

Research Article

The Citation Impact of Open Access LIS Journals: A Study of Selected Journals

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A B S T R A C T

Introduction: In recent years, there has been considerable research on the citation impact of open access (OA) journals, with a focus on citation analysis. Citation analysis involves examining references made in one text to another, providing insights into subject relationships, author effectiveness, and publishing trends.

Purpose: The purpose of this study, is to find out the citation impact of open access in the field of library and information science during the period of 2017 to 2023.

Methodology: In this study, we analyze the frequency of cited articles and journals based on their open access status using two key indicators: output indicators and citation impact indicators.

Result: In this study, we examined two journals and compared both of them by their citation numbers and percentages.

Conclusion: To successfully support open access (OA) publications, a multifaceted approach is essential. This includes educating people about the benefits of OA, such as increased research impact, visibility, and the broader societal advantages of knowledge sharing. Engaging with academic communities through institutional channels, conferences, and social media can help cultivate a culture that values OA publishing.

Keywords: Citation Impact, Open Access, LIS Journals, Citation Analysis, H-index, Bibliometric

Introduction

Open Access journals are not always brand-new works. The majority of the content in many well-known journals is only accessible through conventional access routes, with only a few recent years' worth of content being made available online. With the transition to open access, several reputable publications now provide access to much older information as well. The significance of an author's work is a crucial consideration. Authors will be more eager to use open-access channels if they can witness an increase in the effect of their work as a result of Open Access. 1,2

What is Citation?

A "citation" is how you tell your audience that a specific portion of your writing came from another source. It also gives your readers the information they need to find the position of the source on the reference or Works Cited page. Every citation must have a pair of brackets. One does not have a legitimate in-text citation and runs the risk of being accused of plagiarism without a set of parentheses.³

Citation Impact

Citation impact is the number of times a publication is cited by other publications. These raw citation numbers

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can be analyzed according to a number of characteristics using Web of Science or Scopus. Citation counts are also used to calculate the h-index and other indexes. The use of citation counts in research metrics presupposes that citations indicate research impact, i.e., that the research being cited contributed to the research that cited it.

To calculate the citation impact of a set of documents, divide the overall number of citations by the total number of publications. Citation impact indicates the average number of citations a document has.^{4,5}

Citation Impact = \sum Citations/ \sum Papers

Certain disciplines have a higher Citation Impact than other scientific subjects due to a variety of circumstances, including the extent to which references from other domains are cited.

Citation counts are a prominent measure of the impact of scientific publications. In the evaluation of research institutes, bibliometric indicators based on the number of citations received by an institution's publications are frequently used. However, using citation-based indicators might make it difficult to determine the influence of recent articles. Most papers obtain only a few citations one or two years after they are published. After a year, many publications still have only one or two citations, if any at all. Some of these publications may acquire several citations in subsequent years, but others may garner little attention in the future. This makes it difficult to assess the significance of recent articles. Nonetheless, research institutions frequently want their performance to be evaluated using their most current work.4 In this study, we offer a model for predicting the long-term influence of recent publications.6-8

Citation Impact in LIS

Non-LIS authors have a significant influence on the evolution of LIS due to their preferences for themes and methodologies, therefore we evaluated research influence by topic and author discipline, as well as citation counts. Citation counts of scientific articles are commonly used in scientometrics to quickly identify influential publications. However, some scholars have claimed that using citation-related measures to assess research effect is improper. Nonetheless, some research shows a favourable association between citation count and expert judgement. 9,10

Open Access

The majority of copyright and licencing limitations do not apply to open access (OA) resources. Open Access research publications, unlike those in traditional subscription journals, are free at the point of use for anyone with an internet connection, eliminating the requirement for institutional login IDs and passwords. Open access materials

are those that fit the criteria for "open access" and include free, online versions of peer-reviewed journal articles and conference papers, as well as technical reports, theses, and working papers. In most circumstances, readers can use them without any licensing limitations. They can thus be freely used for study, instruction, and other reasons. Scholars in economically deprived places can also gain access to the most recent research because it is open-access, which means that no payment is required.

Methodology

The purpose of this study, is to find out the citation impact of open access in the field of library and information science during the period of 2017 to 2023. The following ten journals studies; Georgia Library Quarterly, The Journal of Indian Library Association (JILA), South African Journal of Library & information Science (LIASA), SRELS Journal of Information Management, Knowledge Quest, Library Herald, Citaliste: The Scientific Journals on Theory and Practice of Librarianship, Catholic Library World, RBU Journals of Library & Information Science, Journal of Library and Information Studies. In the study, we present a number of indicators or frequency of cited articles and journals according to their use of open access. While the output indicator can be used for the various electronic systems we use in the study, and can relate to various document types analyzed, the citation impact indicators are used only within the context of the database. The number of citations of articles is counted from Google Scholars. .11-14

Results

Table 1 shows the distribution of citations according to volume. The distribution of citations in this table is the total per volume and per issue in one year.

