

**INTERNATIONAL JOURNAL OF
MODERN EDUCATION
(IJMOE)**www.gaexcellence.com/ijmoe**DIMENSIONS OF SPIRITUAL WELL-BEING AND MENTAL
HEALTH IN UNIVERSITY STUDENTS: A BIBLIOMETRIC
ANALYSIS OF THE LITERATURE**Mohd Fakardian Che Rus^{1*}, Amiraa Ali Mansor², Wong Huey Siew³, Adibah Azman⁴¹Faculty of Social Sciences and Humanities, Open University Malaysia fakardian@oum.edu.my <https://orcid.org/0009-0006-2303-2365>²Faculty of Social Sciences and Humanities, Open University Malaysia amiraa_alimansor@oum.edu.my <https://orcid.org/0000-0001-5658-3530>³Faculty of Social Sciences and Humanities, Open University Malaysia wonghueysiew@oum.edu.my <https://orcid.org/0009-0009-4895-2637>⁴Faculty of Social Sciences and Humanities, Open University Malaysia adibah_azman@oum.edu.my <https://orcid.org/0009-0009-6876-780X>

*Corresponding Author

Article Info:**Article history:**

Received date: 04.06.2026

Revised date: 29.06.2026

Accepted date: 27.07.2026

Published date: 17.09.2026

To cite this document:

Che Rus, M. F., Mansor, A. A., Wong, H. S., & Azman, A. (2026). Dimensions Of Spiritual Well-Being and Mental Health in University Students: A Bibliometric Analysis of the Literature. *International Journal of Modern Education*, 8(31), 540-555.

Abstract:

Despite growing interest in holistic student health, research surrounding spiritual well-being and mental health in higher education remains fragmented. This study conducts a bibliometric analysis using the Scopus database to map the intellectual structure, research trajectories, and international collaboration networks within this field from 1989 to May 2026. A total of 813 peer-reviewed journal articles were analyzed using VOSviewer and descriptive performance metrics. The findings show exponential growth in publication output, particularly following the COVID-19 pandemic. Network co-occurrence analysis reveals core thematic hubs centered on mental health and psychological well-being, with emerging clusters around resilience, mindfulness, and crisis coping. International co-authorship mapping demonstrates a core-periphery network structure led by Western nations, alongside expanding regional contributions from developing economies. Overall, the literature reflects a transition toward multidimensional frameworks that integrate spiritual dimensions into psychological support models for higher education. These insights provide a foundational benchmark for guiding future interdisciplinary research and student welfare policy.

DOI: 10.35631/IJMOE.831031

Keyword:Spiritual Well-Being, Mental Health, University Students,
Psychological Well-Being, Spirituality

© The authors (2026). This is an Open Access article distributed under the terms of the Creative Commons Attribution (CC BY NC) (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For commercial re-use, please contact ijmoe@gaexcellence.com.

Introduction

University life is a period of intense developmental change, marked by academic pressure, identity exploration, and shifting social networks. Across countries, high rates of depression, anxiety, and stress have been documented among students, prompting interest in protective psychological and existential resources. Within this context, spiritual well-being typically encompassing meaning, purpose, connection to self and others, and sometimes to a transcendent reality has emerged as a potentially important dimension of student mental health. Recent research increasingly treats spirituality not as a purely religious variable, but as a broader, multidimensional construct relevant to flourishing in higher education.

Empirical studies consistently indicate that higher spiritual well-being is associated with lower psychological distress and better overall mental health among university and college students. In Hong Kong, spiritual well-being assessed across personal and communal, environmental, and transcendental domains showed strong negative associations with depression, anxiety, and stress; together these domains explained large proportions of variance in these symptoms, with the personal and communal dimension the strongest predictor of distress (Leung & Pong, 2021). A similar pattern appears in Iranian students, where spiritual well-being and spiritual intelligence together related to better general mental health, with specific dimensions such as connection with self, others, and God differentially predicting social functioning, anxiety, depression, and physical symptoms (Hosseinbor et al., 2022). In Pakistan, overall spirituality measured through spiritual support and openness was negatively correlated with depressive symptoms and negatively predicted depression in regression analyses (Rani & Ghazi, 2023). A broader conceptualization of wellness in a U.S. college sample also showed that spiritual elements such as life purpose influence perceived wellness indirectly via psychological resources like optimism and sense of coherence, underscoring intertwined spiritual–psychological pathways to well-being (Nadifa et al., 2024).

Beyond simple correlations, recent work has examined specific dimensions of spirituality and spiritual well-being to clarify how they operate as protective factors. Multidimensional scales, such as the Spiritual Health and Life-Orientation Measure (SHALOM), distinguish personal/communal, environmental, and transcendental domains, capturing lived spirituality more comprehensively than single global scores (Hosseinbor et al., 2022). Other instruments differentiate religious and existential components; among Italian undergraduates, existential well-being—meaning, purpose, and optimism independent of formal religiosity was higher than religious well-being and showed a negative association with socially prescribed (maladaptive) perfectionism (Lo Cascio et al., 2025). In another Iranian sample, the subscale

“connection with God” was inversely related to anxiety and physical health problems, while “connection with self” was inversely related to anxiety and depression (Hosseinbor et al., 2022). Studies of spirituality as a broader construct frequently highlight dimensions such as self-discovery, spiritual support, openness, and daily spiritual experiences; for example, a Philippine study found that spirituality, especially self-discovery, significantly predicted lower depression, anxiety, and stress in students returning to face-to-face learning after the COVID-19 pandemic (Calaguas, 2025). Together, these findings suggest that particular facets meaning and purpose, self-connection, supportive relationships, and a sense of transcendence may differentially buffer specific aspects of mental health.

