Jurkiewicz (2003) who describe workplace spirituality at an organisational level also make reference to this connection in addition to offering a transcendent experience while at work. Other facets of spirituality at work, like seeking of meaning, transcendence, and internal consciousness, are also commonly covered in the literature.

Pawar (2016) asserts that there is a beneficial correlation between employees' emotional, psychological, and social well-being and workplace spirituality. According to Altaf & Awan (2011), there was thought to be a negative relation between job overload and job satisfaction. It was discovered that there is a positively significant correlation between workplace spirituality and job satisfaction. Additionally, workplace spirituality mitigates the negative impacts of job overload on job satisfaction. Reduced stress and aggressive behaviour, lower profession and cost to society for women, satisfaction with work, reduced desires to quit, organizational citizenship behaviour, morality, work involvement, absorbing emotional labour, and well-being for staff are all factors that contribute to workplace spirituality. (Krishnakumar & Neck 2002). According to Kolodinsky et al. (2008), organizational spirituality has a negative correlation with organizational frustration and a positive correlation with job involvement, organizational identification, and work rewards fulfilment. The satisfaction of total job rewards, extrinsic rewards, and personal spirituality were all positively correlated. According to Pawar (2009), three work attitudes; job satisfaction, job involvement, and organizational commitment are moderated in the connection between workplace spirituality and job attitudes by individual spirituality and the beneficial elements of spirituality in the workplace, such as purpose in work, community at work, and positive organizational purpose. Employee job attitudes like engagement, job satisfaction, and organizational citizenship behaviour have a favourable relationship with WPS components like meaningful work, feeling of belonging, and alignment with organizational values, according to Baskar and Indra Devi's (2021) research. Sharma and Singh (2020) The relationship between spirituality at work and the efficiency of an organization is strongly associated, with a medium effect; however, gender, length of service, and amount of time spent on mobile devices including networking sites and the internet significantly moderate the association. Spirituality in the workplace and justice in the workplace both positively and significantly predict employee engagement, and there is a significant positive correlation between employee engagement and mental health. In addition, according to Sharma & Kumara (2020), there is a strong moderating effect of employee involvement on the associations between spirituality at work and mental health, as well as the associations between justice in the workplace and mental health.

Bibliometric methodology is the process of applying quantitative methods to the extracted bibliometric data, such as co-citation and co-word analyses (Broadus, 1987). A researcher can use bibliometric analysis to map out the major authors, countries, and organizations that have made significant contributions to the body of knowledge already written about a particular subject (Xu et al., 2018). The study will investigate the following research questions: (a) What are the most significant developments in workplace spirituality in terms of keywords, journals, authors, and nations? (b) How is workplace spirituality conceptually mapped?

2. OBJECTIVES

- To study the most important and prominent trends in workplace spirituality with respect to keywords, subjects, journals, authors, publications, and related countries.
- To determine the intellectual mapping of workplace spirituality.

3. RESEARCH METHODOLOGY

A methodological advance above the conventional literature review is bibliometric analysis. Applying statistical techniques to ascertain both quantitative and qualitative changes in a given research topic, defining the publication profile of the topic, and identifying trends within a discipline comprise a bibliometric analysis (Baker et al.2020). Selecting the proper search engine is crucial for bibliometric research in order to extract relevant information. As a result, the Scopus key collection is regarded as the most important and commonly used database for finding scholarly academic content globally. The years under consideration for the purpose of this study were 1995–2023 (September). The search term "workplace spirituality" was used to locate the study papers. A search engine built on Scopus was utilized to extract the data, allowing for the analysis of authors, affiliations, fields of study, top journals, document types, and top nations. Using R software, the graph in this paper was extracted from biblioshiny. The software Biblioshiny for Bibliometrix, which is regarded as one of the most effective and complete tools for this kind of study (Aria & Coccurullo, 2017), was used to process the data. With the aid of an excel sheet, percentages and frequencies were tabulated. Additionally, the VOS viewer software program is utilized to construct maps in order to determine and see them. The analytical part that follows presents the findings in the form of graphs, tables, and maps.

4. RESULTS

4.1 General information and annual publication output

Table 1: Summary of Bibliometric Analysis from Scopus

DESCRIPTION		RESULTS
MAIN INFORMATION ABOUT THE DATA	Timespan	1995:2023
	Sources (Journals, Books, etc)	515
	Documents	1148
	Annual Growth Rate %	14.44
	Average citations per doc	21.69
	References	52472
DOCUMENT TYPES	Article	865
	Book	35
	Book chapter	123
	Editorial	15
	Conference Paper	37
DOCUMENT CONTENTS	Keywords Plus (ID)	1127
	Author's Keywords (DE)	2242
AUTHORS	Authors	2136
	Authors of single-authored docs	272
AUTHORS COLLABORATION	Single-authored docs	342
	Co-Authors per Doc	2.39
	International co-authorships %	13.3

