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Mapping Scholarly Trails: Embarking on a Bibliometric Pilgrimage of Research Exploration

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ARTICLE INFO ABSTRACT Volume: 3 Pilgrimage is one of the most recognized religious and cultural phenomena of human society, an important feature of the world's major religions: Buddhism, Hinduism, **KEYWORD** Islam, Judaism and Christianity. This study aims to look at the development of pilgrimage studies in the world published in Scopus indexed publications. 121 articles Pilgrimage, Religious tourism, on pilgrimage were analyzed. The method used is bibliometrics by utilizing R Bibliometric Biblioshiny to produce bibliometric maps and analyzed using R Studio. The results indicate a substantial growth in pilgrimage research, with a concentration of studies in specific geographical regions and thematic areas. The analysis identified influential authors and journals, revealing key trends and knowledge gaps in the field. These findings contribute to a comprehensive understanding of pilgrimage research, inform future research and guide policy development.

1. Introduction

Pilgrimage is a prominent religious and cultural practice shared by many major world religions, including Buddhism, Hinduism, Islam, Judaism, and Christianity. Pilgrimage has evolved into a complex phenomenon encompassing religious, cultural, and social dimensions. From its roots in ancient civilizations to its contemporary manifestations, pilgrimage has exerted profound influence on societies, economies, and cultures worldwide. The phenomenon is experiencing a global resurgence, as ancient shrines remain powerful attractors for individuals seeking spiritual fulfillment (Digance, 2003).

The act of pilgrimage involves physical movement to specific geographic locations imbued with religious or cultural significance. These journeys often entail personal transformation, communal bonding, and economic exchange. While pilgrimage was once primarily associated with religious devotion, its contemporary form encompasses a broader spectrum of motivations, including leisure, personal growth, and cultural exploration.

The global reach and impact of pilgrimage is undeniable. Major religious traditions, such as Islam, Hinduism, Buddhism, Christianity and Judaism, have their own pilgrimage practices and destinations. Every year, an estimated three to five million Muslims perform the hajj (the annual Muslim pilgrimage to Mecca on a specific date), about five million pilgrims go to Lourdes in France, and about 28 million Hindu pilgrims visit the Ganges River in India. This demonstrates the enduring power of pilgrimage as a collective human experience. Pilgrimage is also an important subject because of its scope and spatial influence.

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This article examines various studies that explore pilgrimage using bibliometric analysis methods. Although there have been several previous studies that addressed this topic with similar analysis, the metadata (As-Salafiyah & Marlina, 2022) and approaches/applications (Hassan et al., 2022) used are different. Based on our research, this study is one of the first to systematically identify the historical development of pilgrimage-themed research over time through bibliometrics. The metadata used were articles published in the Scopus index. Bibliometric analysis is used to evaluate scientific publications and understand the state of publications on a particular theme. Data were obtained from articles that have been published and indexed by Scopus. This research has significance for various parties, especially academics, and can be a reliable reference for obtaining information on the theme of pilgrimage.

2. Literature Reviews

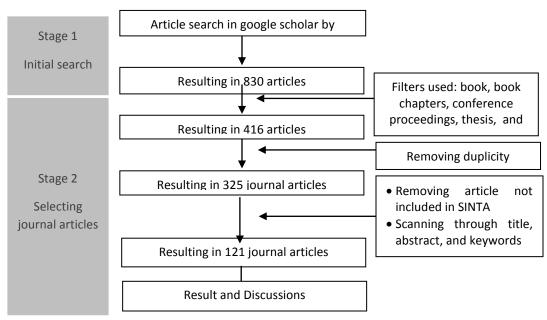
Pilgrimage is often defined as a journey to a holy place with a religious purpose. The concept has existed since ancient times and is an integral part of many of the world's religions, including Islam, Christianity, Hinduism and Buddhism. Pilgrimage often involves long journeys, special rituals, and the exploration of spiritual meaning, which refers to the journey of a religious believer to a sacred site, (Collins-Kreiner, 2010) defines pilgrimage as a journey to a site that is regarded as particularly valuable, particularly meaningful, or as a source of core identity for travelers. Thus, in the context of pilgrimage, the pilgrim's experience and spiritual connection with a site would correspond to an existential form.

However, today, and due to the evolution that both terms have undergone, the boundary between pilgrimage and tourism has become blurred. First, this is due to a change in context. Pilgrimage, as it is understood today, hardly resembles pilgrimage in the Middle Ages (Olsen, 2010). Second, the term pilgrimage is increasingly used in a broader, secular context (Margry, 2008) by visitors and academics to refer to visits to war or celebrity graves, celebrity residences, and burial sites, which exhibit characteristics traditionally associated with pilgrimage. Ground Zero in New York or Graceland are some examples. Third, the term tourism is increasingly considered to describe spiritual travel (Willson et al., 2013).

