



Science beyond English: to what extent do Vietnamese scholars publish in non-English languages?

Van Luong Nguyen¹, Dinh-Hai Luong², Hiep-Hung Pham^{3,4}

¹Department of Training Management, Ho Chi Minh National Academy of Politics, Hanoi; ²Vietnam National Institute of Educational Sciences, Hanoi; ³Center for Research and Practice on Education, Phu Xuan University, Hue; ⁴Reduvation Research Group, Thanh Do University, Hanoi, Vietnam

Abstract

Purpose: Although English has become the *lingua franca* for scholarly communication, scholars worldwide publish in other languages. Nevertheless, few studies have answered the question, “To what extent do scholars publish in non-English languages?” This study addresses that question, limiting its scope to Vietnamese scholars.

Methods: We reviewed 833 non-English documents authored by at least one scholar from Vietnam between 1960 and 2021, exploring aspects such as the language of the publication, the year of publication, the document type, number of document citations, the most prolific and most cited authors, and the primary research themes.

Results: Among non-English languages, French, Russian, and Chinese were the three most often selected by Vietnamese scholars for their publications. The year 2015 was a pivotal year when non-English publications from Vietnam significantly increased. Journal articles were the most common type of document, and the most frequent subject areas were medicine, agricultural and biological sciences, engineering, energy, and environmental science.

Conclusion: Although English is the primary language of science, the number of non-English documents by Vietnamese researchers has been increasing. This suggests that collaborative work between Vietnamese researchers and foreign researchers has also increased.

Keywords

Non-English publishing; Scholarly communication; Vietnam; Bibliometrics

Received: April 27, 2022

Accepted: July 14, 2022

Correspondence to Hiep-Hung Pham

hiep.pham@pxu.edu.vn

ORCID

Van Luong Nguyen

<http://orcid.org/0000-0003-2703-8626>

Dinh-Hai Luong

<http://orcid.org/0000-0003-0167-2645>

Hiep-Hung Pham

<http://orcid.org/0000-0003-3300-7770>

Introduction

Background

English is currently regarded as the *lingua franca* for scholarly communication [1]. For non-English speaking scholars, mastering at least a minimum level of English is a must to facilitate communication with and recognition by international peers [2]. Vietnam is not immune from

this phenomenon. In Vietnam’s current academic landscape, when people say “international publishing,” they imply scientific documents written in English [3]. Nevertheless, anecdotal evidence shows that Vietnamese scholars publish in languages other than English, including Russian, French, and Chinese. Non-English publishing is also important in the social sciences, arts, and humanities [4]. Vietnam, in particular, has long historical, social, economic, and political relationships with several non-English speaking countries, including China, France, and Russia. Therefore, it is important to understand the role of non-English publishing among Vietnamese scholars.

Objectives

This study investigates the patterns and dynamics of non-English scientific documents (co)authored by Vietnamese scholars in terms of the language of publication, year of publication, type of document, number of document citations, number of author citations, and primary research themes.

Methods

Ethics statement

As a literature-based study, approval by the institutional review board and informed consent were not required.

Study design and setting

This is a bibliometric study based on the Scopus database. The search query was conducted at 10:00 AM on February 10, 2022.

Data source/measurement

The Scopus database was selected because it is one of the largest scientific indexed databases covering documents in English and other notable languages. Our search included all authors affiliated with “Vietnam” or “Viet Nam” who published documents in non-English languages. All documents published in 2022 were excluded. We obtained 833 non-English documents authored by at least one scholar from Vietnam between 1960 and 2021. The year 1960 marked the start of our study because this was the first year that a non-English document was found in our search [5]. The retrieved raw data are available from Dataset 1.

Variables and bias

The study variables were document language, yearly number of documents, document type, subject area, author, and research themes. No bias was present.

Statistical methods

The data, including bibliometric indicators, were downloaded in comma-separated values format, and subsequently analyzed with VOSviewer ver. 1.6.8 (<https://www.vosviewer.com>).