4.2. Annual Publication Growth

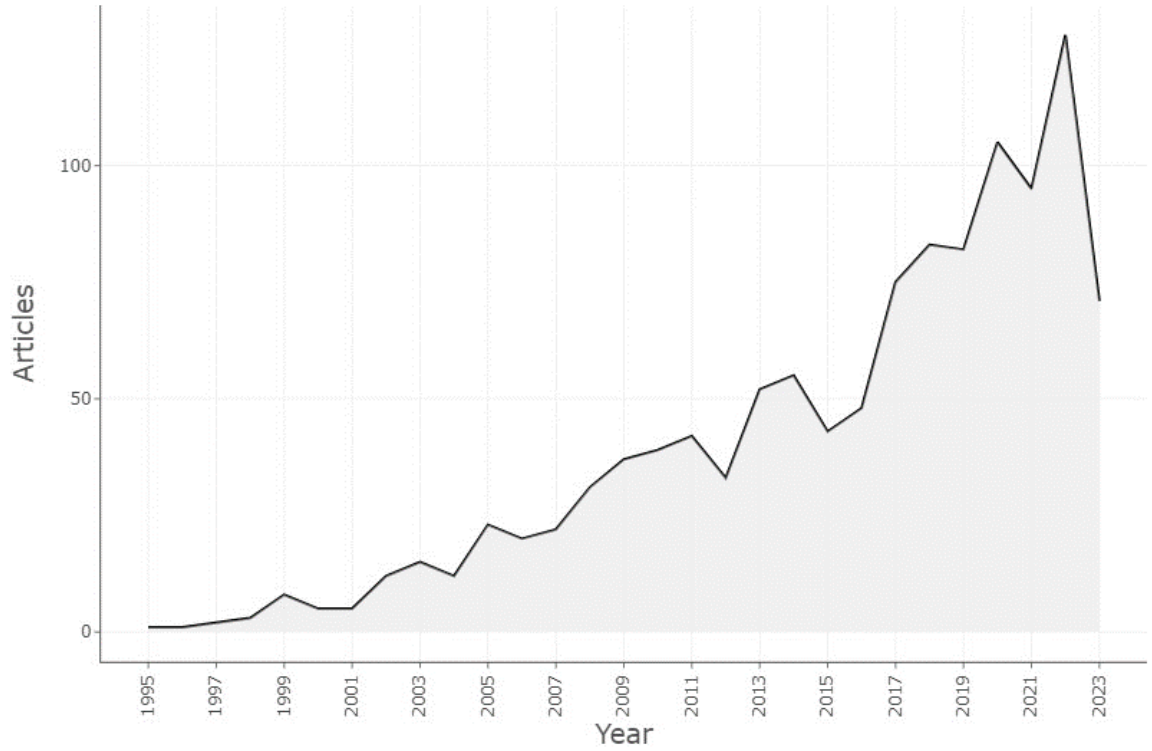


Figure 1: Annual Scientific Production

In a bibliometric analysis of workplace spirituality, Figure 1 shows the annual increase in papers. Documentation volume is continually rising. Between 1995 and 2023 (September), there have been 1148 publications on workplace spirituality. In the first seven years, 24 publications were released, but starting in 2005, more workplace spirituality-related papers have been appearing. Between January 2017 and September 2023, there will be 639 documents published, growing at a 14.44% annual rate.

4.3 Three-Field Plot

To visually evaluate the link between sources, countries, organizations, keywords, major authors, cited sources of information, and author keywords, Biblioshiny uses a three-field structure. Rectangular diagrams in a variety of colors are used to demonstrate key ideas. The relationship between many aspects, including countries, sources, well-known writers, keywords, etc., is indicated by the rectangle's height. There are more connections between the different components the broader the rectangle.

Figure 2 shows how, in a study on workplace spirituality, author nation (on the left), author (middle) and keyword (right) are related. The research identified the words that were most frequently used by authors from different author countries while discussing workplace spirituality. These terms were mostly utilised by authors Giacalone R.A., Jurkiewicz C.I., Douchon D., Fry L.W, and Garg, who are from the United States, India, United Kingdom, Malaysia and Indonesia respectively. Workplace spirituality, spiritual leadership, religion and workplace all come up in the analysis of the top keywords, authors and nations.

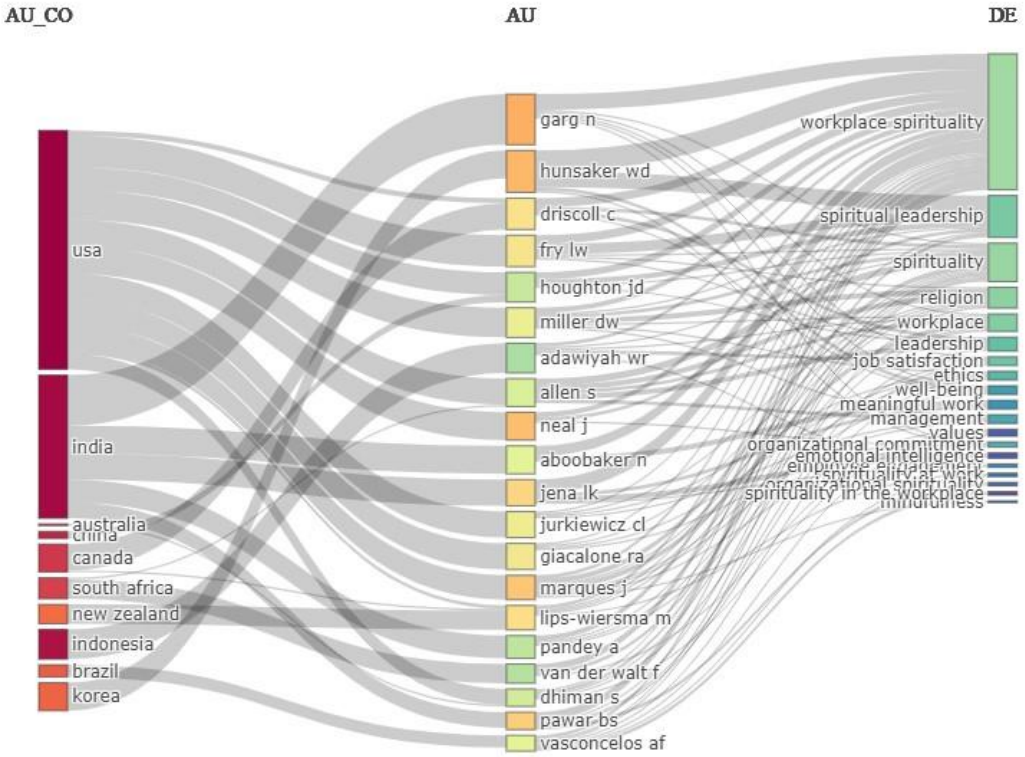


Figure 2. Three-field plot author country (left), author (middle) and keyword (right)

4.4: Most Relevant Sources

The top 10 journals with the most publications on workplace spirituality are listed in Figure 3. In total, the collection contains 1148 papers drawn from 515 sources. The Journal of Management, Spirituality and Religion, Journal of Business Ethics, and The Palgrave Handbook of Workplace Spirituality and Fulfillment were found to be the most productive journals, each producing 127 documents, according to the bibliometric analysis for 1995–2023 (September)