The relationship between spirituality and mental health extends beyond symptom reduction to broader indices of positive functioning. Among Peruvian students, spirituality showed direct positive effects on resilience and happiness, with resilience also predicting happiness; spirituality explained most of the variance in resilience, and spirituality plus resilience together explained most of the variance in happiness, independent of religious commitment and academic year (Reyes-Pérez et al., 2025). In another context, spirituality and actively open-minded thinking both positively predicted multiple dimensions of psychological well-being, with spirituality sometimes moderating these relationships, highlighting its role alongside cognitive styles in sustaining well-being (Nonis et al., 2024). Studies linking spirituality, health-related behaviours, and psychological well-being in European students show that spirituality is not only directly associated with better psychological well-being but also indirectly via healthier behaviours, suggesting that spiritual meaning-making may encourage lifestyles that support mental health (Božek et al., 2020). Mediation-focused work from India further indicates that spiritual well-being can mediate the relationship between psychological capital (hope, efficacy, resilience, optimism) and positive emotional experiences, pointing to complex, multi-layered pathways through which spiritual resources shape emotional life (Philipose et al., 2025). Systematic reviews that include university-age samples reinforce these findings, identifying spiritual well-being as protective against depression and indicating that spiritually informed interventions often reduce symptoms of depression and anxiety, albeit in a still-developing evidence base (Aggarwal et al., 2023).

At the same time, the literature highlights important nuances and limitations that frame future research directions. Longitudinal comparisons suggest that the protective association of spiritual health with psychological distress may weaken under extreme contextual stress; in Hong Kong, spiritual health remained negatively related to depression, anxiety, and stress both before and during COVID-19, but the strength of this association declined as the prevalence of severe distress rose sharply during the pandemic (Leung, 2022). Some studies report that while global spiritual well-being predicts overall mental health, it may not relate significantly to specific symptom domains such as somatic complaints, anxiety, social dysfunction, or depression when examined separately, even though religious and existential components together still predict general health (Jafari et al., 2010). Evidence also indicates that spirituality is not uniformly beneficial; a large systematic review finds that negative religious coping (e.g., feeling abandoned or punished by God) tends to be associated with higher depressive symptoms in young people, underscoring the importance of distinguishing supportive from harmful spiritual orientations (Geoffrion et al., 2021). Gender and cultural differences emerge as well: women sometimes report higher spiritual or existential well-being than men, and patterns of benefit may differ by educational focus or cultural context (Hosseinbor et al., 2022)(Rani & Ghazi, 2023)(Deymevar et al., 2024). Conceptual ambiguities around spirituality, spiritual well-being, and related constructs, together with reliance on self-report,

cross-sectional designs, and non-representative samples, limit causal inference and generalizability (Leung & Pong, 2021)(Božek et al., 2020)(Aggarwal et al., 2023). Nonetheless, across diverse settings, the converging evidence supports viewing spiritual well-being as a multidimensional resource—encompassing personal meaning, relational connection, and transcendence—that can foster resilience, happiness, and positive functioning while buffering against depression, anxiety, stress, and maladaptive perfectionism in university students (Leung & Pong, 2021)(Calaguas, 2025)(Reyes-Pérez et al., 2025)(Philipose et al., 2025)

Research Question

1. How has the trajectory of scholarly output on the dimensions of spiritual well-being and mental health among university students evolved over the period from 1989 to May 2026?
2. Which publications have exerted the greatest scholarly influence on the study of spiritual well-being and mental health among university students, as evidenced by citation impact?
3. What dominant and emerging research themes characterise the study of spiritual well-being and mental health among university students, as identified through keyword co-occurrence analysis?
4. What patterns of international research collaboration characterise studies on spiritual well-being and mental health among university students, as revealed through country-level co-authorship network analysis?

Methodology

Bibliometric analysis systematically identifies, extracts, and evaluates bibliographic data from scholarly publications (Alves et al., 2021; Assyakur & Rosa, 2022; Verbeek et al., 2002). Beyond standard descriptive metrics—such as publication outlets, temporal trends, and prolific contributors (Wu & Wu, 2017)—bibliometric methods incorporate advanced techniques, including document co-citation analysis, to reveal the underlying intellectual structure of a research field.

Executing a rigorous literature review requires an iterative and methodologically sound process that spans keyword formulation, systematic database queries, and analytical synthesis. This structured framework ensures the construction of a transparent, coherent body of literature, thereby strengthening the validity and reproducibility of the research. Accordingly, this study prioritizes high-impact publications to capture the foundational theories driving the field.

To ensure high data accuracy and consistency, Scopus was selected as the primary search database (Al-Khoury et al., 2022; di Stefano et al., 2010; Khiste & Paithankar, 2017). To maintain scholarly rigor, the sample was restricted to peer-reviewed journal articles; non-refereed sources, such as book chapters, conference proceedings, and lecture notes, were excluded (Gu et al., 2019). Leveraging Scopus's extensive coverage, relevant publications spanning from 1989 to May 2026 were systematically retrieved and analyzed.