Table 2 shows the year-wise distribution of citations and average citations per year. As shown in Tables 2 and 3, there are 7 (83-89) volumes from the year 2017 to 2023. Volumes are published in 2 (half-yearly) issues. For the year 2017, the total issued articles are 11, and the citations are 226, and the average of these articles is 20.55%. For 2018, the total number of issued articles is 9, citations are 141, and the average is 15.67%. For 2019, the total number of issued articles is 4, citations are 21, and the average is 5.25%. For 2020, the total issued articles are 11, citations are 37, and the average is 3.36%. For 2021, the total issued articles are 11, citations are 19, and the average is 1.75%. For 2022, the total number of issued articles is 16 and citations are 4 so, the average of citations is 0.25%. For 2023, total issued articles are 2, citations are 0 and the average is 0%.

If we see the all-over citations of this article, the data of total articles of 2017-2023 are 64, the total citations are 448 and the average of citations is 7%.

Table I.South African Journal of Library & Information Science (LIASA) Volume-Wise Distribution of Citations

Vol. No./ Issue No.	No. of Articles	No. of Citations	Average	Cumulative	
			Citation/ Articles	Citations	Percentage
83	11	226	20.55	226	8.23
84	9	141	15.67	367	13.36
85	4	21	5.25	388	14.13
86	11	37	3.36	425	15.48
87	11	19	1.73	444	16.17
88	16	4	0.25	448	16.31
89	2	0	0.	448	16.31
Total 7	64	448	7.	2746	100.

Table 2. South African Journal of Library & Information Science (LIASA) Year-wise Distribution of Citation

Year	No. of Articles	No. of Citations	Average Citation per Year
2017	11	226	20.55
2018	9	141	15.67
2019	4	21	5.25
2020	11	37	3.36
2021	11	19	1.73
2022	16	4	0.25
2023	2	0	0.00

Table 3.RBU Journals of Library & Information Science Volume-wise Distribution of Citations

Vol. No./ Issue No.	No. of Articles	No. of Citations	Average	Cumulative	
			Citation/ Articles	Citations	Percentage
19	13	2	0.15	2	13.3
20	10	0	0.	2	13.3
21	12	0	0.	2	13.3
22	18	1	0.06	3	20.
23	15	0	0.	3	20.
24	16	0	0.	3	20.
Total 6	84	3	0.036	15	100.

Table 4.RBU Journals of Library & Information Science Year-wise Distribution of Citation

Year	No. of Articles	No. of Citations	Average Citation per Year
2017	13	2	0.15
2018	10	0	0.
2019	12	0	0.
2020	18	1	0.06
2021	15	0	0.
2022	16	0	0.

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Table 3 shows the distribution of citations according to volume and per issue in one year. The distribution

Table 4 shows the year-wise distribution of citations and average citations per year. As shown in Tables 3 and 4, there are 6 (19-24) volumes from the years 2017 to 2022. Volumes are published in 1 issue per year. For 2017, the total issued articles are 13, the citations are 2 and the average of these articles is 0.15%. For 2018, the total issued articles are 10, citations are 0 and the average is 0%. For 2019, the total number of issued articles is 12, the citations are 0 and the average is 0%. For 2020, the total issued articles are 18, and citation is 1 and the average is 0.06%. For 2021, the total issued articles are 15, citations are 0 and the average is 0%. For 2022, the total number of issued articles is 16, citations are 0 and the average is 0%.

If we see all citations of this article, the number of total articles of 2017–2022 is 84, total citations are 3, and the average of citations is 0.036%.

Discussion

In this study, we examined the selected journals and compared all of them by their citation numbers and percentages. If we see the highest number of cited journals, the journal name is South African Journal of Library & Information Science (LIASA) with 7% citations of all articles and the least cited journal name is RBU Journals of Library & Information Science with 0.036%.

It's essential to keep in mind that citation rates may differ significantly between journals and academic fields. The number of citations a journal receives might vary depending on its standing, audience, and readership. The cited percentages you supplied imply that when compared to the RBU Journals of Library & Information Science, the South African Journal of Library & Information Science (LIASA) is obtaining a comparatively greater amount of recognition and attention in terms of citations.

However, it's of the utmost importance to take into account other elements when assessing a journal's influence. Citation counts by themselves do not give an accurate representation of a journal's impact. It is also important to consider additional criteria, including the impact factor, h-index, and general calibre and applicability of the research published in the journal. 15,16

Conclusion

To successfully support open access (OA) publications, a multifaceted approach is essential. This includes educating people about the benefits of OA, such as increased research impact, visibility, and the broader societal advantages of knowledge sharing. Engaging with academic communities through institutional channels, conferences, and social media can help cultivate a culture that values OA publishing.

Collaboration with academic institutions, funding organizations, and libraries is crucial to encourage and assist researchers in publishing in OA journals. Dispelling myths about the quality and reputation of OA articles by highlighting reputable journals and successful case studies can further accelerate adoption. While there is some debate about how OA affects citations, evidence suggests that OA articles generally receive more citations than those behind paywalls, with a citation advantage typically ranging from 10% to 20%. This advantage can be attributed to increased visibility, accessibility, and reduced self-citation. Additionally, OA journals benefit the wider economy and society by making research accessible to those who cannot afford subscription fees, and they allow for more rapid distribution of research findings. The advantages for academics and research institutions include expanding research reach, providing impact evidence, increasing citations, and enhancing research quality through transparent and replicable methods. However, a study on the citation impact of OA journals found that despite regular publication, these journals tend to have a lower citation rate compared to traditional journals, indicating that OA journals are cited less frequently by academics, scientists, and research professionals.

