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Research on Chinese Science Journals Based on DOAJ

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Abstract

Through the study, we explore the development path of open access (OA) in Chinese Science journals based on DOAJ. This article examines the development of Open Access (OA) in Chinese Science journals on DOAJ, using a web-based survey of 86 journals. Data from the DOAJ platform and journal websites were collected and analyzed statistically with EXCEL. Findings indicate that the growth of Chinese Science journals is uneven, with a significant number of journals published in English. Most journals require authors to pay Article Processing Charges (APCs), and only 40.7% offer APC waiver policies. The predominant OA license is CC BY-NC-ND. About 69.77% of journals have a publishing cycle of under 20 weeks, and anonymous peer review is the most common method. Print remains the primary publication format, with few journals having long-term digital preservation or dedicated institutions in China for such preservation. Additionally, there is an imbalance in research themes. Recommendations include increasing the number of OA journals in Chinese Science disciplines and encouraging more Chinese journals to join the DOAJ, waving or reasonably charging APCs, adopting flexible Creative Common Licenses, implementing more rigorous peer review processes, reducing publishing cycles, internationalizing journal formats, and conducting further research on long-term digital preservation and expanding research themes.

Keywords

DOAJ, Chinese Science journals, digital preservation, Creative Commons license

1. Introduction

Open access has played a crucial role in disseminating academic resources and break down barriers to knowledge access. Scholars have confirmed the OA advantages in terms of temporal and spatial accessibility. Compared to non-OA articles, OA increases the browsing volume of articles, expands the geographical range of readers, and enables readers from many countries to access these articles. OA also promotes the dissemination of knowledge. As a result, OA effectively attracts readers and breaks the monopoly on academic resources. However, delayed OA has not achieved significant success in attracting readers from developing countries, and its impact on the dissemination of scientific knowledge remains limited (Zhang et al., 2021).

The Directory of Open Access Journals (DOAJ) was established in 2002 by the Open Society Institute with the aim of creating a global index of OA journals. Initially, the directory was hosted by Lund University in Sweden in 2003.The DOAJ indexes and provides high quality, peer-reviewed journals covering all languages, without being limited to any specific language or discipline. The goal of DOAJ is to increase the

visibility of articles and to ensure that all open access and scholarly journals adhere to quality control system to maintain content quality. In 2014, DOAJ implemented a new journal application process, introducing more stringent quality control standards for accepted journals. The application process includes 60 questions (Borchert & Boczar, 2016). Research shows that under the new management, the quality of journals indexed by DOAJ has significantly improved due to the new acceptance criteria (Marchitelli et al., 2017). As of September 25,2023, the DOAJ has indexed 19,898 journals and 9,315,758 articles. The DOAJ not only serves scientific research and academic communication, but it is also widely used for analyzing OA journals across various disciplines.

Kumar (2013), a librarian from India, conducted a study on OA journals in the field of library and information science (LIS) listed in the DOAJ. The study found that before 1990, there was only OA journal in the field, namely the Bulletin of the Medical Library Association, which was the only one journal in the area. The study also revealed that only 19.04% OA journals in LIS had an E-ISSN, about a quarter of journals were published semiannually, 22.22% of journals were published annually, and only 1.58% of journals were published monthly.

In 2014, Indian librarian Devendra Kumar conducted a study on OA journals in the field of environment science listed in the DOAJ. The study found that the United States had the largest number of OA journals in environment science, with 20 journals, accounting for 14.29%, ranking first. Brazil followed as the second-largest contributor. In term of language,125 OA journals of environment science were published in English, the common language, followed by Spanish. Regarding multilingual usage, 105 journals were published in a single language, representing 75%, while 19 journals were published in two languages, accounting for 13.57%. The year 2010 saw the highest number of OA journals launched in environment science, with 18 journals. Universities were the primary publishers of OA electronic journals, ranking first (Kumar, 2014).

