The Scholarly Landscape of Sahaja Yoga Meditation and Meditation Studies: A Bibliometric Analysis

Dr. Rajeev Choudhary
School of Studies in Physical Education
Raipur

Author

Dr. Rajeev Choudhary
Professor, Dean Faculty of Physical Education, Dean Students' Welfare, Head of School of Studies in Law, Pt. Ravishankar Shukla University (A State University), Raipur, Chhattisgarh, India

Phone: +91- 9616557777

E mail: choudharyrajee@gmail.com, rajeevchoudhary@prsu.ac.in

Abstract: Various types of literature reviews and bibliometric analysis have been conducted to identify, access, or synthesize the findings, recurring themes, emerging patterns, research gaps, and employed methodologies within the domains of Sahaja Yoga Meditation (SYM) and Meditation Studies. In recent years, advancements in technology have empowered researchers to scrutinize literature about Sahaja Yoga Meditation and Meditation in a more reliable and objective manner. The primary objective of this investigation is to provide an exhaustive exposition of Sahaja Yoga Meditation (SYM) and meditation research through bibliometric methodologies. Additionally, this study seeks to visually represent and unveil the evolving conceptual and intellectual landscape within this scholarly arena. To achieve these objectives, the investigator conducted a co-occurrence analysis and generated visual maps using articles sourced from PubMed. Employing VOS viewer software, a series of bibliometric analyses were undertaken. In the Sahaja Yoga Meditation research, meticulous co-occurrence analysis of 111 keywords revealed pivotal associations. "Humans", "Adults," "Yoga," and "Meditation" were predominant. Gender, age, and neurological aspects were evident. This analysis outlines key dimensions. Within meditation research, an analysis of 9,675 keywords identified 19 critical themes. "Meditation", "Humans," "Gender," "Age Group," "Mindfulness," and "Psychological Aspects" featured prominently. This comprehensive analysis of bibliometric analysis offers important and valuable insights in relation to both fields, guiding further exploration. The paper illuminates the complex realm of Sahaja Yoga Meditation (SYM) and general meditation research, revealing their multifaceted aspects, including diverse populations, demographics, neuroscience, therapy, and research methods. These insights aid researchers in mapping trends and guiding future meditation studies, offering a valuable contribution through bibliometric analysis.

Keywords: Co-occurrence, Network visualization, Overlay visualization, Density visualization

Introduction:

Meditation, an encompassing term that encompasses a diverse array of practices, primarily centers on the introspective exploration of both the body and the mind. In the context of Western approaches, the primary objective of most meditation methods revolves around attaining enhanced command over attention and emotions, thereby fostering a more harmonious, stress-free, and healthier lifestyle. In contrast, yoga encompasses many techniques, with meditation (referred to as dhyana in classical yoga) occupying a central position. Delving into the origins of yoga, the inaugural known treatise, , "The Yoga Sutras of Patanjali," underscores the fundamental tenet that "Yoga is the suppression of the modifications of the mind [1]. Meditation encompasses a diverse array of contemplative techniques, , each geared towards enhancing consciousness, fostering inner harmony, and alleviating stress, among other objectives. The profound impact of meditation on consciousness and awareness has ignited the curiosity of neuroscientists, prompting extensive investigations into its effects on the human brain. Extensive research within the realm of neuroscience has unveiled intriguing correlations between the transformative experiences brought forth by meditation practices and the consequential structural and functional alterations within the brain This revelation emerges through both longitudinal studies, which chart the evolution of meditative experiences over time, and cross-sectional studies, where distinctions in brain structure and function surface when comparing seasoned meditators to neophytes or individuals who abstain from meditation altogether [2].