3. Methodology

3.1 Data Collection

This research uses the Scopus database to obtain relevant data about publications on pilgrimage. Bibliometric data is obtained from the Scopus database automatically. The first step was to obtain an initial sample data of 830 documents using the keywords "pilgrim" and "pilgrimage". Then we filtered the results by removing data outside of published articles resulting in 416 articles. Furthermore, we removed data that had duplication so that it became 325 articles. The last step we filtered the data obtained by checking the relevance of the documents to our research objectives. Some documents that had no relevance in the field were excluded resulting in a total of 121 documents. We then processed and checked the information obtained for bibliometric purposes. The steps taken to produce 121 journal articles can be seen in the following chart.



3.2 Machine Learning Tools

This research uses R studio for bibliometric analysis to obtain a more accurate and clear analysis. It is a software that provides a set of tools for quantitative research developed by Aria and Cuccurullo. The latest version of this application is a web interface application (Biblioshiny) introduced to help users without the need for coding skills to perform bibliometric analysis (Aria & Cuccurullo, 2017).

4. Results and Discussion

4.1 Descriptive Statistics and Overview of the Sample

In this section, we present important information related to articles published in the field of pilgrimage. The time span of this sample ranges from 1983-2022 sourced from Scopus totaling 276 articles published in 63 journal publication sources by 467 authors. Table 1 describes the descriptive statistics of the bibliometric data used in this study.

This research recorded in the Scopus database has an annual growth rate of 8.25% (1983-2022). Figure 1 shows the number of annual publications of the pilgrimage theme in Scopus and its annual average citations. Scopus records the topic starting in 1983 and increasing until 2016 with 12 articles showing the beginning of impressive publication growth. This growth increased dramatically in 2018 with 22 articles published. In 2020, 46 articles were published, making it the highest publication per year recorded so far. The average citations per article was 19.42. The only single publication in 1983 that was the beginning of the field received an average of 1.85 and this implies that the work had a good impact in the pilgrimage field (Pfaffenberger, 1983). In 2008, there was an increase in citations with an average of 19.60 but there was only 1 article that showed a good impact in the pilgrimage field (Belhassen et al., 2008).

Table 1. Data syntesis indicating summary of data set

Description	Results
Main Information About Data	
Timespan	1983:2022
Sources	63
Documents	276
Annual Growth Rate %	8,25
Document Average Age	6,51
Average citations per doc	19,42
References	12576
Document Contents	
Keywords Plus (ID)	233
Author's Keywords (DE)	1076
Authors	
Authors	467
Authors of single-authored docs	125
Authors Collaboration	
Single-authored docs	141
Co-Authors per Doc	1,89
International co-authorships %	16,67
Document Types	
article	276

Source: Author's analysis vi RBiblioshiny

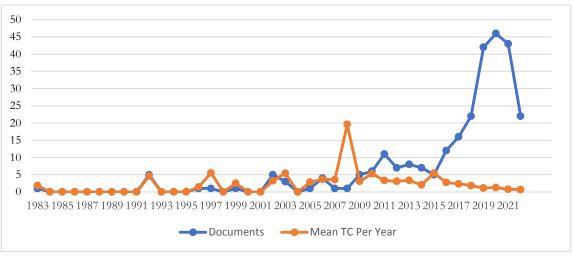


Figure 1. Annual scientific growth of pilgrimage environments and average citations

The figure below is an image consisting of 3 elements: the name of the journal publication, a list of author names, and the keywords used. The three elements are connected by gray plots that are interrelated. In general, the thicker the stream, the greater the contribution. Each journal shows the name of the author who contributed the most to its publication. Each author also shows the keywords that are often used in research on pilgrimage. From the figure below, it is found that in the first element there are 13 journals indexed in the Three Fields Plot with the top number that publishes the most articles with the theme of pilgrimage is the International Journal of Religious Tourism and Pilgrimage. The second element shows the name of the author associated with the first element. As in this study, the top author who published the most articles with the theme of pilgrimage is Collins-Kreiner N. Finally, the third element illustrates keywords that are connected to many authors. From the figure, it is found that the words "pilgrimages" and "religious tourism" are words that appear frequently and this indicates that these words are very closely related to pilgrimage-themed research.