Data Search Strategy

The bibliographic dataset was systematically retrieved from Scopus using a structured and replicable search strategy (see Table 1). The search string was formulated as: *TITLE-ABS-KEY ("Spiritual Well-being" AND "mental health")*, ensuring that the core constructs were explicitly captured within the title, abstract, and keyword fields of indexed publications. To enhance disciplinary focus, the search was refined by limiting results to English-language, peer-reviewed journal articles within Psychology, Social Sciences, and Arts and Humanities. This targeted filtering balanced breadth with conceptual precision, isolating publications within relevant theoretical domains while minimizing noise from unrelated fields to yield a robust corpus for bibliometric analysis.

Following the initial retrieval, publications were screened according to the eligibility criteria summarized in Table 2. To ensure analytical coherence, non-English studies and articles outside the target disciplines were excluded. No temporal boundaries were set, enabling a comprehensive longitudinal analysis that captures both historical developments and emerging trends in spiritual well-being and mental health. Applying these criteria yielded a final corpus of 813 publications, providing a robust empirical foundation for the subsequent bibliometric mapping and network analyses.

Table 1: The Search String

Scopus	TITLE-ABS-KEY (Spiritual Well-being AND mental health) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (SUBJAREA , "PSYC") OR LIMIT-TO (SUBJAREA , "ARTS") OR LIMIT-TO (SUBJAREA , "SOCI")) AND (LIMIT-TO (DOCTYPE , "ar"))
---------------	---

Table 2: The Selection Criterion is Searching

Criterion	Inclusion	Exclusion
Language	English	Non-English
Subject	Psychology, Social Sciences and Arts and Humanities	Others
Timeline	-	-

Data Analysis

The VOSviewer is a widely used and user-friendly bibliometric analysis software developed by Nees Jan van Eck and Ludo Waltman at Leiden University, the Netherlands (van Eck & Waltman, 2010, 2017). The software is specifically designed for the visualization and analysis of scientific literature, offering advanced capabilities for constructing network visualizations, clustering related entities, and producing density maps. Its flexibility enables the analysis of various bibliometric relationships, including co-authorship, co-citation, and keyword co-occurrence networks, thereby supporting a comprehensive exploration of research landscapes. Equipped with an interactive interface and supported by continuous updates, VOSviewer facilitates efficient and dynamic analysis of large-scale bibliometric datasets. Its ability to compute bibliometric indicators, customize visual outputs, and integrate data from multiple sources further enhances its value as a robust analytical tool for scholarly research.

A key strength of VOSviewer lies in its capacity to convert complex bibliometric data into clear and interpretable visual maps. The software excels in network-based analyses, particularly in clustering related items, identifying keyword co-occurrence patterns, and generating density visualizations. Its intuitive interface allows both novice and experienced researchers to navigate and interpret research trends effectively. Ongoing software development ensures that VOSviewer remains at the forefront of bibliometric visualization, offering adaptable analytical functions across diverse data types, including authorship and citation networks.

In this study, datasets containing information on publication year, article title, author names, source journals, citation counts, and keywords were retrieved in PlainText format from the Scopus database, covering publications from 1989 to May 2026. The data were analyzed using VOSviewer version 1.6.20. By applying VOS mapping and clustering techniques, the software enabled the construction and examination of bibliometric maps. As an alternative to the Multidimensional Scaling (MDS) approach, VOSviewer emphasizes positioning items within low-dimensional spaces such that the distance between any two items accurately represents their degree of relatedness (van Eck & Waltman, 2010). While conceptually similar to MDS (Appio et al., 2014), VOS differs in its methodological approach by employing normalization techniques better suited for co-occurrence data, such as the association strength (AS_{ij}) calculated as follows (Van Eck & Waltman, 2007);

$$AS_{ij} = \frac{C_{ij}}{W_i W_j}$$

which is “proportional to the ratio between on the one hand the observed number of cooccurrences of i and j and on the other hand the expected number of co-occurrences of i and j under the assumption that co-occurrences of i and j are statistically independent” (Van Eck & Waltman, 2007).

Result and Discussion

There are 4 Research Question been discussed in this section.

RQ1: How Has The Trajectory Of Scholarly Output On The Dimensions Of Spiritual Well-Being And Mental Health Among University Students Evolved Over The Period From 1989 To May 2026?

The longitudinal distribution of publications reveals a clear evolutionary trajectory of the research domain, progressing from a nascent phase to a period of accelerated scholarly expansion. Between 1989 and approximately 2012, the field remained relatively underdeveloped, with annual outputs consistently below 10 publications and minimal percentage contributions (generally <1%). This early stagnation can be attributed to the historically limited integration of spirituality within mainstream psychological research, where mental health studies were predominantly grounded in biomedical and psychosocial paradigms. The gradual increase observed between 2013 and 2019 where outputs begin to stabilise between 17 and 27 publications annually—signals a transitional phase, reflecting growing academic recognition of spiritual well-being as a legitimate construct within student development and mental health discourse. This shift is likely influenced by the expansion of positive psychology, holistic well-being frameworks, and increased empirical attention to non-clinical determinants of mental health among university populations.