Sahaja Yoga Meditation (SYM) holds a distinct fascination within the realm of meditation techniques due to its unique emphasis on guiding practitioners toward the state of mental silence or thoughtless awareness, wherein thoughts are either suppressed or significantly diminished. This attainment aligns closely with the ancient aspirations outlined in early yoga manuscripts, signifying the ultimate objective of meditation. Meditation encompasses a diverse array of practices, most with the shared objectives of enhancing awareness, consciousness, inner tranquility, self-realization, and focus, while concurrently diminishing stress and anxiety levels [3]. Sahaja Yoga Meditation combines focusing your mind with understanding how we interact with others [4]. Some meditation methods incorporate a spiritual dimension that may establish a connection with various religious traditions, with meditation often being an important and integral dimension of these faiths. The alterations discerned in the brain due to meditation have piqued the interest of the neuroscientific community, prompting numerous reviews to document structural and functional distinctions in the brain associated with meditation practice in both cross-sectional and longitudinal studies [5], [6]. In this state of mental silence, practitioners remain acutely self-aware, perpetually immersed in the present moment, cultivating an environment of serenity, harmony, and heightened efficacy [7]. If we consider the significance and importance of Sahaja Yoga Meditation (SYM), it becomes evident that practitioners highly emphasize the values of self-regulation and teamwork. These strengths, are notably distinct from those identified by mindfulness practitioners, suggest that self-regulation and teamwork may represent unique signature attributes of SYM within the field of meditative practices. Conversely, data shows the results that the love of learning is a hallmark strength among mindfulness practitioners, seems to be less pronounced in SYM practitioners. Consequently, research is not only based upon previous studies by demonstrating specific signature strengths endorsed by SYM practitioners in comparison to non-meditating individuals but also implies potential significant differences in the endorsement of signature strengths among SYM practitioners when compared to those practicing other forms of meditation [8]. Yoga itself is an ancient system founded upon profound philosophical and practical knowledge, embodying a holistic perspective of individual development, refined through centuries for the comprehensive enhancement of both body and mind [9]. In recent times, the practice of meditation has been correlated with the cultivation of character strengths [10].

Bibliometric analysis is an important way to study research. It started in the library and information science field [11]. Bibliometric analysis means using math and stats to carefully evaluate how much research gets published in different areas [12]. Bibliometrics is a tool that helps analyze a large amount of literature both quantitatively and qualitatively. It helps identify the main topics of research and predict future areas of interest [13]. Bibliometric analysis gives scholars a chance to quickly and directly understand the history, basic knowledge, current status, development direction, limitations, and future prospects of a field through statistical perspectives [14]. Bibliometric analysis encompasses various approaches widely employed in scientific research. These methods include citation analysis, co-citation analysis, co-occurrence (co-word or keyword) analysis, bibliographic coupling, and co-author analysis [15]. Among these, citation analysis stands out as the most prevalent. This robust method aims to identify influential publications, authors, journals, and institutions within a specific scientific discipline [16-20]. Citation analysis serves as a metric of impact for research units (e.g., authors, institutions, and journals) within a scientific domain. The underlying assumption is that units garnering more citations hold greater significance, quality, and distinction. It is widely accepted that a higher number of citations in a scientific field indicates heightened importance and remarkable work. Studies classify key indicators for measuring citation-based impact into two categories: size-dependent and size-independent indicators. Size-independent indicators encompass the total number of citations, highly cited publications, and the h-index. In contrast, size-dependent indicators include the average number of citations per publication and the proportion of highly cited publications [21]. The method of bibliometric analysis helps us grasp the information from past, present, and future writings about the skills needed in the 21st century [22]. In tradition, different types of analysis have been done. One is by different types of metrics, and metrics provide valuable insights in relation to a research unit's impact and productivity. They help identify not only the number of citations but also their relative significance within a field [23]. Additionally, there are normalized citation impact indicators that facilitate accurate cross-field and cross-temporal comparisons. These indicators enable researchers to gauge the impact of publications across diverse fields, publication years, or document types. Moving beyond citation analysis, co-occurrence (co-word or keyword) analysis offers insights into prevalent concepts within publications in a scientific field. It helps visualize the cognitive structure of the field by revealing thematic clusters formed through concept relationships. This analysis highlights popular topics, patterns, trends, and emerging areas of interest [24,25]. Co-citation analysis, on the other extreme, establishes links between research units based on their inclusion in each other's bibliographies. Strong co-citation relationships emerge when multiple research units are frequently cited together, helping to visualize the academic and intellectual features of a scientific field and identify seminal works and knowledge bases [26]. Scholars uses the technique called bibliometric analysis for various purposes. These include discovering emerging trends in article and journal performance, understanding collaboration patterns among researchers, identifying constituents of research, and exploring the intellectual structure of a specific domain within existing literature [27]In summary， bibliometric analysis techniques offer important and powerful tools for assessing the impact, productivity, and structure of scientific research within various disciplines. These methods help researchers identify influential works, emerging trends, and collaborative networks in their fields of study. Bibliometric analysis of Sahaja Yoga Meditation (SYM) and meditation provides important insights related to the research trends, scholarly communication, and the impact of these practices on various fields. Bibliometric analysis can help identify the growth of research related to Sahaja yoga meditation and meditation over time It can reveal whether there is an increasing or decreasing interest in these topics among scholars and researchers. By analyzing bibliometric data, one can identify patterns in publication output. This includes the number of publications, journals, and conferences that focus on these topics.