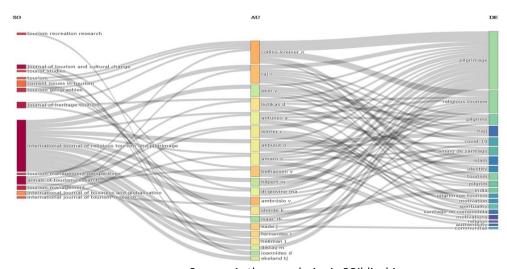


Figure 2. Illustration of three element, consisting of list of journal names, authors, and keywords

Source: Authors analysis via RBiblioshiny

4.2 Source Analysis

Source analysis is an analysis carried out on the name of journal publications to understand the most influential sources in the research topic on pilgrimage with various specific approaches, namely from the number of publications, h-index, g-index, m-index, total citations, and others. Table 2 presents the 10 most relevant sources that focus on publishing articles on pilgrimage as well as the most cited local sources based on the reference list used. These results were obtained from Scopus data in December 2022. It can be seen that the International Journal of Religious Tourism and Pilgrimage is the top source for publishing articles on pilgrimage with 103 articles first published in 2013. Other relevant sources are Annals of Tourism Research, Journal of Tourism and Cultural Change, Journal of Heritage Tourism, Tourism Management and several other sources. Further investigation into the most influential sources based on impact measurement and number of citations. Among the top relevant sources, it was found that Annals of Tourism Research was the most cited source locally with 809 articles. The journal was first published in November 1973. Next most cited were Tourism Management, International Journal of Religious and Pilgrimage, Tourism and Journal of Travel Research, and other sources.

Table 2. Top 10 Journals Discussing Topics of Pilgrimage by Most Relevant Sources and Most Local Cited Sources

No	Most Relevant So	Most Local Cited Sour	Most Local Cited Sources		
	Sources	Articles	Sources	Artciles	
1	Int. J. Religious Tour. Pilgr.	103	Ann. Tour. Res.	809	
2	Ann. Tour. Res.	22	Tour. Manage.	326	
3	J. Tour. Cult. Change	13	Int. J. Religious Tour. Pilgr.	170	
4	J. Herit. Tour	11	Tourism	170	
5	Tour. Manage.	11	J. Travel Res.	133	
6	Tour. Geogr	10	Tour. Recreat. Res.	107	
7	Tour. Manage. Perspect.	8	J. Consum. Res.	93	
8	Tour. Recreat. Res.	7	Int. J. Tour. Res.	88	
9	Tour. Stud.	7	Curr. Issues Tour.	82	
10	Tourism	6	J. Herit. Tour	73	

Source: Authors analysis via RBiblioshiny. The table is reproduced via Excel

Table 3 shows the 10 most influential journals based on impact measurement and number of citations. Annals of Tourism Research is the highest in terms of impact measurement with h-index 15, g-index 22, and m-index 0.366. It is followed by Tourism Management with h-index 9, g-index 11, and m-index 0.333 followed by Journal of Heritage Tourism, Tourism Management Perspectives, International Journal of Religious Tourism and Pilgrimage, and several other sources. As for the total citations, Annals of Tourism Research is the highest with 1987 TCs. This is followed by Tourism Management with 708 TC then followed by Tourism Recreation Research, Journal of Heritage Tourism, International Journal of Tourism Research, and several other sources.

Table 3. Top 10 Journals Discussing Topics of Pilgrimage by Impact Measurement and Total Citations

Na	Impact M	Total Citations				
No	Souces	h-Index	g-Index	m-Index	Sources	Total
1	Ann. Tour. Res.	15	22	0,366	Ann. Tour. Res.	1987
2	Tour. Manage.	9	11	0,333	Tour. Manage.	708
3	J. Herit. Tour.	8	11	0,444	Tour. Recreat. Res.	327
4	Tour. Manage. Perspect.	7	8	0,875	J. Herit. Tour.	240
5	Int. J. Religious Tour. Pilgr.	6	9	0,857	Int. J. Tour. Res.	230
6	J. Tour. Cult. Change	6	13	0,333	J. Tour. Cult. Change	215

7	Tour. Geogr.	6	10	0,286	Int. J. Religious Tour. Pilgr.	193
8	Int. J. Tour. Res.	5	5	0,385	Tour. Manage. Perspect.	171
9	Tourism	5	6	0,333	Tour. Geogr.	138
10	Tour. Recreat. Res.	5	7	0,227	Tour. Stud.	107

The next figure explains the classification based on Bradford's law based on productivity levels. The classification is divided into several parts, namely the core journal group, the middle journal group, and the broad journal. The core journal group as shown in Figure 3 below is a core journal group that is only filled by the International Journal of Religious Tourism and Pilgrimage as the journal with the highest productivity level with the pilgrimage theme. The other journals, namely Annals of Tourism Research, Journal of Tourism and Cultural Change, Journal of Heritage Tourism, Tourism Management, Tourism Geographies, Tourism Management Perspectives, and Tourism Recreation Research are in the middle journal group. The rest other than those mentioned from 63 journal publications are in the broad journal group.