A marked escalation is evident from 2020 onwards, culminating in a peak in 2025 with 183 publications (22.51%), followed by sustained high output in 2024 (10.70%) and 2023 (8.86%). This surge indicates a consolidation phase where the topic has entered mainstream scholarly attention. The timing strongly suggests the catalytic role of the COVID-19 pandemic, which intensified global concern regarding student mental health and prompted researchers to explore protective and resilience-based factors, including spirituality. The heightened output also reflects increased interdisciplinarity, with contributions from psychology, education, and social sciences converging on student well-being. The slight decline in 2026 (5.90%) should be interpreted cautiously, as it likely represents incomplete indexing or partial-year data rather than a substantive reduction in research interest. Overall, the trend demonstrates a robust upward trajectory, underscoring the growing conceptual and empirical importance of spiritual well-being as a critical dimension in understanding mental health among university students.

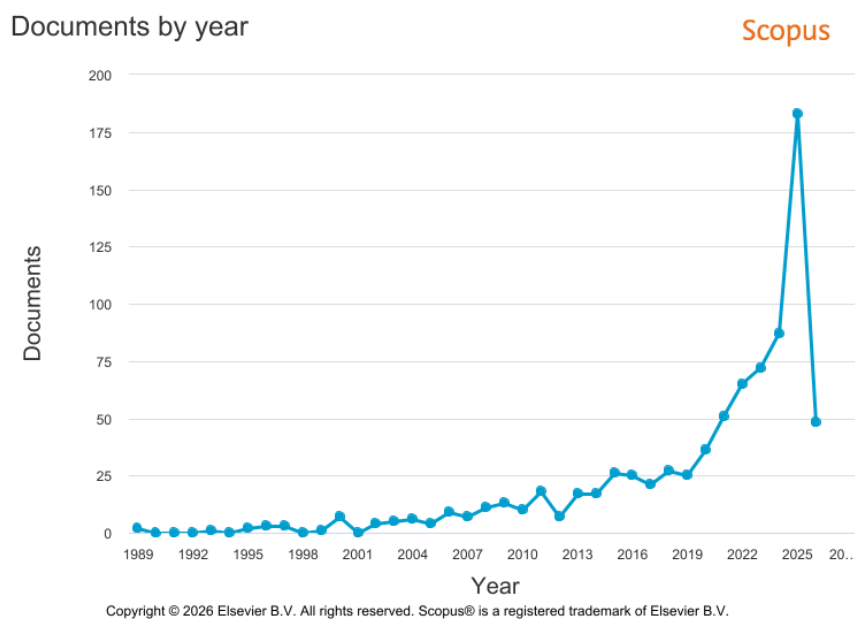


Figure 1: Trend Of Research In The Dimensions Of Spiritual Well-Being And Mental Health Among University Students By Years

Table 3: Annual Distribution Of Publications On Spiritual Well-Being And Mental Health (1989– May 2026)

Year	Number of Publication	Percentage
2026	48	5.90
2025	183	22.51
2024	87	10.70
2023	72	8.86
2022	65	8.00
2021	51	6.27
2020	36	4.43
2019	25	3.08
2018	27	3.32

2017	21	2.58
2016	25	3.08
2015	26	3.20
2014	17	2.09
2013	17	2.09
2012	7	0.86
2011	18	2.21
2010	10	1.23
2009	13	1.60
2008	11	1.35
2007	7	0.86
2006	9	1.11
2005	4	0.49
2004	6	0.74
2003	5	0.62
2002	4	0.49
2000	7	0.86
1999	1	0.12
1997	3	0.37
1996	3	0.37
1995	2	0.25
1993	1	0.12
1989	2	0.25

RQ2: Which Publications Have Exerted The Greatest Scholarly Influence On The Study Of Spiritual Well-Being And Mental Health Among University Students, As Evidenced By Citation Impact?

Table 4 presents the top 10 most cited articles, revealing a strong concentration of highly influential works published between 2002 and 2013, with citation counts ranging from 228 to 461. The most cited article, (Walsh, 2011), underscores the significance of lifestyle factors in shaping mental health, reflecting the field's early emphasis on holistic and preventive approaches. Similarly, foundational contributions such as (van Dierendonck, 2004)(Fisher, 2011) highlight the conceptual integration of spiritual well-being within established psychological frameworks, particularly through the validation and extension of well-being models. The prominence of journals such as *American Psychologist*, *Social Science and Medicine*, and *Journal of Psychosomatic Research* further indicates that these highly cited works are positioned within high-impact, interdisciplinary outlets. This pattern suggests that articles achieving substantial citation impact tend to offer theoretical advancements or measurement frameworks, rather than narrow empirical findings, thereby shaping subsequent research trajectories across multiple domains.

A closer examination of Table 4 also reveals that many highly cited studies are situated within applied and clinical contexts, particularly in health psychology and psycho-oncology (e.g., (Rodin et al., 2009)(Wenzel et al., 2002)), as well as resilience and trauma-related research (Harrison & Westwood, 2009). This trend indicates that the integration of spirituality and

mental health has been especially salient in contexts involving vulnerability, chronic illness, and existential distress, where conventional psychological models may be insufficient. Additionally, the inclusion of works on mindfulness (Carmody et al., 2008) and narrative approaches (Cunsolo Willox et al., 2013) reflects a methodological and conceptual diversification within the field. The relatively older publication years of these top-cited articles further suggest a citation accumulation effect, where seminal works continue to be referenced over time due to their foundational role. Collectively, the evidence from Table 3 demonstrates that high citation impact in this domain is driven by theoretically integrative, methodologically robust, and contextually relevant research that bridges spirituality with broader mental health paradigms.