Figure 3: Most relevant Sources

4.5: Most Revevant Authors

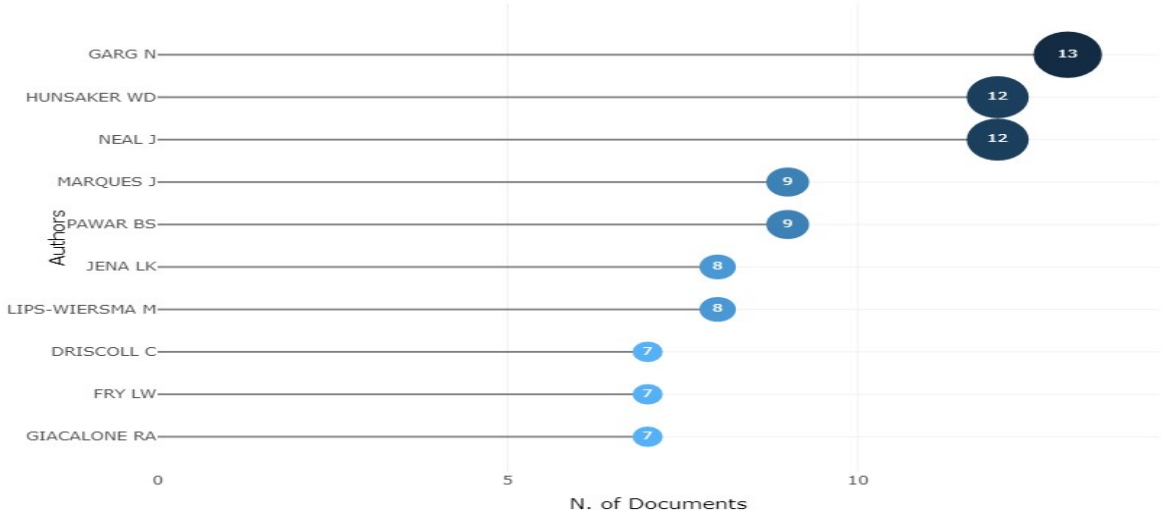


Figure 4: Most Relevant Authors

Based on bibliometric analysis, the top writers on the issuen of workplace spirituality are indicated in figure 4. 1148 research papers on the current research topic were written by a total of 2136 authors. With 13 publications published, Garg N. was the most productive author, folloed by Hunsaker WD and Neal J with 12 documents, Marques J, Pawar B S, Jena L K, Lips-Wersma M, Driscoll C, Fry L M and Giacalone RA.

4.6 Analysis by Author

Author publication and productivity are examined in this investigation. Table 2 lists the top ten writers by number of citations. With 948 citations, Giacalone R.A. is the author with the most. Jurkiewicz C.L. and Duchon D. follow with 921 and 919, respectively.

Table 2- Citation by Authors

Sl.No.	Author	Citation
1	Giacalone R.A.	948
2	Jurkiewicz C.L.	921
3	Duchon D.	919
4	Fry L.W.	778
5	Milliman J.	623
6	Ferguson J.	466
7	Ashmos D.P.	408
8	Neck C.P.	395
9	Pawar B.S.	358
10	Mitroff I.I.	345

Analysing Figure 5 gives it possible to find the author citation network. A citation occurs when two documents mention the same document. This approach is applied to paperwork, journals, and authors (Forteza et al. 2018). There are six clusters in this network of citations. Four of these clusters—purple, blue, green, and yellow—indicate the authors who have received the most citations. Giacalone R.A. has the most citations in the purple cluster, followed by Fry L.W. in the yellow cluster, Jurkiewicz C.L. in the red cluster, and Duchon D. in the green cluster.

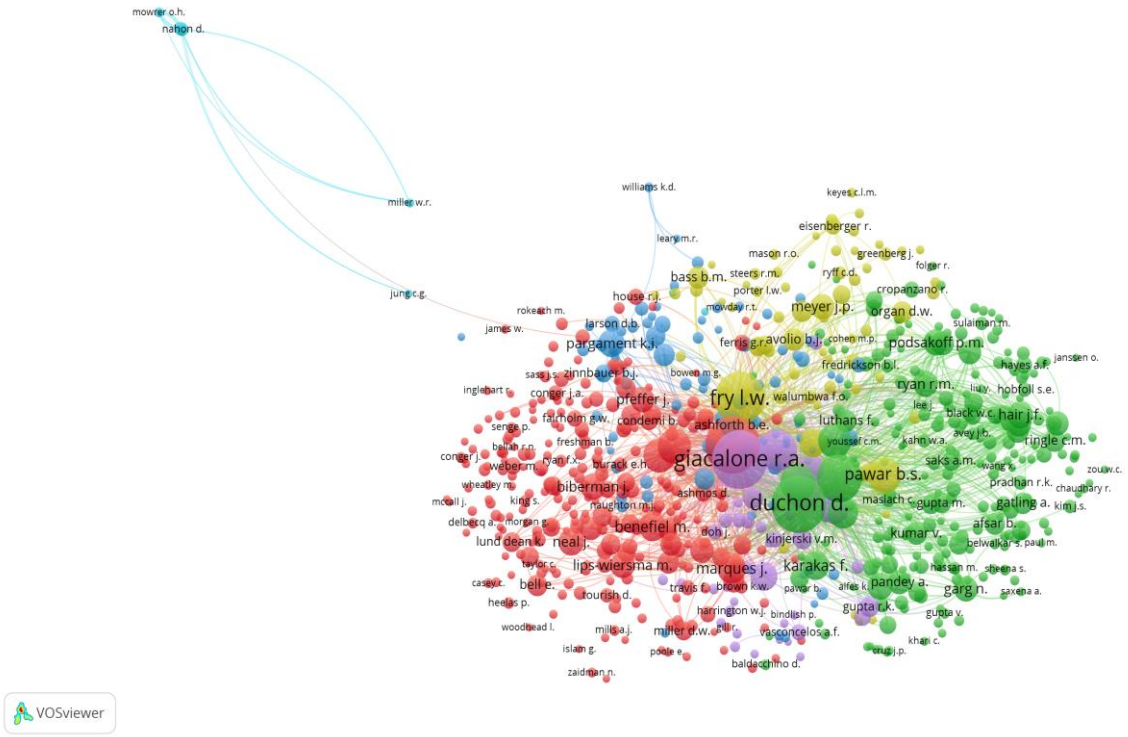


Figure 5: Author citation network

4.7: Most Relevant Affiliations

As depicted in Figure 6, this study also examined the publications produced by organizations or author affiliations that contributed to workplace spirituality-based research. The outcomes of workplace spirituality are produced by 896 institutions. The Cochin University Of Science And Technology came in second with 18 documents, trailing Woodbury University in first place with 21 documents.