Results

Language of publication

The number of non-English documents (co)authored by Vietnamese scholars obtained from the Scopus database be-

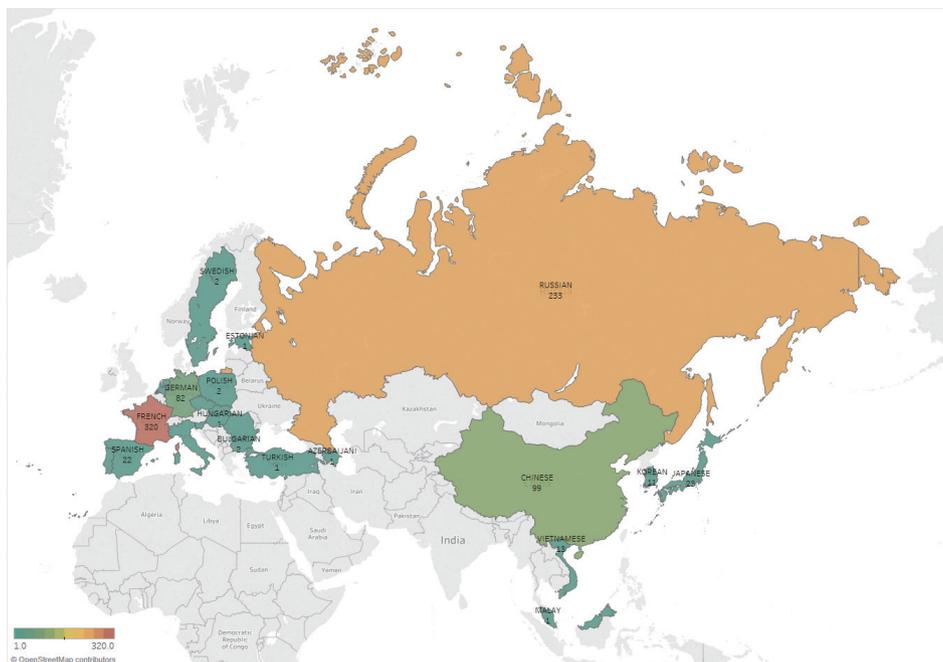


Fig. 1. Distribution of non-English documents (co)authored by Vietnamese scholars 1960–2021.

tween 1960 and 2021 is presented in Fig. 1. Notably, French led with 320 documents (38.42% of the total 833 documents) followed by Russian (233 documents, 27.97%), Chinese (99 documents, 11.88%), German (82 documents, 9.84%), and Japanese (23 documents, 2.76%) (Suppl. 1). A further investigation revealed that 13 Vietnamese-language documents were obtained from two sources: five documents from a Scopus-indexed conference (i.e., the International Society for Rock Mechanics and Rock Engineering, VietRock International Workshop, 2015) and eight documents from a no-longer-active journal (*Tap San Nhan Khoa*) (Suppl. 2).

Growth trends

The growth trends of all non-English documents (co)authored by Vietnamese scholars are shown in Fig. 2. Fig. 2 shows the growth trends of documents in the three most dominant languages, including French (blue columns), Russian (orange columns), and Chinese (gray columns). As shown in Fig. 2, the growth trends between 1960 and 2014 were slow and unstable and the number of publications per year never exceeded 30. The year 2015 marked the first time the number of publications exceeded 30 (44 publications). Although there was a decrease in 2016 (27 publications), the trend continued to increase in subsequent years.

Document types

Regarding the types of documents, most non-English documents written by Vietnamese scholars were 754 journal articles (90.52%), followed by 36 reviews (4.32%), 26 conference

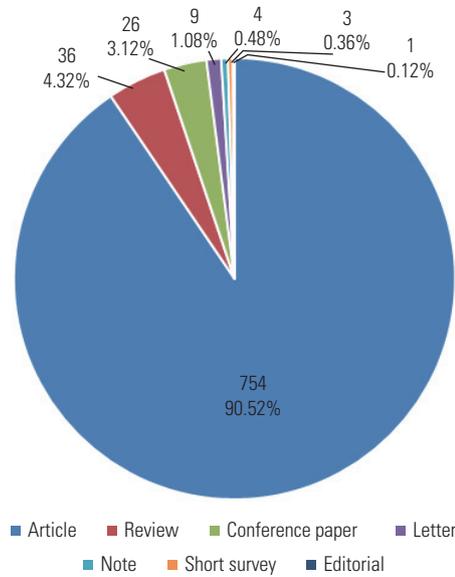


Fig. 3. Non-English documents (co)authored by Vietnamese scholars 1960–2021 according to the type of documents.