Jamdade and Jamdade (2013) conducted a study on 470 education journals listed in the DOAJ. The study found that 39.15% of journals were focused on general education. Subject analysis revealed that 87.45% were dedicated to the pure education disciplines. The largest publications were in English, followed by Portuguese, and then Spanish. Brazil had the highest number of education publications. A total of 235 education journals were published in print, representing 50% of the journals.

In 2018, Indian scholars Singh and Gupta (2018) conducted a study on OA journals in the field of LIS listed in the DOAJ. The study found that 52.3% of OA journals were published in print, 47.7% were published online, and 33% were available in both formats. Regarding the publishing frequency of OA journals, 46.96% were published semiannually, and 23.48% were published quarterly, together accounting for approximately 71% of all OA publications. With the OA development, the United States ranks first in OA journals of the LIS in the DOAJ, followed by Brazil. Regarding the annual increase growth in the number of OA journals, since 2003, the highest increase occurred in 2013, with an addition of 14 journals. Another peak was reached in 2017, with 35 new journals added. English remains the dominant language of publication, accounting for 57.57% of the total, followed by Portuguese at 6.06%. Chinese accounts for only 0.75%. In terms of full-text formats, PDF is the most prevalent, making up 69.69% of the total. Double-blind peer review accounts for the largest proportion at 56.81%, followed by single-blind peer review at 17.42%. Notably, 98.5% OA journals do not charge any publication fees. In 2019, Indian scholars Nayana and Padmavathi conducted a study on Botanical journals in the DOAJ, revealing that English is the most widely used language and holds the dominant position. Compared to India, Brazil has the highest number of publications in the field. Most publications are concentrated in botany and biology, among the other disciplines (Nayana & Padmavathi, 2019).

There are numerous studies on disciplines research in the DOAJ, but as of now, no scholars have investigated OA journals in Chinese Science disciplines. The purpose of the study is to assess the contribution of Chinese scientific OA journals to the DOAJ, analyze the publishing trend of these journals, and promote the OA development in the field, as well as the construction of literature resources.

2. Method

The research data in the article comes from the DOAJ (https://www.doaj.org/),retrieved on September 25,2023, with a total of 86 journals included in the study. A web survey method was used to collect and

analyze data from the DOAJ platform and individual journal websites. The study examines the various aspects of Chinese scientific OA journals, such as the starting year of OA journals, language usage, whether the journals charge the articles processing fees, the license agreements adopted by the journals, and so on. The collected data were then statistically analyzed using Microsoft Excel.

3. Results and Discussion

3.1 Analysis of the Starting Year of OA Journal Publication

Table 1: The Starting year of OA journals in Chinese Science disciplines

Starting year OA journals	Number of OA journals
1980	1
1988	1
2001	1
2003	2
2008	1
2009	2
2010	4
2012	2
2013	1
2014	3
2015	7
2016	4
2017	3
2018	3
2019	5
2020	13
2021	22
2022	10

As shown in Table1, according to the survey on the DOAJ website, the annual growth of OA journals in the Science disciplines in China has shown a fluctuating increase. Before 1900, there were only 2 OA journals, accounting for 2.33% of the total number of such journals. In 2015, the increase was significant, with 7 new journals added. By 2020, the increase surged again, reaching 13 new journals in a single year. The largest increase occurred in 2021, with 22 new journals added that year. However, the growth rate declined in 2022, with only 10 new journals added. As of September 25,2023, there was only 1 OA journal added this year.

3.2 Language analysis of journals

*Table 2: Languages used in Chinese OA journals for **Science** disciplines*

Language	Number of OA journals	Percentage of Total
Chinese	21	24.42%
English	56	65.12%
Chinese and English	9	10.47%

It is can be seen in Table 2, Chinese is used in 21 journals, accounting for 24.24%. English is used in 56 journals, accounting for 65.12%. Both languages are used in 9 journals, accounting for 10.47%. Since English is an international language and has the advantage of being the primary language, it accounting for a large proportion.

