

# Scopus-indexed Journals of Humanities & Social Science in Thailand Through Bibliometric Analysis

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## ABSTRACT

The research dissemination in the present day has been changed to the online era, and the analysis of academic journals holds significant importance in evaluating research output. This study focuses on Thai scopus-indexed journals in humanities and social sciences. The objective is to analyse outstanding research articles based on their citation counts and conduct a comprehensive bibliometric analysis using three selected journals. VOSviewer software was employed to explore the characteristics of these journals. The results reveal that the contributions in these journals encompass various areas such as education, agricultural production, business and economics, and social issues. Furthermore, the bibliometric analysis highlights the journals' emphasis on research related to Thailand and nearby countries and shows the significant contributions made by Thai scholars. In conclusion, Thai scopus-indexed journals in the humanities and social sciences align with current research trends and exhibit collaborations from several continents and different areas. The findings of this study provide information for policymakers, journal publishers, and researchers to guide content strategies as well as promote collaboration among academia.

**Keywords:** Scopus-indexed journals; Thailand; Bibliometric analysis

## 1. INTRODUCTION

Academic publications have gained significant attention from colleges, emphasising the dissemination of knowledge through research articles. Academic journals, renowned for their rigorous peer review process and editorial board expertise, have become a trusted source of up-to-date knowledge for academics as well as play a role in academia<sup>1</sup>. Their role has expanded beyond knowledge dissemination. University rankings by influential organisations like Quacquarelli Symonds (QS), Times Higher Education (THE), and SCImage Institutions Rankings (SIR) now consider the number and quality of research publications, which are often retrieved from databases such as Web of Science and Scopus<sup>2-3</sup>. Consequently, academic journals have become crucial in assessing and ranking universities based on their research output.

In the academic world, there were large number of journals in the field of hard sciences, but soft sciences were less than that, especially in highly reputable databases such as scopus. In Thailand, there were few journals in the soft sciences field. To contribute to the understanding of Thai scopus-indexed journals in the humanities and social sciences field, this study aims to analyse outstanding

research published in the soft science Thai journals. Another aim is the keywords, authors, and country collaboration in the soft science Thai journals indexed in scopus. The findings of this study will make significant contributions to the field. Firstly, this research will provide university administrators with valuable insights to develop policies, allocate appropriate budgets, and formulate effective strategies to support journals aspiring to be listed in scopus. Secondly, it will contribute to the academic community's understanding of Thai humanities and social sciences research in the global context.

## 2. LITERATURE REVIEW

In Thailand humanities and social sciences journals indexed in scopus play a vital role in disseminating researches. Previous studies have explored bibliometric analyses in various contexts, such as individual journal analysis<sup>4-7</sup>. Some studies have examined Scopus-indexed journals in Iran, Indonesia, Saudi Arabia, and other regions<sup>8-12</sup>. Studies of scopus metrics and journals in a diverse countries<sup>13-17</sup>. country based bibliometric analysis and citation analysis of journals<sup>18-19</sup>. In Thailand some researchers focus on single journal in the field of science<sup>20-22</sup>. However, there is a research gap regarding the content and bibliometric analysis specifically focused on Thai humanities and social sciences journals indexed

in scopus. To fill this research gap, this study aimed to conduct content analysis and bibliometric analysis of Thai humanities and social sciences journals indexed in scopus as well as provide insight into bibliometric data.

Comprehensive focus is placed on conducting bibliometric analyses across multiple academic journals, which aim to examine their characteristics and impact e.g. Moed<sup>12</sup>, *et al.* proposed an operational definition of a journal's degree of national orientation and analysed trends in national orientation and citation impact of national journals entering scopus. Similarly, Asl<sup>5</sup>, *et al.* assessed the status of Iranian medical science journals indexed in web of science, scopus, and PubMed, finding that the number of indexed journals had increased over time, with certain subject areas predominating. Taş<sup>4</sup>, *et al.* conducted a bibliometric analysis of sport and exercise psychology journals, identifying the characteristics associated with higher citation impact, such as longer and structured abstracts, multi-institutional and multinational collaborations, and higher numbers of affiliated countries and references. Those three researchers found that journals with higher impact factors were relatively rare and also had specific characteristics. It can be different due to the location where the journal is based.

