



SPIRITUALITY AND STRESS: BIBLIOMETRIC ANALYSIS OF THE CURRENT STATE OF THE ARTICLES AND PERSPECTIVE

SPIRITUALITAS DAN STRES: ANALISIS BIBLIOMERIK TERHADAP STATUS ARTIKEL DAN PERSPEKTIF TERKINI

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ABSTRACT

Article History:

Submitted:
November, 09th
2022

Received in
Revised:
November, 25th
2022

Accepted:
December, 28th
2022

Introduction: to learn more about and comprehend the most recent studies on spirituality and stress. This study assesses pertinent themes connected to spirituality and stress through bibliometric analysis using the keyword "spirituality and stress" as input.

Methods: The Scopus database was chosen in this study since bibliometric analysis thought it was the best. The bibliometric analysis tool VOSviewer software was also used to show a network of authors, nations, journals, and keywords. On September 26, 2022, an analysis based on the most recent five years of publishing, article-type papers, and journal-sourced data from 2017 to the current day discovered a total of 829 documents.

Result: The results showed that in the last 5 years, the number of publications of articles on spirituality and stress has grown significantly and experienced a dynamic development. The USA is the country with the most article publications in the world with lead authors, and research institutes involved. Duke University Medical Center became a prominent journal with regular publications.

Conclusion: The bibliometric analysis presented provides relevant information related to the theme studied, namely spirituality and stress.

Keywords: Bibliometric; Scopus; Spirituality; Stress; VOSviewer

ABSTRAK

Pendahuluan: Untuk mempelajari lebih lanjut tentang dan memahami studi terbaru tentang spiritualitas dan stres. Melalui analisis bibliometrik menggunakan kata kunci "spiritualitas dan stres" sebagai masukan, penelitian ini menilai tema-tema terkait yang terkait dengan spiritualitas dan stres.

Metode: Database Scopus dipilih dalam penelitian ini karena analisis bibliometrik menganggapnya yang terbaik. Alat analisis bibliometrik perangkat lunak VOSviewer juga digunakan untuk menunjukkan jaringan penulis, negara, jurnal, dan kata kunci. Pada 26 September 2022, analisis berdasarkan lima tahun terakhir penerbitan, makalah jenis artikel, dan data yang bersumber dari jurnal dari 2017 hingga hari ini menemukan total 829 dokumen.

Hasil: Hasil penelitian menunjukkan bahwa dalam 5 tahun terakhir, jumlah publikasi artikel tentang spiritualitas dan stres telah tumbuh secara signifikan dan mengalami perkembangan yang dinamis. Amerika Serikat adalah negara dengan publikasi artikel terbanyak di dunia dengan penulis utama, dan lembaga penelitian yang terlibat. Duke University Medical Center menjadi jurnal terkemuka dengan publikasi reguler.

Kesimpulan: Analisis bibliometrik yang disajikan memberikan informasi yang relevan terkait dengan tema yang dikaji yaitu spiritualitas dan stres.



Kata kunci: Bibliometrik; Scopus; Spiritualitas; Stres; VOSviewer

INTRODUCTION

Recently, stress has become a real problem. Stress is the result of a person's failure to deal with threats at all levels, including mental, physical, emotional, and spiritual. At some point, this inability can have an impact on a person's physical health.¹ Stress in general can be defined as a response to the demands of the body that require mental, physical, or emotional adjustment. Stress can come from situations or thoughts that make a person feel angry, anxious, frustrated, or nervous.² Stress is what a person experiences when they are pushed beyond their physical and emotional boundaries. The body's natural instinct to defend itself against mental or physical tension, harsh circumstances, or life-threatening risks is what causes stress. In general, stress is a typical reaction to tension, pressure, and changes in a person's life. This is also a natural response.¹

More focus is needed under pressure. Recently, many people have developed strategies to cope with and relieve stress, one of which is spiritual treatment.¹ According to some assumptions, people will grow more interested and return to religion during difficult circumstances, even when they reach old age. Spirituality is more than just holding a certain view; It also incorporates the meaning of life. The shared values of a person that determine his way of life and behavior are referred to as beliefs. Belief in the Creator and the Almighty is referred to as spirituality. Spirituality has many dimensions, including religious and existential dimensions. Spirituality as a practice and as a belief can serve as a technique to reduce physical and emotional stress, such as pain and helplessness. The improvement and rehabilitation of the patient is aided by health care that emphasizes the psychological needs and spirituality of the patient.³ Therefore, spirituality has an important influence in relation to stress.

