



LANGUAGE BARRIERS IN TOURISM: AN OVERVIEW OF GLOBAL LANDSCAPE THROUGH BIBLIOMETRIC ANALYSIS

Fiaz Ahmad*

Department of Economics and Finance, Sunway Business School,
Sunway University, Petaling Jaya, Malaysia.
fiazahmadq30@gmail.com, (Corresponding Author)

Mohamad Djavad Akbari Motlaq

Faculty of Arts, Chulalongkorn University, Bangkok, Thailand
akbarimotlaq@gmail.com

Ahmad Salman

Faculty of Hospitality & Tourism, Prince of Songkla University,
Phuket Campus, Phuket, Thailand
ahmad.salman111@gmail.com

Mohammed Basendwah

Department of Tourism and Hotel Management,
Umm Al Qura University, Makkah, Saudi Arabia
mohammedm447@gmail.com

ABSTRACT

Traversing linguistic diversity around the globe, this study embarks on a bibliometric journey to unravel language barriers, spanning over four decades of research. This study systematically charts the discourse among scholars, revealing the development of themes, abundant research, and the complexities of cross-border collaboration using R Studio and VOSviewer. The study's findings indicate that the United States and the United Kingdom are crucial contributors and coordinators to the international network of scholarly interaction and its wake-up call for the developing world to focus on this phenomenon to promote the tourism industry. Using information from the Scopus database, the analysis charts research from 1980 to 2023, emphasising the growing importance of eradicating communicative barriers from travel experiences. The study indicates the need for empirical assessments of technology-mediated communication solutions and highlights a substantial gap in understanding language barriers in tourism.

Keywords: Language Barriers, Tourism, Linguistics, Barrier-free Tourism, Bibliometric Analysis

1.0 INTRODUCTION

The rapid expansion of the tourism industry underscores its critical role in global economic and cultural landscapes, necessitating a deeper understanding of the barriers that impede its accessibility and inclusivity. Travelling can elevate individuals' moods and increase their sense of happiness in life (Hwang et al., 2020; Qiao et al., 2019). Additionally, it promotes social equity and economic development (Gondos, 2019; McCabe, 2020). Naturally, language and multilingualism are significant factors in the travel and tourism sector (Heller et al., 2014a).

Language is a critical factor that helps tourists to communicate and understand local cultures and communities. Heller et al. (2014b) state that while communication with foreign visitors necessitates appropriate language skills, which are also evaluated as a criterion for employment, very few can be compensated for, valued, or otherwise "trivialized" following their use. Beyond multilingual behaviours, sociolinguistic studies of tourism also examine language ideologies and the processes of commercialisation and authenticity. As Coray and Duchêne (2017) say, "Peripheral regions market not only their landscape and sports facilities but also their

linguistic and cultural heritage" (p. 64). The literature has not fully addressed the collaborative efforts required to bridge these linguistic divides. The patterns of academic partnerships reveal a complex network of knowledge exchange that has not been thoroughly examined. Understanding these collaborative dynamics is essential for crafting comprehensive strategies that can foster linguistic inclusivity in tourism.

1.1 Role of Language in Tourism:

Understanding the local language and the strength of effective communication enhance the tourist's experience of the destination. In the tourism industry, two well-established principles are related to the significance of multilingualism: (a) Genuine experiences are increasingly in demand from travellers. (b) Say "hi" to your guests in their native tongue for the finest impression. Make them feel important and welcome by demonstrating their desire to be here.

In the service industry, linguistic considerations and bilingual resources are employed in the provision of services. Muth (2015) states that multilingual resources and language aspects are emphasised in marketing as additional value, such as in international health tourism. Other privileged areas where tourism is conducted are service providers like travel agencies, tour businesses, and tourist information centres. These businesses provide transportation, lodging, package tours, and other services that help shape tourism practices. As a result, most contacts occur between tourists and "locals" or between visitors and the staff members of these service providers. Vacation spots (locations and tourist attractions) are significant due to the intersection of local and global semiotic and linguistic practices as well as concrete encounters.

In addition to offering useful travel advice, the tourist travel guide also shapes how travellers are perceived, acting as a "perception manager" (p. 137) or a "vision school" (p. 28) in the words of Gorsemann (1995) and Müller (2012), respectively, and contributing to the creation of the tourist expectation horizon (p. 28), particularly in light of John Urry's "Tourist Gaze", which has become an increasingly prominent topic in recent cultural studies research. The guide can be seen as a

"designer" of tourist models because of its concise language and selection, pronunciation of suggestions, mention of topics that are "worth seeing," and corresponding preference for a specific method of transportation. As suggested by Pagenstecher (2003), "the traveler; a certain tourist view" (p. 205). Furthermore, according to Gunnarson (2013), linguistic flexibility is necessary for people more than managers and high-level employees in the modern economy. Coworkers speak different languages throughout the working day. They must be ready to communicate with coworkers and group leaders who speak a different language than they do (p. 162).

In the current era, a modern technique known as bibliometric analysis helps to identify the evolution, existing trends, and connections in academic and policy debates related to language barriers and tourism studies. By systematically analysing publication trends, citation networks, and topic focus, researchers can better recognise the evolution of a certain topic and the introduction of novel topics (Ellegaard & Wallin, 2015; Shahid et al., 2024; Ahmad et al., 2024). In the era of this technological revolution and the growing impact of artificial intelligence (AI) on our daily lives, it is important to investigate the evolving nature of language barriers and tourism-related research.

This study employs bibliometric analysis to explore the multifaceted connection between language barriers and tourism and to improve our understanding of this phenomenon. The objective is to comprehensively analyse and understand the subject's historical development, status, and potential future trajectories. This strategy offers valuable information on the condition of the topic and effectively pinpoints areas needing further investigation and those that may be enhanced by it. The study addresses the following questions:

RQ1: What is the prevailing publication trend regarding language barriers in tourism?
RQ 2. Which journals and papers have the most significant impact on language barriers in tourism research?

RQ3: Which authors, organisations, and nations contribute to language barriers in tourism research?

2.0 LANGUAGE BARRIERS AND TOURISM:

Studies on the relationship between language, tourism, and measures to remove linguistic barriers are quite rare. Wilson (2018) observed a dearth of scholarly focus on language- and tourism-related concerns. Wilson (2018) examined language interactions in tourist settings and how this affected travellers' decisions about where to go, pointing out that hosts must make more linguistic accommodations for transient guests. Although there has been much research in sociolinguistics on how group interactions affect language learning and language shift, language accommodation in tourism contexts has not been considered in these studies, according to the study.

Studies that address language and tourism difficulties at the local level are still hard to come by. In general, researchers still focus on how language affects traveller experiences and tourism rather than delving into the intricate web of ties that exist within the community. Language shift and tourism have been empirically linked in studies by Uekusa (2019), O'Brien and Federici (2019), Taras et al. (2021), and Wilczewski and Alon (2023). Their analysis revealed a divided response from the community, with those in the tourism industry viewing language as a way of attracting tourists. Although this was a noteworthy discovery, their parameters were not met, and the viewpoints of the speaking community were not examined. The study's overarching goals and purposes obscure the relevance of this discovery. The role and viewpoints of the speaking population are once more ignored in this narrow presentation of language, which is seen solely in terms of tourist interest.