While the review provides insights into the characteristics and impact of these journals, there is a limited focus on ASEAN countries, particularly Thailand, which are developing countries with constraints in terms of resources and infrastructure, especially within the field of social sciences. This research gap necessitates the need for studies that specifically investigate bibliometric data and trends within ASEAN countries, so this would contribute to a better understanding of the impact and quality of scholarly journals.

This article provides two research objectives:

1. To identify outstanding researches published in the soft science Thai journals.
2. To identify keywords, authors, country collaboration in the soft science Thai journals indexed in scopus.

### 3. METHODOLOGY

#### 3.1 Data Collection

The data for this study were collected from two primary sources: *Scopus* website *SCImago Journal Rank (SJR)*. Access to the *Scopus* database was obtained through institution access in 2023. Firstly, all Thai humanities and social sciences journals listed in the SJR were collected by applying a country filter for "Thailand." Secondly, the journal inclusions were filtered by their categorisation in the field of humanities and social sciences, which was identified using category quartiles. Thirdly, to ensure a suitable sample for institutional-level bibliometric analysis, only journals with contain article indexing in *scopus* for more than 200 articles in the database were included, as the minimum acceptable number suggested by Rogers<sup>23</sup>, *et al.* Consequently, journals with fewer than 200 articles were excluded from the study. Based on these

selection criteria, the selected journals for this study are: "*Kasetsart Journal of Social Sciences*," "*ABAC Journal*," and "*Journal of Population and Social Studies*."

#### 3.2 Data Analysis

For the data analysis phase, content analysis was performed using the information available in the *scopus* database. Subsequently, the content of these articles was thoroughly examined, with particular attention given to their topics, methodologies, and findings.

The instrument used in this study involved the VOS viewer, a tool developed by Van Eck & Waltman<sup>24</sup>, to facilitate the mapping of clusters based on word co-occurrence and co-authorship networks. Specifically, VOSviewer version 1.6.19 was employed to analyse the co-occurrence of words within the titles, authors, and keywords of the published articles. By utilising VOSviewer, this study was able to comprehensively examine the network structure within the collected data.

The procedure and decision-making process for analysing the bibliometric data of the selected journals followed a visualisation approach based on van Eck and Waltman<sup>24</sup>. In December 2023, online searches were conducted using the source title of each journal in *Scopus* database to retrieve the articles. The article metadata, e.g. authorship, keywords, and citations, was downloaded in .csv format and processed using VOSviewer for visualisation and bibliometric analysis. To manage complexity, a maximum limit of 25 co-authors per article was set, while co-occurrence thresholds of 2 occurrences were applied to authors, keywords, and citations. These thresholds were selected due to the relatively small amount of data retrieved from the *scopus* database.