3.3 Article processing charges of journals

*Table 3: Article processing charges for OA journals in Chinese **Science** disciplines*

Fees	Number of OA journals	Percentage of Total
Free	31	36.05%
Pay	55	63.95%

As shown in Table 3, there was a slight discrepancy in price comparison due to the difference in DOAJ's data update schedules in each journal. Among Chinese OA journals in Science disciplines, 36.05% do not charge any article processing fees, 63.95% require author to pay fees.

According to the survey, the lowest APC was charged by the Journal of Shanghai Normal University (Nature Science Edition) at just 100 CNY. However, upon conducing a DOAJ search again in January 2024, it revealed that the journal is no longer listed in DOAJ. The next lowest APC was the Journal of Isotopes, with an APC only of 200 CNY.

Only one journal, National Science Open, charges fees in Euros, with an APC of 11,000 EUR. Among journals charging in USD, the lowest fee was 430 USD (The Chinese Journal of Geological Hazard and Control), while the highest was 3,650 USD (Genomics, Proteomics, Bioinformatics). The second highest USD fee was 2,500 USD (Opto-Electronic Advances), followed by Advance in Climate Change Research and Forest Ecosystems, both at 2000 USD. The APCs of other journals ranged between 800 and 1000 USD.

3.4 Creative Commons (CC) License

Table 4: Types of Creative Commons License for OA Journal Articles in Chinese Science Disciplines

Type	Number of OA journals	Percentage of Total
CC BY	16	18.60%
CC BY-NC	6	6.98%
CC BY-SA	1	1.16%
CC BY-NC-SA	1	1.16%
CC BY-NC-ND	38	44.19%
CC BY or CC BY-NC-ND	24	27.91%

For individuals using CC licenses, compliance with the following four terms is required：Attribution (BY), Not-Commercial use (NC), Not-Derivatives (ND), and Share Alike (SA). These terms combine to form six types of Creative Commons Licenses (Creative Commons, 2025).

In Chinese OA journals in the Science disciplines, CC-BY-NC-ND is the predominant type of CC License, accounting for 44.19%. The second most common type is CC-BY or CC BY-NC-ND, which accounts for 27.91%. CC BY follows with 18.60%, and CC BY-NC makes up only 6.98%. The least CC license types are the CC BY-SA or CC BY-NC-SA, each with only 1.16%. As shown in Table 4, the SA is used the least, it indicates that Chinese scientific journals of OA are generally not in favour of allowing modification to their articles by users.

Among the surveyed journals, 35 journals (40.7%) implement waiver policy for articles. 15 journals (17.44%) explicitly do not offer any waiver provision. Notably, the largest proportion—36 journals (41.86%) provide no clear statement regarding about their waiver policy in the guideline.

3.5 Comparison of Different Publishing Cycles

Table 5: Different publication cycles of Chinese OA journals for Science disciplines

Publishing cycles	Number of OA Journals	Percentage of total number
1-4 weeks	1	1.16%
4-8 weeks	13	15.12%
8-12 weeks	15	17.44%
12-16 weeks	21	24.42%
16-20 weeks	10	11.63%
20-24 weeks	8	9.30%
24-28 weeks	4	4.65%
28-32 weeks	7	8.14%
32-36 weeks	2	2.33%
Above36 weeks	5	5.81%

The time from manuscript submission to the final publication is a common concern for authors. As evidenced in Table 5, the distribution of publication timelines reveals significant variation among journals. Only 1 journal demonstrates a fast turnaround time of 1-4 weeks, representing the smallest proportion

(1.16%). The most prevalent publishing cycle falls within 12-16 weeks (24.42%), encompassing 21 journals. The second common publishing cycle is 8-12 weeks, accounting for 17.44%. There are 13 journals with a publishing cycle of 4-8 weeks, making up 15.12%. Five journals have a publishing cycle longer than 36 weeks, accounting for approximately 5.81%. Overall, about 30% of journals have a publication cycle of more than 20 weeks.