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References

- Archambault E, Amyot D, Deschamps P, Nicol A, Provencher F, Rebout L, Roberge G. Proportion of open access papers published in peer-reviewed journals at the European and World Levels—1996–2013. Rapport, Commission Européenne DG Recherche & Innovation; RTD-B6-PP-2011-2: Study to develop a set of indicators to measure open access. Science-Metrix; 2014.
- Bessemer H [Internet]. Gathering evidence about the effectiveness of 'open access' publishing policies in agriculture; [cited 2007 Apr 19]. Available from: http:// agriscontent.wordpress.com/2006/08/23/gatheringevidence-about-the-effectiveness-of-percentE2perce nt80percent9CopenaccesspercentE2percent80perce nt9D-publishing-policies-in-agriculture/
- Björk BC. The hybrid model for open access publication of scholarly articles: a failed experiment? J Am Soc Inform Sci Technol. 2012 Aug;63(8):1496-504.
- Bornmann, L. (2013). How to analyze percentile citation impact data meaningfully in bibliometrics: The statistical analysis of distributions, percentile rank classes, and top-cited papers. Journal of the American Society for Information Science and Technology, 64(3), 587-595.
- Budapest Open Access Initiative. Make research publically available [Internet]. The Open Society

- Foundations; [cited Opensoc2024 Apr 4]. Available from: http://www.opensocietyfoundations.org/openaccess
- Brody T. Citation analysis in the open access world [Internet]. Interactive Media International; 2004 [cited 2007 May 20]. Available from: http://eprints.ecs.soton. ac.uk/10000/01/tim_oa.pdf
- 7. Brody, T., Stamerjohanns, H., Vallières, F., Harnad, S., Yves, G., & Charles, O. (2004). The effect of open access on citation impact.
- Coleman A, Roback J. Open access federation for library and information science [Internet]. D-LIB Magazine. 2005 [cited 2007 May 29];11(12):1-16. Available from: www.dlib.org/dlib/december05/coleman/12coleman. html
- 9. DePaul Library [Internet]. Guides; [cited 2007 May 23]. Available from: https://libguides.depaul.edu/
- Laakso M, Björk BC. Delayed open access: an overlooked high-impact category of openly available scientific literature. J Am Soc Inform Sci Technol. 2013 Jun;64(7):1323–29.
- 11. Lee K, Brownstein JS, Mills RG, Kohane IS. Does collocation inform the impact of collaboration? PLoS One. 2010 Dec 15; 5(12):e14279.
- 12. McVeigh ME. Open access journals in the ISI citation databases: analysis of impact factors and citation patterns: a citation study from Thomson Scientific [Internet]. Philladelphia: Thompson Scientific; 2004 Oct [cited 2004 May 25]. p. 1-25. Available from: http://scientific.thomson.com/media/presentrep/essayspdf/openaccesscitations2.pdf
- 13. Wikipedia [Internet]. Open-access-journal; [cited 2004 May 22]. Available from: http://en.wikipedia.org/wiki/Open-access-journal
- 14. Publishing Open-Access Journals. A brief overview from the Public Library of Science. San Francisco: Public Library of Science; 2004.
- 15. Wikipedia [Internet]. Open access; 2023 Jul 11 [cited 2007 May 24]. Available from: https://en.wikipedia.org/wiki/Open_access
- 16. Library and Information Association of South Africa [Internet]. About; [cited 2007 May 26]. Available from: https://www.liasa.org.za/page/about
- RBU Journal of Library and Information Science [Internet]. About the journal; 2019 [cited 2021 May 25]. Available from: https://lisrbu.wixsite.com/dlis/ rbu-journal-of-lis
- 18. Piwowar, H., Priem, J., Larivière, V., Alperin, J. P., Matthias, L., Norlander, B., ... & Haustein, S. (2018). The state of OA: a large-scale analysis of the prevalence and impact of Open Access articles. PeerJ, 6, e4375.
- 19. Björk, B. C., & Solomon, D. (2012). Open access versus subscription journals: a comparison of scientific

- impact. BMC medicine, 10, 1-10.
- Claxton, L. D. (2005). Scientific authorship: Part 2. History, recurring issues, practices, and guidelines. Mutation Research/Reviews in Mutation Research, 589(1), 31-45. https://doi.org/10.1016/j.mrrev.2005.01.003
- Gasparyan, A. Y., Ayvazyan, L., Blackmore, H., & Kitas, G. D. (2013). Writing a narrative biomedical review: Considerations for authors, peer reviewers, and editors. Rheumatology International, 31(11), 1409-1417. https://doi.org/10.1007/s00296-011-1999-3
- Solomon, D. J., & Björk, B. C. (2012). A study of open access journals using article processing charges. Journal of the American Society for Information Science and Technology, 63(8), 1485-1495. https://doi.org/10.1002/ asi.22673