

DOES THE COVID-19 PANDEMIC AFFECT RESEARCH PRODUCTIVITY ABOUT THE INTERNATIONAL JOURNAL LIBRARY?

Prasetyo Adi Nugroho
Airlangga University Library

Abstract

The Corona virus pandemic caused public activities to be shackled. Libraries as information providers can help the distance learning process due to Corona. Librarians as library managers are required to innovate through research and publications. This study aims to analyze whether the Corona virus pandemic has affected the publication productivity of Indonesian authors in accredited international journals. This study uses a quantitative approach with secondary data analysis methods. The sample of this research is a published scientific paper/paper containing the keyword or topic "library", the keyword or topic "information science", and having a correspondent writer from Indonesia. The results of the study show that the coronavirus pandemic does not have a significant effect on the publication rate. Besides that,

Saykey: Corona, Information Science, Libraries, Publications

Introduction

The corona virus pandemic is a global chaos caused by viruses derived from SARS and MERS, but with different variants. COVID-19 is a new virus where this virus is more susceptible to infecting other people even with physical contact. Therefore, people are advised to reduce physical contact and crowd in public areas (de Oliveira Araújo et al., 2020).

The corona virus pandemic has also changed people's lives, especially in Indonesia. Local governments have begun to limit economic activities and implement health protocols (Suryahadi et al., 2020). Unmitigated, at the beginning of the outbreak, several local governments implemented PSBB or large-scale social restrictions. This causes difficulties

for the community where a lot is going on Layoffs due to the fact that the income of many companies has decreased drastically, or even nonexistent (Wibawa, 2017).

In addition, social restrictions have also caused people in higher education to change their work rules, where now working from home has become a new daily routine for the community (Olivia et al., 2020). This also has an impact on academics, where the teaching and learning process also uses online and long-distance digital technology. As a result, many research and development activities are delayed or take longer to complete (Setiati & Azwar, 2020).

One of the university's efforts to assist remote education and research is by means of a library repository facility



they. The library as a means of driving literacy is the main spearhead for universities in providing the literature needed by academics during a pandemic. Research requires a lot of information as a reference, especially research in the social sciences (Radanliev et al., 2020). Therefore, it is important for librarians to develop their skills, so that they can be more useful for academics. One of the efforts of librarians is to collaborate with academics to conduct research and publications on library studies (Seeman, 2018).

Research and publications have indeed become benchmarks for the success of a higher education institution. Librarians as library management should also conduct research and publications related to library services, so as to produce the latest innovations. Research on higher education librarians is now being encouraged so that they can penetrate Scopus indexed international journals. This is because Scopus is a reference for ranking a university in webometrics (Jati, 2011). This study aims to observe whether the influence of the corona virus pandemic has caused research on libraries to decline.

Literature review

Research As Demands of College Librarians

Universities are required to carry out the Tri Dharma of Education, namely education, research, and community service. Education includes the learning process on campus (Wibawa, 2017). Community service is related to social work, social service activities, as well as the university's contribution to the wider community, especially in rural areas. Research relates to research and publication of research results in national and international standard journals (Nygaard, 2017).

College course also supported by the library as a provider of information for students and lecturers. Without a library, teaching and learning activities and research will be lame due to lack of literacy. Librarians in the higher education area are required to have a better understanding of library science, so they are able to make innovations in the field of literature (Noh, 2015).

The more innovation in library science, the more innovation workable. State universities are one of them, with supported funds

fully funded by the government, librarians can collaborate with lecturers to finance activities their research. In contrast to librarians at public libraries, research budgets at state universities are indeed provided directly by the Ministry of Research and Technology. This opportunity can be used by librarians to improve their competence through collaborative research (Retnowati et al., 2018).

Correlation between Information Science and Library Science in Higher Education Institutions

Library science is part of information science which focuses on the dissemination of information through the library. Library science makes use of processes and techniques related to the information life cycle, including making, packaging, dissemination, transformation, and presentation of information relating to library patrons. Library Science is defined as a systematic collection of knowledge related to books and libraries, including various aspects related to books, such as librarian management (Simmonds & Andaleeb, 2001).

While information science itself is related to the analysis, collection, classification, storage, and protection of information. Information science focuses on how to utilize the flow of information so that it can be useful for agencies or companies. Between information science and library science are mutually sustainable with each other. Information science teaches how to manage information to help library management. The term Library and Information Science (LIS) is often used to emphasize the scientific and technical basis of the subject, and its relationship to Information Science (Hiller, 2001).

Librarians need a variety of information in order to find out trends in demand for literature and information needed by the public. Librarianship is a profession dedicated to applying theory and technology to the utilization of information collections in all formats. Therefore, librarians really need information science so that their talents can help the community in increasing literacy (Tammara, 2020).

Research methods

This study uses descriptive quantitative method with secondary data analysis. This method collects data that has been provided by third parties as data provider agencies to the public. In today's digital era, many global agencies provide free data to the public by utilizing big data. Secondary data can speed up the research process compared to collecting data from scratch, especially during a pandemic like now, where every public activity is limited (Wardhana, 2020).