The information can help related researchers choose the most relevant venues for their work. Bibliometrics can reveal who the prolific authors and research groups are in the area of

Sahaja Yoga Meditation (SYM) and meditation. It can also highlight patterns of collaboration among researchers, institutions, and countries. Citation analysis can help determine the impact of research on these topics. It can identify highly cited papers and influential authors, which can be useful for researchers looking to build on existing knowledge. Bibliometric analysis can uncover interdisciplinary connections between Sahaja Yoga Meditation and other fields of study, such as psychology, neuroscience, health sciences, and spirituality. This may help and guide researchers to understand the broader implications and applications of these practices. It can reveal the geographical distribution of research on Sahaja Yoga Meditation and Meditation. This information can be useful for understanding regional variations in research interests and for identifying potential areas of growth. Examining keywords used in publications can shed light on the specific aspects of Sahaja Yoga Meditation (SYM) and meditation that researchers are focusing on. This can help identify emerging trends and areas of interest. Bibliometric analysis can help construct citation networks, showing how different papers and authors are connected through citations. This can help identify seminal works and influential scholars in the field. This information can inform funding decisions and policy development. By analyzing the existing literature, researchers can identify gaps in knowledge and areas that require further investigation. The introductory part of this research paper provides a comprehensive overview of the multifaceted nature of meditation and its historical roots within the practice of yoga. It underscores the significance of meditation as a means and method of a tool for the enhancement of consciousness, promoting inner harmony, and reducing stress, also its growing interest in the area of neuroscience. Specifically, we highlight the distinctive appeal of Sahaja Yoga Meditation (SYM) for its focus on achieving a state of mental silence or thoughtless awareness, aligning with the profound objectives of meditation elucidated in early Yoga texts. This sets the stage for our research endeavor to analyze the bibliometric landscape and performance assessment of Sahaja Yoga Meditation (SYM) and meditation research through network visualization, shedding light on its impact and evolution in contemporary scholarship. In summary, bibliometric analysis of Sahaja Yoga Meditation (SYM) and meditation is an important tool and technique for understanding the research landscape, identifying key contributors, and uncovering trends and knowledge gaps in these fields. It can support evidence-based decision-making, foster collaboration, and promote the advancement of research and practice in meditation and related areas. The study was conducted to analyze the research trends, scholarly communication, and impact of Sahaja Yoga Meditation (SYM) and general meditation practices. The researchers aimed to explore the bibliometric landscape of these fields using various methods such as citation analysis, co-occurrence analysis, and network visualization.

MATERIAL AND METHODS

Data Collection

The bibliometric related data for the present study were extracted by search option from the PubMed bibliometric database as of September 03, 2023. The choice of PubMed bibliometric database as of September 03, 2023. The choice of PubMed as the primary database

stemmed from its widespread usage and recognition within the academic community. It is renowned for encompassing a comprehensive collection of high-quality research publications and continues to be a pivotal source of bibliographic information.

Two different methodologies are there for obtaining pertinent bibliometric data cantered around research focus: 1) employing specific keywords, and 2) searching for articles within a limited number of journals. In the present study, the researcher selected the former approach to ensure the broadest possible inclusion of articles relevant to Sahaja Yoga Meditation and Meditation research. The process was initiated by establishing essential criteria for the selection of articles. This study's objective was to target publications related to Sahaja Yoga Meditation and Meditation. Thus, the researcher set the publication location filter to "Sahaja Yoga Meditation" and 'Meditation". This analysis was confined to original peer-reviewed publications available in journals indexed by PubMed. Additionally, the researcher considered articles written exclusively in English for inclusion in the study. To maintain a focus on scholarly contributions, the researcher exclusively included articles, filtering out other document types. This exhaustive approach yielded a total of 20 articles related to Sahaja yoga Meditation and 16151 articles related to meditation within the PubMed database.

