



A BIBLIOMETRIC REVIEW ON EDUCATION AMONG INDIGENOUS COMMUNITIES IN MALAYSIA

***Nurul Nadzirah Abdul Nasir**

¹Academy of Contemporary Islamic Studies, Universiti Teknologi MARA Pahang, Raub Campus

Article Info	ABSTRACT
Article history: Received: 12 Dec 2023 Revised: 30 Dec 2023 Accepted: 25 Jan 2024 Published: 1 Feb 2024 Keywords: Bibliometric Scopus Education Indigenous Communities Malaysia  OPEN ACCESS	Bibliometric analysis of 2866 papers from the Scopus database between 2019 and 2023 is being done in this project to provide a thorough evaluation of the education among indigenous communities research sector. Examining Malaysia's contribution to the field, highlighting author, university, and country collaborations in the field, learning about the most recent research topics being worked on by researchers, and identifying the most influential authors, universities, nations, and citations are all goals of the study. The study indicates that the top three nations that have studied education among indigenous groups are Malaysia, Indonesia, and the United States. The majority of researchers at Universiti Malaya, Universiti Kebangsaan Malaysia, and Universiti Putra Malaysia are focused on education within indigenous populations. The most well-known author on this topic is Butt, Z.A. Malaysia conducts a great deal of study on indigenous education because it is one of the countries with the greatest populations of indigenous people.

Corresponding Author:

*Nurul Nadzirah Abdul Nasir,
Academy of Contemporary Islamic Studies, Universiti Teknologi MARA Pahang, Raub Campus.
Email: nurulnadzirah@uitm.edu.my



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INTRODUCTION

The Latin word "educat," which means "led out," is the source of the English term "educating." The process of receiving or providing systematic teaching, particularly at a school or university, is by definition education. People who want to live better and easier lives during their lifetime on this planet are starting to realize that education is a crucial necessity. Malaysia, a nation located in Southeast Asia between the Malay

Peninsula and Borneo Island, has traditionally placed a high priority on the growth of its citizens' educational opportunities. This was demonstrated when the Honourable Tuan Lim Guan Eng, Minister of Finance, announced in the most recent 2020 Budget Speech at the Malaysian Parliament that the Malaysian Government would finance the education sector with RM 64.1 billion. The Orang Asli community, or Indigenous people of the Malay Peninsula, has not kept pace with, and is significantly behind, in terms of educational advancement compared to other ethnic races like the Malays, Chinese, and Indians, despite the education sector receiving significant attention and funding from our government (Sawalludin, et al, 2020).

Since Malaysia's independence from colonial rule in 1957, the diverse Orang Asli population has faced challenges in accessing quality education due to their living off the land, frequently on the outskirts of society, and in remote areas of Peninsular Malaysia's virgin jungle. There are still issues in the present about Orang Asli education, especially in light of some of these children and teenagers' poor formal educational attainment levels. Research has indicated that several teens who identify as Orang Asli would rather work odd jobs or obtain meaningful employment than continue their education to the secondary level immediately after completing it. The aforementioned circumstance places the Orang Asli community at a somewhat disadvantageous position amidst the complex layers of contemporary Malaysian society and the country's progress towards becoming a fully developed nation. While there exist positive anecdotes about Orang Asli kids and teens thriving in the educational system, there are also tales of Orang Asli students failing and dropping out of Malaysian formal schooling (Shah, et al, 2020).

In addition, because of their lower levels of education, the Orang Asli people in Malaysia nonetheless have a high degree of confidence compared to other communities. Several variables contribute to low educational level difficulties. One issue is that the orang Asli communities are located distant from educational institutions, which hinders their ability to advance their degree of education. It's because it takes a long time for the Orang Asli to travel to school. Inadequate public transit options and issues with the caliber of those options are additional issues (Manaf, et al, 2021).

Because the material covered in the classroom was not readily available to them outside of their immediate surroundings, Orang Asli pupils were the ones who were dropping out of school and did not take up the majority of the syllabus that teachers had taught them. Additionally, it was discovered that the students' competency issues with reading, writing, and comprehension skills were caused by the teacher's incapacity to lead efficient teaching and learning activities. Furthermore, the development of the competency of the Orang Asli students received no particular programs or modules. To ensure that Orang Asli students do not lose their identity, the Malaysian Ministry of Education must devise a plan to teach them the value of education and help them acquire indigenous knowledge. To cultivate and use the interest when they become adults, it must begin in elementary school (Wahab, et al, 2020).