At the intersection of language and tourism, scholarly discourse has typically centred on the demands of speakers and visitors. However, Burusphat et al. (2010) employed language vitality as the crucial component in assessing the cultural safety of communities thinking about the development of ethnic tourism, depending on local views regarding the Thai language. The author's clear use of language for this purpose demonstrates the importance of language as a gauge of cultural resilience and the underlying cultural linkages in practice. Various studies have been

published over the past few years on a variety of topics, including the design of accessible facilities (Abreu et al., 2020; Asghar et al., 2020), the reasons behind participating in accessible tourism (Alen et al., 2017), and the attitudes of accessible tourism practitioners (Adam, 2019). Much research content exists, from case studies concentrating on aspects to broad theoretical analysis (Blichfeldt & Nicolaisen, 2011; Allahviranloo & le Priol, 2017). While previous research has extensively explored the impact of communication on tourist satisfaction and destination management in an empirical context related to language barriers and tourism, there remains a discernible gap in our understanding of the evolving nature of the tourism industry around the globe to know the key players, key sources, key countries, and key institutes in the field of language barriers and tourism-related research.

3. METHODOLOGY

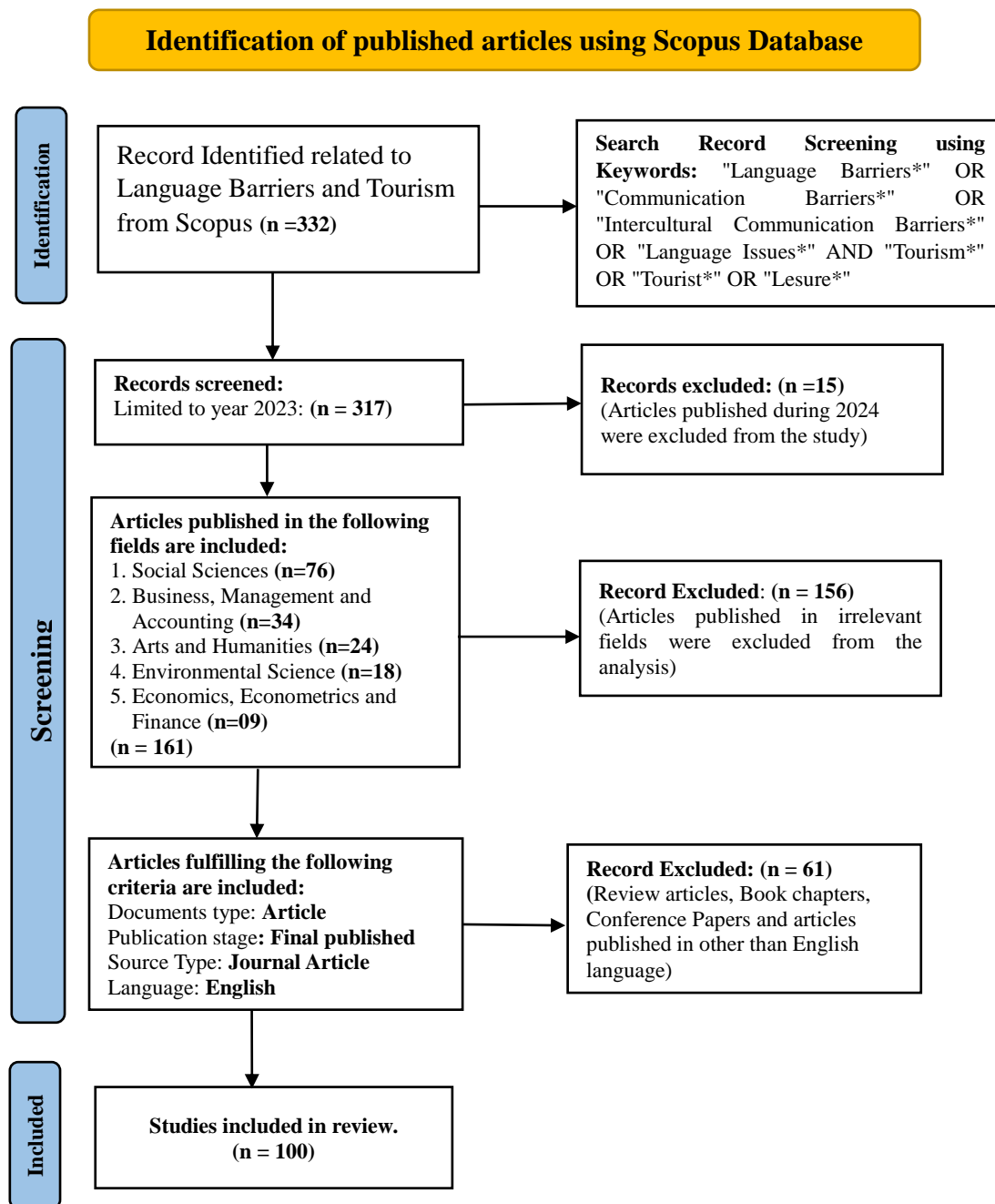
Beginning with several published studies, this study thoroughly examined the relationship between language barriers and tourism. The articles were evaluated to find works centred on the intended topic using productivity, bibliometrics, and descriptive analysis. Through the examination of author biases (Baker et al., 2022; Li et al., 2020), bibliometric analysis is used to assess the intellectual structure of a particular field of study (Mukherjee et al., 2022), assess current knowledge to find research gaps and define the limits of knowledge (de Oliveira et al., 2019). Previous research recommends using the primary techniques enumerated below for a bibliometric analysis using Biblioshiny (R Language based on bibliometrix library) by Aria and Cuccurullo (2017) and VOSviewer by van Eck and Waltman (2010). Donthu et al. (2021a, b) identified three key methods in bibliometric analysis to forecast future trends in scientific research: science mapping to show relationships among elements and performance analysis to evaluate contribution. Zhang et al. (2017) proposed techniques for i) evaluating networking and collaboration through burst analysis; ii) conducting citation analysis at different levels such as individual, source, institute, and national; iii) understanding trends and identifying gaps in a specific scientific field through keyword analysis. Since there were few components (Donthu et al., 2021a, b) and it was necessary

to establish possible theoretical development (Mukherjee et al., 2022) we presented the results using the latter method.

Using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology described by Haddaway et al. (2021), the investigation starts with a database search on Scopus. For the best goal accomplishment, presentation, and visualisation, the data were examined using R Studio, Microsoft Excel, and VOSviewer (Shahid et al., 2024; Ahmad et al., 2024).

3.1 Initial Search

The first stage in conducting a bibliometric analysis of a study field is to analyse the available databases, their usefulness, and the repercussions of using one or the other (Sánchez et al., 2017). There are two major multidisciplinary databases, Scopus and Web of Science (WoS), because they have a wide range and availability of indexed journals (Cicea & Marinescu, 2021). Besides this, Scopus provides access to journal articles and references to the articles by allowing the researcher to search both forward and backwards in time (AlRyalat et al., 2019).



(Page et al., 2021)

Figure 1: PRISMA methodology for data searching and screening.

Hence, this study used the Scopus database to search for articles required for bibliometric analysis. Search terms used for data collection include “Language Barriers*” OR “Communication Barriers*” “Intercultural Communication Barriers*” OR “Language Issues*” AND “Tourism*” OR “Exploration*” OR “Leisure*” OR “Tourist*”.