Scopus an indexing body for international standard journals also provides public data access for subscribing agencies. However, because subscription fees are so expensive, only state higher education institutions, large private universities, and ministries are able to budget funds for subscriptions. This study collected publication data on the Scopus website by comparing data between 2019 and 2020 (Klapka & Slaby, 2018). The sample of this study is published papers containing the keyword or topic "library", the keyword or topic "information science", and having correspondent authors from Indonesia. Data were analyzed in tabular form. The data presented is divided between the number of publications per year, affiliations, and document types (Mafruchati, 2020).

Results and Discussion

Although library science is continuous with information science, of course, it has its own characteristics for students academics. Not all discussion

about library science comes from information science. As in facility management and librarian human resource management. This has caused some academics to prioritize conducting research on one discipline.

Table 1 Number of papers published in 2019-2020

Topic/ Keywords	Year	
	2019	2020
Libraries	284	365
Information science	838	837

The table above shows that there is a significant decrease in scientific papers about libraries. However, papers on information science did not show a significant decline, only one paper apart. This proves that the topic of information science is more in demand than libraries, especially in the digital era like now.

Simmonds and Andaleeb on their studies argue that information science also discuss about the use of data in big data for the intended purpose (Simmonds & Andaleeb, 2001). Due to the corona virus pandemic, people, especially higher education institutions, have had to change their work online (Akyıldız, 2020). This makes the theme of information science more desirable than libraries, considering that all forms of public services must prioritize online access (Aristovnik et al., 2020).

Table 2 List of campuses with the most papers on library and information science topics during 2019-2020

Affiliate Campus	Information science	Affiliate Campus	Libraries
UnivDiponegoro	359	UnivIndonesia	54
UnivIndonesia	126	UnivAirlangga	46
BINUS University	106	UnivPadjadjaran	39
UnivGajah Mada	70	UnivGajah Mada	38
Telkom University	58	UnivDiponegoro	25
November 10th Institute of Technology	43	Bandung Institute of	24
March Eleventh Univ	40	Hasanuddin University	24
Bandung Institute of	37	March Eleventh Univ	23
UnivAirlangga	32	BINUS University	17
UnivIndonesian Education	30	UnivNorth Sumatra	16

The table above shows that the number of information science papers is still higher among the 10 universities above, compared

library. For Information science topics Diponegoro University has more than 300 papers, but only 25 papers on the topic



library. University of Indonesia Library dominate the number of papers 54. Even so, there are far fewer papers on libraries at the University of Indonesia than on information science.

Information science is the latest trend in the field of research, is not only concerned with the problem of how to process data, but also the science of how to process raw data into readable data, and where to get this data. Table 2 shows that even though the University of Indonesia is a university oldest in this country, but for matters of paper about science information, Diponegoro University far outperforms the oldest university. This matter because *bigdata* has provide a variety the kinds of information needed instantly and research on information science uses more secondary data as samples that have been provided by many agencies and public data provider services in cyberspace (Lytras & Visvizi, 2019).

The study by Maceli suggests that information science is a science major that observes the characteristics and uses of information. In addition, information science also analyzes the power map that regulates the flow of information, such as corporations or large agencies that control the circulation of information, and how to process this information so that it can be utilized optimally (Maceli, 2018). This also relates to information and knowledge that can be stored through technology, as well as technological facilities related to its management and use. The use of social media, which is so intense in the current era, makes it necessary to use circulating information so that it can be used by librarians, so that they can produce the latest innovations regarding library management (Rachman & Putri, 2018).

In planning which paper will be published in a journals, academics need to think about what types of publications can be quickly accepted by the editors. Each journal has specificity in publication, including in prioritizing what type of publication is their regular publication. Not all journals prioritize accepting publications in paper form. There are also several journals that focus on reviews.

Table 3: Type of paper during 2019-2020 on Scopus by Indonesian authors

Type paper	Information science		Libraries	
	2019	2020	2019	2020
Article	353	343	200	164
conference papers	460	461	155	88
Reviews	9	20	8	31
paper data	-	1	1	1
Book	-	2	-	-
Book chapter	15	8	1	-

Table 3 shows that there is a decrease in the number of published papers, but not too significant. The topic of information science still outperforms the topic of libraries. Articles which are full scale papers with complete research data still dominate the number of papers published in Scopus indexed journals. This proves that scientific work in full paper format such as articles is still a benchmark for research progress for librarians and academics.

conference papers or Scientific papers published through international conferences are also the second favorite after articles. This is because the competitive level of scientific papers for international conferences is easier when compared to full scale papers, because they do not have to go through a long series of review processes by many global reviewers (Ausloos et al., 2016). International conferences are also easier to participate in because they are organized by several agencies abroad that are willing to cooperate with the host country agencies, so that they can reduce the tightness of the process of reviewing scientific papers (Jen et al., 2018).

