

Indigenous Tourism in Asia and Malaysia: The Bibliometric Analysis

Pelancongan Peribumi di Asia dan Malaysia: Analisa Bibliometrik

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ABSTRACT

Indigenous tourism has gained popularity among tourists seeking diverse cultural experiences. This study provides a comprehensive bibliometric analysis of Indigenous tourism research in Asia, especially in Malaysia, covering publications from 1993 to 2024. Using the Scopus database, 143 documents were analysed with VOSViewer, Microsoft Excel, and Harzing's Publish or Perish to map co-authorship networks, assess citation metrics, and track thematic trends. The findings indicate a significant rise in research output after 2000, peaking in 2016 (14 articles) and 2017 (13 articles), with 2010 and 2016 registering the highest average number of citations. Most publications were journal articles (102) written in English (138), with Australia leading in research output (47 documents), followed by the United Kingdom (18), Canada (15), and Malaysia (7). Keyword analysis revealed a strong emphasis on 'Indigenous Tourism' (74 occurrences), followed by 'Indigenous Population' (35), 'Tourism Development' (29), and 'Ecotourism' (21), which highlights sustainability, heritage, and empowerment as central research themes. The most active institution was the University of Queensland (17 publications), and prominent authors included L. Ruhanen (13 articles) and M. Whitford (9 articles). The field recorded 2,193 total citations, an h-index of 27, and a g-index of 39, which signals robust scholarly engagement. The study also observed increased collaboration among researchers, institutions, and countries, with a growing trend in interdisciplinary studies. It is recommended that future research promote multilingual dissemination, increase the participation of Indigenous communities, and expand beyond the dominant Western focus to include underrepresented regions such as Southeast Asia. These steps are vital for creating more inclusive, equitable, and culturally respectful Indigenous tourism frameworks that align with the goals of sustainable development and the preservation of heritage.

Keywords: *Bibliometric Analysis; Indigenous Tourism; Malaysia, Sustainability; Orang Asli*

ABSTRAK

Pelancongan Peribumi semakin mendapat perhatian dalam kalangan pelancong yang mencari pengalaman budaya yang pelbagai. Kajian ini menyediakan analisis bibliometrik menyeluruh terhadap penyelidikan pelancongan peribumi di Asia, khususnya di Malaysia, merangkumi tempoh penerbitan dari tahun 1993 hingga 2024. Pangkalan data Scopus digunakan untuk mengenal pasti 143 dokumen yang kemudiannya dianalisis menggunakan VOSViewer, Microsoft Excel dan Harzing's Publish or Perish bagi memetakan jaringan kerjasama penulis, menilai metrik sitasi dan mengenal pasti tema penyelidikan. Hasil analisis menunjukkan peningkatan ketara dalam jumlah penerbitan selepas tahun 2000, dengan kemuncak pada tahun 2016 (14 artikel) dan 2017 (13 artikel), serta purata sitasi tertinggi pada tahun 2010 dan 2016. Kebanyakan penerbitan berbentuk artikel jurnal (102) dan ditulis dalam Bahasa Inggeris (138), dengan Australia (47 dokumen) sebagai penyumbang utama, diikuti United Kingdom (18), Kanada (15) dan Malaysia (7). Analisis kata kunci menunjukkan tumpuan terhadap 'Indigenous Tourism' (74 kali), 'Indigenous Population' (35), 'Tourism Development' (29) dan 'Ecotourism' (21), mencerminkan fokus terhadap kelestarian, warisan dan pemerikasaan komuniti. University of Queensland dikenal pasti sebagai institusi paling aktif (17 penerbitan), manakala L. Ruhanen (13 artikel) dan M. Whitford (9 artikel) adalah antara penulis utama. Sebanyak 2,193 sitasi direkodkan dengan h-index sebanyak 27 dan g-index sebanyak 39, mencerminkan penglibatan akademik yang tinggi. Kajian ini turut menunjukkan peningkatan kerjasama antara penyelidik, institusi dan negara serta perkembangan kajian rentas disiplin. Kajian mencadangkan agar penyelidikan akan datang memperluas penyebaran pelbagai bahasa, meningkatkan penglibatan komuniti Orang Asli, dan memberi tumpuan kepada rantau yang kurang diterokai seperti Asia Tenggara. Usaha ini penting bagi membangunkan kerangka pelancongan peribumi yang lebih inklusif, adil dan menghormati budaya selaras dengan matlamat pembangunan lestari dan pemuliharaan warisan.

Kata Kunci: *Analisis Bibliometrik; Pelancongan Peribumi; Kelestarian; Warisan; Orang Asli*

INTRODUCTION

Orang Asli is one of the communities in Malaysia. Indigenous tourism is gaining attention worldwide due to the uniqueness of Indigenous ways of life, language, and culture (Dahlan et al. 2023), as well as heritage, food, and rituals. Indigenous tourism is a common term used to describe tourism activities involving Indigenous peoples or First Nations (Butler 2021). Indigenous tourism is a type of rural tourism that allows tourists to visit Indigenous peoples' settlements and experience daily life with Indigenous community members (Kunasekaran et al. 2015). "The UN does not provide an official definition of "Indigenous People" due to the diversity of identities and histories. Instead, organisations use a contemporary understanding of characteristics such as self-identification, historical continuity with pre-colonial societies, distinct systems and cultures, and a commitment to preserving heritage and the environment. The global population of Orang Asli is estimated to be 476 million. The Orang Asli constitute 6% of the world's population. Orang Asli lands and territories encompass 28% of the global land surface, including unique ecosystems and significant biodiversity. The Orang Asli community plays a crucial role in caring for the Earth's ecosystems and natural resources.

The Indigenous population in Malaysia numbers 206,777, representing approximately 0.64% of the national population (Department of Statistics Malaysia (DOSM) 2020). Specifically, in Selangor the Indigenous population comprises 20,456 individuals, accounting for about 0.3% of Selangor's total population (Department of Orang Asli Development (JAKOA) 2020). In Malaysia, Indigenous people are primarily referred to as "Orang Asli". The definition of "Orang Asli" is found in the Aboriginal Peoples Act of 1957 (Act 134) (ECOLEX 2006). According to the Aboriginal Peoples Act 1954 (Act 134), the Indigenous community can be defined as below: Any individual whose father belongs to the Orang Asli ethnic group, communicates using the Orang Asli language, predominantly adheres to the Orang Asli way of life, customs, and beliefs, and encompasses a lineage tracing through the male descent of the Orang Asli, or a person of any racial background, adopted as an infant by Orang Asli and raised following Orang Asli customs, language, and way of life, and who is integrated as a member of an Orang Asli community, is considered an Orang Asli or a child born of a union between

an Orang Asli woman and a man from a different racial background is eligible for recognition as an Indigenous people, provided that the child typically communicates in the Orang Asli language, adheres to the customary lifestyle and belief systems of the Orang Asli, and remains an active member of the Indigenous community.