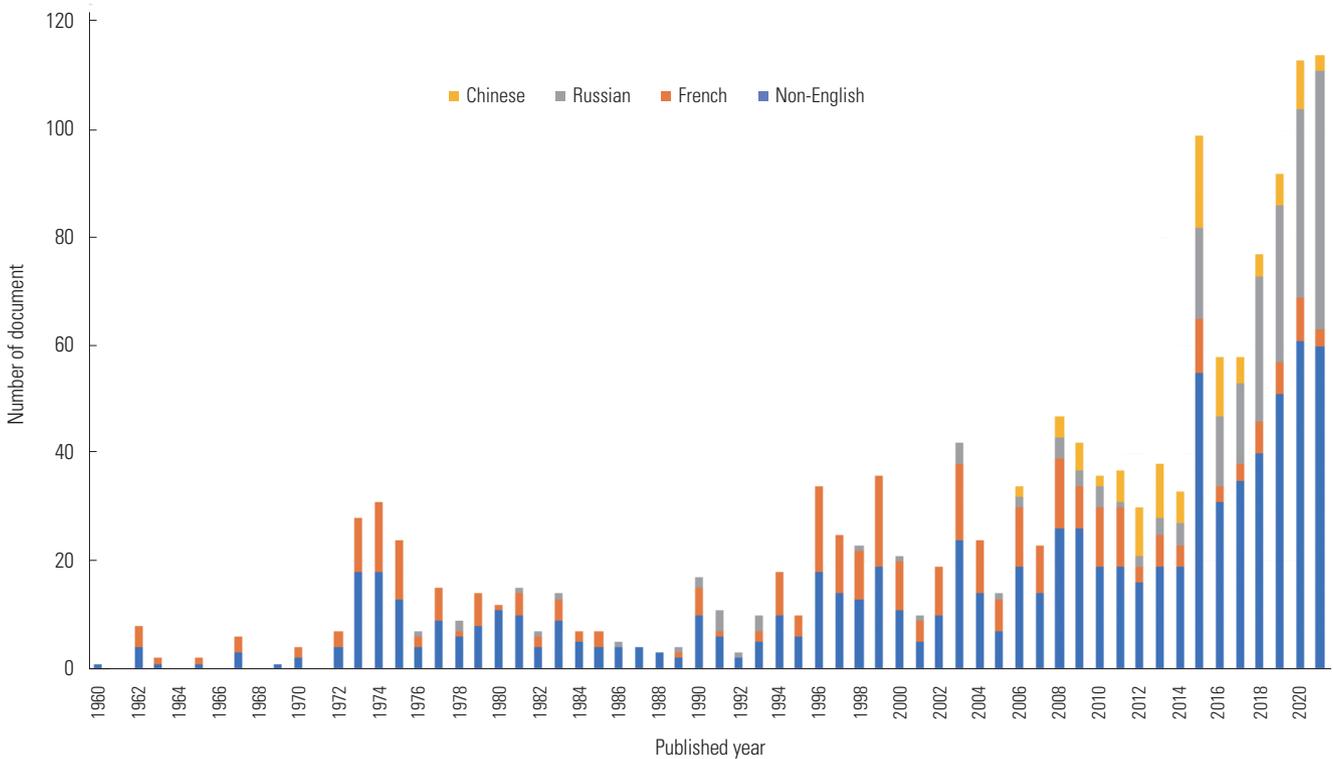


Fig. 2. The growth trends of non-English documents (co)authored by Vietnamese scholars 1960–2021.