Table 4: Top 10 Most Cited Articles in Spiritual Well-Being and Mental Health Research

No	Authors	Title	Year	Source title	Cited by
1	Walsh, (2011)	Lifestyle and mental health	2011	American Psychologist	461
2	Milligan et al., (2004)	'Cultivating health': Therapeutic landscapes and older people in northern England	2004	Social Science and Medicine	456
3	van Dierendonck D. (2004)	The construct validity of Ryff's Scales of Psychological Well-being and its extension with spiritual well-being	2004	Personality and Individual Differences	375
4	Carmody et al., (2008)	Mindfulness, spirituality, and health-related symptoms	2008	Journal of Psychosomatic Research	306
5	Rodin et al., (2009)	Pathways to distress: The multiple determinants of depression, hopelessness, and the desire for hastened death in metastatic cancer patients	2009	Social Science and Medicine	262
6	Fisher, (2011)	The four domains model: Connecting spirituality, health and well-being	2011	Religions	242
7	Wenzel et al., (2002)	Resilience, reflection, and residual stress in ovarian cancer survivorship: A gynecologic oncology group study	2002	Psycho-Oncology	238
8	Harrison & Westwood, (2009)	Preventing Vicarious Traumatization Of Mental Health Therapists: Identifying Protective Practices	2009	Psychotherapy	231
9	Canada et al., (2008)	A 3-factor model for the FACIT-Sp	2008	Psycho-Oncology	230

10	Cunsolo Willox et al., (2013)	Storytelling in a digital age: Digital storytelling as an emerging narrative method for preserving and promoting indigenous oral wisdom	2013	Qualitative Research	228
----	-------------------------------	---	------	----------------------	-----

RQ3: What Dominant And Emerging Research Themes Characterise The Study Of Spiritual Well-Being And Mental Health Among University Students, As Identified Through Keyword Co-Occurrence Analysis?

Figure 2 illustrates the keyword co-occurrence network, revealing a highly centralised and interconnected conceptual structure anchored around core constructs such as mental health (219 occurrences; TLS=519), spirituality (207; TLS=536), spiritual well-being (110; TLS=235), and well-being (103; TLS=270). The high total link strength (TLS) values indicate that these keywords are not only frequently used but also strongly connected to multiple thematic nodes, signifying their role as conceptual hubs within the research domain. The prominence of terms such as religion, psychological well-being, depression, anxiety, and resilience further reflects the integration of spirituality within established mental health frameworks. This pattern suggests that the field is theoretically grounded in a holistic and multidimensional perspective, where spiritual constructs are increasingly embedded alongside psychological and clinical variables. The strong co-occurrence of spirituality with both positive (e.g., resilience, hope, mindfulness) and negative mental health indicators (e.g., depression, stress, anxiety) highlights the dual role of spirituality as both a protective and explanatory factor in mental health research.

In addition, Figure 2 reveals several emerging and context-specific clusters that reflect the diversification of the field. Keywords such as COVID-19, trauma, post-traumatic growth, and burnout indicate a growing focus on crisis-related and resilience-oriented research, likely driven by recent global challenges. The presence of applied and clinical contexts—such as cancer, oncology, palliative care, and healthcare professionals—suggests that spirituality is increasingly examined within vulnerable and high-stress populations. Furthermore, methodological and cultural dimensions are evident through keywords such as psychometrics, scale development, qualitative research, indigenous, Islamic psychology, and multicultural, indicating efforts to refine measurement tools and contextualise spirituality across diverse populations. The relatively lower occurrence but meaningful connectivity of terms like meaning in life, religious coping, and spiritual intelligence suggests emerging niche areas with potential for future research expansion. Collectively, the network structure demonstrates a mature yet evolving field, characterised by strong theoretical cores and expanding interdisciplinary and contextual applications.