Bibliometric analysis has become popular for studying trends in large datasets across various research topics (Donthu et al. 2021). Bibliometric analysis can help systematically review existing research to identify trends, gaps, and influential studies related to sustainable Indigenous tourism. Specifically, by analysing citation networks, keyword co-occurrences, and research clusters, scholars can assess how Indigenous communities are represented in tourism literature, the effectiveness of policies, and the role of governance in ensuring fair and equitable economic benefits (Hall & Williams 2019). This approach provides evidence-based insights to guide future research and policymaking, ensuring that Indigenous tourism frameworks prioritize long-term sustainability and community empowerment. Thus, this study aims to understand Indigenous Tourism in Asia, especially in Malaysia, from a research perspective and to provide an overview of developing a framework using bibliometric analysis.

RESEARCH METHODOLOGY

Bibliometric analysis is a quantitative method used to evaluate the impact, structure, and trends of research within a specific field by analyzing scholarly publications, citations, and other bibliometric indicators (Donthu et al. 2021). This method helps identify influential studies, key authors, and emerging research themes, facilitating a deeper understanding of academic contributions and research gaps (Aria & Cuccurullo 2017). The importance of bibliometric analysis lies in its ability to provide evidence-based insights into the development of knowledge, guide future research directions, and inform policymakers about the evolution of scientific disciplines (Zupic & Čater 2015). Additionally, it enhances academic decision-making by evaluating research productivity, collaboration networks, and citation performance across institutions and disciplines.

Scopus is one of the largest global databases of peer-reviewed abstracts and citations, widely used for research across various fields (Zamani et al. 2023). Scopus provides comprehensive coverage

of scientific journals, conference proceedings, and books, both regionally and globally, with over 82 million documents from more than 7,000 publishers. Publications in Scopus undergo a rigorous content selection and re-evaluation process by an independent Content Selection and Advisory Board (Baas et al. 2020). Scopus helps to increase research efficiency, identify emerging trends, inform strategic research decisions, enhance research visibility, and demonstrate the influence of journals, articles and authors (Elsevier 2024).

Furthermore, the database is known for its stringent selection criteria, prioritizing peer-reviewed and high-impact sources to ensure the credibility and academic rigor of the data used in bibliometric studies (Mongeon & Paul-Hus 2016). This quality control is crucial for producing reliable insights into research performance and trends.

Additionally, Scopus provides global coverage, making it ideal for topics such as Indigenous tourism, which are embedded in diverse cultural and regional contexts. Its data are compatible with various bibliometric and visualisation tools, such as VOSviewer, Bibliometrix, and CiteSpace, facilitating efficient data extraction and comprehensive analysis (Donthu et al. 2021).

The bibliometric analysis was conducted based on a defined set of inclusion criteria to ensure the validity and thematic relevance of the dataset. The analysis encompassed peer-reviewed journal articles, conference proceedings and book chapters published in English and indexed in the Scopus database. The literature was identified using a comprehensive search strategy incorporating the following keywords: “Indigenous tourism” OR “Indigenous Tourism Malaysia” OR “Indigenous Tourism Asia” OR “Indigenous Malaysia” OR “Indigenous Asia.” The search was restricted to the article title field to enhance specificity and thematic alignment.

The subject areas selected included Business, Management, and Accounting, Social Sciences, Economics, Econometrics, and Finance; Arts and Humanities, Environmental Science, and other related disciplines. Publication years were derived from bibliographic metadata extracted via Harzing’s Publish or Perish software, which retrieved the data directly from Scopus, ensuring accuracy in chronological representation.

A total of 143 documents meeting these criteria were identified and included in the analysis. The application of consistent inclusion parameters ensured a focused and comprehensive dataset, enabling a robust exploration of research trends, influential contributions, and thematic developments within the domain of Indigenous tourism.

STEPS OF BIBLIOMETRIC ANALYSIS

Figure 1 below shows how the data has been extracted. The data was identified in Scopus using the following keywords and search strings: “Indigenous tourism” OR “Indigenous Tourism Malaysia” OR “Indigenous Tourism Asia” OR “Indigenous Malaysia” OR “Indigenous Asia.” The search field was “article title,” and the subject areas included “Business,” “Management, and Accounting,” “Social Science,” “Economics,” “Econometrics and Finance,” “Arts and Humanities,” “Environmental Science,” and other related fields (as shown in Figure 1). The search yielded 143 documents, all of which were included in the bibliometric analysis. Several tools were employed to gain a deeper understanding of the data. VOSViewer is one of the tools used, which generates and maps bibliometric connections. Microsoft Excel was used to compute the frequency and proportion of each publication and to create related graphs and charts for better visualisation. Harzing’s Publish or Perish software was also used to calculate the citation metrics (Zamani et al. 2023).