Data Screening and Cleaning

Data cleaning is an essential step in achieving more precise and reliable results before embarking on data analysis, especially when researcher is dealing with bibliometric data. Data often contains various issues such as duplicates, inaccuracies, and omissions. Since bibliometric data is editable, the researcher meticulously reviewed and corrected it to eliminate potential errors and redundancies before conducting any analysis.

The examination during this process of study showed four types of errors: misspelling of authors' names, duplication of authors' names in various formats, duplication of author affiliations in different formats, and missing publication timestamps for certain articles. To address these issues comprehensively, the researcher utilized Thesaurus files and meticulously rectified duplicate, inaccurate, and missing entries within the bibliometric data.

Using the VOS Viewer 1.6.19 software [23], the researcher conducted a series of bibliometric (scient metric) analyses. VOS Viewer, a freely accessible tool, employs distance-based visualization techniques to create bibliometric maps that highlight networks within extensive datasets. These networks encompass items of interest such as publications, authors, and keywords, along with the connections between them, such as co-citations from the same publications, co-authorships, or co-occurrences.

This study's bibliometric analysis encompassed two main categories: (1) Co-occurrence analysis of all keywords related to studies of Sahaja Yoga Meditation (SYM) and (2) Co-occurrence analysis of all keywords related to studies of Meditation.

Mapping, on the other hand, provided a visual representation of the intellectual structure and its evolution in our research field. It allowed us to observe how research elements interacted and connected, as well as the strength of these relationships. The researcher used only one distinct analysis technique in mapping: co-occurrence.

This study employed both performance analysis and mapping to delve into the cognitive and intellectual structure of Sahaja Yoga Meditation (SYM) and Meditation research. Co-occurrence analysis identified noteworthy and promising

keywords or key items that are likely to shape the future of Sahaja Yoga Meditation (SYM) and Meditation research.

RESULTS

Section: A deals with the co-occurrence analysis of Sahaja Yoga Meditation research with all keywords.

A co-occurrence analysis was conducted to identify the most emphasized and prominent keywords within the domain of Sahaja Yoga Meditation research. In the process, a minimum keyword occurrence threshold of 2 was applied specifically to the Sahaja Yoga Meditation research, resulting in 30 keywords out of 111 that met this requirement.
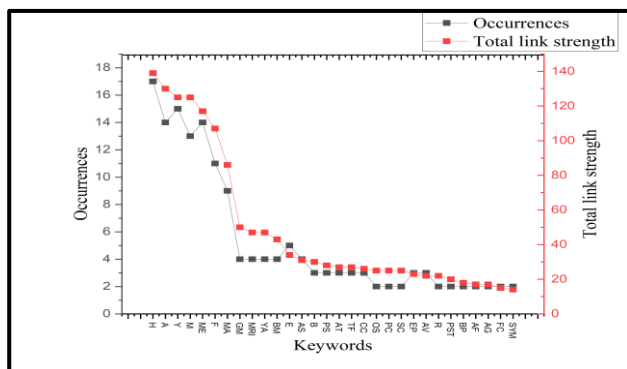
Table -1

Co-occurrence of the keywords associated with Sahaja Yoga Meditation research.

S. No	Keyword	Occurrences	Total link strength
1.	Humans (H)	17	139
2.	Adult (A)	14	130
3.	Yoga (Y)	15	125
4.	Male (M)	13	125
5.	Meditation (ME)	14	117
6.	Female (F)	11	107
7.	Middle Aged (MA)	9	86
8.	Gray Matter (GM)	4	50
9.	Magnetic Resonance Imaging (MRI)	4	47
10.	Young Adult (YA)	4	47
11.	Brain Mapping (BM)	4	43
12.	Electroencephalography (E)	5	34
13.	Adolescent (AS)	4	31
14.	Brain (B)	3	30
15.	Photic Stimulation (PS)	3	28
16.	Attention (AT)	3	27
17.	Time Factors (TF)	3	27
18.	Cerebral Cortex (CC)	3	26
19.	Organ Size (OS)	2	25
20.	Prefrontal Cortex (PC)	2	25
21.	Self-Control (SC)	2	25
22.	Epilepsy (EP)	3	23
23.	Analysis of Variance (AV)	3	22
24.	Rest (R)	2	22
25.	Prospective Studies (PST)	2	20
26.	Blood Pressure (BP)	2	18
27.	Affect (AF)	2	17
28.	Aged (AG)	2	17
29.	Functional Connectivity (FC)	2	15
30.	Sahaja Yoga Meditation (SYM)	2	14
	Total	159	1462