Source: Authors analysis via RBiblioshiny

4.3 Author Analysis

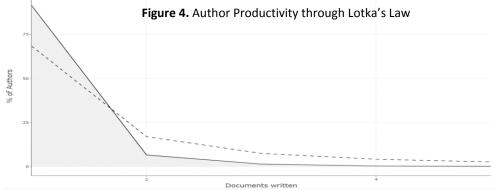
Investigating author-related matters in bibliometric studies is essential to exploit the most influential authors, affiliations, and country of origin. Table 4 shows the 10 most influential authors based on the number of publications, impact measures, and total citations obtained. Collins-Kreiner N, is the highest ranked author with 5 publications (Collins-Kreiner, 2010a, 2010b, 2016; Collins-Kreiner & Gatrell, 2006; Kliot & Collins-Kreiner, 2003), followed by Ambrosio V and Raj R with 4 publications each. In terms of impact measurement, Collins-Kreiner N ranked the highest (h-index 5, g-index 5, and m-index 0.238) followed by Belhassen, Hellman J, and several other authors. Based on total citations, Collins-Kreiner also ranked highest with 477 TCs, followed by Belhassen Y, Caton K, and several other authors.

Table 4. Top 10 Authors Addressing Topics of Pilgrimage by Number of Publications, Impact Measurements, and Total Citation

	Number of Publications		Impact	Impact Measurements			Total Citations	
No	Authors	Articles	Authors	h- Index	g- Index	m- Index	Authors	Total
1	Collins-Kreiner	5	Collins-Kreiner N	5	5	0,238	Collins-Kreiner	477

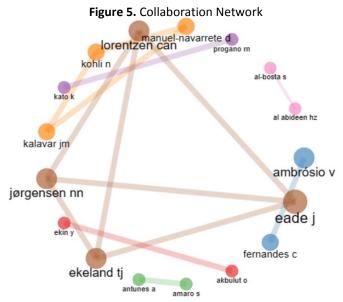
	N						N	
2	Ambrósio V	4	Belhassen Y	3	3	0,167	Belhassen Y	344
3	Raj R	4	Hellman J	3	3	0,429	Caton K	294
4	Belhassen Y	3	Liutikas D	3	3	0,3	Stewart WP	294
5	Eade J	3	Raj R	3	4	0,231	Digance J	256
6	Fernandes C	3	Winter C	3	3	0,231	Nolan ML	231
7	Hellman J	3	Amaro S	2	2	0,333	Nolan S	231
8	Liutikas D	3	Ambrósio V	2	3	0,154	Cohen E	182
9	Shinde K	3	Antunes A	2	2	0,333	Eade J	160
10	Winter C	3	Di Giovine MA	2	2	0,5	Ryan C	153

Figure 4 shows the frequency distribution of scientific productivity using Lotka's law distribution map. The ordinate shows the percentage of authors from different literatures, while the abscissa shows the number of documents. The dotted line represents Lotka's law. In the figure, 91.2% of the authors published 1 article. Meanwhile, the number of authors who wrote more than 1 article on the theme of pilgrimage was 6.6%. This indicates that the number of authors who only wrote 1 article is much higher.



Source: Authors analysis via RBiblioshiny

Next is the collaboration network between authors on the theme of pilgrimage. According to scientists, the social network generated in a field will describe the relationship between two or more individuals who carry out collaboration (Prell et al., 2009; Song et al., 2019). In Figure 5, it can be seen that several author names are displayed and their respective connections. Author connections are shown by groups of the same color type and lines between one author's name and another. The size of the circle also indicates the number of articles published, so the larger the size, the greater the number of articles produced. The results obtained are that there are 7 largest clusters in this study. The first cluster is a brown cluster that shows collaboration between 4 authors penulis (Jørgensen et al., 2020, 2021). Then the second cluster is orange in color which shows the collaboration of 3 authors. The next clusters are blue, red, green, purple, and pink red clusters indicating collaboration between 2 authors.