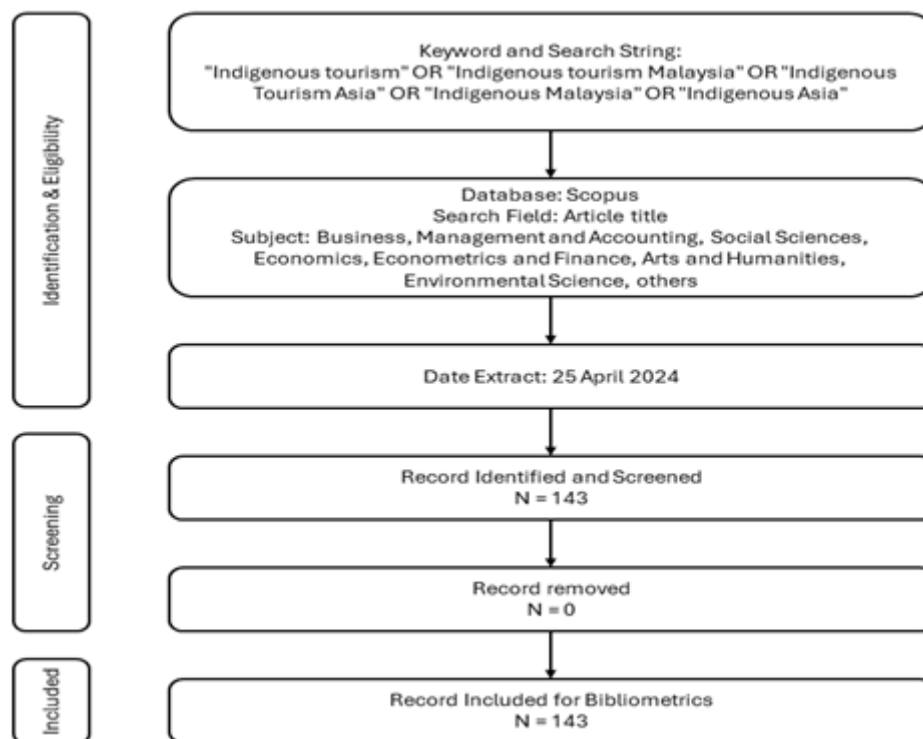


FIGURE 1. Flowchart of the Analysis Process

RESULT AND FINDINGS

YEAR OF PUBLICATION

Table 1 illustrates the yearly distribution of publications based on the keyword search. The first publication on this subject appeared in 1993, with only one article published. During the 1990s, three articles related to the keywords and search strings were published. From 2000 onward, the number

of articles published increased gradually year by year. Between 2000 and 2010, the highest number of articles published was in 2007, with 10 articles. Between 2011 and 2020, 2016 and 2017 showed higher article publication numbers, with 14 (9.79%) and 13 (9.09%) articles, respectively. The years with a higher average of citations per publication are 2016 and 2017, averaging 12 citations. The years with the highest average citations per cited publication are 2010 and 2016, with values of 248 and 296.

TABLE 1. Number of Publications Per Year

| Year | TP | (%) | NCP | TC | C/P | C/CP | h | g |
|-------------|-----|---------|-----|---------|-----|------|-------|--------|
| 2024 | 5 | 3.50% | 5 | 3.50% | 2 | 2 | 0.40 | 1.00 |
| 2023 | 9 | 6.29% | 14 | 9.79% | 7 | 12 | 1.33 | 1.71 |
| 2022 | 9 | 6.29% | 23 | 16.08% | 7 | 54 | 6.00 | 7.71 |
| 2021 | 10 | 6.99% | 33 | 23.08% | 9 | 115 | 11.50 | 12.78 |
| 2020 | 7 | 4.90% | 40 | 27.97% | 4 | 69 | 9.86 | 17.25 |
| 2019 | 9 | 6.29% | 49 | 34.27% | 9 | 118 | 13.11 | 13.11 |
| 2018 | 8 | 5.59% | 57 | 39.86% | 7 | 48 | 6.00 | 6.86 |
| 2017 | 13 | 9.09% | 70 | 48.95% | 12 | 219 | 16.85 | 18.25 |
| 2016 | 14 | 9.79% | 84 | 58.74% | 12 | 296 | 21.14 | 24.67 |
| 2015 | 10 | 6.99% | 94 | 65.73% | 10 | 163 | 16.30 | 16.30 |
| 2014 | 7 | 4.90% | 101 | 70.63% | 7 | 97 | 13.86 | 13.86 |
| 2013 | 8 | 5.59% | 109 | 76.22% | 8 | 113 | 14.13 | 14.13 |
| 2012 | 2 | 1.40% | 111 | 77.62% | 2 | 55 | 27.50 | 27.50 |
| 2011 | 2 | 1.40% | 113 | 79.02% | 2 | 63 | 31.50 | 31.50 |
| 2010 | 6 | 4.20% | 119 | 83.22% | 6 | 248 | 41.33 | 41.33 |
| 2009 | 2 | 1.40% | 121 | 84.62% | 2 | 43 | 21.50 | 21.50 |
| 2007 | 10 | 6.99% | 131 | 91.61% | 10 | 159 | 15.90 | 15.90 |
| 2006 | 1 | 0.70% | 132 | 92.31% | 1 | 8 | 8.00 | 8.00 |
| 2005 | 3 | 2.10% | 135 | 94.41% | 2 | 14 | 4.67 | 7.00 |
| 2004 | 2 | 1.40% | 137 | 95.80% | 2 | 70 | 35.00 | 35.00 |
| 2003 | 2 | 1.40% | 139 | 97.20% | 2 | 30 | 15.00 | 15.00 |
| 2001 | 1 | 0.70% | 140 | 97.90% | 1 | 34 | 34.00 | 34.00 |
| 1999 | 2 | 1.40% | 142 | 99.30% | 1 | 106 | 53.00 | 106.00 |
| 1993 | 1 | 0.70% | 143 | 100.00% | 1 | 57 | 57.00 | 57.00 |
| Grand Total | 143 | 100.00% | | | 126 | 2193 | 15.34 | 17.40 |

Notes: TP = total number of publications; NCP = number of cited publications; TC = total citations; C/P = average citations per publication; C/CP = average citations per cited publication; h = h-index; g = g-index

DOCUMENT AND SOURCE TYPES

The published document types include articles, book chapters, conference papers, notes, reviews, books, and editorials. According to Table 2, the most common type is articles (102), followed by book chapters (32), conference papers (3), notes

and reviews (2) and books and editorials (1). The source types related to the search string are journals, books, book series, and conference proceedings. The greatest number of sources is journals (105), while the fewest are book series and conference proceedings (3).

TABLE 2. Document and Source Types

| Document Types | Total |
|-----------------------|-------|
| Article | 102 |
| Book Chapter | 32 |
| Conference Paper | 3 |
| Note | 2 |
| Review | 2 |
| Book | 1 |
| Editorial | 1 |
| Source Types | Total |
| Journal | 105 |
| Book | 32 |
| Book Series | 3 |
| Conference Proceeding | 3 |

SOURCE TITLE

Table 3 presents the top 15 source titles related to Indigenous tourism in Malaysia and Asia. The Journal of Sustainable Tourism is the leading source, with 15 documents (10.49%), followed by 'Tourism and Indigenous Peoples Issues and Implications' (8 documents, 5.59%), the Journal of Heritage Tourism (7 documents, 4.90%), Tourism Management (6 documents, 4.20%), Annals of Tourism Research (5 documents, 3.50%), Current Issues in Tourism

(5 documents, 3.50%), the Journal of Hospitality and Tourism Management (5 documents, 3.50%), Tourism Culture and Communication (4 documents, 2.80%), Geojournal of Tourism and Geosites, Indigenous Tourism Movements, the International Indigenous Policy Journal, the Journal of Ecotourism, Sustainability Switzerland, 'Tourism and Indigeneity in The Arctic,' and the Asia Pacific Journal of Tourism Research (3 documents each, 2.10%).