3.6 Comparison of Peer Review Types

All Chinese Science OA journals require peer review. As shown in Table 6, there is one journal with a peer review and one journal with both peer review or double anonymous peer review. Double anonymous peer review is used by 28 journals, accounting for 32.56%. Anonymous peer review is employed by 56 journals, accounting for 65.12%. From Table 6, it can be seen anonymous peer review is the primary peer review type used in Chinese Science OA journals.

*Table 6: Peer review types of articles in OA journals of Chinese **Science** disciplines*

Types	Number of OA journals	Percentage of total number
Peer review	1	1.16%
Double anonymous peer review	28	32.56%
Anonymous peer review	56	65.12%
Peer review or Double anonymous peer review	1	1.16%

3.7 Comparison of Journal Publishing Formats

With the advancement of computer and network communication technologies, journal publishing has undergone significant changes, the online journal gaining increasing popularity, particularly following the emergence of printers. However, print journals continue to play an irreplaceable role.

As shown in Table 7, there are 27 online journals, accounting for 31.40%. While print journals are 42, representing 48.84%. The formats of online and prints are only 17, making up 19.77&. Therefore, the formats of Chinese Science OA journals are mainly print.

Table 7: Publication formats of articles in OA journals of Chinese Science disciplines

Formats	Number of OA journals	Percentage of total number
online	27	31.40%
Print	42	48.84%
Online and print	17	19.77%

3.8 Analysis of Long Preservation of Digital Journals

The long-term digital preservation of academic resources is typically conducted without infringing on the commercial interests of the publishers. Some well-known international digital preservation systems include LOCKSS (Lots of Copies Keep Stuff Safe), CLOCKSS (Controlled Lots of Copies Keep Stuff Safe), Portico, Koninklijke Bibliotheek, and PMC (PubMed Central), among others. LOCKSS system is widely popular due to its open-source technology, low preservation cost, and the security and reliability of its archived materials (Xia & Li, 2007). CLOCKSS, an extension of LOCKSS, is a tax-exempt, not-for-profit organization made by a board consisting of libraries and publishers. Since CLOCKSS employs dark preservation, access is granted only under specific triggering circumstances (Liu, 2013). Portico is an alliance for third-party digital resource storage and is also a dark archive alliance. It generally serves as a backend system for long-term preservation of digital resources, not supporting direct user access, and resources can only be accessed under specific conditions (Liu et al., 2016). Portico is also a preservation alliance. As of October 23,2023, a total of 1,288 libraries and over 1,068 publishers joined the Portico (https://www.portico.org/). To provide Dutch research institutions with long-term, permanent historical academic e-journals, the Koninklijke Bibliotheek established the e-Depot electronic journal preservation system (Steenbakkers, 2005). For PMC, it is a free digital archive for life and biomedical literature (PubMed Central, 2023).

*Table 8: Digital long-term preservation system for OA journals of Chinese **Science** Disciplines*

Digital preservation	Number of OA journals	Percentage of total number
CLOCKSS; LOCKSS; PMC; Portico; Koninklijke	1	1.16%

Bibliotheek; German National Library		
Wanfang Database;CQVIP Database	1	1.16%
the National Edition Library	1	1.16%
the National Library of China	3	3.49%
CLOCKSS; Portico; Koninklijke Bibliotheek	34	39.54
CLOCKSS; LOCKSS; Koninklijke Bibliotheek	1	1.16%
PMC (PubMed Central)	2	2.33%
Portico	1	1.16%
Internet Archive	2	2.33%
Not Digital Archive	40	46.51%

Based on the data in Table 8, it can be observed that 34 OA journals are preserved in CLOCKSS, Portico, and Konlinklijke Bibliotheek systems, accounting for 39.54%. Additionally, 40 journals have not been digitally preserved, representing 46.51%. The National Library of China has preserved only 3 journals, while Wanfang and CQVIP databases, and National Edition Library, have each preserved merely 1 journal.