3.2 Screening of Search Results

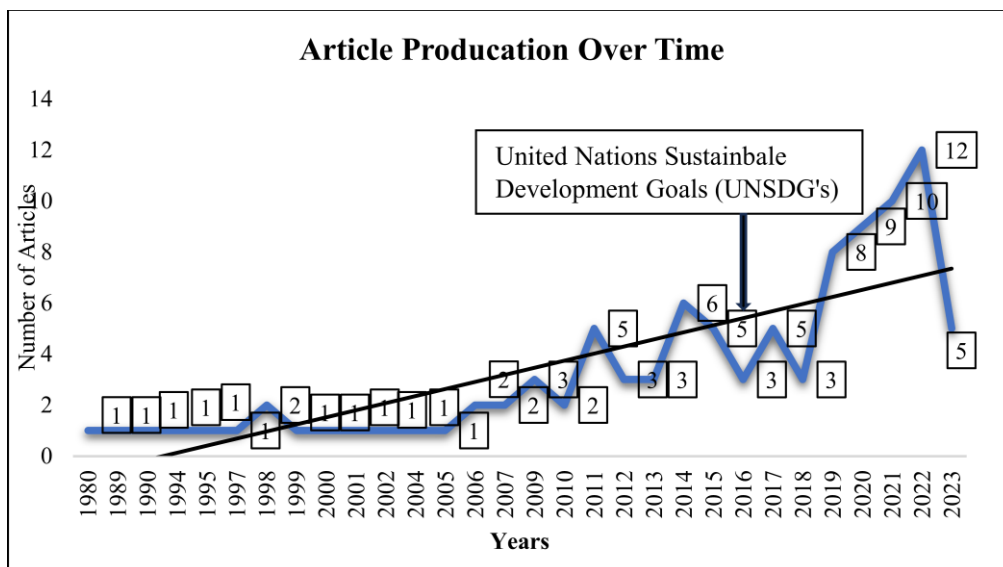
The total number of documents found on Scopus data was 322 initially, but then it was limited to the articles published before 2024 that were only considered for the study. Further, the articles were screened using the filter of relevant fields of the subject matter, articles related to social science, business and management science, arts and humanities, environmental science, and economics and finance were included in the study for more

analysis to evaluate the conceptual relationships among the authors. The relationships between the articles were evaluated in network analysis using multidimensional scaling and centrality degree. This work combines deductive and inductive methods with a triangulation data-collecting technique to investigate language barriers and tourism developments. Extending bibliometric research methods suggests future study paths based on advancements, evolution, and possible gaps (Shahid et al., 2024; Ahmad et al., 2024). The bibliometric analyses were conducted to provide a detailed comprehension using graphical representation.

4. DATA ANALYSIS AND RESULTS

4.1. Performance Analysis:

4.1.1 Article Production Overtime



accurate and field-specific analysis. After applying screening and cleaning (outlined in Figure 1), 100 articles were shortlisted for data analysis spanning the period 1980–2023.

3.3 Bibliometric Methodology

Performance matrices were first presented as a means of understanding the performance indicators in the area. Performance analyses and yearly evaluations of articles and publications are included in this section. Subsequently, a networking study utilising sophisticated bibliometric methods was conducted to evaluate the degree of cooperation at each stage. The study also looked at author affiliation and co-word

Analysing language barriers and tourism publications reveals interesting trends that have evolved as portrayed in Figure 2. An increase in publications from 2020 to 2021 indicates a growing recognition of language barriers in the global tourism industry, facilitated by developments in technology and communication. Minor publication rates in the 1990s and early 2000s suggest a less international tourism industry and a lack of resources and awareness on the topic. Language barriers remained a focal point during the consistent publication rates in the 2010s. With the introduction of sustainable development goals in 2015, there has been an increasing trend in publications related to

language barriers and tourism. Understanding and addressing language barriers in the tourism sector enhances the tourist experience. It promotes broader sustainable development objectives, helping to build more inclusive communities and enabling them to achieve common goals.

4.1.2. Most Important Source (Journal)

Table 4.1 highlights the most important articles published by the most important sources on language barriers in tourism. TC (total citations), NP (number of publications), and H-index delineate their influence accordingly. Leading the table is “Health and Human Rights” with a significant number of total citations of 176 and an h-index of 2, despite having only 2 publications. This indicates the impact within the field, emphasising the critical importance and intersection of health, human, and language barriers in tourism.

The Journal of Travel Research follows 149 citations, a 1 h-index, and a single publication, highlighting its importance in disseminating initial research in the field. Similarly, “Health Communication” also accumulates 111 citations across 2 publications with 2 h-index, demonstrating their contributions to understanding different but vital aspects of tourism influenced by language barriers.

Other important journals like “Leisure Sciences” and “Tourism Management” each also hold significant importance in the field, with 93 and 85 citations respectively. Both journals have 2 publications that highlight their contributions to understanding different aspects of language barriers in tourism. Similarly, other journals, although less cited than these journals, make notable contributions to specific aspects of communication and tourism.

4.1.3. Most Influential Articles:

Table 4.2 provides an overview of the important work in language barriers and tourism research areas. The citations received by these articles highlight the significance, relevance, and profound influence of the language challenges in tourism. The academic community has dedicated significant attention to these works, as evidenced by their total citation count (TC). Academics and researchers use these publications to comprehend and address significant matters in language barriers in tourism. Each publication offers a unique perspective, empirical evidence, and theoretical understanding of the language challenges in tourism.

Studies from 1980 to 2023 provide significant

Table 4.1: Most important sources

Source Name	TC	NP	H-index
Health And Human Rights	176	2	2
Journal Of Travel Research	149	1	1
Health Communication	111	2	2
Social Science and Medicine	98	4	3
Leisure Sciences	93	2	2
Tourism Management	85	2	2
Journal Of Medical Ethics	68	1	1
Annals Of Tourism Research	60	1	1
Mental Health in Family Medicine	57	1	1
The Annals of Regional Science	57	1	1
Aids And Behavior	43	1	1
Journal Of Intellectual Disability Research	43	1	1
International Business Review	41	1	1
International Journal of Offender Therapy and Comparative Criminology	40	1	1
International Journal of Hospitality Management	38	1	1
International Journal of Contemporary Hospitality Management	37	1	1
Psychology And Psychotherapy: Theory, Research and Practice	37	1	1
International Review for Spatial Planning and Sustainable Development	28	1	1
Internet Research	28	1	1
Journal Of Mixed Methods Research	27	1	1

Note: Top 20 Sources, TC: Total Citations; NP: Number of publications

resources for scholars, policymakers, and professionals working in the tourism industry. These studies guide them in comprehending key issues when it comes to resolving language barriers in the tourism industry. This considerable number of citations highlights

their impact as seminal sources that contribute to shaping the trajectory of research in this important field. Additionally, this also serves to guide and trace the evolution of the topic of academic discussion, highlighting changes in scholarly interest over time.