TABLE 3. Source Titles

| No | Source Title | TD | % |
|----|--|----|--------|
| 1 | Journal of Sustainable Tourism | 15 | 10.49% |
| 2 | Tourism and Indigenous Peoples Issues and Implications | 8 | 5.59% |
| 3 | Journal of Heritage Tourism | 7 | 4.90% |
| 4 | Tourism Management | 6 | 4.20% |
| 5 | Annals of Tourism Research | 5 | 3.50% |
| 6 | Current Issues in Tourism | 5 | 3.50% |
| 7 | Journal of Hospitality and Tourism Management | 5 | 3.50% |
| 8 | Tourism Culture and Communication | 4 | 2.80% |
| 9 | Geojournal of Tourism and Geosites | 3 | 2.10% |
| 10 | Indigenous Tourism Movements | 3 | 2.10% |
| 11 | International Indigenous Policy Journal | 3 | 2.10% |
| 12 | Journal of Ecotourism | 3 | 2.10% |
| 13 | Sustainability Switzerland | 3 | 2.10% |
| 14 | Tourism and Indigeneity in The Arctic | 3 | 2.10% |
| 15 | Asia Pacific Journal of Tourism Research | 2 | 1.40% |

MOST LANGUAGES USE

Language is an important consideration for reaching readers interested in this topic. According to Table

4, the primary language of publication is English, with 138 articles. Other languages include Spanish (3 articles), Portuguese (2 articles), and German (1 article).

TABLE 4. Most of the Languages Used

| No | Language | Total Document |
|----|------------|----------------|
| 1 | English | 138 |
| 2 | Spanish | 3 |
| 3 | Portuguese | 2 |
| 4 | German | 1 |

MOST ACTIVE COUNTRY

According to Table 5, the top 15 most active countries publishing articles on topics related to Indigenous tourism or peoples are: Australia (47

documents), the United Kingdom (18), Canada (15), the United States (12), Sweden (10), New Zealand (8), Malaysia and Taiwan (7 each), Brazil (5), Finland, Indonesia, Norway, and Spain (4 each), and Chile and South Africa (3 each).

TABLE 5. The Most Active Country in Publication

| No | Country | Total Document | Continent |
|----|----------------|----------------|---------------|
| 1 | Australia | 47 | Oceania |
| 2 | United Kingdom | 18 | Europe |
| 3 | Canada | 15 | North America |
| 4 | United States | 12 | North America |
| 5 | Sweden | 10 | Europe |
| 6 | New Zealand | 8 | Oceania |
| 7 | Malaysia | 7 | Asia |
| 8 | Taiwan | 7 | Asia |
| 9 | Brazil | 5 | South America |
| 10 | Finland | 4 | Europe |
| 11 | Indonesia | 4 | Asia |
| 12 | Norway | 4 | Europe |
| 13 | Spain | 4 | Europe |
| 14 | Chile | 3 | South America |
| 15 | South Africa | 3 | Africa |

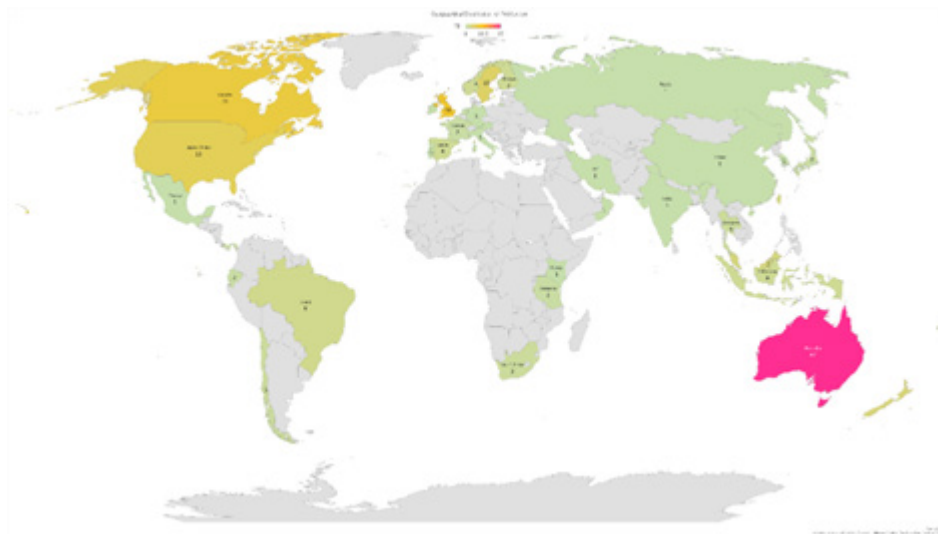


FIGURE 2. Map of publications for articles around the world

MOST PUBLICATION INSTITUTIONS

Each author possesses specific expertise and is affiliated with an institution for research, development, and societal engagement. Table 6 presents the top 15 institutions in article publication. The University of Queensland (Australia) is the leading institution for Indigenous tourism publications, with 17 documents, followed by the University of Queensland Business School (11

documents), Griffith University (10 documents), Southern Cross University (9 documents), the School of Business and Tourism and Griffith Business School (7 documents each), Charles Darwin University and UiT Norges Arktiske Universitet (4 documents each), and the University of Johannesburg, the University of Waikato, Victoria University, University of Kent, Universitat d'Alacant, Höskolan Dalarna, and Macquarie University (3 documents each).

TABLE 6. Most Publication Institutions

| No | Institution | Total Document | % | Country |
|----|--|----------------|-------|----------------------------|
| 1 | The University of Queensland | 17 | 11.89 | Brisbane, Australia |
| 2 | The University of Queensland Business School | 11 | 7.69 | Brisbane, Australia |
| 3 | Griffith University | 10 | 6.99 | Brisbane, Australia |
| 4 | Southern Cross University | 9 | 6.29 | Gold Coast, Australia |
| 5 | School of Business and Tourism | 7 | 4.90 | Lismore, Australia |
| 6 | Griffith Business School | 7 | 4.90 | Brisbane, Australia |
| 7 | Charles Darwin University | 4 | 2.80 | Darwin, Australia |
| 8 | UiT Norges Arktiske Universitet | 4 | 2.80 | Tromsø, Norway |
| 9 | University of Johannesburg | 3 | 2.10 | Johannesburg, South Africa |
| 10 | The University of Waikato | 3 | 2.10 | Hamilton, New Zealand |
| 11 | Victoria University | 3 | 2.10 | Melbourne, Australia |
| 12 | University of Kent | 3 | 2.10 | Canterbury, England |
| 13 | Universitat d'Alacant | 3 | 2.10 | Alicante, Spain |
| 14 | Högskolan Dalarna | 3 | 2.10 | Falun, Sweden |
| 15 | Macquarie University | 3 | 2.10 | Sydney, Australia |

MOST ACTIVE AUTHOR

Table 7 presents the most active authors in Indigenous tourism. L. Ruhanen is among the leading authors with 13 publications, followed by M. Whitford (9),

A. Holder (4), J. Buultjens, P. Espeso-Molinero, P. Kunasekaran, M. Mkono, A. Movono, M.J. Pastor-Alfonso, D. Theodossopoulos, and A. Viken (3 each) and T.E. Abascal, J.C. Barbieri, C.N. Brandão, and A.C. Bunten (2 each).

