometrics	1

Table 5 shows the co-authorship pattern of hot papers. This table indicates that four out of six hot papers were result of scientific collaboration and two of them have been conducted by one researcher.

**Table 5. Co-authorship pattern**

Co-authorship	No. of hot papers
One author	2
Two authors	1
Three authors or more	3

Table 6 shows the number of hot papers per year.

**Table 6. Publication year**

Publication Year	No. of hot papers
2016	4
2017	2

## Discussion and Conclusion

Hot Papers are selected on the basis of citation frequency. Citations frequency reflects that a scientific paper has captured the scientific community's attention. However, it should be noted that "*there is an inherent delay in the normal process of diffusing ideas.*"

*Science and scholarship do not happen overnight. Even the Hot Papers themselves required years to incubate. New scientific ideas abound. So getting one's ideas across requires an ongoing educational and marketing effort. In addition to publishing, most highly cited authors spend years proselytizing their discoveries by discussing them at conferences and seminars and at every other opportunity" (Garfield, 2000).*

Hot papers in a subject area are indicators of emerging scientific impact as they reveal which recent research papers are currently attracting the attention of the global research community. Hot papers in the LIS subject area are recently published research papers that are accruing citations at a clip markedly above those of comparable type and age. This study by investigating the research method of hot research papers indicates that two papers out of six were conducted based on bibliometric, two papers have been done by using survey method, one paper used the content analysis method, and one of them was an empirical analysis in the field of bibliometrics.

## References

- Clarivate Analytics (2017a). *Essential Science - Hot Papers. Essential Science Indicators - Data Information: Understanding Core Data - Hot Papers*. Science Watch. Retrieved December 10, 2017, from <http://archive.sciencewatch.com/about/met/core-hp/>
- Clarivate Analytics (2017b). *New hot papers*. ScienceWatch.com. Retrieved December 10, 2017, from <http://archive.sciencewatch.com/dr/nhp/>
- Clarivate Analytics (2017c). *Incites Essential Science Indicators Help- Hot Paper*. Retrieved December 10, 2017, from <http://ips-science-help.thomsonreuters.com/incitesLiveESI/ESIGroup/glossaryAZgroup/g2/8078-TRS.html>
- Garfield, E. (2000). The Evolution of "Hot Papers". *The Scientist*, 14[14]:4, July 10, 2000.

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