Table 4.2: Most Influential Articles

Authors	Title	Source Title	Year	TC
Chen J.S.; Hsu C.H.C.	Measurement of Korean tourists' perceived images of overseas destinations	Journal of Travel Research	2000	149
Baldwin S.B.; Eisenman D.P.; Sayles J.N.; Ryan G.; Chuang K.S.	Identification of human trafficking victims in health care settings.	Health and human rights	2011	148
Ulrey K.L.; Amason P.	Intercultural communication between patients and health care providers: An exploration of intercultural communication effectiveness, cultural sensitivity, stress, and anxiety	Health Communication	2001	103
Stead M.; Eadie D.; Gordon D.; Angus K.	Hello, hello - It's English I speak: A Qualitative Exploration of Patients' Understanding of the Science of Clinical Trials	Journal of Medical Ethics	2005	68
Cheng M.; Zhang G.	When Western hosts meet Eastern guests: Airbnb hosts' experience with Chinese outbound tourists	Annals of Tourism Research	2019	60
Makkonen T.; Williams A.M.; Weidenfeld A.; Kaisto V.	Cross-border knowledge transfer and innovation in the European neighborhood: Tourism cooperation at the Finnish-Russian border	Tourism Management	2018	58
Shannon P.; O'Dougherty M.; Mehta E.	Refugees' perspectives on barriers to communication about trauma histories in primary care	Mental Health in Family Medicine	2012	57
Nijkamp P.; Rietveld P.; Salomon I.	Barriers in spatial interactions and communications - A conceptual exploration	The Annals of Regional Science	1990	57
Allison M.T.; Hibbler D.K.	Organizational barriers to inclusion: Perspectives from the recreation professional	Leisure Sciences	2004	52
Drennan G.; Swartz L.	The paradoxical use of interpreting in psychiatry	Social Science and Medicine	2002	51
Henshaw M.; Thomas S.	Police encounters with people with intellectual disability: Prevalence, characteristics, and challenges	Journal of Intellectual Disability Research	2012	43
Kajula L.J.; Sheon N.; Vries H.D.; Kaaya S.F.; Aarø L.E.	Dynamics of parent-adolescent Communication on sexual health and HIV/AIDS in Tanzania	AIDS and Behavior	2014	43
Francioni B.; Vissak T.; Musso F.	Small Italian wine producers' internationalization: The role of network relationships in the emergence of late starters	International Business Review	2017	41

Authors	Title	Source Title	Year	TC
Stodolska M.; Shinew K.J.; Camarillo L.N.	Constraints on Recreation Among People of Color: Toward a New Constraints Model	Leisure Sciences	2020	41
Tadros E.; Finney N.	Exploring the Utilization of Structural and Medical Family Therapy with an Incarcerated Mother Living With HIV	International Journal of Offender Therapy and Comparative Criminology	2019	40
Yu L.; Huat G.S.	Perceptions of management difficulty factors by expatriate hotel professionals in China	International Journal of Hospitality Management	1995	38
Pugh M.A.; Vetere A.	Lost in translation: An interpretative phenomenological analysis of mental health professionals' experiences of empathy in clinical work with an interpreter	Psychology and Psychotherapy: Theory, Research and Practice	2009	37
McMillan C.L.; O'Gorman K.D.; MacLaren A.C.	Commercial hospitality: A vehicle for the sustainable empowerment of Nepali women	International Journal of Contemporary Hospitality Management	2011	37
Nguyen D.; Imamura F.; Iuchi K.	Disaster management in coastal tourism destinations: The case for transactive planning and social learning	International Review for Spatial Planning and Sustainable Development	2016	28
Baldwin S.B.; Eisenman D.P.; Sayles J.N.; Ryan G.; Chuang K.S.	Identification of human trafficking victims in healthcare settings	Health and Human Rights	2011	28

Note: TC= Total Citations (citations count); Top 20 Articles

4.1.4. Top contributing journals

Table 4.3 provides a detailed list of top contributing journals highlighting the journal's number of publications (NP), total citations (TC), and H-index values. "Social Science and Medicine" is at the top of the list with 4 publications and 98 citations. Total citations (TC) highlight that the studies published in this journal have gained significant recognition and are actively being used by the researchers. The h-index of the "Social Science and Medicine" is 3. Next in the table are 'Health and Human Rights' and 'Health Communication', each with 2 publications but commanding a higher total citation count, particularly 'Health and Human Rights' with a remarkable TC of 176. This indicates that these journals play a significant role in discussing language barriers in the context of health and human rights in

tourism. 'Tourism Management' and 'Leisure Sciences' also demonstrate a strong presence. Furthermore, "Tourism Management" and "Leisure Sciences" also demonstrate a strong presence, maintaining strong citations of 85 and 93, respectively. Scholars, policymakers, and academicians can seek these influential journals and review important literature to understand language barriers in the tourism industry, guiding them toward better decision-making and gaining more scholarly insight.

Table 4.3: Top contributing journals

Journal Name	NP	TC	H-index
Social Science and Medicine	4	98	3
Health And Human Rights	2	176	2
Health Communication	2	111	2
Leisure Sciences	2	93	2

Tourism Management	2	85	2
Sustainability (Switzerland)	2	18	2
Tourism Recreation Research	2	10	2
Journal Of Environmental Management and Tourism	2	5	2
Journal Of Travel Research	1	149	1
Journal Of Medical Ethics	1	68	1
Annals Of Tourism Research	1	60	1
Mental Health in Family Medicine	1	57	1
The Annals of Regional Science	1	57	1
Aids And Behavior	1	43	1
Journal Of Intellectual Disability Research	1	43	1
International Business Review	1	41	1
International Journal of Offender Therapy and Comparative Criminology	1	40	1
International Journal of Hospitality Management	1	38	1
International Journal of Contemporary Hospitality Management	1	37	1
Psychology And Psychotherapy: Theory, Research and Practice	1	37	1

Note: NP: Number of Publications; TC: Total Citations, Top 20 Contributing Journals

4.1.4. Top contributing countries:

Table 4.4 highlights the production of articles and their impact measured by the number of citations by countries. The top twenty countries that were selected for publishing on the issue of language barriers in tourism are shown in Table 4.4 which includes eight developed countries and 12 combinations of developing and underdeveloped countries. This distribution highlights an overview of the global research landscape in this domain. The United States leads the table with 31 articles and a high citation count of 911, highlighting a major influence and research productivity in this field. The considerable contributions of the United States reflect its active engagement in language barriers in tourism. The United Kingdom follows as a significant contributor

after the United States with 11 documents and 280 citations, indicating a strong research output in the domain. Even though the United Kingdom published 11 articles, its impact in terms of citations is not as significant as it is of the United States. China which has been historically observed to be a top contributor in tourism-related subjects, falls to fifth number in this domain. It is essential to understand that these findings may not be generalisable to other academic disciplines. Other countries for instance, Finland and Israel mentioned in Table 4.4 possess fewer documents; they exhibit relatively high citations, highlighting that the quality of impact of the research from these countries is significantly relative to their output volume. Additionally, this also indicates that this topic is being globally studied.

Table 4.4: Top Contributing Countries

Country	Documents	Citations	Regional Divide
United States	31	911	North America
United Kingdom	11	280	Europe
Australia	8	149	Oceania
South Africa	7	130	Africa
China	6	75	Asia
Canada	3	57	North America
Japan	4	60	Asia
Netherlands	4	114	Europe
Germany	2	5	Europe
Hong Kong	3	48	Asia
Italy	3	48	Europe
Malaysia	2	9	Asia
New Zealand	3	78	Oceania
South Korea	3	3	Asia
Cambodia	2	24	Asia
Finland	2	76	Northern Europe
Indonesia	1	3	Asia
Israel	2	81	Asia
Macao	1	1	Asia
Norway	2	48	Europe

Note: Top 20 Countries

4.2. Science Mapping:

Science mapping, as defined by Donthu et al. (2021a), is an analytical technique that visually portrays the interconnections and accessible information within a particular domain, such as sustainable finance research (Ahmad et al., 2024). To perform science mapping for this study, two bibliometric analysis techniques (word cloud and co-occurrence of keywords)

were utilised in VOSviewer. This was followed from a study conducted by Ahmad et al. (2024), where the authors used these two techniques in science mapping. This guides us to better understand the fundamental themes of language barriers in tourism.