### 4. RESULTS

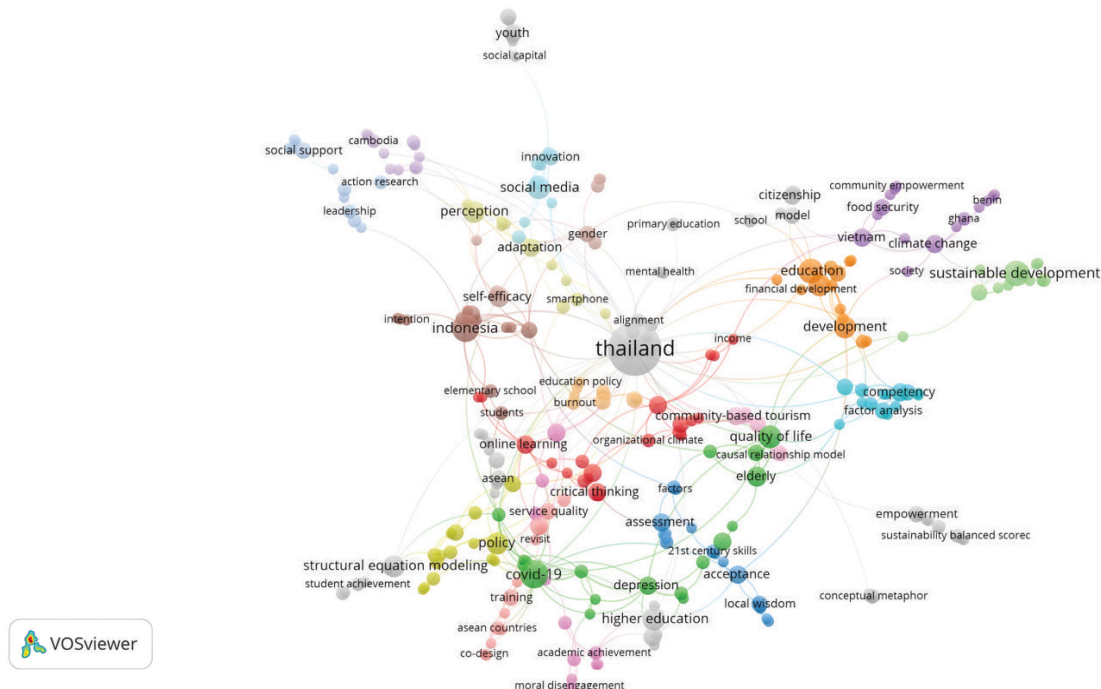
#### 4.1 Most Outstanding Research Articles

Table 1 provides a list of the top-cited articles in each selected journal. Among those journals, the article "Application of livelihood vulnerability index in assessing smallholder maize farming households' vulnerability to climate change in Brong Ahafo region of Ghana" which was published in 2018 received the highest number of citations. The article received 18.33 citations per year on average. Total citations among the top cited articles show the Kasetsart Journal of Social Sciences leads another journal in terms of citations followed by the Journal of Population and Social Studies and ABAC Journal consequently.

Analysis of the three journals shows similarities in the content which can be observed in terms of the focus on global challenges, such as climate change, COVID-19, and social issues. These topics reflect the journals' commitment to addressing critical issues facing societies. However, differences arise in the specific areas of focus within each journal. The Kasetsart Journal of Social Sciences seems to be outstanding on environmental issues and agricultural production improvement, particularly in developing countries, while the ABAC Journal focuses on business

**Table 1. Most cited articles in the selected journals**

Rank	Title	Year of publication	No. of citations
<b><i>Kasetsart Journal of Social Sciences (N=855)</i></b>			
1	Application of livelihood vulnerability index in assessing smallholder maize farming households' vulnerability to climate change in Brong-Ahafo region of Ghana	2018	110
2	The role of innovation in creating a competitive advantage	2020	85
3	Perceived quality, perceived risk and customer trust affecting customer loyalty of environmentally friendly electronics products	2017	82
4	Factors determining subsistence farmers' access to agricultural credit in flood-prone areas of Pakistan	2018	77
5	Development of a problem-based learning model via a virtual learning environment	2017	75
<b><i>ABAC Journal (N=276)</i></b>			
1	Communication satisfaction, employee engagement, job satisfaction, and job performance in higher education institution	2019	19
2	The effect of cultural intelligence on burnout of Thai cabin crew in non-national airlines moderated by job tenure	2020	14
3	Key determinants on switching intention in cambodian banking market	2021	12
4	World and national stock market reactions to COVID-19	2020	12
5	A causal effect of customer relationship management, attitude, subjective norm, perceived behavioral control of customer affecting purchase intention to using anti-aging business in Thailand	2021	11
<b><i>Journal of Population and Social Studies (N=252)</i></b>			
1	Depression, Anxiety, and Stress During the COVID-19 Pandemic: Comparison Among Higher Education Students in Four Countries in the Asia-Pacific Region	2021	26
2	Health and educational status of Rohingya refugee children in Bangladesh	2017	26
3	Prospects and contexts of demographic transitions in Thailand	2018	19
4	Religiosity, spirituality, and happiness in Thailand from the perspective of Buddhism	2018	18
5	Indonesia's sample registration system in 2018: A work in progress	2018	14