TABLE 7. Most Active Authors in Indigenous Tourism

| No | Author Name | TD | % | Affiliation | Country |
|----|----------------------|----|-------|--|-------------|
| 1 | Ruhanen, L. | 13 | 9.09% | The University of Queensland | Australia |
| 2 | Whitford, M. | 9 | 6.29% | Griffith University | Australia |
| 3 | Holder, A. | 4 | 2.80% | The University of Queensland | Australia |
| 4 | Buultjens, J. | 3 | 2.10% | School of Business and Tourism | Australia |
| 5 | Espeso-Molinero, P. | 3 | 2.10% | Universitat d'Alacant | Spain |
| 6 | Kunasekaran, P. | 3 | 2.10% | Universiti Putra Malaysia | Malaysia |
| 7 | Mkono, M. | 3 | 2.10% | The University of Queensland Business School | Australia |
| 8 | Movono, A. | 3 | 2.10% | Massey University | New Zealand |
| 9 | Pastor-Alfonso, M.J. | 3 | 2.10% | Universitat d'Alacant | Spain |
| 10 | Theodossopoulos, D. | 3 | 2.10% | | |
| 11 | Viken, A. | 3 | 2.10% | Arctic University of Norway | Norway |
| 12 | Abascal, T.E. | 2 | 1.40% | Victoria University | Australia |
| 13 | Barbieri, J.C. | 2 | 1.40% | EAESP/FGV | Brazil |
| 14 | Brandão, C.N. | 2 | 1.40% | EAESP/FGV | Brazil |
| 15 | Bunten, A.C. | 2 | 1.40% | | |

AUTHORSHIP ANALYSIS

Figure 3 illustrates the authorship distribution within the collected data. The graph shows both single-authored and multi-authored publications. Single-

authored documents total 45, while multi-authored documents number 98. These numbers reflect publications from 1993 to 2024. The increasing number of authors suggests a rise in collaboration among researchers in the tourism field.

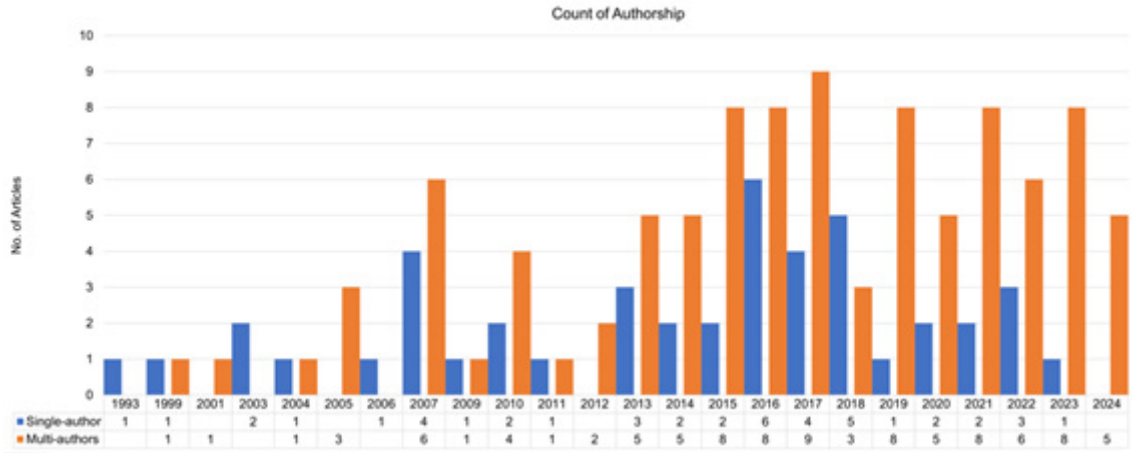


FIGURE 3. Count of Authorship

NETWORK VISUALISATION

The network visualisation depicts a co-authorship network where nodes represent authors and edges represent collaborations. Central figures such as “L. Ruhanen” and “M. Whitford” are highly connected, indicating their influential roles. Distinct clusters, for example, those around “A. Holder” and “P. Espeso-Molinero,” show frequent intra-group collaborations, while bridging authors like “C. De

Bernardi” connect different clusters, suggesting interdisciplinary research. Isolated groups, such as those around “A. Trupp,” indicate niche research areas. This visualisation highlights collaboration patterns, central and bridging authors, and the structure of the research community, offering insights into influential researchers and interdisciplinary connections. The network visualisation can be seen in Figure 3.

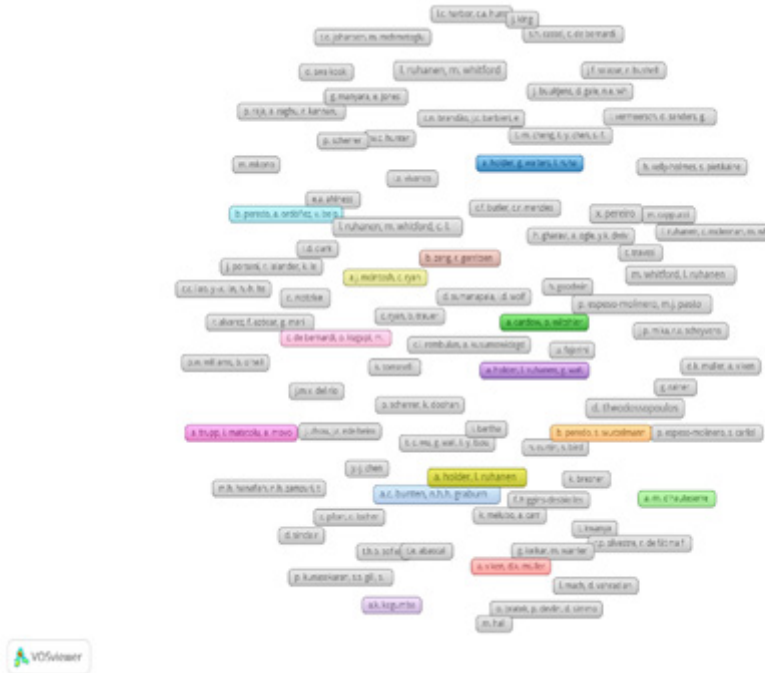


FIGURE 4. Network Visualisation on the Authorship

OVERLAY VISUALISATION

The overlay visualisation shows a co-authorship network evolving, where colours indicate the year of publication. Central figures such as “L. Ruhanen” and “M. Whitford” remain influential throughout the period. The colour gradient from blue to green and yellow indicates that more recent collaborations appear on the network’s periphery. Authors such