4.2.1. Temporal Analysis Using Word Clouds for Language Barriers in Tourism Research

The word cloud visualises the 100 most significant terms associated with the author’s research on language barriers to tourism. Each word’s size in the cloud corresponds to its frequency within the literature, emphasising the prevalence and focus of specific concepts. Central terms such as “tourism”, “communication”, “language”, and “barriers” highlight the primary areas of investigation, indicating a strong focus on the challenges and dynamics of communication within diverse tourism settings.



Figure 3: Word Cloud of Author keywords

The term “communication” reflects the essential role of interpersonal and intercultural interactions in tourism, which is often influenced by language proficiency and understanding. “Language” directly addresses the core linguistic challenges that affect both service providers and tourists, impacting the overall experience and satisfaction. “Barriers” suggests the various obstacles—linguistic, cultural, or even technical—that can hinder effective communication.

Adjacent terms like “diversity”, “ethnicity”, “migrant”, and “refugee” suggest that the research covers beyond mere linguistic differences to incorporate wider sociocultural dynamics. This inclusion points to an exploration of how diverse backgrounds affect communication, and the implications for service adaptability and customer experience in tourism.

Methodological terms such as “grounded theory” indicate the research approaches used to explore these themes, emphasising a structured, data-driven investigation into how communication barriers can be addressed. Geographical terms like “Asian” and “indigenous” highlight specific demographic focuses within the studies, suggesting targeted research into how different cultural backgrounds influence communication practices in tourism.

The use of less frequent but still significant terms like “sustainable tourism” and “medical tourism” suggests the incorporation of language barriers into dedicated areas of tourism, examining how communication affects wider objectives like sustainability and health services in tourist experiences. This points to the multidisciplinary nature of the research, bridging tourism studies with environmental, health, and social sciences.

4.3. Network Analysis:

4.3.1. Co-Occurrence of Keywords

Figure 2 illustrates the information related to the co-occurrence of authors’ keywords in clusters. To better understand the co-occurrence of keywords, it was divided into three clusters to better understand the language barriers in tourism.

Cluster 1: Communication barrier, human relation, communication, human relation, and communication disorder are the keywords of this cluster. The connection between “communication” and “humans” highlights a fundamental focus on the interpersonal aspects of tourism, where communication plays a crucial role in the interaction between tourists and service providers or among tourists themselves. The keyword “communication barriers” is directly associated with “humans”, indicating a challenge hindering effective communication. The keyword “human relation” also connects closely with “communication barriers”, highlighting the impact of effective communication on human relations in the tourism context. This also highlights a key point of studies exploring how language barriers influence the quality of interaction and could impact the overall experience of the tourists.

Cluster 2: Language, human experiment, and tourism are the main keywords in this cluster. They emphasised the importance of effective communication in tourism. Moreover, cluster 2 keywords such as language are linked with cluster 1 keywords communication reflecting the primary role of language as both facilitator and barrier in tourism. Similarly, the link between the keywords’ human relations” and “communication barriers” highlights the

processing, perception, and interpersonal dynamics in diverse cultural settings and backgrounds. The “human” keyword in this cluster emphasises the status of focusing on human factors in communication which could include different factors such as behaviours, general characteristics, and innate needs of human beings as communicators. Lastly, the presence of different age terms such as “aged” and “middle-aged” raises an awareness of

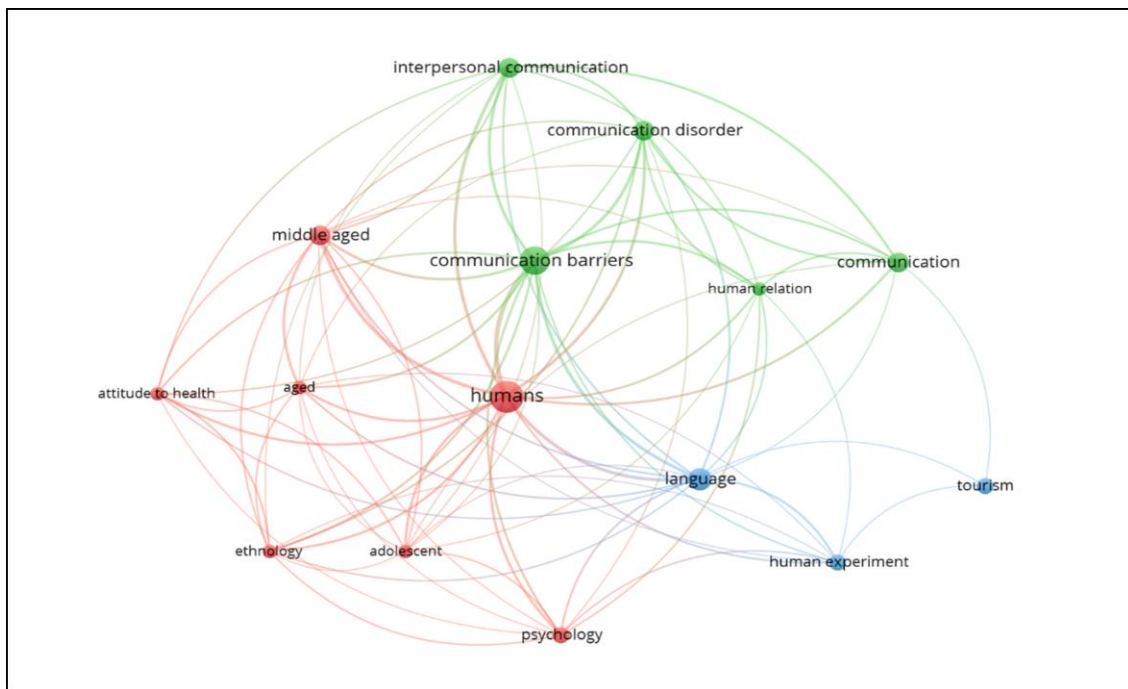


Figure 4: Co-occurrence Network of Author keywords

impact of communication on interpersonal relationships within tourism settings. Lastly, “tourism” as a keyword, linked with “communication”, shows an investigation of how all these variables such as language barriers, human relations, and communication shape the tourist experience. This cluster highlights the significant role of communication in guaranteeing successful engagement and satisfactory experiences for all parties involved.

Cluster 3: Ethnology, psychology, adolescent, attitude to health, age, middle-aged and humans were the main keywords in this cluster. Ethnology helps to understand the cultural differences and norms that significantly shape communication patterns. Then psychology, connected with ethnology, explores the cognitive processes and behavioural patterns that influence how individuals communicate. This also includes psychological factors such as language

how different age demographics steer communication barriers. For instance, older tourists might face different challenges compared to middle-aged tourists, which can also influence their attitudes toward health and wellness in tourism destinations.