This study is a bibliometric analysis. The term "bibliometric," which Pritchard first used in 1969 and which was later defined as "the application of mathematical and statistical approaches to books and other communication media," was first used. Bibliometric techniques include content analysis, keyword co-event analysis, co-quote analysis, and co-authoring analysis in addition to text analysis, and citation analysis.⁴ In this work, bibliometric analysis is performed using VOSviewer (Visualizations of Similarities Viewer), an important analytical tool. Keywords, connections, country or location of papers, publication volume, institution, author, and

journal are all factors considered by bibliometrics.⁵ Information metrics in general, or scientometric in more technical terms, are quite comparable to bibliometric analysis. Webometrics, which studies many elements of the web, is another famous illustration.⁶

In essence, the bibliometric analysis identifies a collection of literature, usually linked as a set of data published on a specific subject area. It is practical to use statistical methods when studying data sets. Initially, bibliometric analysis—also known as citation analysis—was primarily concerned with the scientific characteristics of the output, such as the number of publications produced and the number of citations the publication received. Citation analysis is a common bibliometric technique that evaluates the influence of publications by measuring scientific quality indicators for a particular researcher, rating agency such as a university, or even an entire country.⁶ However, as bibliometrics developed, they were increasingly used to provide data on the relationships between different authors, groups, fields of study, institutions, etc. These data are usually scattered among the published literature of studies or publications. It can be used to evaluate contributions made to the field of study by authors, institutions, and even countries.

Today, it has progressively developed into a research center in several sectors.^{7,8,9} This information helps researchers work closely with others and stay informed about emerging trends in their field. In terms of applications, many organizations, especially government organizations, are increasingly asking their personnel for productivity or performance reports. As a result, bibliometric research may be useful in all situations.¹⁰ In other words, the use of bibliometrics in academic research can be described as "a set of methods for providing quantitative analysis of written publications". H-index, co-authorship, number of publications, number of citations, the average number of citations per article, and the total number of publications are the most popular metrics used in the bibliometric analysis.¹¹ Despite the advantages, careful consideration should be taken when analyzing bibliometric data. The main argument against bibliometrics is that influence, as determined by the size of the citation, does not necessarily indicate quality. Publishing and citation trends in different sectors are also likely to vary widely. Therefore, the strict application is required for the direct evaluation



of publications and citation metrics across different domains.¹⁰

RESEARCH METHOD

On September 26, 2022, data was collected by utilizing Scopus as a journal offering article services. The largest scientific database with the best reputation and caliber is Scopus. In addition, Scopus offers a variety of peer-reviewed journal publications. Keywords related to stress and spirituality are used in the data search. The phrase "Spirituality and Stress" is used. The subjects we identified were included in the Scopus search engine for journals, and there were as many as 2464 publications on the topics of stress and spirituality. Then a screening is carried out based on articles published in the last 5 years, article-type documents, and sourced from journals. Finally, 829 articles were obtained. This research does not require ethical clearance because it does not use living things as objects of research.