Source: Authors analysis via RBiblioshiny

The map image below is a country collaboration map showing the top countries where authors collaborated on pilgrimage-themed research. The red line connects the relationship between countries that collaborate in publishing articles. Based on the data obtained, the USA is the country that collaborates the most with other countries, namely 15 countries with 20 articles, followed by the UK as many as 6 countries with 7 articles, Australia as many as 5 countries with 6 articles. The top collaborator countries are USA with UK and USA with India with 3 articles each, followed by USA with Israel, UK with Norway, Poland with Slovakia, and Australia with China with 2 articles each, then followed by several other countries collaborating with each producing 1 article.



Figure 6. Collaboration World Map

Source: Authors analysis via RBiblioshiny

Table 5 shows the top 10 affiliations and countries of the authors who produced articles on the theme of pilgrimage. It was found that Concordia University, University of Haifa were the top affiliations with 5 articles each, followed by Arizona State University, University of Toronto, and University of Venda with 4 articles each. As for the top countries based on the origin of the authors, it was found that the USA ranked the highest with 60 articles, followed by the UK with 39 articles, India with 30 articles, Australia with 19 articles, Canada and China with 18 articles each, and several other countries.

Table 5. Top 10 Affiliations and Country Adressing Topics of Pigrimage

No	Most Relevant Affiliations		Country S Produ	
	Authors	Articles	Authors	Articles
1	Concordia University	5	USA	60
2	University of Haifa	5	UK	39
3	Arizona State University	4	India	30
4	University of Toronto	4	Australia	19
5	University of Venda	4	Canada	18
6	Brigham Young University	3	China	18
7	Estoril Higher Institute for Tourism and Hotel Studies	3	Portugal	17
8	Kazan Federal University	3	Israel	12
9	Kinneret College on The Sea of Galilee	3	Spain	12
10	Leeds Beckett University	3	Germany	10

4.4 Document Analysis

Regarding relevant documents in the field of pilgrimage, this study investigates global publication citations (GC) to measure the number of citations a document receives from all Scopus databases and measure the impact of a document that in many cases may receive citations from other disciplines. In addition to global citations, local citations (LC) are also used to measure the number of citations a document receives from the documents included in the research data to be analyzed (Aria & Cuccurullo, 2017). Thus, global citations consider a wide range of citations from various citations in a global perspective, while local focuses only on the discipline being studied. In addition to the count of scientific productivity, this study also shows the number of citations for an application ensuring the significance and impact of a document (Grant et al., 2000; Waheed et al., 2018).

Table 6 describes the top 10 documents based on GC which places Collins-Kreiner N's work published in 2010 at the highest rank with a total of 306 citations, followed by Belhassen Y's work published in 2008 with a total of 294 citations, Digance J published in 2003 with a total of 256 citations, and several other works. Table 7 describes the top 10 documents based on LC which puts Collins-Kreiner N's work remains in the top rank as in GC with 43 LC, followed by Digance J's work published in 2003 with 37 LC, Nolan ML's work published in 1992 with 25 LC, Eade J's work published in 1992 with 21 LC, Lois-Gonzales RC's work published in 2015 with 19 LC.

Table 6. Top 10 Articles by Most Global Cited Documents

No	Documen Title	Authors & Year Published	Source	Global Total Citation
1	Researching pilgrimage: Continuity and transformations	(Collins-Kreiner, 2010b)	Ann. Tour. Res.	306
2	The search for authenticity in the pilgrim experience	(Belhassen et al., 2008)	Ann. Tour. Res.	294
3	Pilgrimage at contested sites	(Digance, 2003)	Ann. Tour. Res.	256
4	Religious sites as tourism attractions in Europe	(Nolan & Nolan, 1992)	Ann. Tour. Res.	231
5	Pilgrimage centers: Concentric and excentric	(Cohen, 1992)	Ann. Tour. Res.	182
6	Pilgrimage and tourism at Lourdes, France	(Eade, 1992)	Ann. Tour. Res	148

7	Exploring the dialectics of route-based tourism: The	(Murray &	Tour.	143
	Camino de Santiago	Graham, 1997)	Manage.	145
8	Motives for a secular pilgrimage to the Gallipoli	(Hyde & Harman,	Tour.	142
	battlefields	2011)	Manage.	142
9	Understanding tourists in religious destinations: A social	(Nyaupane et al.,	Tour.	117
9	distance perspective	2015)	Manage.	11/
10	Taoism, temples and tourists: The case of Mazu	(Shuo et al., 2009)	Tour.	105
10	pilgrimage tourism	(31100 et al., 2009)	Manage.	105