However, the sad thing in table 3 is that the number of books published each year is almost non-existent. This is because books require more time and a lot of information, when compared to other types of publication. In addition, the publication incentive for a book is smaller when compared to scientific works such as articles, reviews, or conference papers (Retnowati et al., 2018).

Conclusion

Based on the results of the study above, it can be concluded that the coronavirus pandemic caused a decrease in publication productivity, but not significantly. The total number of scientific works on literature actually increased in 2020. This study too

shows that scientific work on information science is more desirable than libraries. Meanwhile, for the type of scientific work, full scale papers or referred to as articles still dominate,

when compared to typeoother scientific work. Conference papers are an alternative choice for academics and librarians as writers, because they are more convenient than articles.

REFERENCES

- Akyıldız, S. T. (2020). College students' views on the pandemic distance education: A focus group discussion. *International Journal of Technology in Education and Science*, 4(4), 322–334.
- Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N. & Umek, L. (2020). Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability*, 12(20), 8438.
- Ausloos, M., Nedic, O. & Dekanski, A. (2016). Day of the week effect in paper submission/acceptance/rejection to/in/by peer review journals. *Physica A: Statistical Mechanics and Its Applications*, 456, 197–203.
- de Oliveira Araújo, F. J., de Lima, L. S. A., Cidade, P. I. M., Nobre, C. B. & Neto, M. L. R. (2020). Impact of Sars-Cov-2 And its reverberation in global higher education and mental health. *Psychiatry Research*, 112977.
- Hiller, S. (2001). *Assessing user needs, satisfaction, and library performance at the University of Washington Libraries*.
- Jati, H. (2011). Web impact factor: a webometric approach for Indonesian universities. *International Conference on Informatics for Development*, 74–77.
- Jen, W., Zhang, S. & Chen, M. (2018). *Predicting Conference Paper Acceptance*.
- Klapka, O. & Slaby, A. (2018). Visual Analysis of Search Results in Scopus Database. *International Conference on Theory and Practice of Digital Libraries*, 340–343.
- Lytras, M. D. & Visvizi, A. (2019). Big Data Research for Social Science and Social Impact. *Sustainability*, 12(1), 1–4.
- Maceli, M. (2018). Tech-Savvy Librarian Versus (Library) Technologist: Understanding the Future Role of Librarians in Technology Practice. In *Re-envisioning the MLS: Perspectives on the Future of Library and Information Science Education* (pp. 153–178). Emerald Publishing Limited.
- Mafruchati, M. (2020). The Use of Dates against COVID-19, based on Effectiveness or Religion's Believe? Trends and Relevance Analysis in Big Data. *Vaccine*, 1, 0.
- Noh, Y. (2015). Imagining library 4.0: Creating a model for future libraries. *The Journal of Academic Librarianship*, 41(6), 786–797.
- Nygaard, L. P. (2017). Publishing and perishing: an academic literacies framework for investigating research productivity. *Studies in Higher Education*, 42(3), 519–532.
- Olivia, S., Gibson, J. & Nasrudin, R. an. (2020). Indonesia in the Time of Covid-19. *Bulletin of Indonesian Economic Studies*, 56(2), 143–174.
- Rachman, Y. B. & Putri, D. A. (2018). Social Media Application in Indonesian Academic Libraries. *Webology*, 15(1).
- Radanliev, P., De Roure, D., Walton, R., Van Kleek, M., Santos, O., Montalvo, R. M. & Maddox, L. T. (2020). What country, university or research institute, performed the best on COVID-19? Bibliometric analysis of scientific literature. *ArXiv Preprint ArXiv:2005.10082*.
- Retnowati, T. H., Mardapi, D. & Kartowagiran, B. (2018). Kinerja dosen di bidang penelitian dan publikasi ilmiah. *Jurnal Akuntabilitas Manajemen Pendidikan*, 6(2), 215–225.
- Seeman, C. (2018). *When is a Library No Longer a Library? The Future of All-Digital Academic Libraries. Passing from 'traditional' to modern*.
- Setiati, S. & Azwar, M. K. (2020). COVID-19 and Indonesia. *Acta Medica Indonesiana*, 52(1), 84–89.
- Simmonds, P. L. & Andaleeb, S. S. (2001). *Usage of academic libraries: The role of service quality, resources, and user characteristics*.
- Suryahadi, A., Al Izzati, R. & Suryadarma, D. (2020). *The Impact of COVID-19 Outbreak on Poverty: An Estimation for Indonesia*. SMERU Working Paper.



Tamaro, A. M. (2020). COVID 19 and Libraries in Italy. *International Information & Library Review*, 52(3), 216–220.

Wardhana, A. K. (2020). Information search trends about sharia: a comparison study between business-industry genre with book-literature genre. *Journal of Halal*

Product and Research, 3(1), 35–42.

Wibawa, S. (2017). Tridharma Perguruan Tinggi (Pendidikan Dan Pengabdian Kepada Masyarakat). *Disampaikan Dalam Rapat Perencanaan Pengawasan Proses Bisnis Perguruan Tinggi Negeri*. Yogyakarta, 29, 1–15.