The Indigenous people are acknowledged as the nation's first community in terms of education. Even nevertheless, history has demonstrated that the situation and development of education among Indigenous peoples have been gradual. Even though the children of Indigenous peoples demonstrate a desire to learn, the community remains excluded from schooling. Nonetheless, they become more conscious of the value of education when they witness strangers taking an interest in their kids' education. It's undeniable that among the successful Indigenous people who have held prominent positions in the government. To improve one's capacity and alter life's course in the direction of a higher standard of living, Indigenous children's access to and control over their education is vital. In contrast, employment that generated extra income allowed people to preserve money for unexpected expenses or a rainy day. The perception is that higher incomes contribute to the prosperity and comfort of Indigenous people (Johar, et al, 2020).

Research Questions

- What is the trend/What are the research trends in education among indigenous communities studies according to the year of publication?
- Who has been published in the area concerning the authors, their affiliated organizations, and countries?
- Which are the most influential countries?
- What are the popular keywords related to the study?

METHODOLOGY

The combination, organization, and analysis of bibliographic data extracted from publications with a scientific bent constitute bibliometrics, according to Verbeek et al. (2002). Apart from standard descriptive information such as publishing journals, year of publication, and major author classification, it also comprises advanced methodologies such as document co-citation analysis (Wu & Wu, 2017). To do a thorough literature review, generate a bibliography, and produce reliable results, the following steps are necessary: selecting relevant keywords, conducting literature searches, and conducting analyses. Through the use of bibliometric analysis, readers can eventually gain a thorough comprehension of the research topic. To find relevant studies, we examined the Scopus database.

Data search strategy

In the humanities, social sciences, and natural sciences, finding, analyzing, and sharing information is made feasible by Scopus, an excellent research platform, according to Sudakova et al. (2022). The Scopus database improves the effectiveness and productivity of the research process. Since it indexes the best publications on the subject of education and provides data for bibliometric research, the Scopus database was selected. We looked up relevant studies in the Scopus database. Several terms were preferred and the most comprehensive search was carried out. There was an internet search done on the Scopus database website. Three search terms were selected: "Malaysia," "education," and "indigenous communities." Next came restrictions based on language. This was the final search phrase used.

A study that used a screening procedure selected the search terms for article retrieval. Education AND indigenous communities AND Malaysia AND (LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2023)), 6984 documents were retrieved from the Scopus database. Following that, 2866 English-language research publications were found using the final search string refinement, and they were employed for bibliometric analysis.

Data analysis

VOSviewer software version 1.6.15 was used to evaluate data sets that were taken from the Scopus database, which covered the years 2019 to 2023. Author names, journals, citations, keywords, and the year of research publication were all included in the data sets. This application was used to create maps and conduct analysis using the VOS clustering and mapping techniques. Van Eck & Waltman (2010) proposed VOSviewer as an alternative to the Multidimensional Scaling (MDS) approach. Like MDS, VOSviewer focuses on placing objects in low-dimensional spaces so that the distance between any two objects accurately reflects their degree of relatedness and similarity (Appio, et al, 2014).

Once the weighted sum of squared distances between all item pairings is lowered, VOSviewer organizes the objects into a map-like structure. According to Appio, the normalization of LinLog/modularity was implemented. Applying visualization techniques using VOSviewer to the data set and conducting studies such as keyword co-occurrence, citation analysis, and co-citation analysis also led to the discovery of patterns based on mathematical relationships (Appio, et al, 2014).