as “A. Holder” and “P. Espeso-Molinero” have maintained active collaborations in recent years. The network highlights both longstanding and emerging collaborations; newer connections (in yellow) indicate fresh research dynamics and partnerships forming in the field. This temporal layer helps identify both established and upcoming research trends. The overlay visualisation can be seen in Figure 5.

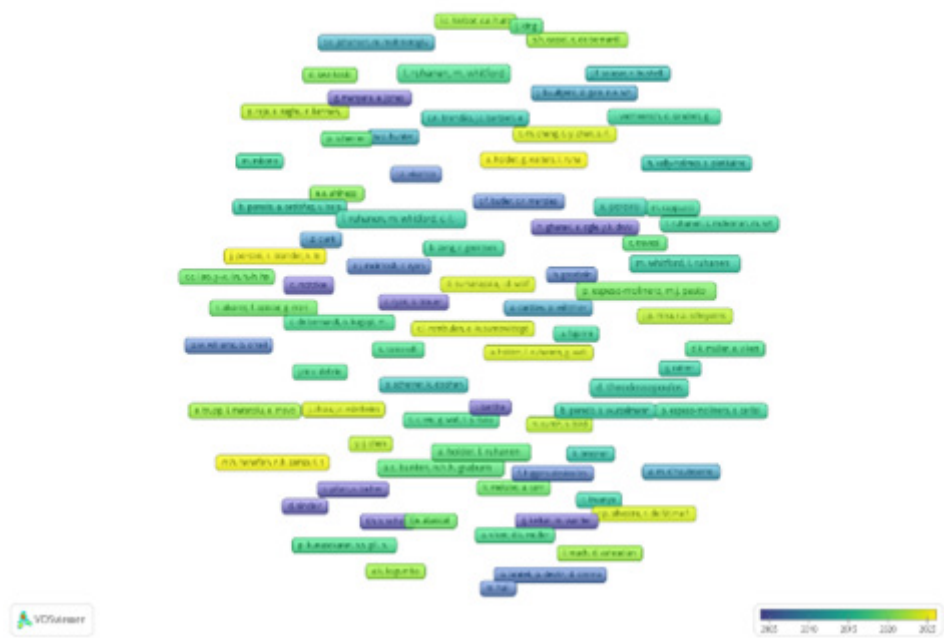


FIGURE 5. Overlay Visualisation in Authorship

DENSITY VISUALISATION

The density visualisation highlights areas of intense collaboration within the co-authorship network. Central authors such as “L. Ruhanen” and “M. Whitford” are located in the densest regions, indicating their extensive collaborative efforts. The bright yellow and orange areas signify high-density clusters, reflecting frequent co-authorship within

these groups. Peripheral authors in purple areas are less connected, suggesting fewer collaborations. This visualisation emphasises the core influential researchers and collaboration hubs within the network, while also identifying less active or emerging research areas. The gradient from the dense center to sparse edges illustrates the varying levels of collaboration intensity across the network. The density visualisation can be seen in Figure 6.

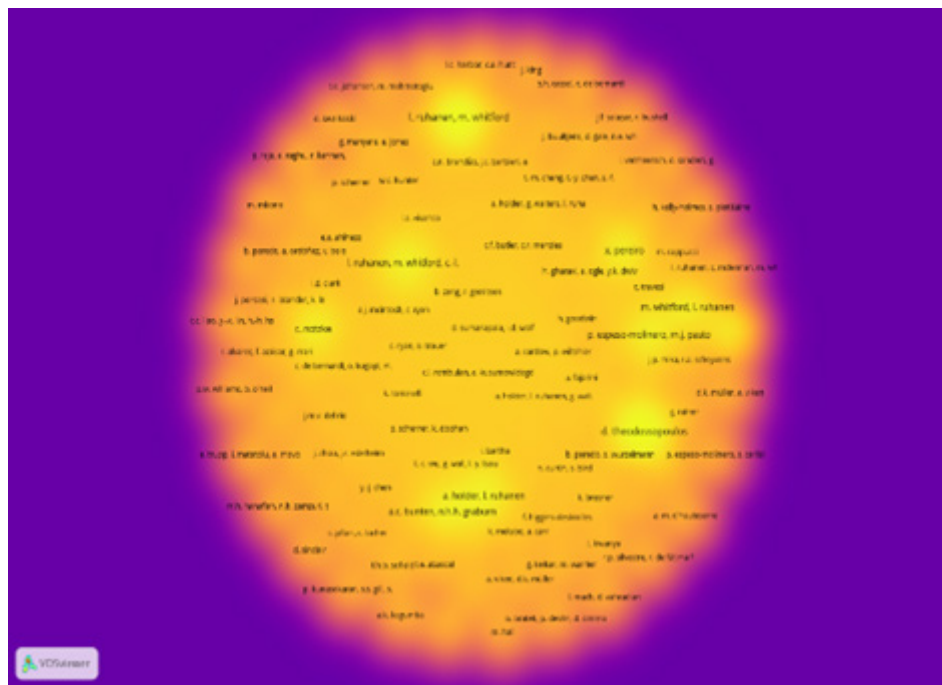


FIGURE 6. Density Visualisation on Authorship

MOST USED KEYWORDS

Keywords are very important for finding the right articles when conducting research. Based on Table 9 below, out of 143 articles found, the top 15 keywords are: 'Indigenous tourism' (74 occurrences), 'Indigenous populations' (35 occurrences), tourism development (29 occurrences), ecotourism

(21 occurrences), Australia (19 occurrences), sustainability (17 occurrences), heritage tourism (15 occurrences), tourism management (14 occurrences), sustainable tourism and tourism (12 occurrences each), sustainable development (9 occurrences), empowerment, indigenous people, and tourism market (7 occurrences each), and authenticity (6 occurrences).