RESULT

This section will be explained statistical data based on the Scopus journal on spirituality and stress. As already mentioned above, the article is searched in the Scopus database with keywords that are then filtered by year of publication, source type, and document type. This study uses the publication limit of the last 5 years. The selected sources are journals and document types of articles. After going through the screening process, the number of articles shows the number 829 articles. Articles are then analyzed based on the development of publications, authors, countries, institutions, journals, and regions (data visualization phase):

Publication Rate of Articles on Spirituality and Stress

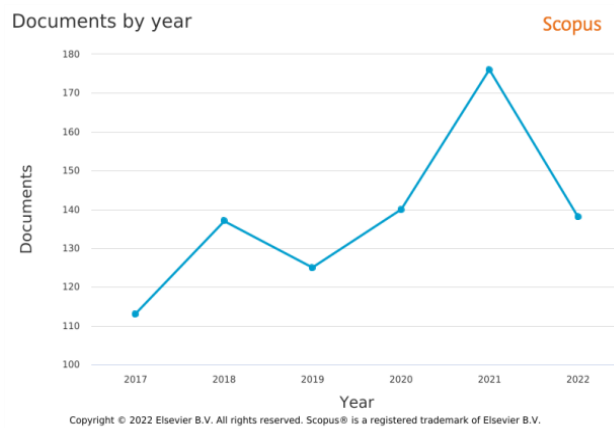


Figure 1. Publication Rate of Articles on Spirituality and Stress

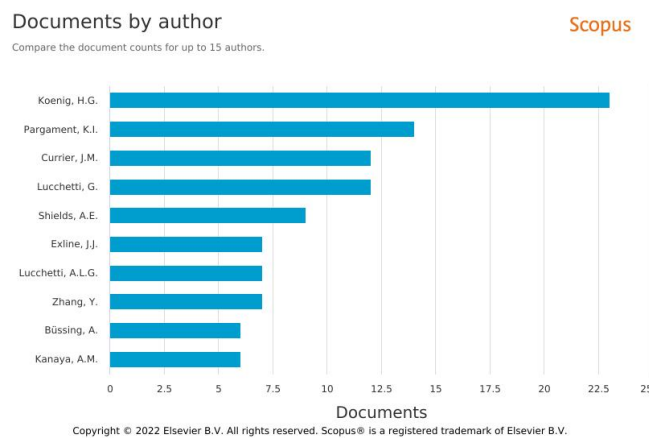


Figure 2. Authors with the Most Articles on Spirituality and Stress

Figure 1 shows the trend of publishing research on spirituality and stress based on articles published per year in the last 5 years. The results

showed that the publication of spirituality and stress articles has increased and decreased. This is indicated by the marking of dynamic graphs. In



2017 the number of articles published was 113 and increased by the following year by 137 articles. In 2019 there was a decrease in the number of articles published by 125. However, the next 2 years increased quite significantly, namely 140 and 176 articles. To date, in 2022 there are 138 articles have been published.

Author with the Most Articles on Spirituality and Stress

Figure 2 shows the 10 authors with the most publications on spirituality and stress. Koenig H.G. is the author with the most publications on the list with 23 articles. Pargament has written 14 articles. Followed by Currier and Lucchetti G. managed to write the same number of articles, which is 12 articles, above Shields with a difference of 3 articles. Exline, Luchetti A.L.G, Zhang, Bussing, and Kanaya are also part of the authors of articles on the topics of spirituality and stress. The interesting thing about these authors is that most of the authors of spirituality and stress articles are from the United States.

Journal with the Most Publications on Spirituality and Stress

Figure 3 shows the 10 journals with the most publications in the last 5 years on spirituality and stress. The 10 journals accounted for 156 articles out of 829 total number of article publications in the last 5 years. The leader of the journal based on the table is Duke University Medical Center with 21 articles and followed by King Abdulaziz University with 18 articles. Bowling Green State University published 17 articles and made a one-off with Duke University. VA Medical Center (Veterans Affairs) publishes the same number of articles as the University of California, San Francisco, which is 15

articles. This also applies to the Universidade Federal de Juiz de Fora with the University of South Alabama and Harvard Medical School with Columbia University which have the same number of publications, i.e. 14 and 13 articles, respectively.

Countries with The Highest Publications on Spirituality and Stress

Figure 4 shows the country with the highest level of publication on spirituality and stress in the last 5 years. The United States became the country with the highest level of publication, reaching 404 publications. The difference in numbers between the United States and Iran is significant, 351 articles apart. This led to the United States becoming the leader in the category of countries with the highest publications in the world. This fact is in line with Figure 3 of the highest number of article authors where 8 of the 10 most authors are from the United States. Then after Iran followed Brazil with 50 articles, India with 41 articles, England with 35 articles, and other countries that are also listed in this category.