Table 1 shows the representation of the co-occurrence of keywords associated with research on Sahaja Yoga Meditation. Keywords are the specific terms or phrases that are relevant to research on Sahaja Yoga Meditation. The occurrence column tells us how many times each mentioned keyword appears in the present research papers or documents being analysed. Total Link Strength (TLS) is a quantitative measure that represents the observed strength of the relationships or connections between the keywords. Humans (H): This keyword has occurred 17 times and has a total link strength (TLS) of 139, suggesting that it is a significant focus in Sahaja Yoga Meditation research. Adult (A): It occurred 14 times with a total link strength (TLS) of 130, indicating its relevance to the research. Yoga (Y): This occurred 15 times with a total link strength (TLS) of 125, highlighting the importance of yoga in the context of Sahaja Yoga Meditation. Male (M): It occurred 13 times with a total link strength (TLS) of 125, showing that the gender aspect is a subject of interest in this research. Meditation (ME): It occurred 14 times with a total link strength (TLS) of 117, emphasizing the role of meditation in Sahaja Yoga. Female (F): It occurred 11 times with a total link strength (TLS) of 107, indicating a focus on the gender aspect of Sahaja Yoga Meditation. Middle Aged (MA): It occurred 9 times with a total link strength (TLS) of 86, suggesting a specific interest in middle-aged individuals. Gray Matter (GM): It occurred 4 times with a total link strength of 50, potentially indicating a neurological focus. Magnetic Resonance Imaging (MRI): It occurred 4 times with a total link strength (TLS) of 47, indicating the application of MRI technology in the research. Young Adult (YA): It occurred 4 times with a total link strength (TLS) of 47, suggesting a focus on young adults in the context of Sahaja Yoga Meditation. Brain Mapping (BM): Brain mapping is a term used in neuroscience to refer to the process of mapping or understanding the functions and regions of the brain. In the context of Sahaja Yoga Meditation research, it has It occurred 4 times and has a total link strength (TLS) of 43, suggesting a strong association between this keyword and the meditation practice. Electroencephalography (E): Electroencephalography is a technique used to record electrical activity in the brain. In this research context, it has appeared 5 times and has a total link strength (TLS) of 34, indicating its significance in studies related to Sahaja Yoga Meditation. Adolescent (AS): Adolescents are individuals in the age group between childhood and adulthood. In the context of Sahaja Yoga Meditation research, this keyword has occurred 4 times with a total link strength (TLS) of 31, suggesting that research involving adolescents is interconnected with this meditation practice. Brain (B): The keyword "Brain" is a general term referring to the organ central to cognitive functions. It has occurred 3 times and has a total link strength (TLS) of 30, indicating that studies that are related to the brain are connected to Sahaja Yoga Meditation research. Photic Stimulation (PS): Photic stimulation involves the use of light or visual stimuli. In the context of Sahaja Yoga Meditation, it has occurred 3 times with a total link strength (TLS) of 28, suggesting a connection between this technique and the meditation practice. Attention (AT): Attention is a cognitive process involving the focus of mental awareness on specific aspects of the environment. It has occurred 3 times with a total link strength (TLS) of 27, indicating its relevance to Sahaja Yoga Meditation research. Time Factors (TF): Time factors may refer to the consideration of time in research design and analysis. It has occurred 3 times with a total link strength (TLS) of 27 in the context of Sahaja Yoga Meditation research. Cerebral Cortex (CC): The cerebral