4.4. Collaboration between Countries:

Figure 5 illustrates the collaboration network among countries regarding language barriers in tourism. This network analysis shows the intensity and frequency of cooperative research across different countries. In Figure 5, the United States appears to be the central node in this network, with multiple connections to Canada. Furthermore, the United States also has connections with South Africa, Australia, New Zealand, and China indicating a significant level of cooperative research activities. After the United States, Australia also shows research cooperation with different countries such as New Zealand and China. This highlights a broader

international cooperation driven by mutual research interests. China and Malaysia's strong relationship in research and development further highlights its role in international research collaboration, indicating a significant relationship between language barriers in tourism. The United Kingdom provides a singular link to South Africa. One possible reason for this could be the focus of study areas with the language barriers context that are relevant to both countries, for instance, tourism in multilingual societies. This network map not only highlights the global research collaborations but also indicates the strategic partnerships among countries to enhance the understanding of language barriers in tourism.

4.5. Co-Authorship Analysis Between Authors

Figure 6 offers a detailed analysis of co-authorship among researchers. Kimberly J. Shinew is a key collaborator and a central node. Her research connections are with several authors, including Elizabeth Hoban and Chung-Shing Chan, highlighting a core cluster of continuous collaborative research. The change from blue to yellow color highlights the temporal progression in collaboration among researchers, with blue indicating earlier collaborations and yellow indicating more recent research activities.

Figure 6 highlights a clear representation of the co-authorship dynamics within the context

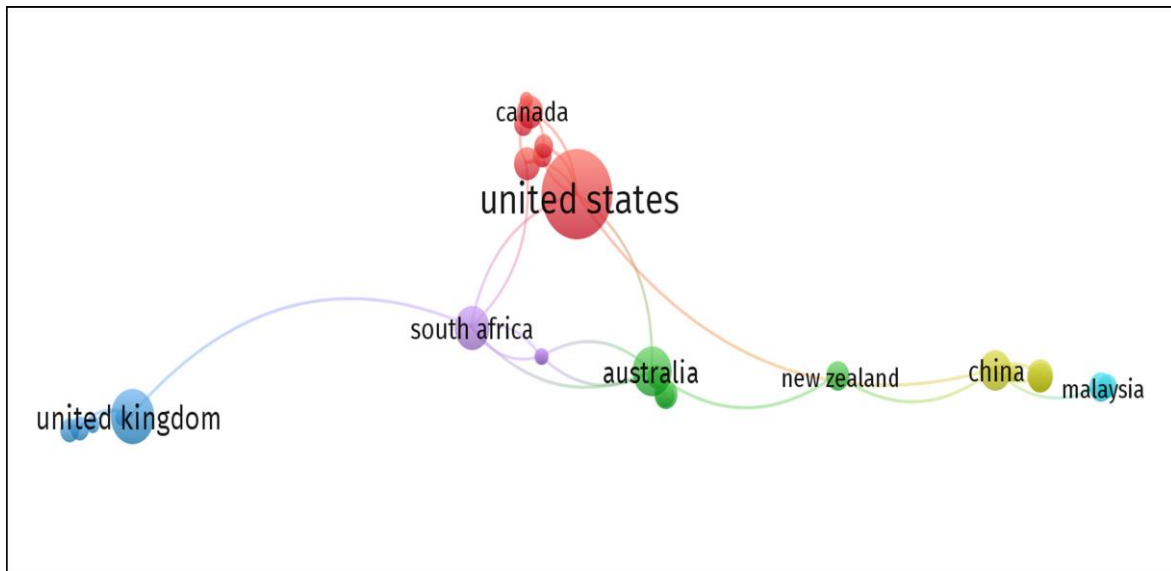


Figure 5: Collaboration between the Countries

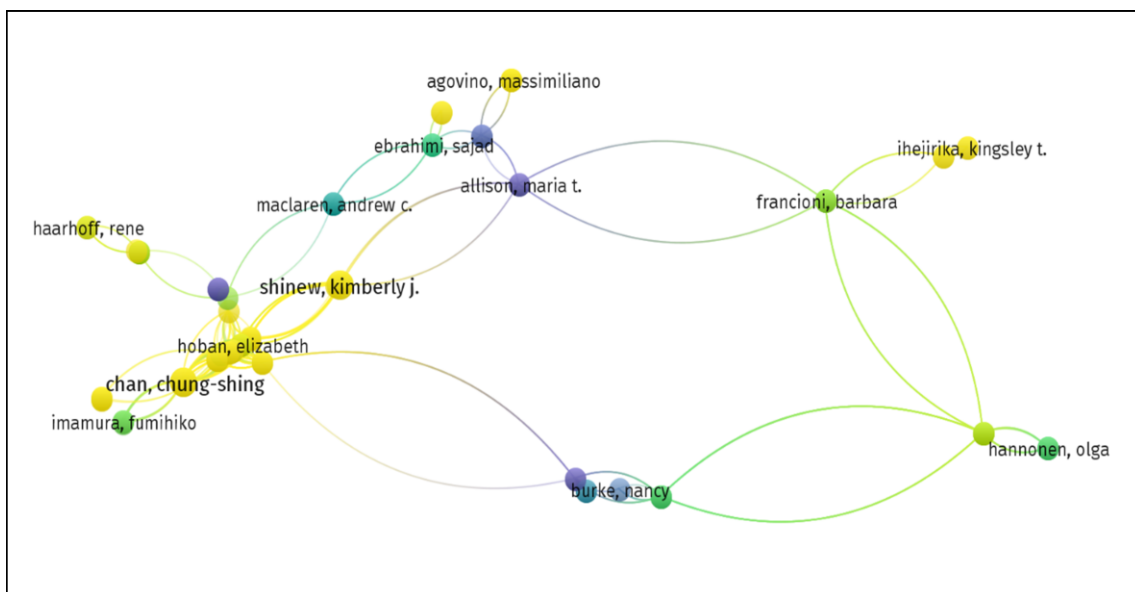


Figure 6: Collaboration between the Authors

of language barriers in tourism. It helps to understand the key contributors and the evolution of their collaborations. Figure 6 guides us to understand the connectivity and influence patterns among researchers over time, demonstrating the collaborative nature of scientific research in addressing complex issues like language barriers in tourism.

Canada, the United Kingdom, and the Netherlands highlight its strong bilateral research relationship and position the United States as a hub for international collaboration.

Australia and South Africa also emerged as prominent nodes after the United States. They also have strong connections with countries