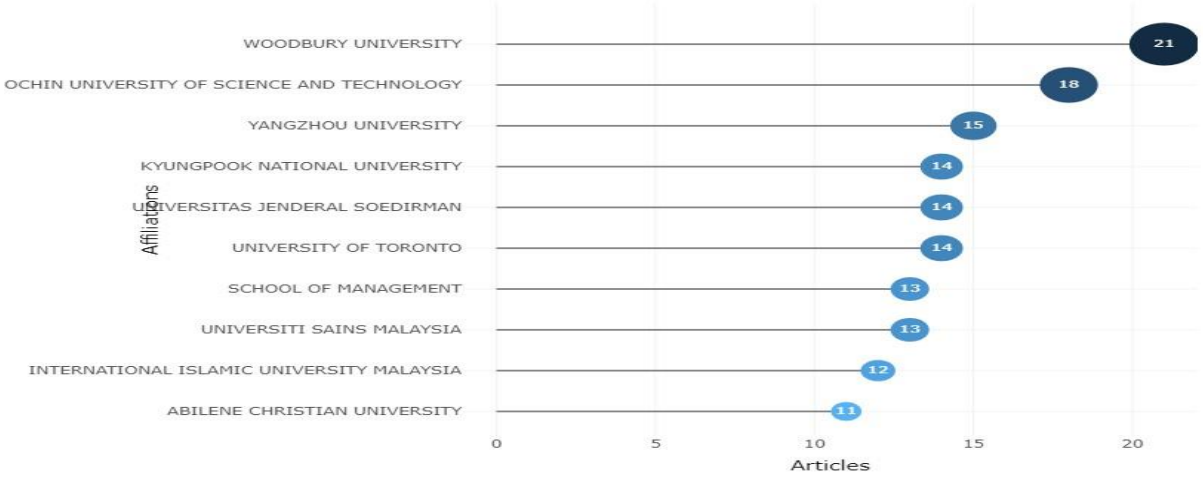


Figure 6: Most Relevant Affiliations

4.8: Most Relevant Countries by Corresponding Authors

In addition to active participation in workplace spirituality, this study took into account publishing productivity relative to the respective author countries. Table 3 and Figure 7 show the countries of the corresponding authors as well as the number of papers they have written. Additionally, it examines the percentages of single-country publications, multiple-country publications, and multiple-country publication ratios. According to the data on country collaboration, the USA had the most publications (211), 193 of which were single-country publications (SCP) and 18, with an MCP ratio of 0.085, were the result of multiple-country publications (MCP). India came in second with 132 documents, 123 of which were single-country publications and 9, with an MCP ratio of 0.068.

Table 3: Corresponding Author Countries

Country	Articles	SCP	MCP	MCP Ratio
USA	211	193	18	0.085
India	132	123	9	0.068
United Kingdom	38	29	9	0.237
Malaysia	34	20	14	0.412
Indonesia	33	29	4	0.121
China	31	24	7	0.226
South Africa	31	27	4	0.129
Canada	28	28	0	0.000
Australia	27	26	1	0.037
Korea	25	22	3	0.120

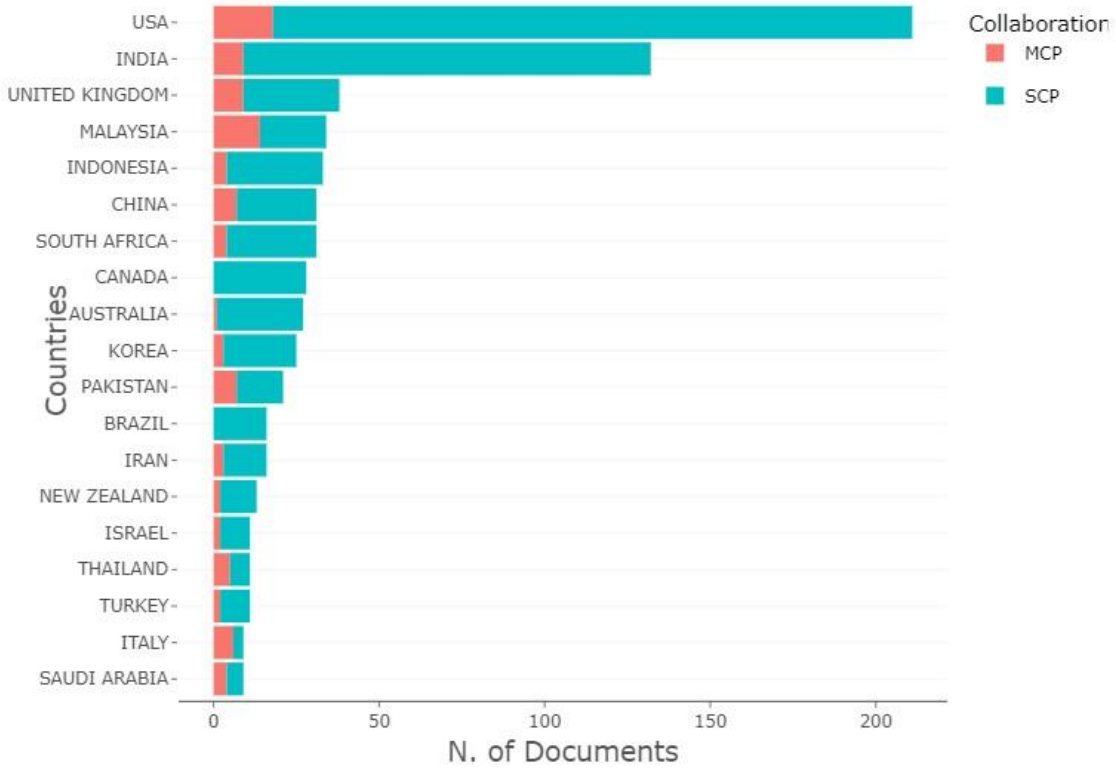


Figure 7: Corresponding Author Countries

4.9: Country Scientific Production

The five top producing countries for science are included in Table 4 and Figure 8. The statistics show that the USA is the most productive country, contributing 728 documents. India produced 376 articles, placing second in terms of productivity. Following it are China (111), Malaysia (129), and Indonesia (140).