3.9 Full Text Formats of the Articles

*Table 9: Full text formats of the articles in OA journals of the Chinese **Science** Disciplines*

Full text format of the articles	Number of OA journals	Percentage of the total number
CNKI Database	1	1.16%
Springer Database	1	1.16%
Elsevier ScienceDirect Database	34	39.53%
HTML; PDF; XML	1	1.16%
HTML; PDF	34	39.53%
PDF; XML	1	1.16%
PDF	12	13.95%

Through an investigation of hyperlink URLs in the DOAJ, it was found 34 journals linked to the articles with full text format of Elsevier ScienceDirect database, accounting for 39.53%.Articles from 34 journals are exclusively available in HTML and PDF formats, representing 39.53%. The second most common format is PDF, accounting for 13.95%. Only one journal each linked to full-text articles in the CNKI database and Springer database. Notably, regardless of whether the hyperlink is directed to domestic or international databases or journal webpage full-text formats, PDF is consistently available, making it the most widely used and internationally accepted. It is worth noting that the two journals' websites can't be accessed: Journal of Shanghai Normal University (Natural Science Edition) and Journal of Radars. The findings are presented in Table 9.

3.10 Analysis of Journal Themes

*Table 10: The theme distribution of OA journals in Chinese **Science** disciplines*

Theme	Number of OA journals
Astronomy	4
Biology (general)	18
Botany	2
Chemistry	12
Geology	13
Human Anatomy	0
Mathematics	18
Microbiology	0
Nature History	0
Physics	19
Physiology	2
Science (General)	3
Zoology	2

The research on journal themes is unbalanced. The largest number of OA journals are in the field of Physics, with 19 journals. Mathematics and Biology (general) rank second, each with 18 journals. Geology

ranks third, followed by Chemistry in the fourth place. Meanwhile, no OA journals are found in Human anatomy, Microbiology, or Nature History. The distribution of other themes is presented in Table 10.

4. Conclusions

4.1 China Needs to Increase the Number of OA Journals in Science Disciplines and Appropriately Allow More Chinese Journals to Enter DOAJ

As the data of DOAJ is continuously updated, a new report was released on October 23, 2023, which provided statistics on OA journals in Science disciplines. The results revealed that the United Kingdom ranks first with 486 OA journals, followed by Indonesia in second place with 320 journals, Switzerland in third place with 218 OA journals, the United States in fourth place with 215 OA journals, and Brazil in fifth place with 159 journals. In comparison, China only has 86 journals in Science disciplines, which is relatively fewer than those of the top five countries. An analysis of the starting year of OA journals in China shows that the number of OA journals in Science disciplines has significantly grown from 2020 to 2022, with a notable increase of 22 journals in 2021. However, by September 23,2023, only one new OA journal had been added.

In the DOAJ, the proportion of journals in Education disciplines that are exclusively in English is 47.45% (Jamdade & Jamdade, 2013), while in LIS, the figure is 57.57% (Singh & Gupta, 2018), and in Botany, it is 54.54% (Nayana & Padmavathi, 2019). Currently, the use of English in Chinese OA Science journals is relatively high, reaching 65.12%. According to a language survey conducted on May 23,2025, there are 2,996 journals in English, 257 in Spanish, 236 in Indonesian, 158 in Portuguese, 139 in Russian, and only 53 in Chinese. To increase the presence of Chinese Science journals, it is essential to encourage more Chinese-language journals to join DOAJ.

4.2 Waiver or Reasonable Article Processing Charges for Chinese Science Journals

High article processing charges impose a financial burden on authors, hindering the publication of their works. To address the issue, some publishers have implemented the APC waiver policies, particularly from low or middle-income countries (LMICs) (Shieber, 2009). According to the World Bank, China is an upper-middle-income country, making the researcher illegible for APC waivers. Notably, the waiver policy has led to an increase in submissions from LMICs.