cortex is the outer layer of the brain responsible for many higher-level functions. It has occurred 3 times with a total link strength (TLS) of 26 in studies related to Sahaja Yoga Meditation. Organ Size (OS): Organ size may relate to the dimensions of specific body organs. In the context of Sahaja Yoga Meditation research, it has occurred twice with a total link strength (TLS) of 25, indicating a potential connection. Prefrontal Cortex (PC): The prefrontal cortex is a brain region associated with decision-making and self-control. It has occurred twice with a total link strength (TLS) of 25 in Sahaja Yoga Meditation research. Self-Control (SC): Self-control is a psychological and behavioural concept related to an individual's ability to regulate their emotions and actions. Epilepsy (EP): It has occurred 3 times with a total link strength (TLS) of 23. Epilepsy is a neurological disorder characterized by recurrent seizures. This keyword suggests a connection between Sahaja Yoga Meditation and epilepsy research. Analysis of Variance (AV): It has occurred 3 times with a total link strength (TLS) of 22. Analysis of variance is a statistical technique used to analyse differences among groups. Its presence indicates that this statistical method is associated with Sahaja Yoga Meditation research. Rest (R): It has occurred 2 times with a total link strength (TLS) of 22. "Rest" may refer to periods of relaxation or inactivity, possibly indicating the relevance of rest in Sahaja Yoga Meditation studies. Prospective Studies (PST): It has occurred 2 times with a total link strength (TLS) of 20. Prospective studies are research designs that follow individuals over time. This suggests that Sahaja Yoga Meditation Research includes longitudinal studies. Blood Pressure (BP): It has It occurred 2 times with a total link strength (TLS) of 18. This keyword indicates a potential connection between Sahaja Yoga Meditation and the study of blood pressure regulation. Affect (AF): It has occurred 2 times with a total link strength (TLS) of 17. Affect refers to an individual's emotional state or mood. Its presence suggests a focus on emotional well-being in Sahaja Yoga Meditation research. Aged (AG): It has It occurred 2 times with a total link strength (TLS) of 17. "Aged" likely relates to research involving elderly individuals, indicating a demographic focus in the studies. Functional Connectivity (FC): It has occurred 2 times with a total link strength (TLS) of 15. Functional connectivity is a concept in neuroscience that relates to the synchronization of brain activity. Its inclusion suggests a neurological aspect to Sahaja Yoga Meditation research. Sahaja Yoga Meditation (SYM): It has It occurred 2 times with a total link strength (TLS) of 14. Sahaja yoga meditation (SYM) is the central keyword and represents the main focus of the research. Sahaja Yoga Meditation is being studied in relation to other keywords listed, which are related to various areas of research.

Figure: 1- Graphical Depiction of Keyword Co-Occurrence in Sahaja Yoga Meditation Research

On the horizontal axis, 30 keywords are displayed, on the left vertical axis, frequencies of the occurrence of all keywords are displayed, and on the right vertical axis, frequencies of total link strength of all keywords are displayed. On the left side of the horizontal axis, the highest number of occurrences (17) and the highest total link strength (139) are found for keyword humans (H); on the other hand, on the right side of the horizontal axis, the lowest number of occurrences (2) and the lowest total link strength (14) are found for keyword Sahaja Yoga Meditation (SYM).

Figure:2-Network visualization of Sahaja Yoga Meditation Research: A Network Analysis of Co-Occurring Keywords (Source: Prepared by Author using VOS viewer 1.6.19 software, 2023)

Figure:3-Overlay visualization of Sahaja Yoga Meditation Research: A Network Analysis of Co-Occurring Keywords (Source: Prepared by Author using VOSviewer 1.6.19 software, 2023)

Figure:4-Density visualization of Sahaja Yoga Meditation Research: A Network Analysis of Co-Occurring Keywords (Source: Prepared by Author using VOSviewer 1.6.19 software, 2023)

Figure 6 to 8 showed

Co-occurrence network map of different keyword in relation to Meditation researches. The size of the node indicated number of co-occurrences and the connections shows the co-occurrence, and different colours represent

the chronological occurrence overlay visualization of the researches.