Table 4: Country Scientific Production

Country	Number of Articles
USA	728
India	376
Indonesia	140
Malaysia	129
China	111

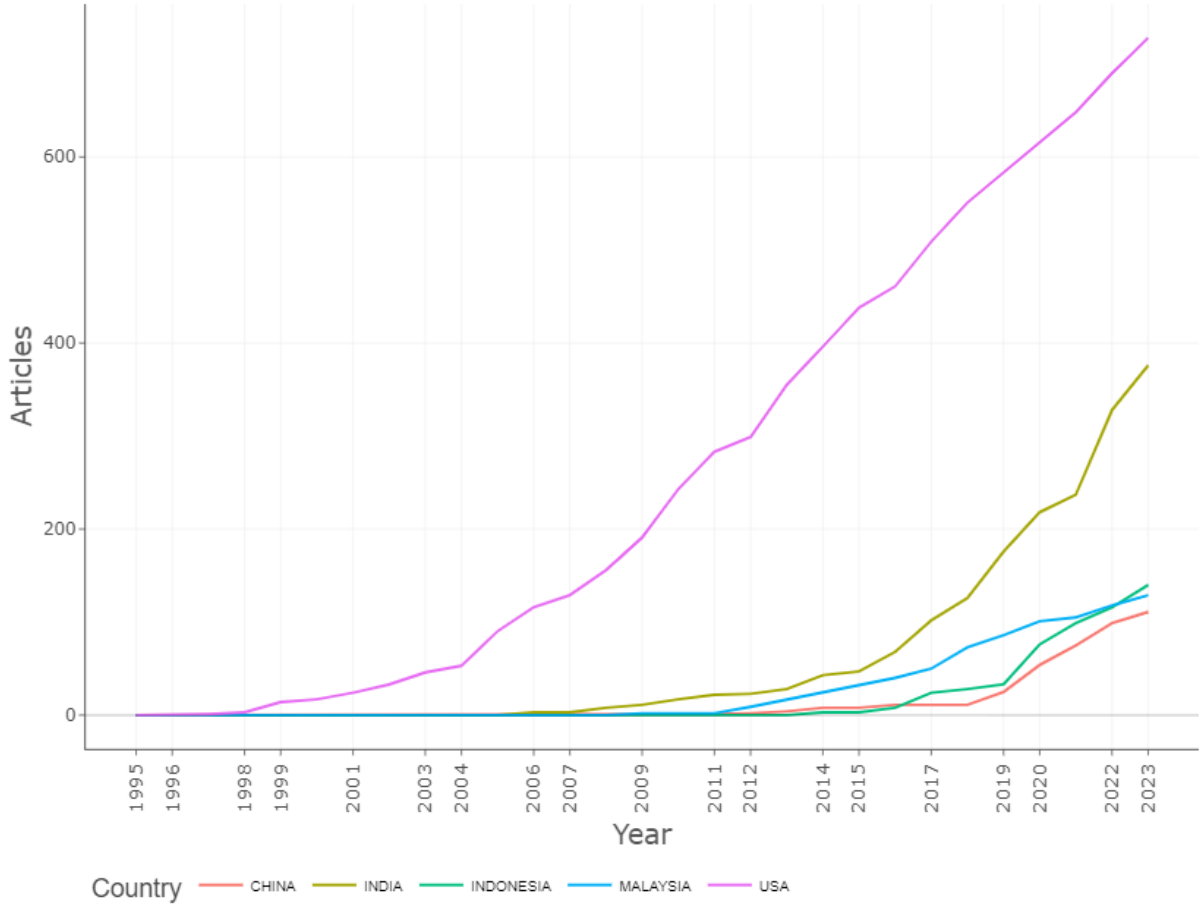


Figure 8: Country Scientific Production

4.10: Most Global Cited Documents

In the context of workplace spirituality, the documents which garnered the most citations worldwide are furnished in table 5. The research paper by Fry L.W. entitled "Towards a Theory of Spiritual Leadership" which appeared in the "Leadership Quarterly" journal earned the highest number of citations (1104). The second on the list is "Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: A literature review" which was cited 631 times and was written by Jackson D.; Firtko A.; Edenborough M. "Workplace spirituality and employee work attitudes: An exploratory empirical assessment" authored by Milliman J.; Czaplewski A.J.; Ferguson J., came in the third position with 630.

Table 5: Top Ten Globally Cited Documents

Article	Author	Journal	DOI	Total Citations
Towards a Theory of Spiritual Leadership	Fry L.W.	Leadership Quarterly	10.1016/j.leaqua.2003.09.001	1104
Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: A literature review	Jackson D.; Firtko A.; Edenborough M.	Journal of Advanced Nursing	10.1177/0021886301371003	631
Workplace spirituality and employee work attitudes: An exploratory empirical assessment	Milliman J.; Czaplewski A.J.; Ferguson J.	Journal of Organizational Change Management	10.1108/09534810310484172	630
Nurturing the spirit at work: Impact on work unit performance	Duchon D.; Plowman D.A.	Leadership Quarterly	10.1016/j.leaqua.2005.07.008	461
Spirituality and performance in organizations: A literature review	Karakas, Fahri	Journal of Business Ethics	10.1007/s10551-009-0251-5	409

Burnout and resilience among nurses practicing in high-intensity settings	Rushton C.H.; Batcheller J.; Schroeder K.; Donohue P.	American Journal of Critical Care	10.4037/ajcc2015291	375
Spiritual values and practices related to leadership effectiveness	Reave L.	Leadership Quarterly	10.1016/j.leaqua.2005.07.003	364
Moral distress of staff nurses in a medical intensive care unit	Elpern E.H.; Covert B.; Kleinpell R.	American Journal of Critical Care	10.4037/ajcc2005.14.6.523	342
A values framework for measuring the impact of workplace spirituality on organizational performance	Jurkiewicz C.L.; Giacalone R.A.	Journal of Business Ethics	10.1023/B:BUSI.0000015843.22195.b9	340
Workplace spirituality and organizational commitment: An empirical study	Rego A.; Pina E Cunha M.	Journal of Organizational Change Management	10.1108/09534810810847039	327

4.11: Most Frequent Words

The top 10 author keywords found in workplace spirituality documents are shown in Table 6, while a tree plot of the top 50 writer keywords is shown in Figure 9. 10% of the top 50 writer keywords were utilized by the author, who used the term "workplace spirituality" 215 times. "Religion" is used by the author 151 times, accounting for 7% of the text. "Human" is used 144 times, while "humans" is used 115 times, accounting for 7% of the text. More often used author keywords include "adult," "female," "male," "article," "spirituality," and "middle aged."