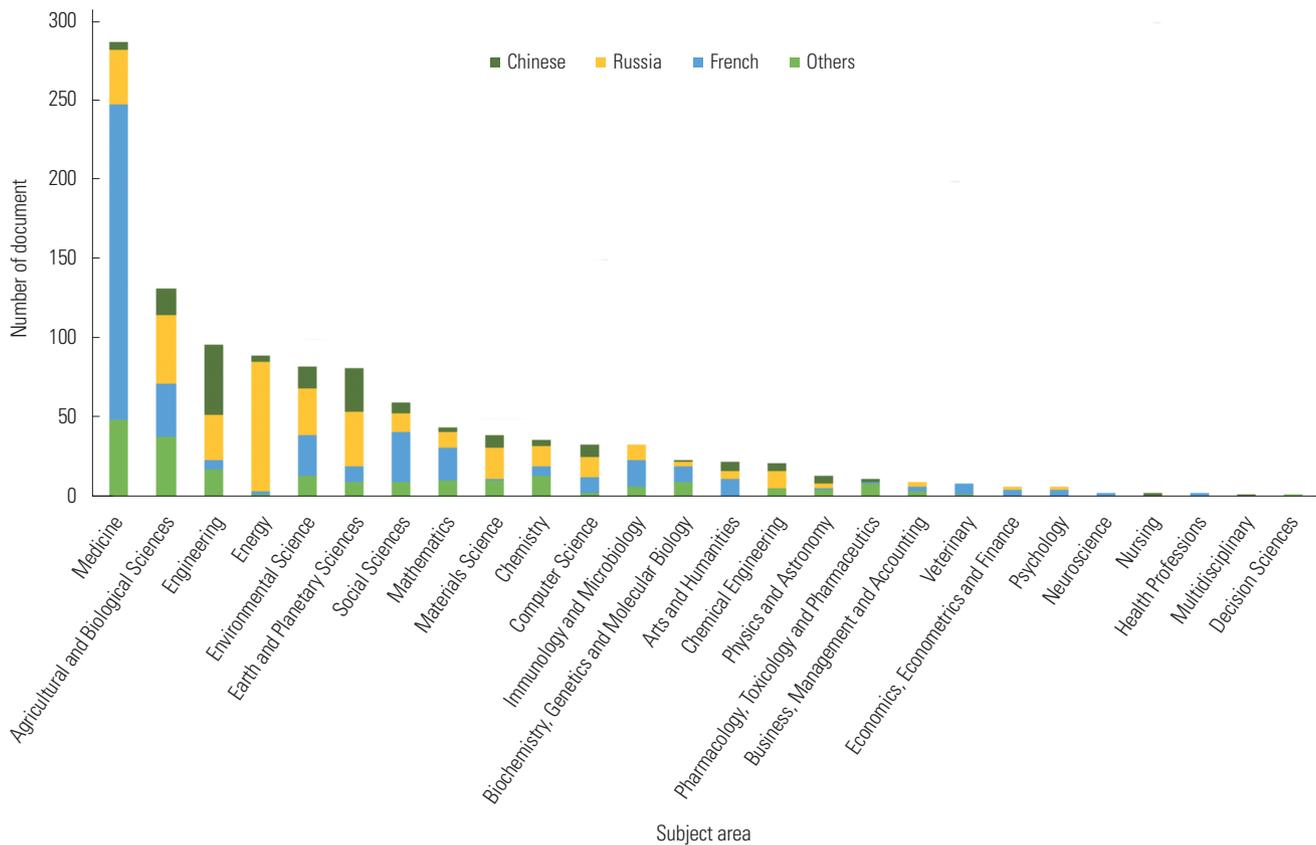


Fig. 4. Non-English documents (co)authored by Vietnamese scholars 1960–2021 according to the subject area.

papers (2.12%), and 9 letters (1.08%) (Fig. 3).

Subject areas and research themes

The number of non-English documents (co)authored by Vietnamese scholars according to subject area is presented in Fig. 4. The leading subject area was medicine, with 288 documents (34.57%). Other major subjects included 132 agriculture and biological sciences (15.85%), 96 engineering (11.52%), 90 energy (10.80%), 83 environmental science (9.96%), and 82 earth and planetary sciences (9.84%).

Fig. 5 presents the key topics and keywords found in the study documents. A single topic extracted from these documents corresponded to several keywords. Understandably, all keywords were from documents written in the major non-English languages (i.e., French, Russian, and Chinese). The topics were diverse and fragmented (Suppl. 3).

Top documents and authors

Suppl. 4 shows the top 10 non-English documents (co)authored by Vietnamese scholars according to the number of citations. The documents written in French received more citations than the documents written in other languages. Specifi-

cally, seven French documents were among the top cited documents (numbers 1–4, 7, 9, 10), followed by two documents written in Chinese (numbers 5 and 6) and one written in Russian (number 8).