**Figure 1. Keywords co occurrences of Kasetsart journal of social sciences (N=752).**

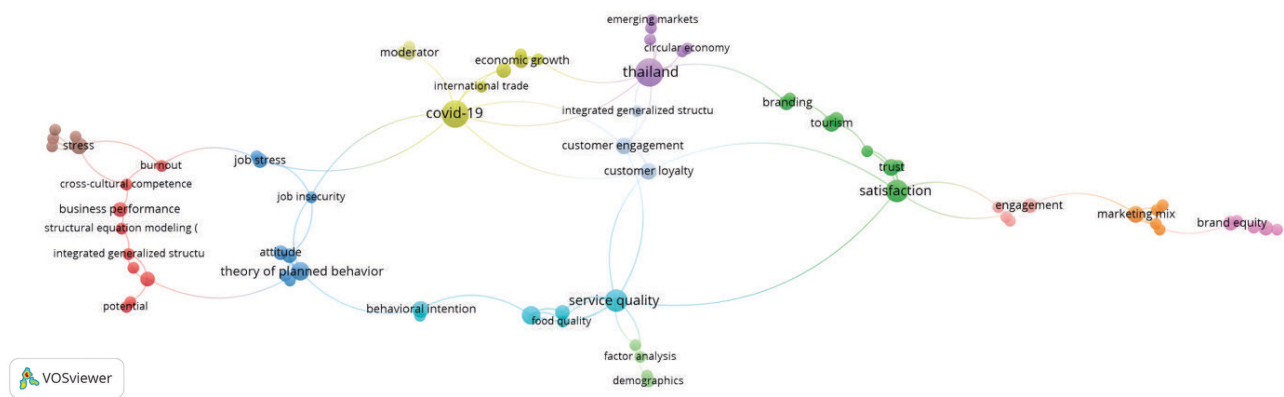


Figure 2. Keyword co-occurrence of ABAC journal.