Table 6: Most frequent words

Words	Frequency	Percentage
Workplace	215	10%
Religion	151	7%
Human	144	7%
Humans	115	5%
Adult	113	5%
Female	113	5%
Male	103	5%
Article	102	5%
Spirituality	100	5%
Middle aged	65	3%

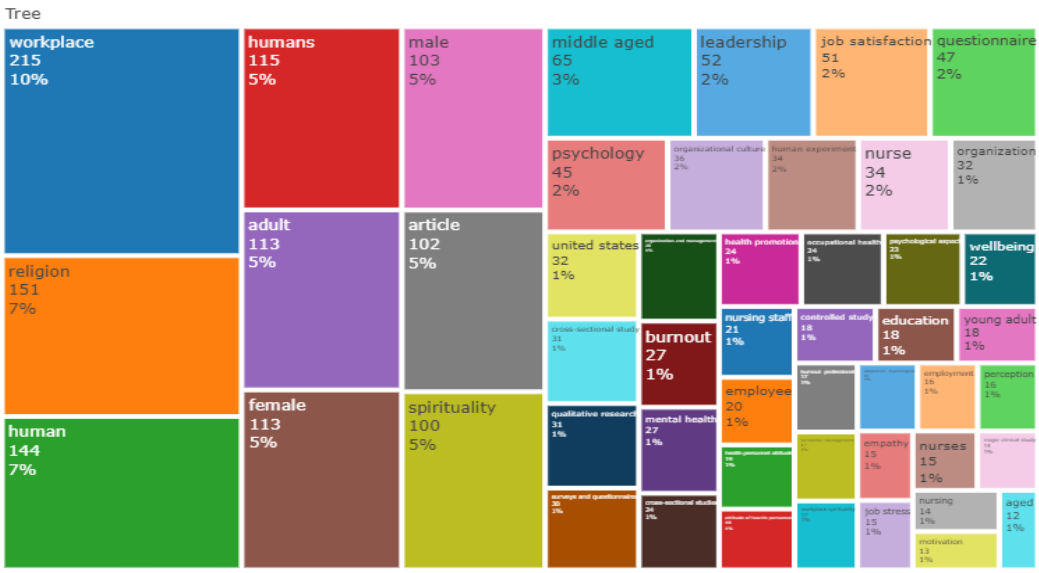


Figure 9: Tree plot of top 50 author-keywords

4.12. Keyword Analysis

The 1148 articles in the study were categorized by looking up and analysing the most popular keywords. This analysis makes the topics that appear repeatedly in the focus area stand out. On the figure 10 map, the keywords are arranged into seven clusters. Workplace spirituality (dark red cluster), religion (yellow cluster), humans (dark blue cluster), adults (green cluster), nurses (purple cluster), education (light red cluster), and attitude of health personnel (light blue cluster) are the primary keywords for each cluster. This map also demonstrates the apparent paths the study is taking and the possible topics for further research opportunities: workplace spirituality, religion, and humans.

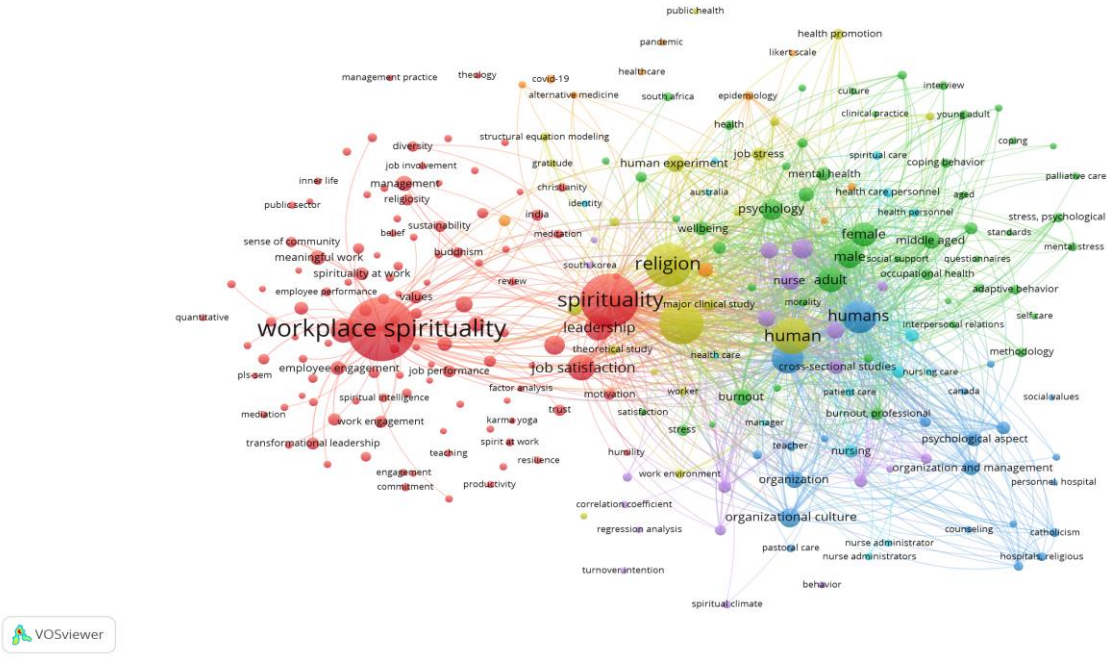


Figure 10: Keyword Analysis

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There are 3066 keywords found in the 1148 articles. Seven important terms, including "workplace spirituality," "spirituality," "religion," "humans," "workplace," "human," and "article," appeared more than 100 times among the 232 words that did appear. Both "spirituality" and "workplace spirituality" appear in 454 and 321 articles, respectively. Aside from seven keywords that appeared 100 times, just six keywords "adult," "female," "male," "job satisfaction," "leadership," and "spiritual leadership" occurred more than 50 times.

4.13: Thematic Map

Thematic map displaying clusters and keywords Plus found by the co-occurrence network from 1995 to 2023 (September). The X-axis denotes a theme's centrality and importance, while the Y-axis denotes its density. Figure 11 displays the theme map within the context of workplace spirituality. The main themes in the lower right quadrant, including education, well-being, and work satisfaction, point to important yet understudied areas. The upper left quadrant's specialty topics behavioural research and knowledge management—have little bearing on this topic. The main themes in the third quadrant are organization and management, leadership, adults, males, and females. Emerging themes include workplace spirituality, sustainable development, regression analysis, and personnel survey.