Table 7. Top 10 Articles by Most Local Cited Documents

No	Document Title	Authors & Year Published	Source	Local Total Citation
1	Researching pilgrimage: Continuity and transformations	(Collins-Kreiner, 2010b)	Ann. Tour. Res.	43
2	Pilgrimage at contested sites	(Digance, 2003)	Ann. Tour. Res.	37
3	Religious sites as tourism attractions in Europe	(Nolan & Nolan, 1992)	Ann. Tour. Res.	25
4	Pilgrimage and tourism at Lourdes, France	(Eade, 1992)	Ann. Tour. Res.	21
5	Tourists and pilgrims on their way to Santiago. Motives, Caminos and final destinations	(Lois-González & Santos, 2015)	J Tour. Cult. Change.	19
6	Exploring the dialectics of route-based tourism: The Camino de Santiago	(Murray & Graham, 1997)	Tour. Manage.	18
7	Pilgrimage centers: Concentric and excentric	(Cohen, 1992)	Ann. Tour. Res.	18
8	The search for authenticity in the pilgrim experience	(Belhassen et al., 2008)	Ann. Tour. Res.	17
9	Polish pilgrim-tourists	(Jackowski & Smith, 1992)	Ann. Tour. Res.	16
10	Pilgrimage and tourism at Santiago de Compostela	(Santos, 2002)	Tour. Recreat. Res.	15
_	A .1			

Source: Authors analysis via RBiblioshiny. The table is reproduced via Excel

4.5 Analysis Author's Keyword

Keyword analysis is an analysis of the keywords used by authors in a publication and its use in this study is to investigate trending topics and the focus of scientists in the field (Song et al., 2019). A thematic map is an analysis that takes data from author keywords and interconnects them in an effort to derive themes. These themes are characterized by density and centrality. Density is used to measure the compactness between nodes represented by the vertical axis, while centrality looks at the degree of correlation between different topics and is represented by the horizontal axis (Esfahani et al., 2019). Both will measure whether or not a particular topic is well-developed and how important it is. The higher the number of relationships a node has, the higher its centrality and importance, and will be in an important position in the network. Similarly, the cohesiveness between nodes will present the density of a research field to see its ability to develop and sustain itself.

Figure 8 is a thematic map in the field of research on pilgrimage which is basically divided into 4 quadrants, namely the upper right quadrant (Q1) representing motor themes, (Q4) the lower right quadrant representing basic themes, the upper left quadrant (Q2) representing niche themes, and the lower left quadrant (Q3) representing emerging or declining themes. The data processing results from the application show that there are 25 clusters spread across 4 quadrants. The themes between Q1 and Q4 are "Jerussalem, Palestine, Egypt" and "pilgrimage, tourism, pilgrims". The themes in Q1 are "sacred space, body,

Christian", "place, Saskatchewan, space", "community, health, movement", "anthropology, ancestors, cultural heritage", "flow, meaning", "Christian pilgrimages, shrines, peregrinatio", and "religious tourism, motivations, Islam". The themes in quadrant Q4 are "satisfaction, spiritual tourism, pilgrimage sites", "virtual pilgrimages", and "spirituality, covid-19, pilgrimage tourism". The themes in Q1 are "sacred space, body, Christianity", "place, Saskatchewan, space", "community, health, movement", "anthropology, ancestors, cultural heritage", "flow, meaning", "Christian pilgrimage, shrine, peregrinatio", and "religious tourism, motivation, Islam". The themes in quadrant Q4 are "satisfaction, spiritual tourism, pilgrimage places", "virtual pilgrimage", and "spirituality, covid-19, pilgrimage tourism". The themes in Q2 are "experiental motivation, experiental relationship quality, experiental risk", "secular pilgrimage, social memory, tourist motivation", "conceptual model, pilgrimage route", "destination development, greece, holy land, orthodox", and "cultural tourism, religious pigrimage". Finally, the themes in Q3 are "travel motivation, destination marketing", "anime pilgrimage", "performance", "sport tourism", "tourist experience", "Sabarimala", "Medjugorje", and "travel narratives".

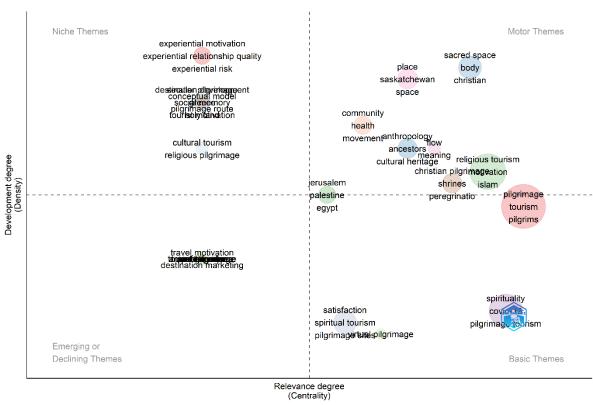


Figure 8. Thematic Map

Source: Authors analysis via RBiblioshiny

Next is the analysis using denrogram trees which are useful for showing the most used topics and their relationship with other topics as well as the classification of these topics grouped with different color types. Representations of this type are often used in various contexts such as for clustering hierarchies that describe the distribution of relationships between elements in the clusters generated from Biblioshiny analysis. These groupings are also organized with respect to the height of the coordination lines between topics and between clusters.