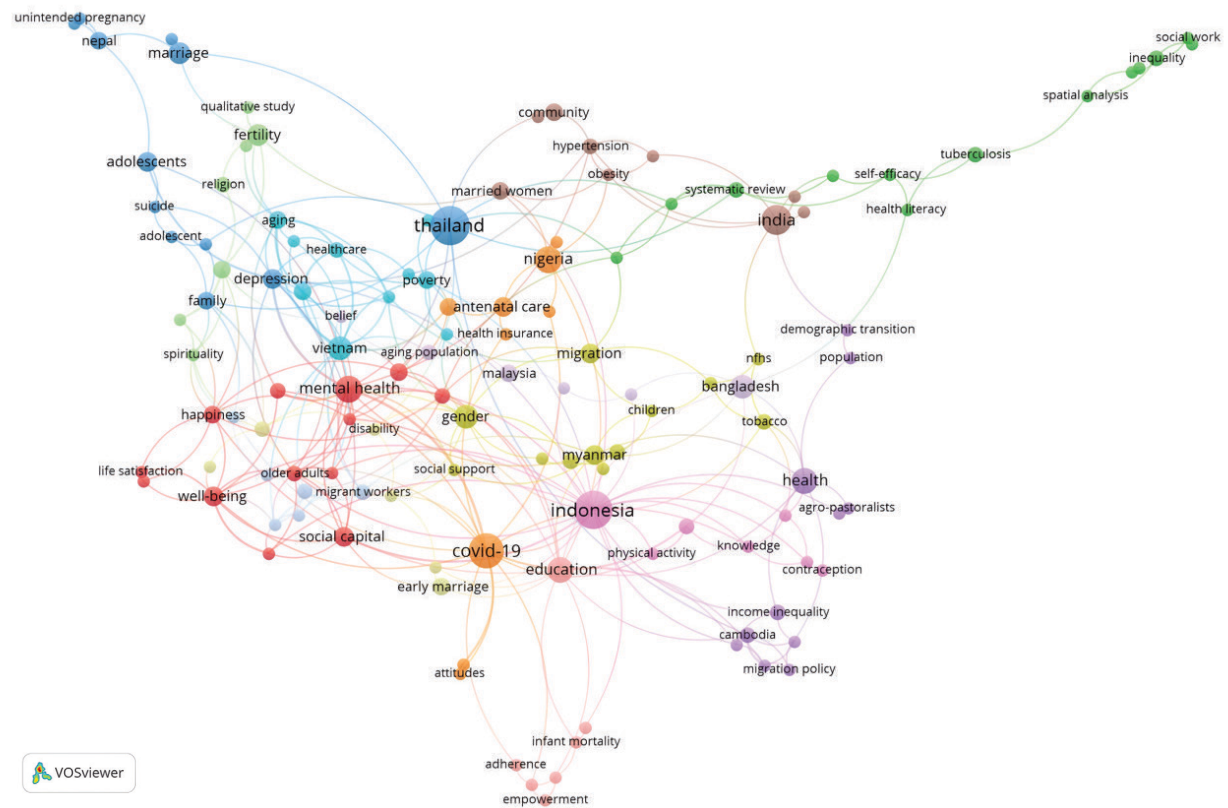


Figure 3. Keyword co-occurrence of journal of population and social studies.

Table 2. The 10 most frequent occurrences in each journal

Rank	Kasetsart journal of social sciences	ABAC journal	Journal of population and social studies
1	Thailand	Service quality	Metal health
2	Covid-19	Covid-19	Depression
3	Indonesia	Thailand	Indonesia
4	Natural rubber	Customer engagement	Covid-19
5	Sustainable development	Satisfaction	Social capital
6	Education	Stress	Education
7	Equilibrium price	Theory of planned behaviour	Myanmar
8	Equilibrium quantity	Customer loyalty	Well-being
9	Simultaneous equation	Perceived behavioral factor	Adolescents
10	Higher education	Perceived value	Bangladesh



and economics, exploring the effects of COVID-19 on the economy, customer engagement, and job satisfaction. The *Journal of Population and Social Studies*' most cited articles delve into social issues such as marginalised populations and the challenges faced by Rohingya refugee children in Bangladesh, as well as the ongoing impact of COVID-19 on societies.

#### 4.2 Keyword Co-occurrence

The content of the journal is analysed through keyword co-occurrence, which refers to how two or more keywords appear together in a text or document. Each node represents a word, with larger nodes indicating higher frequency of occurrence. The links between nodes indicate co-occurrences, with thicker edges representing more frequent co-occurrences.

In the analysis of the selected journals, The *Kasetsart Journal of Social Sciences* explores keywords 288 items in 27 clusters. The biggest cluster contains 21 words shown in red at the top of Figure 1. The overall content related to various aspects of development, cultural adaptation, and social integration, with a strong emphasis on Thailand. The *ABAC Journal* keywords contain 59 items in 12 clusters. The biggest cluster contains 7 words shown in red at the middle of the map in Figure 2. The overall

contents focus on topics such as the ASEAN Economic Community, internationalisation, and medical tourism, again with a notable presence of Thailand. The *Journal of Population and Social Studies* keywords contains 109 items in 14 clusters. The biggest cluster contains 10 words which shown in red at the center area of Figure 3. The overall contents as shown in Table 2 focus on health-related issues, including COVID-19, domestic violence, and prevention, while also highlighting the regional context by including keywords like India and Indonesia. These journals demonstrate their unique areas of expertise within the broader field of social sciences.

#### 4.3 Authorship and Institution

Table 3 provides data on the most prolific occurrences of authors in each journal shows different characteristics of author pool. The prolific authors in The *Kasetsart Journal of Social Sciences* were mostly from Thailand affiliated by Chulalongkorn University and Prince of Songkla University. The *ABAC Journal* as well author comes from Thailand. The differences among three journals can be found in *Journal of Population and Social Studies*, it is surprising that an academic journal contain foreign authors as a prolific author which rarely found in the previous researches.