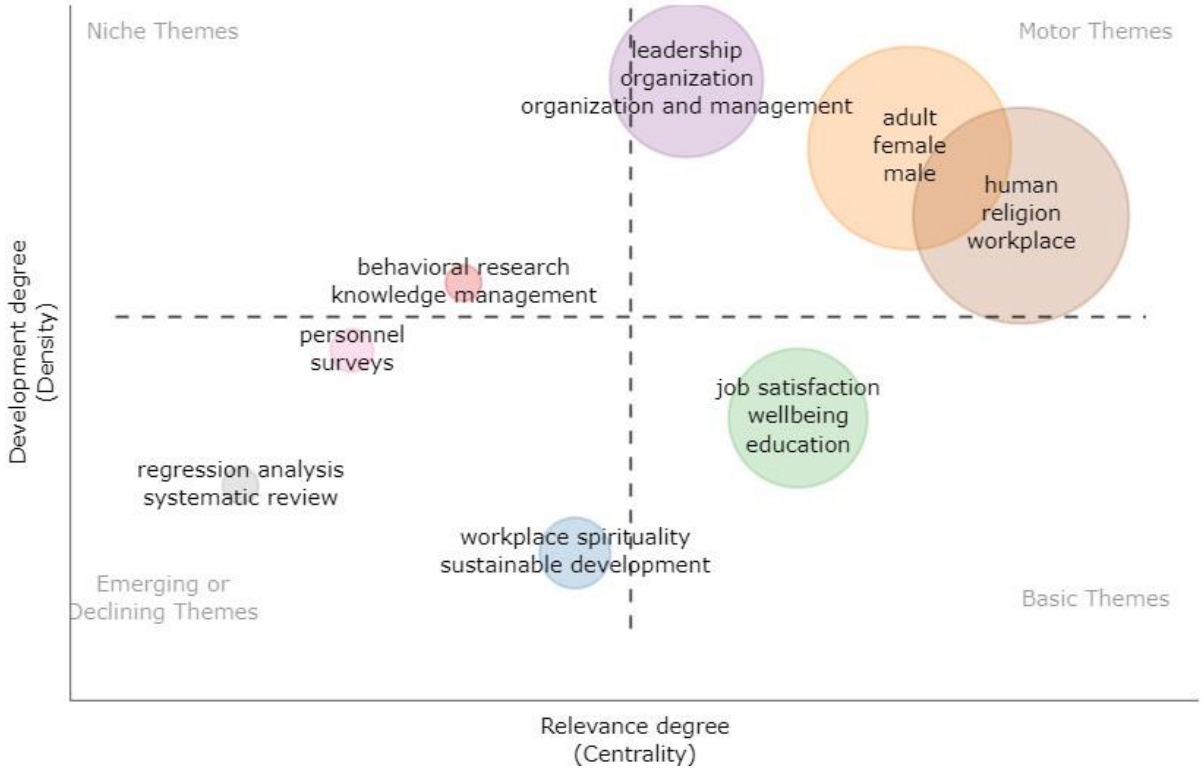


Figure 11: Thematic map

4.14 Geographical Analysis of Document publications.

Since the 1148 publications in the sample are spread out across 77 countries, it is possible to determine that this research topic is international by looking at the author's place of affiliation. This suggests that a minimum of one study has been published in each of these nations.

The 15 nations indicated in Table 7 together have citations totalling 89.98% of all published works in the subject of research. With 364 articles published overall, the United States leads the globe in publications, next to India (185 articles) and the United Kingdom (60 articles). Portugal is rated fifteenth in publications with 615 citations. The three countries with the most citations are the United States, India, and Canada.

Table 7. Number of documents in Coauthorship by country (1995-2023)

Sl.No.	Coauthorship by countries	Number of documents	Citations
1	United States	364	13058
2	India	185	2239
3	United Kingdom	60	1134
4	Malaysia	51	617
5	Indonesia	50	271
6	Australia	48	1575
7	South Africa	48	343
8	Canada	47	1967
9	Pakistan	34	507
10	South Korea	31	272
11	China	27	413
12	New Zealand	25	669
13	Iran	25	219
14	Brazil	24	466
15	Portugal	14	615

Figure 12 displays the nation coauthorship map derived from the sample of 1148 publications. The United States, India, and the United Kingdom are among the nations clustered together. The reason for this is that 53.04% of all papers come from these three countries.

The coauthorship between these countries is indicated by the lines linking the places on the map, and the distance and strength between the clusters indicate how much coauthorship these countries publish. This gives an insightful picture of the strength of workplace spirituality research across national boundaries.