The figure below shows that there are 2 classifications of topics analyzed from the author's keywords, namely red and blue topics. This shows that the relationship between the red and blue group topics are close to each other. Then each group is further divided into several clusters, and each cluster is further divided into several sub-clusters. And so on until the topics are used. Some topics that are part of one cluster show that there is a relationship between them in research articles with the theme of pilgrimage in recent years.

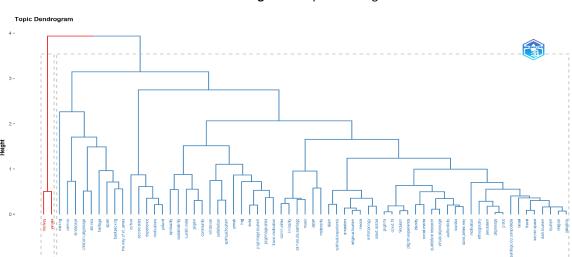


Figure 9. Topic Dendrogram

Source: Authors analysis via RBiblioshiny

5. Conclusion

The conclusion of this bibliometric study shows that the theme of pilgrimage experienced significant growth in publications from 1983 to 2022 with an annual growth rate of 8.25%. Source analysis shows that the "International Journal of Religious Tourism and Pilgrimage" is the main source with the largest contribution in this field, while the "Annals of Tourism Research" has the highest citation impact. From the author analysis, Collins-Kreiner N stood out as the most influential author with the most publications and citations. Keyword analysis revealed that the topics of "pilgrimage," "religious tourism," and "spiritual tourism" dominated the research, with some new themes such as "virtual pilgrimage" emerging during the COVID-19 pandemic. International collaboration was also significant, with the United States as the country with the most collaborations. Overall, this research provides an in-depth understanding of the trends and dynamics in pilgrimage studies, demonstrating the importance of collaboration and topic diversification in future research.

References

- 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
- As-Salafiyah, A., & Marlina, L. (2022). Mapping research on Islamic fintech using biblioshiny-R. *Journal of Islamic Economics Literatures*, 3(2).
- Belhassen, Y., Caton, K., & Stewart, W. P. (2008). The search for authenticity in the pilgrim experience. *Annals of Tourism Research*, 35(3), 668–689. https://doi.org/10.1016/j.annals.2008.03.007
- Cohen, E. (1992). Pilgrimage centers. Concentric and excentric. *Annals of Tourism Research*, 19(1), 33–50. https://doi.org/10.1016/0160-7383(92)90105-X
- Collins-Kreiner, N. (2010a). Current Jewish pilgrimage tourism: Modes and models of development. *Tourism*, *58*(3), 259–270.
- Collins-Kreiner, N. (2010b). Researching pilgrimage: Continuity and transformations. *Annals of Tourism Research*, *37*(2), 440–456. https://doi.org/10.1016/j.annals.2009.10.016
- Collins-Kreiner, N. (2016). The lifecycle of concepts: the case of 'Pilgrimage Tourism.' *Tourism Geographies*, *18*(3), 322–334. https://doi.org/10.1080/14616688.2016.1155077
- Collins-Kreiner, N., & Gatrell, J. D. (2006). Tourism, heritage and pilgrimage: The case of haifa's bahá'í gardens. *Journal of Heritage Tourism*, 1(1), 32–50. https://doi.org/10.1080/17438730608668464