**Table 3. The prolific authors of each journal**

Rank	Author	Institution	Country	Number of appearances in scopus	Authors' citation in scopus	H-index in scopus
<b>The Kasetsart Journal of Social Sciences (N= 855)</b>						
1	Lacheem, Kasetchai	Prince of Songkla University	Thailand	48	247	9
2	Phitthayaphinant, Purawich	Thaksin University	Thailand	17	33	3
3.	Somboonsuke, Buncha	Prince of Songkla University	Thailand	30	68	5
4.	Pasiphol, Shotiga	Chulalongkorn University	Thailand	10	8	1
5.	Siribanpitak, Pruet	Chulalongkorn University	Thailand	13	19	3
<b>ABAC Journal (N= 276)</b>						
1.	Khanthavit, Anya	Thammasat University	Thailand	32	273	7
2.	Meesing, Absorn	Assumption University	Thailand	10	0	0
3.	Schreier, Claus	Mahidol University	Thailand	13	41	3
4.	Potipiroon, Wisanupong	Prince of Songkla University	Thailand	29	267	9
5.	Nizenyumukiza, Emmanuel	National Institute of Development Administration	Burundi	12	142	4
<b>Journal of Population and Social Studies (N= 252)</b>						
1.	Felix, Mark Stephan	Mahidol University	Thailand	20	42	5
2.	Suryaputri, Indri Yunita	Badan Riset dan Inovasi Nasional	Indonesia	9	15	2
3.	Wurisastuti, Tri	Info Badan Riset dan Inovasi Nasional	Indonesia	6	2	1
4.	Bakass, Fatima	National Institute of Statistics and Applied Economics (INSEA)	Morocco	9	16	3
5.	Nizenyumukiza, Emmanuel	Université des Grands Lacs	Burundi	5	14	2



In the examination of country cooccurrence networks within selected scholarly journals, Figure 4 shows the collaborative relationships in the *Kasetsart Journal of Social Sciences*. With 25 items distributed across 10 clusters, the preeminent red-highlighted cluster on the left side of the figure provide collaboration involving countries across Asia, Europe, North America, and Africa. Conversely, the *ABAC Journal*, depicted in Figure 5, presents a network of 25 items across 7 clusters. The red-highlighted cluster on the right side of the figure signifies collaboration among countries spanning Asia, Europe, and Australia. Figure 6, illustrating the *Journal of Population and Social Studies*, shows 22 items across 7 clusters, with the salient red-highlighted cluster on the left embodying collaboration among diverse countries from three continents, with Thailand prominently featuring as the most frequently occurring entity. These findings offer valuable information into the global dynamics of scholarly collaboration and highlight the varying scales and scopes of networked relationships across distinct academic journals in Thailand.

## 5. DISCUSSION

This study shows the prominent researches with high citations were concluded as follows. The prominent articles in *The Kasetsart Journal of Social Sciences* focused on environmental issues related to climate change in Ghana followed by article related to and agricultural production improvement, in developing countries. It can be observed that the journal includes a combination of work in the environmental field and work in the business field among the top five most cited works. In contrast, *The ABAC Journal* and *The Journal of Population and Social Studies* provide more fewer diversity in term of prominent content which focus on specific area of study. Moreover, The bibliometric analysis revealed the characteristics of the selected journals. Most of them shared keyword in the specific countries such as 'Thailand' 'Indonesia' as well as specific discipline such as 'education'. This may be due to the researches were mostly conducted in Asiatic region which is the country where those three journal are located. For the prominent author, Thai scholars play significant role as contributions to the journals. The co-country network seems indifferent among the three journals. Thai scholar mostly connect with researcher in Asia such as China, Vietnam, Malaysia etc. It maybe because of similarities of situation faces in this area.

The current study provides both similarities and differences from previous research<sup>4-5,12</sup>. Firstly, the similarities shows that most prolific articles related to the current situation in the area where the journal is based. As same as the prolific author. The prolific author often comes from where the journal is based. The collaboration were come from mostly in Asia. In contrast, the distinction may be found from *Kasetsart Journal of Social Sciences*. The content of the highly cited article seems diversities when compare to academic journals in hard science field<sup>25</sup>. It seems different from the top

Asiatic journals which author collaboration come from several continents<sup>25-27</sup>. It can be indicated that if the journal aims to be the top of Asiatic region, the editor and editorial board might encourage author from several continents.