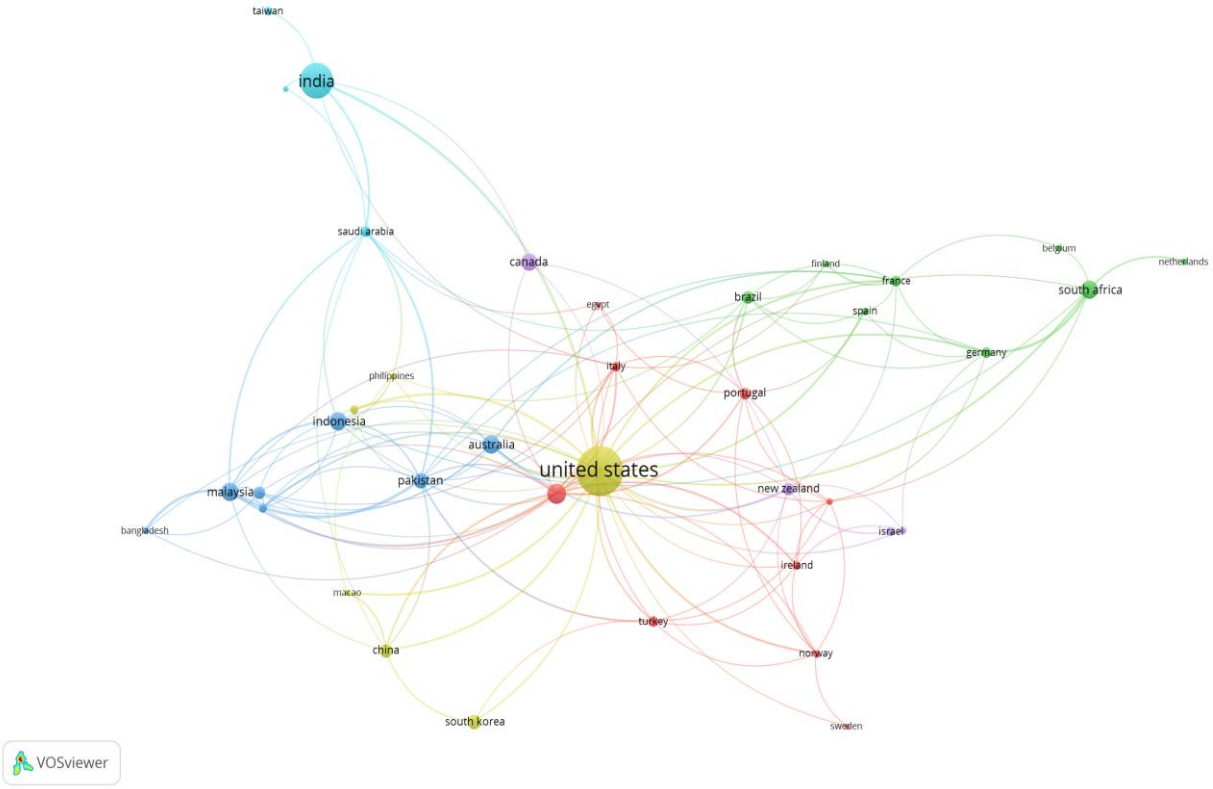


Figure 12. Coauthorship by countries

4.15 Analysis of Source Documents

Table 8 shows the sources which highest 10 number of articles of workplace spirituality published. Journal of Management, Spirituality and Religion is the most prominent source producing articles, followed by Journal of Business ethics and The Palgrave handbook of Workplace Spirituality and fulfillment.

Table 8: Sources of article publication

Sl.No.	Source	Documents
1	Journal of Management, Spirituality and Religion	127
2	Journal of Business Ethics	37
3	The Palgrave handbook of Workplace Spirituality and fulfillment	25
4	Journal of Organisational Change Management	21
5	Journal of Nursing Management	18
6	Handbook of Faith and Spirituality	18
7	Journal of Management Development	13
8	International Journal of Organisational Analysis	12
9	Purushartha	11
10	Religions	11

4.16 Bibliographic Coupling

Bibliographic coupling, referred to as two documents citing an identical source (Forteza et al. 2018), can be used to evaluate the strength of a publication relative to a set of other publications. You can employ this tactic with writers, journals, publications, institutions, even countries. Through an analysis of the bibliographic coupling of the sources, it is possible to identify the publication and sources that are linked together through numerous citations.

The bibliographic coupling of sources is represented in Figure 13, which makes it possible to see and assess the strength of the relationship between them. Five distinct clusters are shown on the image, and the lines depict concurrent citations between sources.

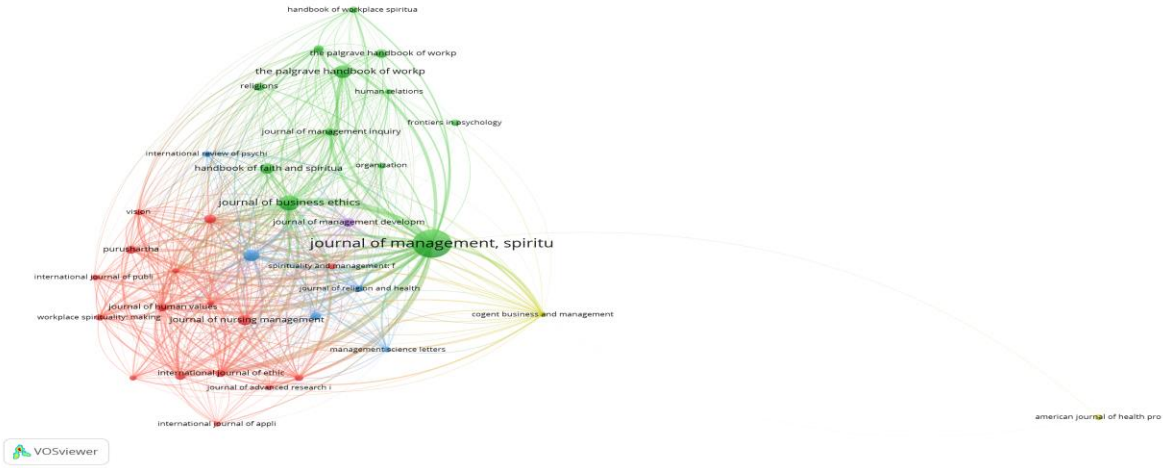


Figure 13: Bibliographic coupling of Source

5. DISCUSSION

In terms of workplace spirituality, Garg N, Hunsaker WD, and Neal J are the most productive writers. Giacalone R.A., Jurkiewicz C.L., and Duchon D. are the authors most frequently referenced, according to the citation. The three main universities that publish on workplace spirituality are Woodbury, Yangzhou University, and Cochin University of Science and Technology. The USA led the world in publications (211), of which 193 were single-country publications (SCP) and 18 were the product of multiple-country publications (MCP), with an MCP ratio of 0.085. With 132 documents (of which 123 were single-country publications) and 9 with an MCP ratio of 0.068, India ranked second. The research papers that are most frequently cited worldwide on workplace spirituality are "Towards a Theory of Spiritual Leadership" by Fry L.W., which was published in the journal "Leadership Quarterly," "Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: A literature review" by Jackson D., Firtko A., Edenborough M., and "Workplace spirituality and employee work attitudes: An exploratory empirical assessment" by Milliman J., Czaplewski A.J., Ferguson J.

The terms "workplace spirituality," "religion," "human," "humans," "adult," "female," and "male" are most frequently associated with it. Clusters and keywords Plus discovered by the co-occurrence network are displayed on a thematic map. The lower right quadrant's primary themes—education, wellbeing, and job satisfaction indicate significant but little-researched areas. Knowledge management and behavioural research, the specialization areas in the upper left quadrant, are not very relevant to this subject. The third quadrant's primary topics include adults, males and females, organization and management, and leadership. Regression analysis, people surveys, sustainable development, and workplace spirituality are some of the emerging issues. The United States, India, and the United Kingdom are among the nations clustered together. The reason for this is that 53.04% of all publications come from these three countries. The most well-known periodicals of workplace spirituality are Journal of Management, Spirituality and Religion, Journal of Business Ethics, and The Palgrave Handbook of Workplace Spirituality and Fulfilment.

6. CONCLUSION

This study is the first of its type on workplace spirituality; it includes highly referenced research conducted abroad and conducts a thorough examination of the literature using bibliometric analysis. The bibliometric analysis employed the Scopus database, which contains 1148 research papers on spirituality. The data showed that the publishing pattern for Workplace Spirituality has been steady for over a year, indicating that scholars both past and present have considered the subject to be intriguing and that the findings have advanced the field's understanding. The keyword research allowed us to investigate new study subjects, and the co-occurrence analysis of terms allowed us to connect significant research areas and field clusters. The keywords found through bibliometric analysis of the latest works cited are thought to have an effect on the development of spirituality in the workplace research. Workplace spirituality, spiritual leadership, and spirituality were found to have the most impact.

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