Fields of study of Spirituality and Stress

Figure 5 shows the distribution of publications in the field of spirituality and stress derived from different disciplines. In the results of the analysis, it was found that medicine is a discipline that dominates publications with a total of 399 articles (30.2%). Then below it was followed by the field of Nursing, which was 223 articles (16.9%). Psychology does not conflict with Nursing, which is 221 articles (16.7%). Arts and Humanities, Social Sciences, and other fields also contribute to the publication of articles on spirituality and stress.

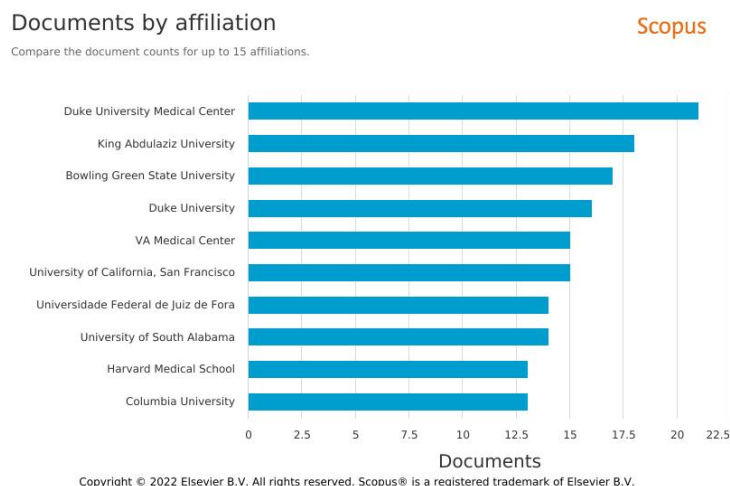


Figure 3. Journals with the most publications on spirituality and stress

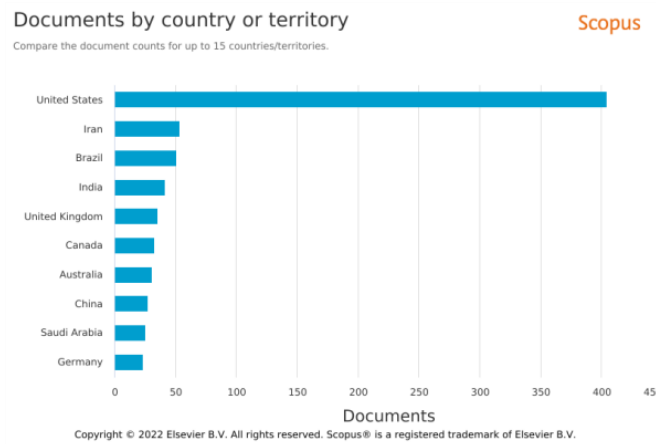


Figure 4. Countries with the Highest Publications on Spirituality and Stress

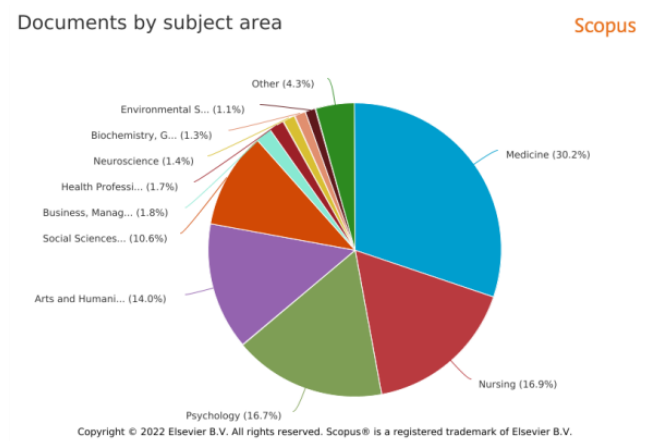


Figure 5. Areas of Study of Spirituality and Stress

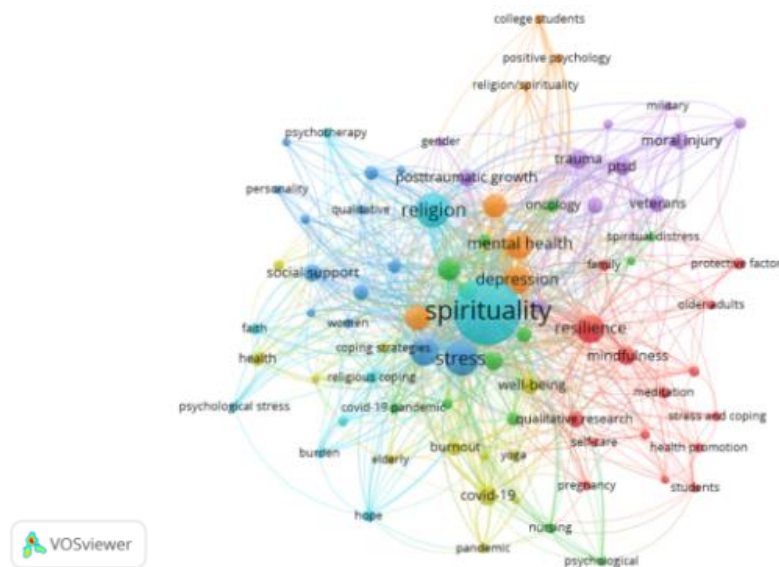


Figure 6. Spirituality and Stress Visualization of Networks Based on Scopus Using VOSviewer



DISCUSSION

In this study, peer-reviewed papers in the field of stress and spirituality research were all analyzed using bibliometric data from the Scopus database. The fluctuations in the publication charts each year show how the body of literature on spirituality and medical education has become more dynamic over the past five years. Research on stress and spirituality has grown over the past five years.

The results of this study show trends in the study of stress and spirituality, as well as trends in publishing (peer-reviewed journals), contributing authors, disciplines or fields of study, producing countries, and most important papers. Keyword analysis of words with a lower incidence gives the possibility of research topics as a contribution of this work.¹⁰

After bibliometric analysis of stress and spirituality, some of the advantages in libraries include: 1. Getting to know the main articles in many areas 2. Understand the goals and tendencies of science in various disciplines 3. Understand the subject, discipline or field of study 4. Recognize the author 5. Predicting the course of scientific progress 6. Control the flow of communication and information 7. Examining the relevance of fading and spreading scientific literature 8. Projecting output from organizations, governments, states or entire disciplines, whether they are publisher authors.¹¹