## 6. CONCLUSIONS

In conclusion, despite the fact that these three Scopus-indexed journals in the social sciences and humanities are published in the same nation, their varied content, citation styles, authors, and academic partnerships demonstrate the disparities in the scholarly environments of various countries. A distinct pattern shows that the nation of origin of the journal has a significant impact on the majority nationality of contributing authors as well as the international academic community, which is dependent on regional academic cooperation. Thai scholar collaborated with different scholar from diverse continents depending on their field. Among the many bibliometric analyses of recent scholarly publications, there is currently limited space for publisher-perspective study of academic journals, which leaves room for future research in this area. Consequently, there might still be chances for academics to conduct more in-depth examinations of publication methods.

## REFERENCES

1. Davidson. The periodicals collection: Its purpose and uses in libraries. Andro Doutsch, 1969.
2. Srisawad, S. The association of research collaboration and bibliometrics data with citation impact among articles based on Scopus Q1 from Nursing Institutions in Thailand. *Princess Naradhiwas Univ. J. Humanit. Soc. Sci.*, 2019, **6**(1), 154-170.
3. Times Higher Education. World university rankings 2023: Methodology. <https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2023-methodology>, 2023.
4. Taş, H.; Mikhaylova, A.; Ödemiş, H.; Çisem, E.U. & Söğüt, M. Characteristics of articles published in different quartiles: A bibliometric analysis of sport and exercise psychology journals. *Balt. J. Sport Health Sci.*, 2023, **4**(123), 35-44. doi: 10.33607/bjshs.v4i123.1145
5. Asl, S.G.Z.; Aliakbari, H.; Sotouneh, S. & Amani, M. Survey of the statues of Iranian medical science journals indexed in databases of Web of Science, Scopus and PubMed. *Int. J. Inf. Sci. Manag.*, 2022, **21**(1), 193-205. doi: 10.22034/ijism.2022.1977572.0
6. Tur-Porcar, A.; Mas-Tur, A.; Merigó, J.M.; Roig-Tierno, N. & Watt, J. A bibliometric history of the *Journal of Psychology* between 1936 and 2015. *J. Psychol.*, 2018, **152**(4), 199-225. doi: 10.1080/00223980.2018.1440516
7. Chaudhuri, R.; Chavan, G.; Vadalkar, S.; Vrontis, D. & Pereira, V. Two-decade bibliometric overview of publications in the *Journal of Knowledge Management*. *J. Knowl. Manag.*, 2021, **25**(6), 1367-3270.