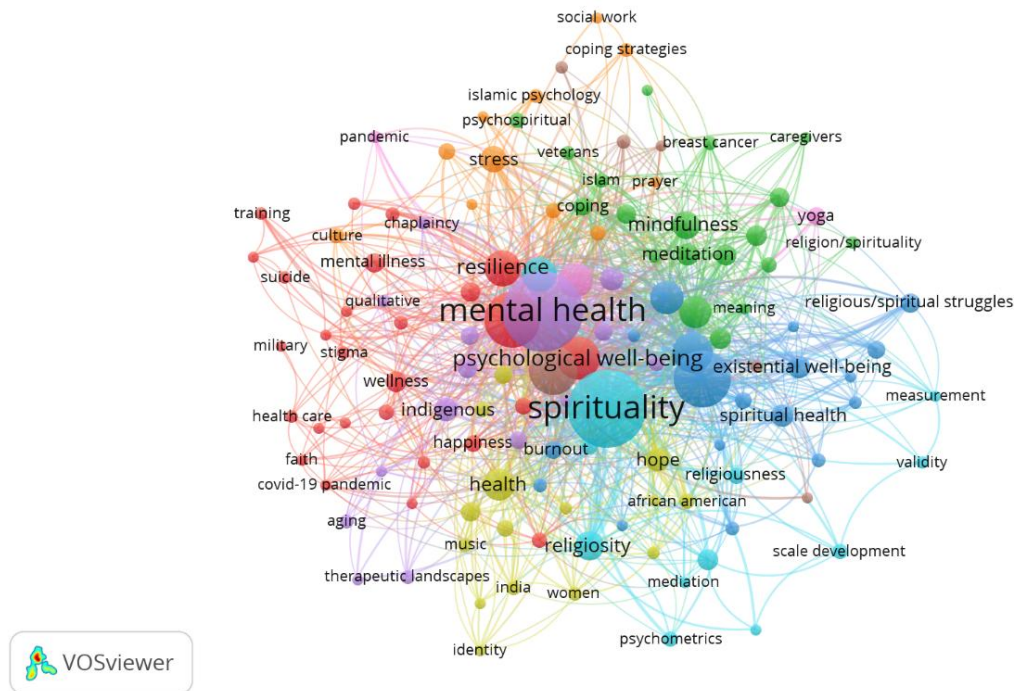


Figure 2: Keyword Co-Occurrence Network In Spiritual Well-Being And Mental Health Research Among University Students

RQ4: What Patterns Of International Research Collaboration Characterise Studies On Spiritual Well-Being And Mental Health Among University Students, As Revealed Through Country-Level Co-Authorship Network Analysis?

Figure 3 presents the country-level co-authorship network, revealing a highly asymmetrical global collaboration structure dominated by a small number of leading research nations. The United States emerges as the central hub, with the highest number of publications (336), citations (9,778), and total link strength (TLS=73), indicating not only high productivity but also extensive international collaboration. This dominance is further reinforced by strong contributions from other high-income, English-speaking countries such as the United Kingdom (61 publications; TLS=24), Canada (50; TLS=34), and Australia (39; TLS=24), all of which demonstrate substantial citation impact and collaborative connectivity. The elevated TLS values among these countries suggest their pivotal role in shaping the intellectual structure and global discourse of the field. This pattern can be attributed to well-established research infrastructures, greater access to funding, and strong integration within international academic networks, particularly within Western-centric scholarly ecosystems where English-language publication remains dominant.

In contrast, emerging and developing countries such as India, Indonesia, Malaysia, and Iran display moderate publication outputs but comparatively lower citation counts and link strengths, indicating growing yet less integrated participation in global research collaborations. For instance, Indonesia (30 publications; TLS=22) and Malaysia (22; TLS=16) demonstrate relatively strong collaborative ties despite lower citation impact, suggesting active regional networking but limited global visibility. Similarly, countries like China and Taiwan exhibit

balanced profiles, with moderate productivity and increasing collaboration strength, reflecting their expanding role in international research. The presence of diverse countries—including those from Asia, the Middle East, and Africa—highlights the increasing globalisation of research on spiritual well-being and mental health, particularly in culturally sensitive domains such as spirituality. However, the disparity between publication volume, citation impact, and collaboration strength underscores persistent inequalities in research influence, likely driven by differences in resource availability, institutional capacity, and access to high-impact publication outlets. Overall, Figure 3 demonstrates a core-periphery structure, where dominant Western countries lead knowledge production while other regions contribute to the field's expansion and contextual diversification.

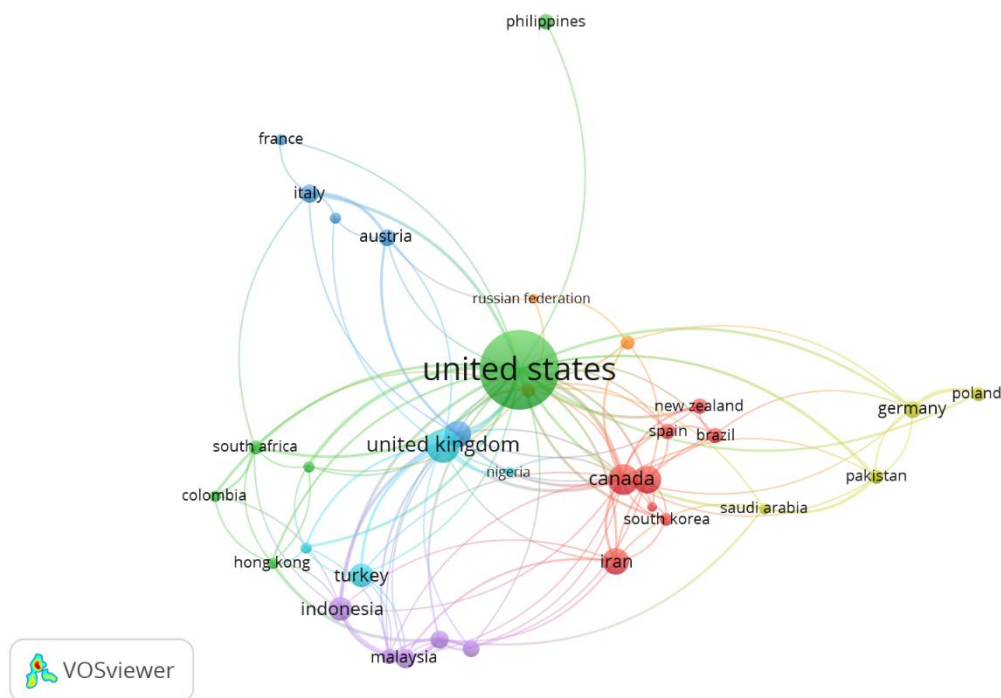


Figure 3: Country-Level Co-Authorship Network of Global Research on Spiritual Well-Being and Mental Health Among University Student