In China, the APC of OA journals for Chinese Science disciplines is moderate, typically ranging from 800 $ to 1000 $, with only a few journals charging higher fees. Although China is classified as an upper-middle-income country, it is commendable for Chinese Science OA journals to adopt APC waiver policies where feasible. The author suggests if Chinese Science journals receive financial sponsorship, they can implement waiver policies for authors. However, if there is no external funding, it is necessary to charge a reasonable APC.

4.3 Flexible Creative Commons Licenses

The CC license, developed by Lawrence Lessig of the United States in the 1980s, is a form of copyright licensing designed for creative works. From 2009 to 2019, the CC-BY license was the most widely adopted, followed by CC BY-NC-ND. Due to the minimal restrictions, CC-BY remains highly popular, whereas the stringent CC BY-NC-ND license was suited for rigorously peer-reviewed scientific journals (Zhu & Niu, 2020). Indian scholar Pooja Mishra and colleagues analyzed license agreements in the DOAJ, finding that 39.44% of journals adopted CC-BY, while 17.01% used CC BY-NC-ND. Notably, 47% of journals imposed certain publishing restrictions on authors, whereas the majority (53%) granted authors unrestricted publishing rights (Mishra et al., 2022).

The authors contend that CC BY-NC-ND likely represents the predominant license among Chinese Science journals. Among the DOAJ-indexed journals, approximately 10% have been awarded the DOAJ seal--a certification mark granted to OA journals that demonstrate high transparency, adherence to best practice, and rigorous publishing standards. Earning the DOAJ seal requires meeting seven stringent criteria (DOAJ, 2019). To date, Computational Visual Media is the only Chinese OA journal to have received the

distinction. As the DOAJ continues to refine its standards, the proportion of Chinese Science journals granting authors unrestricted publishing rights should increase accordingly.

4.4 Adopting Strict Peer Review Types to Improve Article Quality

Peer review is crucial because it enhances the quality of articles. In the field of computer science, 51.19% of articles undergo anonymous peer review, 25% undergo double-blind peer review, and 23.31% are subject to open peer review (Mehraj & Ganaie, 2019). Similarly, in Chinese Science OA journals, the proportion of anonymous peer review is relatively high, followed by double-blind peer review, with only one journal using open peer review. This indicates that Chinese OA journals of Science place significant emphasis on maintaining high publication standards, though further strengthening of these policies remains necessary.

4.5 Increase the Publications of Large Database Publisher Vendors and Shorten the Publishing Cycle

For the publication of OA journals in LIS, university presses are the primary publishers, accounting for 39%, followed by organizations (19%) and academic societies (17%) (Singh & Chander, 2018). In contrast, commercial publishers dominate the OA journal publishing in Chinese Science disciplines, particularly Keai communication Company. Keai is a joint venture established by China Science Publishing & Media and Elsevier, two leading publishers in science, technology, and medicine (STM). The company primarily provides publishing services for English-language STM in China and launching high-impact international journals. The well-known Science Press is also among the most prominent corporate publishers. Academic societies hold the second position in China's scientific publishing rankings. University presses trail immediately after, among which Tsinghua University Press stands out as the most distinguished. However, the vendors of large international database publisher remain underrepresented in Chinese OA journals' markets.

Shortening publishing cycles can increase article output. A study on OA veterinary and animal science journals found that 25.07% of journals had a publication cycle of 4-8 weeks, 24.18% took 9-12 weeks, 20.16 required 13-18 weeks, and only 1.49% needed prolonged cycles of 49-53 weeks (Rathinasabapathy & Veeranjaneyulu, 2021). In comparison, most Chinese OA journals of science have publication cycles of 12-16 weeks, with approximately 30% exceeding 20 weeks—a significantly higher proportion. Therefore, efforts should be made to reduce the publication timelines for Chinese OA journals of science.

4.6 Journal Publishing Formats Must Keep Up with the Internet Era, with the Internationalization of Full Article Formats

For the publishing formats of the political science disciplines in the DOAJ,18% of article formats are print, 37.96% are online, and 44.04% combine both print and online formats (Veerabasavaiah & Muthuraja, 2018). To adapt to the internet era, article publishing formats of Chinese OA Science journals must transform from the print-dominate model to prioritizing online publishing in order to increase article visibility.