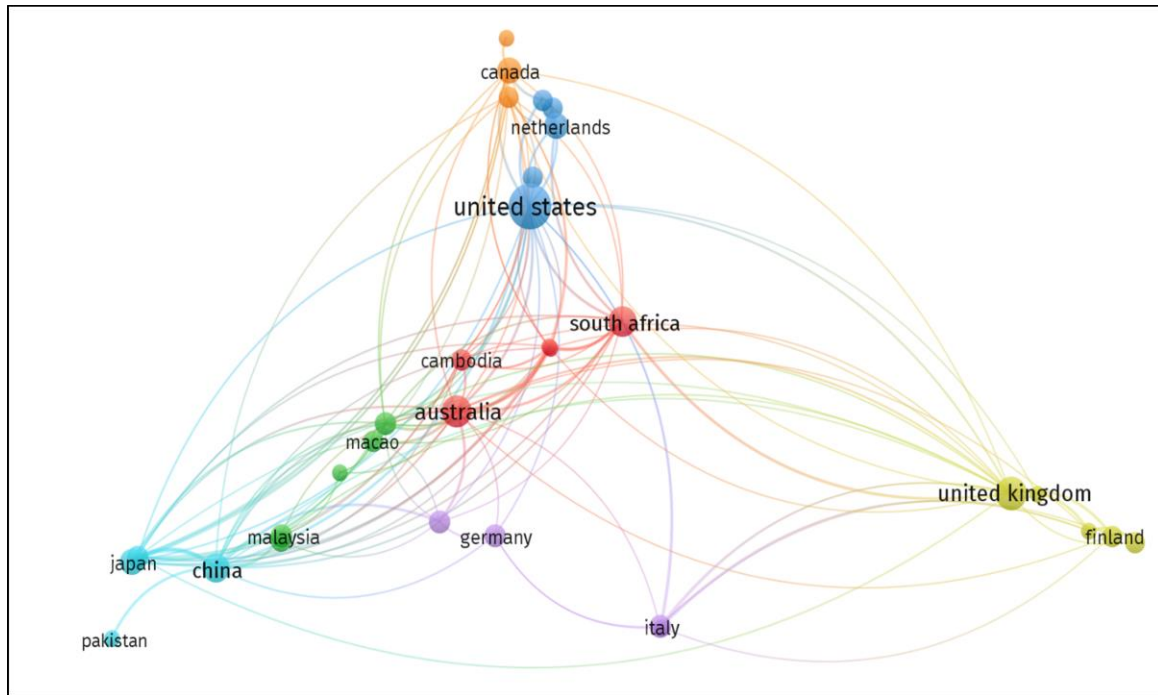


Figure 7: Bibliographic Coupling between the countries

4.6. Bibliographic Coupling between the Countries

Figure 7 presents a detailed bibliographic coupling analysis among countries, highlighting the degree of research connectivity based on shared references in the literature related to language barriers in tourism. Several key nodes can be observed in Figure 7, with each country represented as a node. The thickness and the number of lines among them indicate the strength and frequency of bibliographic connections. The United States emerges as a central and largest node in Figure 7, indicating that it has the most significant bibliographic connections when it comes to language barriers in tourism. This also implies a dominant influence which indicates that the research from the United States is significantly referenced across various studies from other countries, highlighting its important role in shaping global research discourse on the topic. Furthermore, the United States' strong ties with countries like

e.g. Cambodia, the United States, and the United Kingdom, representing that their research is cited by researchers in other countries within this zone of study. On the other hand, countries like China, Japan, and Malaysia also show a miscellaneous range of connections across the network, indicating their engagement in a broad spectrum of the topic of language barriers in tourism. Lastly, countries like the Netherlands, Germany, Italy, and Finland are also signified in the network, each related to several other countries, indicating a strong research connection and collaboration across European academia.

5. CONCLUSION

This bibliometric analysis delivers a comprehensive review of the language barriers in tourism studies since the 1980s. It investigated the field's development, influential publications, and patterns of international collaboration. This analysis revealed significant growth in the number of publications over the past four decades, particularly noting a surge in the recent

decade. This reflects a heightened academic focus on language or communication challenges in the global tourism context.

The rapid increase in the number of publications highlights that several journals and articles have significantly formed the discourse on language barriers in tourism. For instance, "Health and Human Rights" and "Journal of Travel Research" emerged as the top cited sources, highlighting their main influence in bridging language communication in the tourism sector. The study also highlighted the status of international collaboration, with the United States standing out due to its extensive research output and high citation impact, acting as a central hub in the scholarly network. Furthermore, it was also observed that the United States and other top countries increasingly interact with countries in Asia and Africa, which shows the global nature of tourism itself. The thematic clusters revealed in the study using co-occurrence of keywords analysis highlight the interdisciplinary nature of the field, incorporating aspects of social sciences, communication studies, and even health sciences to tackle the multifaceted impacts of language barriers on tourism.

This bibliometric analysis does not only highlight the evolution and current state of research on language barriers in tourism. However, it also emphasises the potential of highlighting innovative methods and collaborative efforts to enhance communication inclusivity in global tourism. Also, it enriches the tourist experience and promotes sustainability in tourism development globally.

5.1 Practical implications:

This study offers several practical implications for various stakeholders in the tourism industry. Firstly, for industry practitioners, the study highlights the significance of integrating multilingual resources and services. Implementing technologies and multilingual guides could enhance the visitor experience. Second, the policymakers are advised to develop policies that promote linguistic inclusivity at tourism destinations; the policies could include funding for language training and the development of multilingual tourism marketing content. Third, this study also indicated the importance of global knowledge exchange and collaboration initiatives,

suggesting the government and tourism boards initiate partnerships with top contributing countries to exchange, collaborate, and develop best practices and innovative solutions to deal with the language barrier challenges in tourism. Fourth, the study does not only provide implications for policymakers and practitioners, it also indicates the opportunities for technology developers and startups. This study suggests developing and refining translation technologies and AI-driven communication tools tailored for the tourism industry to help mitigate language barriers. These practical implications aim to bridge the gap between academic and real-world applications, thus enhancing the inclusivity and accessibility of global tourism while simultaneously minimising the challenges that occur due to language.

5.2 Future research direction

This study's findings offer strong insights that can impact future research directions in the study of language barriers in tourism. Given the dynamics and evolving nature of global tourism, future research studies should focus on multidisciplinary approaches that integrate key insights from linguistics, cultural studies, technology, and tourism management. This can help to understand how different factors impact tourists' experiences. Furthermore, qualitative studies using semi-structured interviews are also recommended to understand and identify the key challenges in language barriers in tourism. Cross-cultural qualitative studies are recommended to identify the key issues in the field.

Next, it is also recommended to develop and assess the technological impacts in the field such as real-time translation devices, that can help to reduce the language barriers in tourism. Studies can evaluate the effectiveness, and cultural appropriateness of these technologies and also help to understand how these technologies can reduce the key issue of language barriers in tourism. Additionally, a longitudinal study to assess the long-term impact of these technologies on tourism experience is also recommended. Future research directions, as highlighted by this study, have the potential to inform actionable strategies that can reduce language barriers in tourism and thus contribute towards a sustainable tourism industry.