- doi: 10.1108/JKM-07-2020-0571
8. Donthu, N.; Kumar, S. & Pattnaik, D. Forty-five years of Journal of Business Research: A bibliometric analysis. *J. Bus. Res.*, 2020, **109**, 1-14. doi: 10.1016/j.jbusres.2019.10.039
9. Tanveer, M.; Bhaumik, A.; Hassan, S. & Haq, I. A Scopus based bibliometric evaluation of Saudi Medical Journal from 1979 to 2019. *Talent Dev. Excell.*, 2020, **12**(2s), 2328-2337.
10. Alizade, H. Performance analysis of ISC journals using Scopus and ISC indicators. *Int. J. Inf. Sci. Manag.*, 2014, Special Issue, 39-44.
11. Lukman, L.; Rianto, Y.; Al Hakim, S.; Nadhiroh, I. & Hidayat, D. Citation performance of Indonesian scholarly journals indexed in Scopus from Scopus and Google Scholar. *Sci. Ed.*, 2018, **5**(1), 53-58. doi: 10.6087/kcse.119
12. Moed, H.; Moya-Anegón, F.; Guerrero-Botet, V. & Lopez-Illescas, C. Are nationally oriented journals indexed in Scopus becoming more international? The effect of publication language and access modality. *J. Informetr.*, 2020, **14**, 1-10. doi: 10.1016/j.joi.2020.101011
13. Malvic, T.; Andreic, Z.; Barudžija, U.; Bedekovic, G.; Hrncevic, L.; Ivšinovic, J.; Korman, T.; Kovac, Z.; Pavlic, K. & Pašic, B. Citation rate challenges for a small journal indexed in Scopus and WoS- case study from central Europe (Croatia), editorial view. *Publications*, 2022, **10**(3), 1-18. doi: 10.3390/publications1003003
14. Jang, H. Analysis of Korean journals rejected by Scopus since 2011. *Sci. Ed.*, 2020, **7**(1), 50-54. doi: 10.6087/kcse.189
15. Krauskopf, E. An analysis of discontinued journals by Scopus. *Scientometrics*, 2018, **116**, 1805-1815. doi: 10.1007/s11192-018-2808-5
16. Okagbue, H.; Atayero, A.; Adamu, M.; Bishop, S.; Oguntunde, P. & Opanuga, A. Exploration of editorial board composition, citescore and percentiles of Hindawi journals indexed in Scopus. *Data Brief*, 2018, **19**, 743-752. doi: 10.1016/j.dib.2018.05.066
17. Gaur, B.; Singh, R.K. & Garg, K.C. Journal of Informetrics: A bibliometric study of papers published during 2007-2021. *DESIDOC J. Libr. Inf. Technol.*, 2023, **43**(6), 454-461. doi: 10.14429/djlit.43.6.18918
18. Basumatary, B.; Tripathi, M. & Verma, K.M. Does Altmetric Attention Score correlate with citations of articles published in high Cite Score journals? Analysis of three open access LIS journals. *DESIDOC J. Libr. Inf. Technol.*, 2023, **43**(6), 432-440. doi: 10.14429/djlit.43.06.19412
19. Sahu, R. & Parabhoi, L. Bibliometric study of library and information science journal articles during 2014-2018. *DESIDOC J. Libr. Inf. Technol.*, 2020, **40**(6), 390-395. doi: 10.14429/djlit.40.06.15631
20. Amanullah, A. An investigation in the interdisciplinary nature of digital humanities: A bibliometric analysis. *DESIDOC J. Libr. Inf. Technol.*, 2023, **43**(4), 234-240. doi: 10.14429/djlit.43.04.19229
21. Sirirak, K. Analysis of Walailak Journal of Science and Technology indexed in Scopus database between 2012-2020: A bibliometric analysis. *TLA Bulletin*, 2021, **65**(2), 137-154.
22. Maporn, S.; Puseerit, J.; Rungwisai, P.; Arsapar, P. & Photong, C. Bibliometric analysis of Thai journals indexed in Scopus. *TLA Bulletin*, 2023, **67**(1), 177-198.
23. Rogers, G.; Szomszor, M. & Adams, J. Sample size in bibliometric analysis. *Scientometrics*, 2020, **125**, 777-794. doi: 10.1007/s11192-020-03647-7
24. Van Eck, N. & Waltman, L. Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 2010, **84**, 523-538. doi: 10.1007/s11192-009-0146-3
25. Maporn, S.; Puseerit, J.; Rungwisai, P.; Arsapar, P.; Chowtivanakul, P. & Photong, C. Investigation of the top Scopus-indexed journals in agricultural and biological sciences across diverse Asian countries: A bibliometric analysis. *J. Appl. Inform. Technol.*, 2024, **6**(2), 132-157. doi: 10.14456/jait.2024.9
26. Gayathri, S. & Srinivasaragavan, S. Measuring scholarly traits of a university: A scientometric study of the scholarly publications of Bharathidasan University. *DESIDOC J. Libr. Inf. Technol.*, 2024, **44**(4), 212-221. doi: 10.14429/djlit.44.04.19419
27. Utami, W.; Sari, A. A. & Prayitno, H. J. Publications affiliated with Universitas Muhammadiyah Surakarta from Indonesia in Scopus database: A bibliometric analysis. *DESIDOC J. Libr. Inf. Technol.*, 2024, **44**(4), 203-211. doi: 10.14429/djlit.44.04.19429

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**Ms Jirarat Puseerit** is currently working as librarian and international journal secretary in the Division of Research Facilitation and Dissemination at Mahasarakham University, Mahasarakham Thailand. For this work, she focused on developing the methodology. She plays a role in checking for plagiarism, English language proof, draw a discussion, working on research collection for literature review and reviewed the manuscript for grammatical accuracy and clarity.