RESEARCH FINDINGS AND DISCUSSIONS

1. What is the trend/What are the research trends in urban poverty studies according to the year of publication?

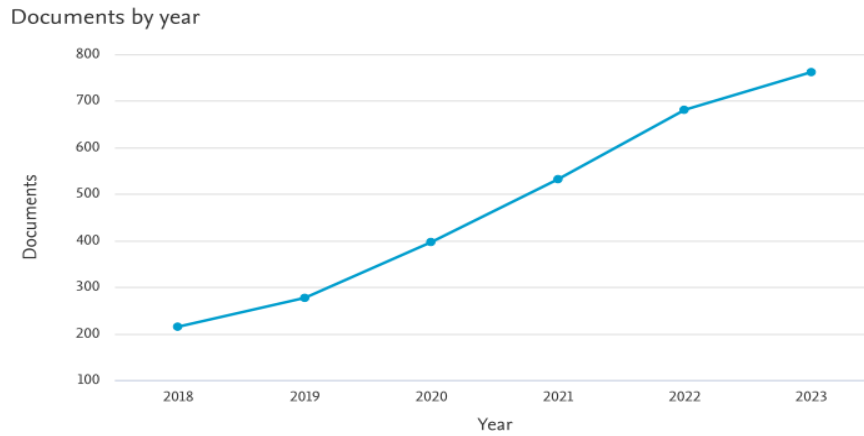


Figure 1: Research trends in education among indigenous communities studies

Table 1: Number of publications according to the year

Year	Number of publications
2023	762
2022	681
2021	532
2020	397
2019	277

The research trends in education among indigenous communities' studies show an upward trend ranging from 277 (2019) to 762 (2023). There were 277 publications in 2019, representing 10.46%, 397 publications in 2020, representing 14.99%, 532 publications in 2021, representing 20.08%, 681 publications in 2022, representing 25.71%, and 762 publications in 2023 representing 28.77% (See Figure 1 and Table 1).

2. Who has been published in the area concerning the authors, their affiliated organizations, and countries?

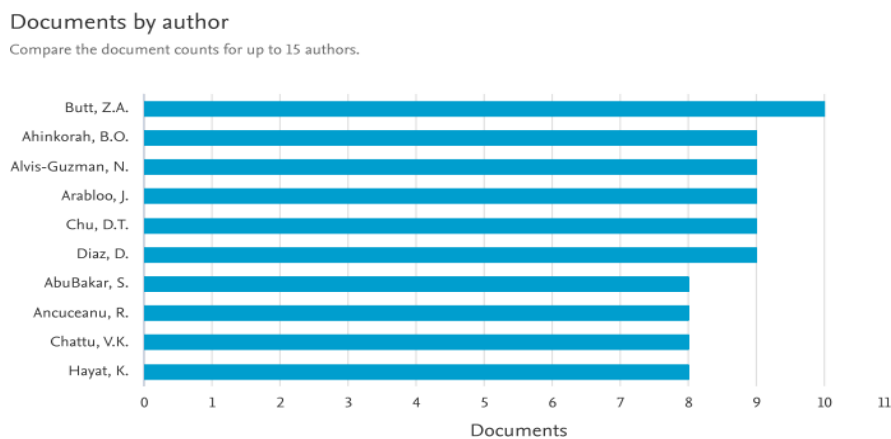


Figure 2: The authors who write the most cited articles

Table 2: List of authors who wrote the most cited articles

Authors	Number of cited articles
Butt, Z.A.	10
Ahinkorah, B.O.	9
Alvis-Guzman, N.	9
Arabloo, J.	9
Chu, D.T.	9
Diaz, D.	9
AbuBakar, S.	8
Ancuceanu, R.	8
Chattu, V.K.	8
Hayat, K.	8

Butt, Z.A. published 10 articles (11.49%), Ahinkorah, B.O., Alvis-Guzman, N., Arabloo, J., Chu, D.T., and Diaz, D. published 9 articles respectively (10.34%), AbuBakar, S., Ancuceanu, R., Chattu, V.K., and Hayat, K. published 8 articles respectively (9.20%) (See Figure 2 and Table 2).

Documents by affiliation

Compare the document counts for up to 15 affiliations.