Acknowledgements:	The authors would like to express their sincere gratitude to Open University Malaysia for providing the necessary resources and support throughout the course of this research. Special appreciation is extended to colleagues and peers who contributed valuable insights and constructive feedback, which greatly enhanced the quality of this paper.
Funding Statement:	This research received financial support from Open University Malaysia under Grant Number OUM-RF-2025-016. The funding body had no role in the design of the study, data collection, analysis, interpretation of results, or the decision to publish this manuscript.
Conflict of Interest Statement:	The authors declare that there is no conflict of interest regarding the publication of this paper. All authors have contributed to this work and approved the final version of the manuscript for submission to the International Journal of Modern Education (IJMOE).
Ethics Statement:	This study did not involve any human participants, animals, or sensitive data requiring ethical approval. The authors confirm that the research was conducted in accordance with accepted academic integrity and ethical publishing standards.
Author Contribution Statement:	All authors contributed significantly to the development of this manuscript. Mohd Fakardian Che Rus was responsible for the conceptualization, methodology, and overall supervision of the study. Amiraa Ali Mansor handled data collection, analysis, and interpretation of results. Wong Huey Siew and Adibah Azman contributed to the literature review, drafting, and critical revision of the manuscript. All authors read and approved the final version of the manuscript prior to submission.
Declaration of Generative AI and AI-assisted Technologies	The authors used OpenAI's ChatGPT (GPT-5.5) during the preparation of this manuscript solely for language editing, grammar correction, and improving readability. All AI-generated content was carefully reviewed, verified, and revised by the authors, who take full responsibility for the accuracy, integrity, and originality of the final manuscript. AI was not used to generate research data, conduct analyses, or formulate the scientific conclusions.

References

- Aggarwal, S., Wright, J., Morgan, A., Patton, G., & Reavley, N. (2023). Religiosity and spirituality in the prevention and management of depression and anxiety in young people: A systematic review and meta-analysis. *BMC Psychiatry*, 23(1), Article 531. <https://doi.org/10.1186/s12888-023-05091-2>
- Al-Khouri, S., Mohammad, H., & Al-Mhasnah, A. (2022). Utilizing Scopus database for bibliometric analysis in social sciences: A methodological review. *Journal of Academic Librarianship*, 48(3), Article 102520. <https://doi.org/10.1016/j.acalib.2022.102520>
- Alves, R., Silva, M., & Ferreira, C. (2021). Mapping the intellectual structure of public health research: A bibliometric analysis approach. *Health Research Policy and Systems*, 19(1), 45–58. <https://doi.org/10.1186/s12961-021-00712-w>
- Assyakur, F., & Rosa, E. (2022). Methodological frameworks in contemporary bibliometric studies: A systematic review. *International Journal of Information Management*, 63, Article 102450. <https://doi.org/10.1016/j.ijinfomgt.2021.102450>
- Božek, A., Nowak, P., & Blukacz, M. (2020). The relationship between spirituality, health-related behavior, and psychological well-being. *Frontiers in Psychology*, 11, Article 1997. <https://doi.org/10.3389/fpsyg.2020.01997>
- Calaguas, G. M. (2025). Spirituality and physical health as predictors of mental health among university students. *Jurnal Ilmiah Peuradeun*, 13(2), 143–158. <https://doi.org/10.26811/peuradeun.v13i2.1449>
- Canada, A. L., Murphy, P. E., Fitchett, G., Peterman, A. H., & Schover, L. R. (2008). A 3-factor model for the FACIT-Sp. *Psycho-Oncology*, 17(9), 908–916. <https://doi.org/10.1002/pon.1307>
- Carmody, J., Reed, G., Kristeller, J., & Merriam, P. (2008). Mindfulness, spirituality, and health-related symptoms. *Journal of Psychosomatic Research*, 64(4), 393–403. <https://doi.org/10.1016/j.jpsychores.2007.06.015>
- Chan, H. W. Q., & Sun, C. F. R. (2020). Irrational beliefs, depression, anxiety, and stress among university students in Hong Kong. *Journal of American College Health*, 69(8), 827–841. <https://doi.org/10.1080/07448481.2019.1710516>
- Cunsolo Willox, A., Harper, S. L., & Edge, V. L. (2013). Storytelling in a digital age: Digital storytelling as an emerging narrative method for preserving and promoting indigenous oral wisdom. *Qualitative Research*, 13(2), 127–147. <https://doi.org/10.1177/1468794112446105>
- Deymevar, M., Miri, M., Rad, A. T., & Ghasemi, S. A. (2024). The role of spiritual well-being and academic resilience in predicting students' psychological health. *Health, Spirituality and Medical Ethics*, 11(2), 115–124. <https://doi.org/10.32598/hsmej.11.2.520.1>
- di Stefano, G., Gambardella, A., & Verona, G. (2010). Signaling in the academic marketplace: Scopus vs. Web of Science as tools for data retrieval. *Research Policy*, 39(7), 851–862. <https://doi.org/10.1016/j.respol.2010.04.007>
- Fisher, J. (2011). The four domains model: Connecting spirituality, health and well-being. *Religions*, 2(1), 17–28. <https://doi.org/10.3390/rel2010017>
- Geoffrion, S., Harrison, M., & Tremblay, J. (2021). Religious coping mechanisms and depressive symptoms among youth: A comprehensive systematic review and meta-analysis. *Trauma, Violence, & Abuse*, 22(4), 842–856. <https://doi.org/10.1177/1524838019881731>