Table 1 presents the top 10 authors based on two categories: number of documents and number of citations. Six authors appear in both categories, including Thanh NV, Tran MD, Nguyen TH, Tran L, Hieu PT, and Nguyen T, whereas four authors appear in only one category. In total, there were 14 authors appearing in at least one category. These authors all used the top three non-English languages identified in Fig. 2 (French, Russian, or Chinese) to publish their research. One scholar published in all three languages (Nguyen TH), and three scholars used two languages (Tran L, Nguyen T, and Bach TT).

Discussion

Key results

This study seeks to answer the question, “To what extent do Vietnamese scholars publish in non-English languages?” using 1960 to 2021 data from 833 non-English documents col-

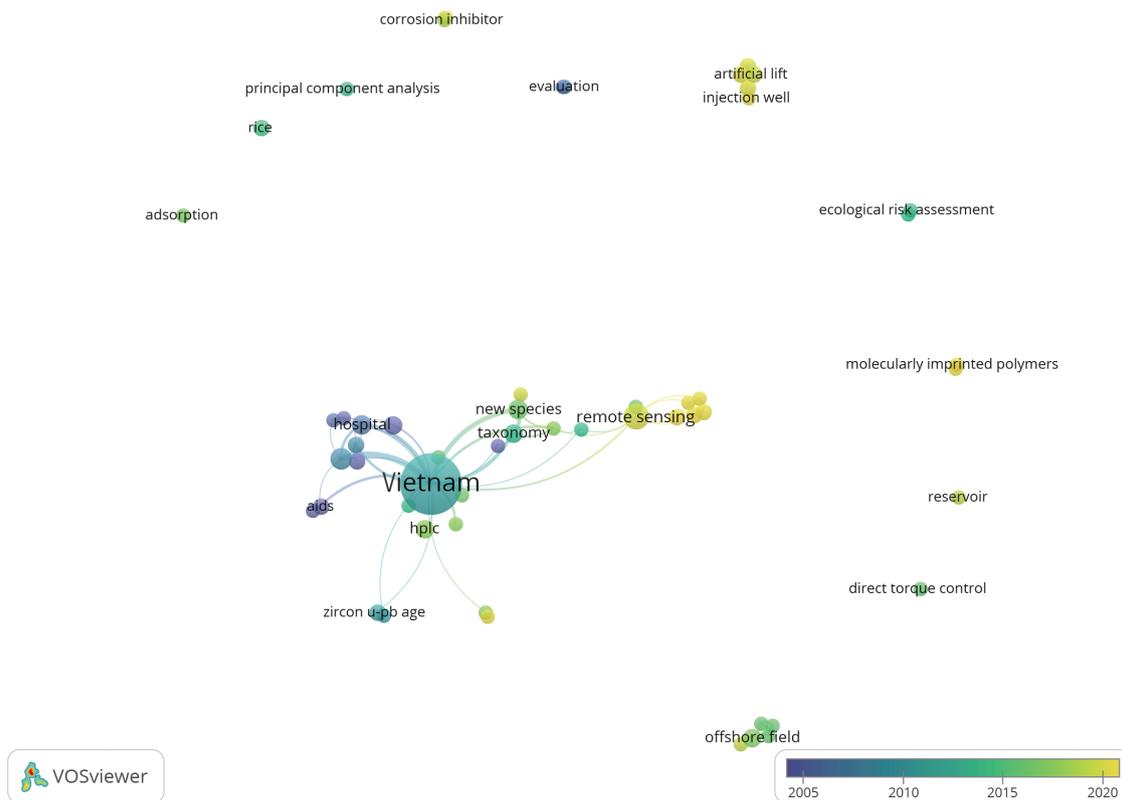


Fig. 5. Key topics and co-occurring keywords of non-English documents (co)authored by Vietnamese scholars 1960–2021. Total number of keywords, 55; the number of co-occurring keywords, at least 3.