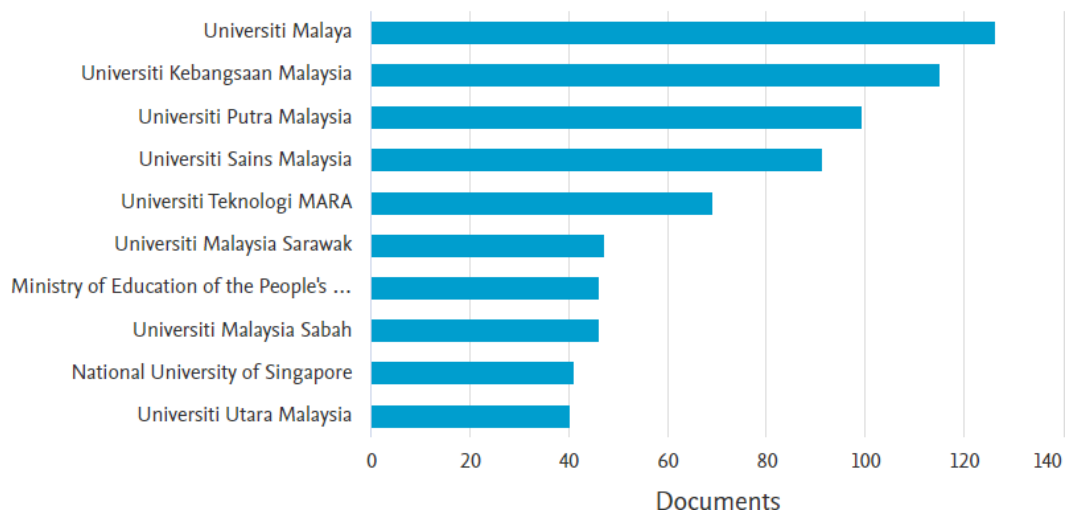


Figure 3: The affiliated organizations that published most articles

Table 3: List of affiliated organizations that published most articles

Affiliated organizations	Number of articles
Universiti Malaya	126
Universiti Kebangsaan Malaysia	115
Universiti Putra Malaysia	99
Universiti Sains Malaysia	91
Universiti Teknologi MARA	69
Universiti Malaysia Sarawak	47
Ministry of Education of the People's Republic of China	46
Universiti Malaysia Sabah	46
National University of Singapore	41
Universiti Utara Malaysia	40

In terms of the establishments, associations, or academic institutions that do excellent work on education among indigenous communities, the leading ones are: “Universiti Malaya” with 126 publications, or 17.5%; “Universiti Kebangsaan Malaysia” with 115 publications, or 15.97%; “Universiti Putra Malaysia” with 99 publications, or 13.75%; “Universiti Sains Malaysia” with 91 publications, or 12.64%; “Universiti Teknologi MARA” with 69 publications, or 9.58%; “Universiti Malaysia Sarawak” with 47 publications, or 6.53%; Ministry of Education of the People’s Republic of China and “Universiti Malaysia Sabah” with 46 publications respectively, or 6.39%; National University of Singapore with 41 publications, or 5.69%; “Universiti Utara Malaysia” with 40 publications, or 5.56% (See Figure 3 and Table 3).

Documents by country or territory

Compare the document counts for up to 15 countries/territories.