Speaking of spirituality and stress, the definition of spirituality is an aspect of humanity that refers to the way individuals seek and express meaning and purpose and the way they experience their connectedness with the present, with self, with others, with nature, and with the significant or sacred.¹² A person with strong spirituality will be less stressed and better able to handle life's challenges. In difficult times, a person will become more interested and return to religion, as well as grow more religious. Religion and spirituality are multifaceted concepts involving thoughts, emotions, and behaviors as well as the positive and negative aspects of one's relationship with the Creator. The way people frame crisis events in the context of their religious beliefs can help them to gain a deeper understanding of life's relationship with God and hope.¹³ Religious experiences and spiritual well-being today are associated with symptoms of anxiety and hopelessness.³ Spiritual practices are found to increase resilience and positive coping among individuals and can act as a protective factor to undermine the psychological effects of disasters aforementioned. The literature reports on the positive relationship between religiosity and psychological health, increased self-esteem, and decreased stress levels.¹⁴

When a person experiences stress, illness, loss, healing, or pain, spiritual strength can help them move toward healing. When under stress, one needs spiritual guidance that brings inner peace.³ Religious rituals and beliefs can help one cope in times of life stress, due to hope and comfort. In the face of stressful events, general beliefs in religion and their practice must be transformed into specific forms of coping. It is this specific form of coping that appears to have direct implications for an individual's health in difficult times.¹⁵