Table 1. The top 10 authors published in non-English languages according to the number of documents and citations

Rank	Top 10 authors according to number of documents			Top 10 authors according to number of citations		
	Author (language)	Affiliation	Documents	Author (language)	Affiliation	Citations
1	Thanh NV (Russian)	Vietnamese Academy of Sciences and Technology	36	Tran MD (Chinese)	Hanoi University of Mining and Geology	93
2	Tran MD (Chinese)	Hanoi University of Mining and Geology	6	Tran L (Chinese, French)	Quang Binh University	71
3	Nguyen TH (Russian, Chinese, French, German)	Le Quy Don Technical University	6	Thanh NV	Vietnamese Academy of Sciences and Technology	47
4	Hung TL (Russian)	Le Quy Don Technical University	6	Bui M (Chinese)	Hanoi University of Mining and Geology	36
5	Tran L (Chinese, French)	Quang Binh University	5	Hieu PT (Chinese)	Vietnam National University, Ho Chi Minh City	30
6	Hieu PT (Chinese)	Vietnam National University-Ho Chi Minh City	5	Nguyen T (Chinese, French)	Ho Chi Minh City University of Industry	29
7	Nguyen T (Chinese, French)	Ho Chi Minh City University of Industry	5	Nguyen TH (Russian, Chinese, French, German)	Le Quy Don Technical University	22
8	Van Tien D (French)	Hanoi University	5	Bach TT (Korean, French)	Hospital Viet-Duc	20
9	Nguyen Duc Hanh (French)	Institute of Pasteur Viet Nam	5	Le HT (Chinese)	Hong Duc University	16
10	Nguyen Van Ai (French)	Institute of Pasteur Viet Nam	5	Quang DD (French)	Van Phuc Diplomatic Compound	15

lected from the Scopus database. The most frequent language was French (38.4%). In 2015, the number of non-English documents was 44. Medicine, agriculture and biological sciences, and engineering were the top-ranking fields of study.

Interpretation

Language

Vietnamese scholars published their documents in both English and non-English languages. The major non-English languages were 320 French (38.42%), 233 Russian (27.97%), 99 Chinese (11.88%), 82 German (9.84%), and 23 Japanese (2.76%). It is reasonable that these were the dominant languages as they are all languages of leading academic systems with long histories of collaboration with the Vietnamese academic system [6]. The French, Russian, and Chinese languages not only reflect established academic relationships with Vietnam but also historical political ties. Fig. 1 presents 13 documents written in Vietnamese.

Growth trends

Prior to 2014, the number of non-English documents (co)authored by Vietnamese authors was modest. Nevertheless, the trend appears to increase from 2015 onward with varied contributions in the three dominant languages. From the beginning years of this study, documents written in French have consistently contributed to the overall non-English documents (co)authored by Vietnamese scholars [7–10]. In contrast, the first document written in Russian was published in 1976, 14 years after the French, and there was a minimal contribution of Russian documents between 1976 and 2014. After 2015, the number of Russian documents increased significantly and contributed to the overall increase in non-English documents. Compared to documents written in French and Russian, the first documents written in Chinese appeared much later in 2006 [11,12].

Document types

Journal articles were the most common non-English documents by Vietnamese authors, with 754 published between 1960 and 2021 (90.52%). Other document types included reviews, conference papers, and letters. This finding implies that Vietnamese authors have not explored the full range of Scopus-indexed document types in non-English languages. This finding is similar to previous studies that explored the types of documents written in English by Vietnamese authors [13]. In the future, Vietnamese authors who want to publish their works in non-English languages should consider submitting their work to outlets other than journals (e.g., conferences).

Subject areas and research themes

When analyzing the top subject areas and research themes, this study did not find a significant number of non-English documents in the social sciences or the arts and humanities, contrary to our initial expectations. A similar study, using documents obtained from Web of Science between 2001 and 2015 that were written in English and (co)authored by Vietnamese scholars, identified engineering and technology, biomedical sciences, physics, and mathematics as the top subject areas [6]. Thus, the above mentioned gap in documents related to the social sciences and the arts and humanities reveals that there is still room for future Vietnamese scholars to publish in these non-English outlets.

Top authors and documents

The lists of top authors (according to the number of publications and citations) and top documents (according to the number of citations) are important references for future Vietnamese scholars who want to publish their works in non-English journals.

Limitations

This study had several limitations. First, due to the limited text available for each study, we did not utilize all aspects of bibliometric analysis, such as science mapping. Future studies could employ science mapping to further investigate the topic. Second, bibliometric analysis does not provide insight into the content of the studied documents. Future studies could avoid this limitation by adopting content analysis.