TABLE 9. Most Used Keywords

| No | Keywords | Total |
|----|-------------------------|-------|
| 1 | Indigenous Tourism | 74 |
| 2 | Indigenous Population | 35 |
| 3 | Tourism Development | 29 |
| 4 | Ecotourism | 21 |
| 5 | Australia | 19 |
| 6 | Sustainability | 17 |
| 7 | Heritage Tourism | 15 |
| 8 | Tourism Management | 14 |
| 9 | Sustainable Tourism | 12 |
| 10 | Tourism | 12 |
| 11 | Sustainable Development | 9 |
| 12 | Empowerment | 7 |
| 13 | Indigenous People | 7 |
| 14 | Tourism Market | 7 |
| 15 | Authenticity | 6 |

CITATION METRICS

The citation metrics are derived from Scopus data using specific selected keywords. A few key metrics have been extracted. The publication years related to the keywords range from 1993 to 2024 — a 31-year citation period. Table 10 below illustrates that approximately 143 papers related to the topic have

received 2193 citations. The average citations per year are 70.74, and the average citations per paper are 15.34. The average citations per author are around 1352.17, the average papers per author are 83.64, and the average authors per paper are 2.29. The h-index (Hirsch 2005) is 27, which is a good indication for this topic. The g-index (Egghe 2006) is 39 for the selected keywords.

TABLE 10. Citation Metrics

| ITEM | DATA |
|-------------------|------------------|
| Publication years | 1993 – 2024 |
| Citation years | 31 (1993 – 2024) |
| Papers | 143 |
| Citations | 2193 |
| Cites/year | 70.74 |
| Cites/paper | 15.34 |
| Cites/author | 1352.17 |
| Paper/author | 83.64 |
| Author/paper | 2.29 |
| h-index | 27 |
| g-index | 39 |

MOST POPULAR PAPER CITED

Table 11 below lists the top 15 articles with the highest number of citations from other authors. The most cited article is “Indigenous Tourism Development in the Arctic” by C. Notzke, published in 1999. This paper has accumulated 106 citations, with an average of 4.24 citations per year. It is followed by M. Whitford and L. Ruhanen (2016), whose article, “Indigenous Tourism Research, past

and present: where to from here?” has been cited 80 times, averaging 10 citations per year. Another highly cited article is “Indigenous Tourism Stages and their Implications for Sustainability,” with 75 citations and an average of 5.36 citations per year. Another paper by the same authors, M. M. Whitford and L. M. Ruhanen, published in 2010 and titled “Australian Indigenous Tourism Policy: Practical and Sustainability,” has received 69 citations, averaging 4.93 citations per year.

TABLE 11. Most Popular Paper Cited

| No. | Author(s) | Title | TC | C/Y |
|-----|--|--|-----|------|
| 1 | C. Notzke (1999) | Indigenous tourism development in the Arctic | 106 | 4.24 |
| 2 | M. Whitford, L. Ruhanen (2016) | Indigenous tourism research, past and present: where to from here? | 80 | 10 |
| 3 | D. Weaver (2010) | Indigenous tourism stages and their implications for sustainability | 75 | 5.36 |
| 4 | M.M. Whitford, L.M. Ruhanen (2010) | Australian Indigenous tourism policy: Practical and sustainable policies? | 69 | 4.93 |
| 5 | C. Notzke (2004) | Indigenous tourism development in Southern Alberta, Canada: Tentative engagement | 69 | 3.45 |
| 6 | L. Ruhanen, M. Whitford (2019) | Cultural heritage and Indigenous tourism | 66 | 13.2 |
| 7 | L. Ruhanen, M. Whitford, C.-L. McLennan (2015) | Indigenous tourism in Australia: Time for a reality check | 63 | 7 |
| 8 | T.H.B. Sofield (1993) | Indigenous tourism development | 57 | 1.84 |

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| | | | | |
|----|--|---|----|-------|
| | R. Scheyvens, A. Carr, A. Movono, E. Hughes, F. Higgins-Desbiolles, J.P. Mika (2021) | Indigenous tourism and the sustainable development goals | 53 | 17.67 |
| 9 | | | | |
| 10 | N. Nielsen, E. Wilson (2012) | From invisible to Indigenous-driven: A critical typology of research in Indigenous tourism | 52 | 4.33 |
| 11 | S.R. Taylor (2017) | Issues in measuring success in community-based Indigenous tourism: elites, kin groups, social capital, gender dynamics and income flows | 50 | 7.14 |
| 12 | H. Kelly-Holmes, S. Pietikäinen (2014) | Commodifying Sámi culture in an indigenous tourism site | 50 | 5 |
| 13 | X. Pereiro (2016) | A review of Indigenous tourism in Latin America: reflections on an anthropological study of Guna tourism (Panama) | 49 | 6.13 |
| 14 | W.C. Hunter (2011) | Rukai indigenous tourism: Representations, cultural identity, and Q method | 46 | 3.54 |
| 15 | J. Buultjens, D. Brereton, P. Memmott, J. Reser, L. Thomson, T. O'Rourke (2010) | The mining sector and indigenous tourism development in Weipa, Queensland | 44 | 3.14 |

Notes: TC = Total Citation, C/Y = Cited per year

DISCUSSION

The bibliometric analysis of Indigenous tourism research highlights its steady growth and increasing academic interest over the past three decades. The first publication appeared in 1993, with a gradual growth in the number of articles from the early 2000s. The highest number of publications occurred in 2007 with 10 articles, while 2016 and 2017 saw the most publications in the following decade with 14 and 13 articles, respectively. These years also had the highest average citations per publication, emphasising the impact and relevance of research during this period. The years 2010 and 2016 recorded the highest citation averages, reflecting their significant influence in shaping Indigenous tourism discourse. The research is predominantly published as journal articles, with 102 articles, followed by book chapters with 32 chapters, with smaller contributions from conference papers, notes, reviews, books, and editorials. The Journal of Sustainable Tourism is the leading publication source with 15 articles (10.49%), followed by Tourism and Indigenous Peoples Issues and Implications with 8 articles and the Journal of Heritage Tourism with 7 articles. The dominance of sustainability- and heritage-related journals reflects the interdisciplinary nature of Indigenous tourism research, focusing on cultural preservation, economic development, and environmental sustainability.