REFERENCES

- Abreu, D., Codina, B., Toledo, J. and Suarez, A. (2020), "Validation of an ebat as a mobility aid for blind people", *Assistive Technology*, 1-10.
- Adam, I. (2019), "Accommodators or non-accommodators? A typology of hotel frontline employees' attitude towards guests with disabilities", *International Journal of Hospitality Management*, 82, 22-31.
- Ahmad, F., W.H. Cheong, C., Rana Tanveer Hussain, Salman, A., Hussain, K., Muhammad Khalid Shahid, & Muhammad Akram Naseem. (2024). Financial Inclusion and Sustainability: A Contemporary and Future Perspective from Bibliometric Analysis. In Rehman, A. U. & Malik, A. H. (Eds.), *Financial Inclusion, Sustainability, and the Influence of Religion and Technology* (pp. 105-132). IGI Global. <https://doi.org/10.4018/979-8-3693-1475-3.ch006>
- Alen, E., Losada, N. and de Carlos, P. (2017), "Profiling the segments of senior tourists through motivation and travel characteristics", *Current Issues in Tourism*, 20(14), 1454-1469.
- Allahviranloo, M. and Le Priol, E. (2017), "A methodology on quantifying spatial-temporal disparities in the travel behavior of mobility-impaired travelers with non-disabled travelers: case studies of London and New York", *Journal of Transport & Health*, 5, S31-S31.
- AlRyalat, S. A. S., Malkawi, L. W., & Momani, S. M. (2019). Comparing bibliometric analysis using Pub- Med, Scopus, and Web of Science databases. *Journal of Visualized Experiments*, 152, e58494.
- Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959-975. <https://doi.org/10.1016/j.joi.2017.08.007>
- Asghar, I., Cang, S. and Yu, H.N. (2020), "An empirical study on assistive technology supported travel and tourism for the people with dementia", *Disability and Rehabilitation: Assistive Technology*, 15(8), 933-944.
- Baker, H. K., Kumar, S., Pandey, N., & Srivastava, A. (2022). The review of accounting studies at age 25: A retrospective using bibliometric analysis. *Review of Accounting Studies*, 1-33. <https://doi.org/10.1007/s11142-022-09743-8>
- Blichfeldt, B.S. and Nicolaisen, J. (2011), "Disabled travel: not easy, but doable", *Current Issues in Tourism*, 14(1), 79-102.
- Burusphat, S., Deepadung, S., Suraratdecha, S., Ardsamiti, N., Patpong, P., & Setapong, P. (2010). Language vitality and the ethnic tourism development of the Lao ethnic groups in the western region of Thailand. *The Journal of Lao Studies*, 2(2), 23-46.
- Cicea, C., & Marinescu, C. (2021). Bibliometric analysis of foreign direct investment and economic growth relationship. A research agenda. *Journal of Business Economics and Management*, 22(2), 445-466.
- Coray, R., Duchêne, A. (2017). *Mehrsprachigkeit und Arbeitswelt (Literaturübersicht)*, Freiburg.
- de Oliveira, O. J., da Silva, F. F., Juliani, F., Barbosa, L. C. F. M., & Nunhes, T. V. (2019). Bibliometric method for mapping the state-of-the-art and identifying research gaps and trends in literature: An essential instrument to support the development of scientific projects. In *Scientometrics recent advances*. Intech Open
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021a). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285-296.
- Donthu, N., Kumar, S., Pandey, N., Pandey, N., & Mishra, A. (2021b). Mapping the electronic word-of-mouth (eWOM) research: A systematic review and bibliometric analysis. *Journal of Business Research*, 135, 758-773.
- Ellegaard, O., & Wallin, J. A. (2015). The bibliometric analysis of scholarly production: How great is the impact? *Scientometrics*, 105(3), 1809-1831. <https://doi.org/10.1007/s11192-015-1645-z>

- Gondos, B. (2019), "Equal opportunities for people with reduced mobility in tourism", *Civil Szemle*, 16(2), 85.
- Gorsemann, S. (1995). Bildungsgut und touristische Gebrauchsanweisung. Produktion, Aufbau und Funktion von Reiseführern, Waxmann, Münster.
- Gunnarson, B.-L. (2013). Multilingualism in the Workplace. *Annual Review of Applied Linguistics*, 33, 162-189.
- Haddaway, N. R., McGuinness, L. A., & Pritchard, C. C. (2021). PRISMA2020: R package and ShinyApp for producing PRISMA 2020 compliant flow diagrams.
- Heller, M., Jaworski, A., Thurlow, C. (2014a). Introduction: sociolinguistics and tourism - mobilities, markets, multilingualism. *Journal of Sociolinguistics*, 18(4), 425-458.
- Heller, M., Pujolar, J., Duchêne, A. (2014b). Linguistic commodification in tourism. *Journal of Sociolinguistics*, 18(4), 539-566.
- Hwang, J., Kim, J.J., Lee, J.S.H. and Sahito, N. (2020), "How to form well-being perception and its outcomes in the context of elderly tourism: the moderating role of tour guide services", *International Journal of Environmental Research and Public Health*, 17(3), 16.
- Li, Z. C., Huang, H. J., & Yang, H. (2020). Fifty years of the bottleneck model: A bibliometric review and future research directions, *Transportation Research Part-B: Methodological*, 139, 311-342.
- McCabe, S. (2020), "Tourism for all?" Considering social tourism: a perspective paper", *Tourism Review*, 75(1), 61-64.
- Mukherjee, D., Lim, W. M., Kumar, S., & Donthu, N. (2022). Guidelines for advancing theory and practice through bibliometric research. *Journal of Business Research*, 148, 101-115.
- Müller, S. (2012). Die Welt des Baedekers. Eine Medienkulturgeschichte des Reiseführers 1830-1845, Campus Verlag GmbH, Frankfurt.
- Muth, S. (2015). Russian as a commodity: medical tourism and the healthcare industry in post-Soviet Lithuania. *International Journal of Bilingual Education and Bilingualism*, 20(4), 404-416.
- O'Brien, S., & Federici, F. M. (2019). Crisis translation: Considering language needs in multilingual disaster settings. *Disaster Prevention and Management: An International Journal*, 29(2), 129-143.
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T., Mulrow, C. D., Shamseer, L., Tetzlaff, J., Akl, E. A., Brennan, S., Chou, R., Glanville, J., Grimshaw, J., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E., Mayo-Wilson, E., McDonald, S., . . . Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, n71. <https://doi.org/10.1136/bmj.n71>
- Pagenstecher, C. (2003). Der bundesdeutsche Tourismus. Ansätze zu einer Visual History: Urlaubsprospekte, *Reiseführer, Fotoalben, 1950-1990*, Hamburg.
- Qiao, G.-H., Chen, N., Thompson, M. and Xiao, X.-N. (2019), "Social tourism for Chinese rural left-behind children: an instrument for improving their happiness", *Asia Pacific Journal of Tourism Research*, 24(5), 468-481.
- Sánchez, A. D., Del Río, M. D. L. C., & García, J. Á. (2017). Bibliometric analysis of publications on wine tourism in the databases Scopus and WoS. *European Research on Management and Business Economics*, 23(1), 8-15.
- Shahid, M. K., Khin, A. A., Seong, L. C., Shahbaz, M., & Ahmad, F. (2024). Mapping the Relationship of Research and Development Expenditures and Economic Growth through Bibliometric Analysis: A Theoretical Perspective. *Journal of the Knowledge Economy*. <https://doi.org/10.1007/s13132-024-01781-8>
- Taras, V., Baack, D., Caprar, D., Jimenez, A., & Froese, F. (2021). Research: how cultural differences can impact global teams. *Consumer behavior*. Harvard Business Review.
- Uekusa, S. (2019). Disaster linguicism: Linguistic minorities in disasters. *Language in Society*, 48(3), 353-375.

- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538.
<https://doi.org/10.1007/s11192-009-0146-3>
- Wilczewski, M., & Alon, I. (2023). Language and communication in international students' adaptation: a bibliometric and content analysis review. *Higher Education*, 85(6), 1235–1256.
<https://doi.org/10.1007/s10734-022-00888-8>
- Wilson, A. (2018). International tourism and (linguistic) accommodation: Convergence towards and through English in tourist information interactions. *Anglophonia. French Journal of English Linguistics*, (25).
<https://doi.org/10.4000/anglophonia.1377>
- Zhang, Y., Huang, K., Yajuan, Y. U., & Yang, B. (2017). Mapping of water footprint research: A bibliometric analysis during 2006–2015. *Journal of Cleaner Production*, 149, 70–79.