Conclusion

In recent years, Vietnam has implemented several initiatives aimed at boosting publications in international journals. In addition, academic scholars in Vietnam have studied various aspects of how to publish their works in international outlets. Nevertheless, these efforts have primarily emphasized documents written in English rather than non-English languages. Although our study confirms that English is not the only means of scholarly communication in Vietnam, there is still room for further investigation of this topic.

Conflict of Interest

No potential conflict of interest relevant to this article was reported.

Funding

The authors received no financial support for this article.

Data Availability

Dataset file is available from the Harvard Dataverse at: <https://doi.org/10.7910/DVN/C9VHWF>

Dataset 1. The retrieved raw data of 833 non-English documents collected from Scopus with search terms.

Supplementary Materials

Supplementary files are available from: <https://doi.org/10.7910/DVN/C9VHWF>

Suppl. 1. Top 10 non-English languages used by Vietnamese scholars according to the number of citations.

Suppl. 2. Thirteen documents written in Vietnamese.

Suppl. 3. Major topics and co-occurring keywords extracted from non-English documents (co)authored by Vietnamese scholars.

Suppl. 4. Top 10 non-English documents (co)authored by Vietnamese scholars according to the number of citations.

References

- O'Neil D. English as the lingua franca of international publishing. *World Eng* 2018;37:2:146–65. <https://doi.org/10.1111/weng.12293>
- Meneghini R, Packer AL. Is there science beyond English? *EMBO Rep* 2007;8:2:112–6. <https://doi.org/10.1038/sj.embor.7400906>
- Tran T, Trinh TP, Le CM, Hoang LK, Pham HH. Research as a base for sustainable development of universities: using the delphi method to explore factors affecting international publishing among Vietnamese academic staff. *Sustainability* 2020;12:3449. <https://doi.org/10.3390/su12083449>
- Liu W. The changing role of non-English papers in scholarly communication: evidence from Web of Science's three journal citation indexes. *Learn Publ* 2017;30:115–23. <https://doi.org/10.1002/leap.1089>
- Broz O, Trinh P, Cam Cong T. Complications cardio-pulmonaires rares et fatales de l'Ascariidose: ascaris dans le coeur et pneumonite par embolisation de leurs oeufs. *Pathol Microbiol (Basel)* 1960;23:36–45. <https://doi.org/10.1159/000160968>
- Nguyen TV, Ho-Le PT, Le VU. International collaboration in scientific research in Vietnam: an analysis of patterns and impact. *Scientometrics* 2017;110:1035–51. <https://doi.org/10.1007/s11192-016-2201-1>
- Bui QH, Buu-Hoi NP, Tran LY, Nhiep T, Nguyen VD, Vu DM. Activité anthelmintique du 2- (4'-thiazolyl) -benzimidazole chez l'Homme. *Chemotherapia* 1962;5:326–31. <https://doi.org/10.1159/000220006>
- Toan NC. Involutionn-aire. *Acta Math Acad Sci Hung* 1962;13:231–4. <https://doi.org/10.1007/BF02020787>
- Toan NC. Involutionn-aire et ses applications a l'étud des hyperquadriques dans les espaces euclidiens et non-euclidiens an dimensions. *Acta Math Acad Sci Hung* 1962;13:109–13. <https://doi.org/10.1007/BF02033630>
- Toan NC. Définition géométrique des quadriques dans les espaces non-euclidiens. *Acta Math Acad Sci Hung* 1962;13:101–7. <https://doi.org/10.1007/BF02033629>
- Tong SQ, Liu ZF, Le KP, Huang W. Chemical weathering in the Red River basin: records of major and trace elemental geochemistry. *Bull Miner Petrol Geochem* 2006;25:218–25. <http://www.bmpg.ac.cn/EN/abstract/abstract10575.shtml>
- Do HC, Ning S. Energy edge extraction method for super-spectral images. *Geomat Inf Sci Wuhan Univ* 2006;31:132–5. <http://ch.whu.edu.cn/en/article/id/2385>
- Vuong QH, Do MT, Pham TV, et al. The status of educational sciences in Vietnam: a bibliometric analysis from Clarivate Web of Science database between 1991 and 2018. *Probl Educ 21st Cent* 2020;78:644–62. <https://doi.org/10.33225/pec/20.78.644>