Language distribution indicates that English is the primary medium of publication, with 138 articles, minor contributions in Spanish (3), Portuguese (2), and German (1). This suggests a global outreach of Indigenous tourism research while also highlighting the limited representation of non-English perspectives, which could offer valuable localised insights. Geographically, Australia leads in research output with 47 articles, followed by the United Kingdom (18), Canada (15), and the United States (12). Other notable contributors include Sweden, New Zealand, Malaysia, and Taiwan. The prominence of Australia, Canada, and New Zealand aligns with their significant Indigenous populations and established Indigenous tourism industries. Malaysia's inclusion signals the growing importance of Southeast Asian Indigenous tourism research, particularly in sustainability and heritage conservation. The institutional analysis reinforces Australia's dominance, with the University of Queensland (17 articles), Griffith University (10), and Southern Cross University (9) being the top contributors. These universities are known for their strong tourism research programs. Other key institutions in Europe, North America, and Asia contribute to the field, reflecting its multidisciplinary and international scope.

The co-authorship network visualisation identifies leading scholars such as L. Ruhanen (13 publications) and M. Whitford (9), whose extensive

collaborations position them as central figures in Indigenous tourism research. Emerging researchers like A. Holder and P. Espeso-Molinero indicate growing interest and new perspectives in the field. Overlay and density visualisations highlight both long-standing and emerging research collaborations, suggesting a balance between established expertise and new scholarly contributions. Keyword analysis reveals ‘Indigenous tourism’ (74 occurrences) as the most frequently used term, followed by ‘Indigenous populations’ (35), ‘tourism development’ (29), and ‘ecotourism’ (21). The emphasis on sustainability is evident in keywords such as ‘heritage tourism’ (15), ‘sustainable tourism’ (12), and ‘sustainable development’ (9). These trends reflect the ongoing global discourse on responsible tourism and Indigenous community empowerment.

The citation metrics confirm the increasing relevance of Indigenous tourism research, with 143 documents accumulating 2,193 citations over 31 years. The h-index of 27 and g-index of 39 indicate strong academic impact, while citation rates (70.74 citations per year and 15.34 per paper) demonstrate consistent engagement. The most cited article, ‘Indigenous Tourism Development in the Arctic’ by C. Notzke (1999), with 106 citations, highlights the importance of Arctic Indigenous tourism models. Other highly cited works by Whitford and Ruhanen emphasise policy and sustainability considerations in Indigenous tourism development.

While this bibliometric analysis offers valuable insight into the development and structure of Indigenous tourism research, several critical issues merit further discussion:

GEOGRAPHICAL IMBALANCE AND THE DOMINANCE OF THE GLOBAL NORTH

The data reveals a concentration of scholarship from countries in the Global North, particularly Australia (47 articles), followed by the United Kingdom and Canada. This imbalance aligns with previous critiques of knowledge production in Indigenous research, which argue that dominant epistemologies often emerge from settler-colonial contexts, potentially overshadowing local narratives and priorities in regions such as Southeast Asia (Smith 2012; Hall & Tucker 2004).

LANGUAGE BIAS AND KNOWLEDGE ACCESSIBILITY

The overwhelming use of English (138 out of 143 publications) highlights a linguistic bias that limits access for non-English-speaking Indigenous communities. As emphasised by Swadener and Mutua (2008), the marginalisation of Indigenous languages in academia reinforces epistemic exclusion, curtailing broader community engagement and participation.

LIMITED INTEGRATION OF SOCIO-POLITICAL CONTEXTS

Although keywords such as “sustainability,” “heritage tourism,” and “empowerment” recur, the analysis shows a gap in engagement with critical socio-political dimensions such as land rights, cultural commodification, and policy conflicts. These are key issues raised in Indigenous scholarship (Bunten 2010; Higgins-Desbiolles 2018), which caution against an overly romantic or economistic portrayal of Indigenous tourism.

INSTITUTIONAL CENTRALISATION AND KNOWLEDGE GATEKEEPING

The dominance of specific institutions (e.g., University of Queensland, Griffith University) and authors (e.g., Ruhanen, Whitford) in publication networks may reflect intellectual gatekeeping. While their contributions are significant, an overconcentration of perspectives risks stifling diversity in theoretical framing and community engagement models (Wilson 2008).

UNDERREPRESENTATION OF COMMUNITY-BASED PARTICIPATORY RESEARCH

The bibliometric approach, while methodologically rigorous, does not capture whether studies are community-led or co-created with Indigenous peoples. Research that fails to engage Indigenous communities as equal partners risks perpetuating extractive knowledge practices (Chilisa 2012). The future of Indigenous tourism research must prioritise participatory action research (PAR) and Indigenous-led methodologies.

NEED FOR CONTEXTUALISATION OF PUBLICATION TRENDS

The peaks in publication activity in 2016 and 2017 may correspond to shifts in global or national policy, such as increased attention to the UN Sustainable Development Goals (SDGs) or local Indigenous tourism initiatives. However, the lack of temporal or contextual analysis in bibliometric studies can obscure underlying drivers of research activity (Scheyvens & Biddulph 2018).

Overall, this bibliometric analysis offers critical insights into the evolution, key contributors, and thematic focus of research on Indigenous tourism. The increasing collaboration among scholars, institutions, and countries suggests a growing recognition of Indigenous tourism as a crucial research area. Future studies should explore underrepresented regions to develop more inclusive and comprehensive Indigenous tourism frameworks, ensuring global applicability and sustainability.

CONCLUSION

This bibliometric analysis underscores the growing significance of Indigenous tourism research, reflecting its expansion in academic literature and increasing scholarly engagement. The findings reveal a consistent rise in publications, particularly in recent years, emphasising the evolving discourse on sustainability, heritage preservation, and economic empowerment within Indigenous tourism. The dominance of English-language publications highlights accessibility but also indicates a need for greater representation of Indigenous voices from non-English-speaking regions.

Institutional and author collaborations have played a pivotal role in shaping the field, with key figures such as L. Ruhanen and M. Whitford contributing significantly to knowledge production and policy discourse. However, critical reflections highlight several limitations within the current body of literature. These include geographical and institutional imbalances, lack of socio-political contextualisation, and insufficient incorporation

of community-based and participatory research approaches. Further, the overreliance on Global North institutions may limit the applicability of findings to the Southeast Asian context.

The keyword and citation analyses reinforce the importance of sustainable development and Indigenous community empowerment, aligning with broader global tourism and heritage conservation goals. Highly cited articles and influential publications continue to guide research directions, emphasising the need for interdisciplinary and cross-regional studies to enhance Indigenous tourism frameworks worldwide. Future research should prioritise inclusivity by incorporating diverse Indigenous perspectives—particularly from underrepresented regions like Southeast Asia—and actively involve Indigenous communities in co-producing knowledge. This approach will ensure that Indigenous tourism research is not only academically robust but also socially equitable and culturally respectful.

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