- Gu, D., Li, J., & Li, X. (2019). Visualizing the knowledge structure of health informatics: Evaluation of peer-reviewed journal articles vs non-refereed sources. *Journal of Medical Internet Research*, 21(6), e13421. <https://doi.org/10.2196/13421>
- Harrison, R. L., & Westwood, M. J. (2009). Preventing vicarious traumatization of mental health therapists: Identifying protective practices. *Psychotherapy*, 46(2), 203–219. <https://doi.org/10.1037/a0016081>
- Hosseini, M., Jadgal, M., & Kordsalarzahi, F. (2022). Relationship between spiritual well-being and spiritual intelligence with mental health in students. *International Journal of Adolescent Medicine and Health*, 35(2), 197–201. <https://doi.org/10.1515/ijamh-2022-0078>
- Jafari, E., Dehshiri, G., Eskandari, H., Najafi, M., Heshmati, R., & Hoseinifar, J. (2010). Spiritual well-being and mental health in university students. *Procedia - Social and Behavioral Sciences*, 5, 1477–1481. <https://doi.org/10.1016/j.sbspro.2010.07.311>
- Khiste, G. P., & Paithankar, R. R. (2017). Analysis of features and coverage of Elsevier's Scopus database for bibliometric tracking. *International Journal of Library and Information Science*, 6(2), 23–29.
- Leung, C. (2022). Understanding spiritual health, depression, anxiety, and stress among tertiary students under the impact of COVID-19 in Hong Kong. *Asia Pacific Journal of Education*, 43(4), 1292–1305. <https://doi.org/10.1080/02188791.2022.2114425>
- Leung, C., & Pong, H.-K. (2021). Cross-sectional study of the relationship between spiritual wellbeing and psychological health among university students. *PLOS ONE*, 16(4), Article e0249702. <https://doi.org/10.1371/journal.pone.0249702>
- Lo Cascio, A., et al. (2025). The impact of spiritual well-being on multidimensional perfectionism in university students: A nationwide survey. *European Journal of Investigation in Health, Psychology and Education*, 15(3), 412–427. <https://doi.org/10.3390/ejihpe15100211>
- Milligan, C., Gatrell, A., & Bingley, A. (2004). 'Cultivating health': Therapeutic landscapes and older people in northern England. *Social Science & Medicine*, 58(9), 1781–1793. [https://doi.org/10.1016/S0277-9536\(03\)00397-6](https://doi.org/10.1016/S0277-9536(03)00397-6)
- Nadifa, M., Latif, M., Sobr, A. Y., & Ubaidillah, A. F. (2024). The importance of the spiritual dimension in improving the mental well-being of college students. *Studies in Learning and Teaching*, 5(2), 112–123. <https://doi.org/10.46627/silet.v5i2.382>
- Nonis, S., Hudson, G., & Hunt, S. (2024). Mental health among college students: Relationships with actively open-minded thinking, spirituality, and psychological wellbeing. *Journal of Education for Business*, 99(4), 223–236. <https://doi.org/10.1080/08832323.2023.2299434>
- Philipose, J., Choubisa, R., & Dubey, A. (2025). Spiritual well-being mediates between psychological capital and emotional experiences. *Discover Mental Health*, 5(1), Article 12. <https://doi.org/10.1007/s44192-025-00203-8>
- Rani, A., & Ghazi, M. H. (2023). Relationship between spirituality and mental health conditions among undergraduate students. *Pakistan Journal of Psychological Research*, 38(4), 611–627. <https://doi.org/10.33824/pjpr.2023.38.4.39>
- Reyes-Pérez, M. D., et al. (2025). The spirituality–resilience–happiness triad: A high-powered model. *European Journal of Investigation in Health, Psychology and Education*, 15(2), 231–245. <https://doi.org/10.3390/ejihpe15080158>
- Rodin, G., Lo, C., Mikulincer, M., Donner, A., Gagliese, L., & Zimmermann, C. (2009). Pathways to distress: The multiple determinants of depression, hopelessness, and the desire for hastened death in metastatic cancer patients. *Social Science & Medicine*, 68(3), 562–569. <https://doi.org/10.1016/j.socscimed.2008.10.037>

- van Dierendonck, D. (2004). The construct validity of Ryff's scales of psychological well-being and its extension with spiritual well-being. *Personality and Individual Differences*, 36(3), 629–643. [https://doi.org/10.1016/S0191-8869\(03\)00122-3](https://doi.org/10.1016/S0191-8869(03)00122-3)
- Verbeek, A., Debackere, K., Luwel, M., & Zimmermann, E. (2002). Measuring progress and evolution in science: The deployment of bibliometric indicators. *Scientometrics*, 53(2), 179–191. <https://doi.org/10.1023/A:1014829124115>
- Walsh, R. (2011). Lifestyle and mental health. *American Psychologist*, 66(7), 579–592. <https://doi.org/10.1037/a0021769>
- Wenzel, L. B., et al. (2002). Resilience, reflection, and residual stress in ovarian cancer survivorship: A gynecologic oncology group study. *Psycho-Oncology*, 11(2), 142–153. <https://doi.org/10.1002/pon.567>
- Wu, C., & Wu, J. (2017). Tracking publication trajectories and leading contributors in positive psychology: A bibliometric analysis. *Frontiers in Psychology*, 8, Article 1432. <https://doi.org/10.3389/fpsyg.2017.01432>