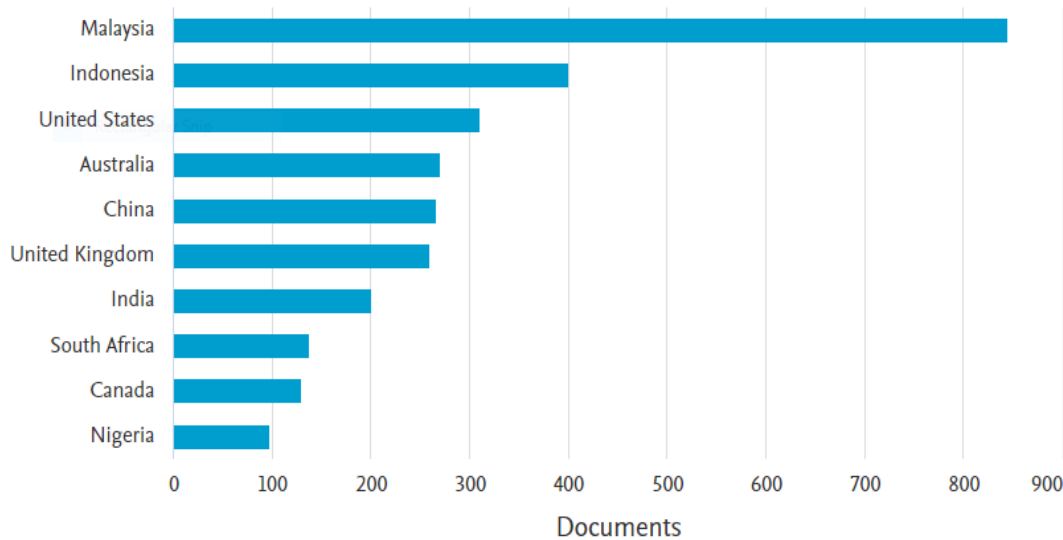


Figure 4: The countries that published most articles

Table 4: List of countries that published most articles

Countries	Number of articles
Malaysia	844
Indonesia	399
United States	309
Australia	269
China	265
United Kingdom	259
India	200
South Africa	136
Canada	129
Nigeria	97

Based on Figure 4 and Table 4, Malaysia (844 publications, 29.03%) is the nation that published the most articles. Indonesia (399 publications, 13.73%), the United States (309 publications, 10.63%), Australia (269 publications, 9.25%), China (265 publications, 9.16%), the United Kingdom (259 publications, 8.91%), India (200 publications, 6.88%), South Africa (136 publications, 4.68%), Canada (129 publications, 4.44%), and Nigeria (97 publications, 3.34%) are the next most-published countries.

3. Which are the most influential countries?

As shown in Figure 6, the largest cluster is the red one, which has 66 items in it. Among the terms that are highlighted are “Malaysia”, “sustainability”, “education”, “Orang Asli”, “indigenous peoples”, “curriculum”, “traditional knowledge”, “rural development”, “indigenous communities”, and “learning”. The second cluster is green and contains 28 items. “Human”, “adult”, “social support”, “interpersonal relations”, “communication”, “gender”, and “consultation” are a few of them. “Counseling”, “indigenous”, “minority groups”, “socioeconomic status”, “ethnic groups”, “language”, and “social class” were the top seven terms utilized in the third cluster, nicknamed the blue cluster. 23 keywords make up the yellow cluster, which is the fourth largest. Throughout this cluster, the most common terms were “male”, “child”, “preschool child”, “educational status”, “poverty”, “primary school”, “rural population”, “school”, and “demography”. Within the other clusters, the most popular keywords are: “education program”, “family”, “parents”, “satisfaction”, and “self-esteem” for the turquoise cluster (14 items); “awareness”, “knowledge”, “sociodemographics”, and “students” in the orange cluster (11 items); “classification” for the purple cluster (4 items). These results highlight the importance of education towards the sustainable development of indigenous communities in Malaysia.

CONCLUSION AND RECOMMENDATION

The study of education among indigenous communities in Malaysia produced 2866 research articles between 2019 and 2023, which makes up 41.04% of the 6984 research articles that are now listed in Scopus. The production was initially determined by years, colleges, nations, authors, and citations by an objective evaluation of the database.

With 2866 articles published in the five years between 2019 and 2023, 2023 will be the year with the highest number on education among indigenous communities. As per the writers’ statement, Butt, Z.A. has the greatest number of published articles on the subject. “Universiti Malaya”, “Universiti Kebangsaan Malaysia”, and “Universiti Putra Malaysia” are among the institutions that perform excellent work on education among indigenous communities. Considering that Malaysia is one of the nations with the largest populations of indigenous people, the country does a lot of research on indigenous education.

The most significant organization in the subject is not determined by the number of publications from a particular country, institution, or author. Quality—especially for the community that can read and evaluate it—is more important than quantity when it comes to a work of art being used as a reference in a field of study. Therefore, before submitting your work there, you must locate a reputable publication on the topic.

There are some limitations to this study. Initially, the data collection process did not include all academic journals, including WoS, as we just utilized Scopus. However, our dataset—which we obtained from Scopus—is appropriate because it includes all necessary components of financial literacy, even though it’s possible that using synonymous search phrases may provide a dataset that is more accurate on the issue. Furthermore, we only utilized the word “indigenous communities” as a search term in the data search, even though terms like “indigenous people,” “indigenous population,” and others may be used to broaden the search scope. Additionally, we searched for items that were directly about Malaysia; other articles might have been located elsewhere in Asia or the globe. Subsequent investigations ought to focus on the indigenous populations found in Asian nations, or globally.

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