PDF remains the most widely used format for journal articles. In the Chemistry disciplines of DOAJ, while all articles are available in PDF, 56.10% of journals also provide full-text HTML, and 21.95% offer XML formats (Li, 2017). For Chinese OA Science journals, maintaining PDF as a standard format is essential, but greater adoption of HTML should be encouraged to improve readability and global compatibility.

4.7 Advancing the Research on Digital Preservation of Journals

Within DOAJ, 69% of journals from Central European countries have established archiving policies. CLOCCKS is commonly used in Asian countries. Portico and National libraries serve as the widely used archiving repositories for the publishers in Central European countries, with 19% of journals archived in more than one location. There is a positive correlation existing between archiving journals and JCR indexing, meaning that archived journals tend to have more JCR index entries than non-archived journals (Marijanović

& Stančić, 2023). In the study, 46.51% of OA journals of Chinese Science disciplines currently lack digital preservation measures, highlighting a significant gap in long-term accessibility. To address this, China must strengthen international digital preservation collaborations while simultaneously developing robust domestic solutions for sustainable digital archiving.

4.8 Expending Journal Research Themes for Balanced Development

An analysis of Chinese OA journals in Science disciplines reveals a predominant focus on physics, mathematics, biology (general), geography, and chemistry, indicating national emphasis and an open attitude to international research in these fields. However, a significant gap exists in OA research areas such as human anatomy, microbiology, and natural history.

Additionally, disciplines including Botany, Physiology, and Zoology remain underrepresented in Chinese OA Science journals. To achieve balanced development across research domains, researchers in China must extend the study into neglected areas, therefore diversifying the scope of national OA Science journals in DOAJ. This strategic expansion will not only fill existing research voids, but also the comprehensiveness of China's academic contributions in the global OA landscape.

5. Prospect

Indian librarian Sivakumaren (2014) conducted a study on social science journals in the DOAJ (Directory of Open Access Journals) and found that there are 50 journals in this category. The majority of these journals are published in the United States, followed by Canada and then Spain. Only a small number of journals charge authors publication fees. Certain institutions, such as DESIDOC (Defence Scientific Information and Documentation Centre) and NISCAIR (National Institute of Science Communication and Information Resources), are publishing journals under an open-access model.

Singh (2018) conducted a study on Indian journals indexed in the DOAJ and found that there was only one journal in 2003, but the number had grown to 254 by 2017. According to statistics from the DOAJ, India ranks as the 12th largest open-access (OA) journal publishing country globally. In terms of disciplinary distribution, India's OA journal publishing is predominantly led by natural sciences, while progress in social sciences and humanities remains relatively underdeveloped.

While China's OA journals in Science disciplines lag significantly behind international standards, we believe that by aligning with the selection criteria and inclusion policies of the DOAJ, we can refine our policies and accelerate the development of OA publishing in China. To improve the success rate of DOAJ applications, it is essential to thoroughly understand its evaluation principles. Bi (2017) from Xian Jiaotong-Liverpool University provides a detailed analysis of DOAJ's standards and registration procedures, offering valuable guidance for journal editors. Additionally, Bi proposes recommendations for high-quality publishing practices to help editors navigate the potential challenges.

However, DOAJ's new selection criteria have sparked debate. Some journals removed from the DOAJ maintain high rankings in the SCI-mago Journal & Country Rank, indicating their acceptable academic quality (Sun, 2019). Therefore, journals not accepted by DOAJ should not be discouraged. As academic librarians, we should fully utilize DOAJ by curating and linking its high-quality journals, and then promoting these resources to researchers to meet their scholarly needs (Bankar et al., 2022). Moving forward, continued efforts in policy improvement, editorial standards and research awareness will be crucial in bridging the gap between China's OA journals and global benchmarks.

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Conflicts of Interest

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