CONCLUSION

This research addresses gaps in the literature by conducting a bibliometric analysis of the literature on stress and spirituality published in the last five years. In addition, the project intends to modernize and improve bibliometric analysis. Have successfully demonstrated how to map and visualize bibliometric data using the VOSviewer application. This bibliometric research provides information that the research of spirituality and stress has developed quite well in terms of various aspects. The downside of this study is that it only uses peer-reviewed publications and datasets from the Scopus database as resources. Therefore, we suggest future studies to use various other internet resources to obtain more high-quality scientific contributions. To avoid making author judgments, the results of this bibliometric analysis should also be compared with the results of other approaches, such as Hitscite and BibExcel.

RECOMMENDATION

Based on these conclusions, it is written that the study is only sourced from the Scopus database. Therefore, the researchers suggest using another database. Then to avoid subjective authors, bibliometric analysis can use other applications. The researchers hope that bibliometric analysis of spirituality and stress will be more successful and useful for other studies.

ACKNOWLEDGEMENT

Researchers express gratitude to all those who have helped in the success of this research. May Allah reward you with a better reply.

BIBLIOGRAPHY

1. Aditama D. Hubungan Antara Spiritualitas dan Stres pada Mahasiswa yang Mengerjakan Skripsi. *J eL-Tarbawi*. 2017;10(2):39–62.
2. Kumar A, Rinwa P, Kaur G, MacHawal L. Stress: Neurobiology, consequences and



- management. *J Pharm Bioallied Sci.* 2013;5(2):91–7.
3. Adyatma MA, Murtaqib M, Setioputro B. Hubungan Spiritualitas dengan Stres pada Penderita Hipertensi di Poli Jantung RSUD dr. H. Koesnadi-Bondowoso. *Pustaka Kesehat.* 2019;7(2):88.
 4. Dias GP. Fifteen years of e-government research in Ibero-America: A bibliometric analysis. *Gov Inf Q [Internet]*. 2019;36(3):400–11. Available from: <https://doi.org/10.1016/j.giq.2019.05.008>
 5. van Eck NJ, Waltman L. Citation-based clustering of publications using CitNetExplorer and VOSviewer. *Scientometrics.* 2017;111(2):1053–70.
 6. Ellegaard O, Wallin JA. The bibliometric analysis of scholarly production: How great is the impact? *Scientometrics.* 2015;105(3):1809–31.
 7. Ahmad P, Slots J. A bibliometric analysis of periodontology. *Periodontol* 2000. 2021;85(1):237–40.
 8. Bashir MF, Ma B, Bilal, Komal B, Bashir MA. Analysis of environmental taxes publications: a bibliometric and systematic literature review. *Environ Sci Pollut Res.* 2021;28(16):20700–16.
 9. Celik E, Durmus A, Adizel O, Nergiz Uyar H. A bibliometric analysis: what do we know about metals(oids) accumulation in wild birds? *Environ Sci Pollut Res.* 2021;28(8):10302–34.
 10. Napitupulu D. A Bibliometric Analysis of E-Government Research DigitalCommons @ University of Nebraska - Lincoln A Bibliometric Analysis of E-Government Research Darmawan Napitupulu. 2021;(July):6–11.
 11. Royani Y, Idhani D. Analisis Bibliometrik Jurnal Marine Research in Indonesia. *Mar Res Indones.* 2018;25(4):63–8.
 12. Wenham J, Best M, Kissane DW. Systematic review of medical education on spirituality. *Intern Med J.* 2021;51(11):1781–90.
 13. Boas AV. Spirituality and health in pandemic times: Lessons from the ancient wisdom. *Religions.* 2020;11(11):1–19.
 14. Algahtani FD, Alsaif B, Ahmed AA, Almishaal AA, Obeidat ST, Mohamed RF, et al. Using Spiritual Connections to Cope With Stress and Anxiety During the COVID-19 Pandemic. *Front Psychol.* 2022;13(July):1–9.
 15. Purnama R. Rahmad Purnama, Penyelesaian Stress Melalui Coping Spiritual. *Al-AdYan.* 2017;12:70–83.