- Digance, J. (2003). Pilgrimage at contested sites. Annals of Tourism Research, 30(1), 143-159.
- Eade, J. (1992). Pilgrimage and tourism at Lourdes, France. *Annals of Tourism Research*, 19(1), 18–32. https://doi.org/10.1016/0160-7383(92)90104-W
- Esfahani, H. J., Tavasoli, K., & Jabbarzadeh, A. (2019). Big data and social media: A scientometrics analysis. *International Journal of Data and Network Science*, *3*(3), 145–164. https://doi.org/10.5267/j.ijdns.2019.2.007
- Grant, J., Cottrell, R., Fawcett, G., & Cluzeau, F. (2000). Evaluating "payback" on biomedical research from papers cited in clinical guidelines: Applied bibliometric study. *British Medical Journal*, 320(7242), 1107–1111. https://doi.org/10.1136/bmj.320.7242.1107
- Hassan, M. K., Bashar, A., Rabbani, M. R., & Choudhury, T. (2022). An insight into the fintech and islamic finance literature: A bibliometric and visual analysis. In *FinTech in Islamic financial institutions: Scope, challenges, and implications in Islamic finance* (pp. 131–156). Springer.
- Hyde, K. F., & Harman, S. (2011). Motives for a secular pilgrimage to the Gallipoli battlefields. *Tourism Management*, *32*(6), 1343–1351. https://doi.org/10.1016/j.tourman.2011.01.008
- Jackowski, A., & Smith, V. L. (1992). Polish pilgrim-tourists. *Annals of Tourism Research*, 19(1), 92–106. https://doi.org/10.1016/0160-7383(92)90109-3
- Jørgensen, N. N., Eade, J., Ekeland, T. J., & Lorentzen, C. A. N. (2020). The processes, effects and therapeutics of pilgrimage walking the St. Olav Way. *International Journal of Religious Tourism and Pilgrimage*, 8(1), 33–50.
- Jørgensen, N. N., Eade, J., Ekeland, T. J., & Lorentzen, C. A. N. (2021). The motivations of pilgrimage walking the St.Olav Way in Norway. *International Journal of Religious Tourism and Pilgrimage*, 8(8), 110–126.
- Kliot, N., & Collins-Kreiner, N. (2003). Wait for us We're not ready yet: Holy land preparations for the new millennium The year 2000. *Current Issues in Tourism*, 6(2), 119–149. https://doi.org/10.1080/13683500308667948
- Lois-González, R. C., & Santos, X. M. (2015). Tourists and pilgrims on their way to Santiago. Motives, Caminos and final destinations. *Journal of Tourism and Cultural Change*, 13(2), 149–164. https://doi.org/10.1080/14766825.2014.918985
- Margry, P. J. (2008). Secular pilgrimage: a contradiction in terms? *Shrines and Pilgrimage in the Modern World: New Itineraries into the Sacred*, 13–46.
- Murray, M., & Graham, B. (1997). Exploring the dialectics of route-based tourism: The Camino de Santiago. *Tourism Management*, *18*(8), 513–524. https://doi.org/10.1016/S0261-5177(97)00075-7
- Nolan, M. L., & Nolan, S. (1992). Religious sites as tourism attractions in Europe. *Annals of Tourism Research*, 19(1), 68–78. https://doi.org/10.1016/0160-7383(92)90107-Z
- Nyaupane, G. P., Timothy, D. J., & Poudel, S. (2015). Understanding tourists in religious destinations: A social distance perspective. *Tourism Management*, *48*(1), 343–353. https://doi.org/10.1016/j.tourman.2014.12.009
- Olsen, D. H. (2010). Pilgrims, tourists and Max Weber's" ideal types".
- Pfaffenberger, B. (1983). Serious pilgrims and frivolous tourists the chimera of tourism in the pilgrimages of Sri Lanka. *Annals of Tourism Research*, 10(1), 57–74. https://doi.org/10.1016/0160-7383(83)90115-9
- Prell, C., Hubacek, K., & Reed, M. (2009). Stakeholder analysis and social network analysis in natural resource management. Society and Natural Resources, 22(6), 501–518. https://doi.org/10.1080/08941920802199202
- Santos, X. M. (2002). Pilgrimage and tourism at Santiago de Compostela. *Tourism Recreation Research*, *27*(2), 41–50. https://doi.org/10.1080/02508281.2002.11081219
- Shuo, Y. (Sam) S., Ryan, C., & Liu, G. (Maggie). (2009). Taoism, temples and tourists: The case of Mazu pilgrimage tourism. *Tourism Management*, 30(4), 581–588. https://doi.org/10.1016/j.tourman.2008.08.008

- Song, Y., Chen, X., Hao, T., Liu, Z., & Lan, Z. (2019). Exploring two decades of research on classroom dialogue by using bibliometric analysis. *Computers and Education*, 137(March), 12–31. https://doi.org/10.1016/j.compedu.2019.04.002
- Waheed, H., Hassan, S. U., Aljohani, N. R., & Wasif, M. (2018). A bibliometric perspective of learning analytics research landscape. *Behaviour and Information Technology*, *37*(10–11), 941–957. https://doi.org/10.1080/0144929X.2018.1467967
- Willson, G. B., McIntosh, A. J., & Zahra, A. L. (2013). Tourism and spirituality: A phenomenological analysis. *Annals of Tourism Research*, 42, 150–168.