Presents a depiction of Network Visualization, Overlay visualization and Density visualization mapping. In this visualization, every node within the analysis of keyword co-occurrence is assigned a distinctive color, representing the density of individual elements. As the number of nodes and their respective weights increases, the overall density also rises. Additionally, these keywords provide valuable insights and information into upcoming research directions by revealing emerging trends and practices in the area of mindfulness and well-being through the identification after analysis of specific occurrences in VOS viewer. Within each cluster, these keywords not only encompass a wide range of current themes but also have the potential to shape future developments.

Table:4 Co-occurrence of the Item Clustering and frequency of Keywords about Meditation Research

Clusters (4)	Cluster-wise Total Items	Items (19)	Links (171)	Total Link Strength (8707)	Occurrences
1	9	Anxiety	18	4028	762
		Depression	18	3688	693
		Humans	18	26403	7186
		Meditation	18	18210	4682
		Mindfulness	18	8113	2004
		Quality of Life	18	4367	791
		Stress, Psychological	18	6362	1144
		Treatment Outcome	18	4888	792
		Yoga	18	5611	1305
2	8	Adolescent	18	4847	782
		Adult	18	16031	2717
		Aged	18	6984	1072
		Female	18	19426	3471
		Male	18	17620	3153
		Middle Aged	18	12974	2009
		Surveys and Questionnaire	18	4381	717
		Young Adult	18	6049	868
3	1	Relaxation Therapy	18	2477	644
4	1	Attention	18	2755	588

The table: 4 is related to the findings of "Co-occurrence of Item Clustering and the number (frequency) of Keywords about Meditation Research." The first column represents different clusters or groups of items within the research. In this finding, there are four distinct clusters. The second column shows the total number of items, topics, or areas that fall within each formed cluster. Cluster 1 has 9 items, Cluster 2 has 8 items, and Clusters 3 and 4 each have 1 item. The column of Items is the total count of all unique items or topics across all clusters. In this, there are a total of 19 unique items or topics being examined. The column of links indicates the total number of links or connections between items within each cluster. These links represent relationships, associations, or connections between the items. In this article, there are a total of 171 links. The column of total link strength provides a measure of the overall strength or significance of the links within each cluster. It quantifies how strong the connections or associations are between these items. The total link strength across all clusters is 8707. The last column of Occurrences shows the total number of times each item occurs in the present research datasets. Cluster 1: The notable 9 items in this specific cluster are Anxiety, Depression, Humans, Meditation, Mindfulness, Quality of Life, Stress, Psychological, Treatment Outcome, and Yoga. This cluster appears to be focused on various aspects of mental health, meditation, and well-being, with a strong emphasis on humans and their experiences. All items contain 18 links and have their own total link strength. Cluster 2: The notable 8 items in this cluster are adolescent, adult, aged, female, male, middle-aged, surveys and questionnaires, and young adults. This cluster seems to be related to demographic factors and surveys/questionnaires, potentially exploring the impact of Sahaja yoga meditation on different age groups and genders. In this cluster also, all items contain 18 links and have a total link strength. Cluster 3: This cluster consists of only one item, "Relaxation Therapy," and has 18 links with a total link strength of 2477. Cluster 4: Like Cluster 3, this specified cluster contains a single item, "Attention," and has 18 links with a total link strength of 2755. Overall, this table provides an overview of the organization of topics or items within the research, their interconnections, and their frequency of occurrence. Researchers and academicians can use this provided information better to understand the structure and focus of the study and to identify potential areas of interest for further investigation.

DISCUSSION

The present research paper presents a comprehensive analysis selected for the bibliometric landscape of Sahaja Yoga Meditation research and general meditation research. In this section, the key findings and insights derived from the results presented in the paper are discussed.

Co-occurrence Analysis of Sahaja Yoga Meditation Research:

The paper begins by conducting a co-occurrence analysis of keywords associated with Sahaja Yoga Meditation research. This analysis presents significant insights selected for the prominent themes and areas of focus within this domain. One main striking finding is the prominence of keywords such as "Humans", "Adult," "Yoga," "Meditation," and "Male." These keywords indicate that Sahaja Yoga Meditation Research often

focuses on the human experience, particularly among adults, and emphasizes the role of yoga and meditation practices. The high total link strength of these keywords underscores their importance in the research landscape. Additionally, the presence of keywords like "Female", "Middle Aged," and "Young Adult" suggests a demographic focus, indicating that researchers explore how Sahaja Yoga Meditation affects different age groups and genders. This reflects the holistic approach to meditation research, encompassing diverse populations. Furthermore, keywords related to neuroscience, such as "Gray Matter", "Magnetic Resonance Imaging," "Brain Mapping," and "Electroencephalography," demonstrate a growing interest in the neurological aspects of Sahaja Yoga Meditation. Researchers are delving into the effects of meditation practices on brain functions and structures, highlighting the interdisciplinary nature of the research area. The co-occurrence analysis also brings attention to the importance of concepts like "Photic Stimulation", "Attention", and "Cerebral Cortex" within Sahaja Yoga Meditation (SYM) research, indicating the exploration of various meditation techniques and their impact on cognitive processes. Moreover, terms like "Prospective Studies" and "Blood Pressure" suggest that longitudinal studies and health-related aspects are integrated into Sahaja Yoga Meditation (SYM) research, signifying a holistic approach that considers long-term effects and physical well-being. The inclusion of keywords like "Self-Control" and "Epilepsy" hints at the potential therapeutic applications of Sahaja Yoga Meditation (SYM) and its exploration as an intervention in various contexts, including mental health and neurological disorders. Finally, the central keyword, "Sahaja Yoga Meditation (SYM)," represents the core focus of the research, and its co-occurrence with other keywords illustrates the multidimensional nature of Sahaja Yoga Meditation studies.

Co-occurrence Analysis of General Meditation Research:

The paper extends its analysis to general meditation research, identifying prominent keywords and their associations. This section of the present study provides valuable information in the broader field of meditation. Keywords like "Meditation", "Mindfulness", "Quality of Life," and "Stress, Psychological" dominate the general meditation research landscape, highlighting the fundamental concepts that researchers explore. Meditation and mindfulness practices are central themes, emphasizing their widespread use in contemporary research. Demographic factors, such as "Adolescent", "Adult," "Aged," "Female," "Male," and "Young Adult," indicate that meditation research encompasses a wide range of age groups and gender considerations. This reflects an inclusive approach to studying meditation's effects on diverse populations. The strong presence of "Humans" as a keyword underscores the overarching focus on human experiences and well-being in meditation research. It signifies the field's dedication to understanding the impact of meditation practices on individuals. The co-occurrence of "Surveys and Questionnaires" and "Treatment Outcome" highlights the research methodologies employed in meditation studies, emphasizing data collection through surveys and assessments of the effectiveness of meditation as an intervention. Moreover, the connection between "Relaxation Therapy" and meditation research suggests that meditation is being explored as a relaxation technique, potentially with

therapeutic applications. The keyword "Yoga" holds significance in general meditation research, indicating a growing interest in the relationship between yoga and meditation practices and their combined effects on well-being. Finally, "Attention" emerges as an important keyword, suggesting a focus on studying the impact of meditation on cognitive processes and attentional mechanisms.

Clusters and Research Direction:

The paper's analysis reveals the presence of distinct clusters within both Sahaja Yoga Meditation research and general meditation research. These clusters represent various categories or topics within each research domain, highlighting the diversity of research interests. For Sahaja Yoga Meditation research, the identified clusters suggest a focus on mental health, demographic factors, relaxation therapy, and attention. These clusters provide a roadmap for researchers to explore specific areas within the domain. In general meditation research, clusters indicate a strong emphasis on mental health, demographic factors, research methodologies, and the relationship between meditation and yoga. These clusters offer insights into the multifaceted nature of meditation research. The research findings of the present study shed light on the implications and future directions within which the realms of Sahaja Yoga Meditation (SYM) and the broader field of meditation, providing important and valuable insights and direction for conducting further research. The analysis of citation bursts and co-occurrences reveals emerging trends in scientific research, hinting at the potential future avenues of exploration [28]. Notably, this study identifies the most robust trends among recent developments [29]. The authors delve into the realm of mindfulness meditation, emphasizing the need for additional research to deepen our understanding of its underlying mechanisms [30]. It is imperative to remain vigilant against misinformation and methodological weaknesses that have plagued previous studies in mindfulness and meditation, with specific attention to assessment methods, mindfulness training, potential alternative effects, and their intersection with brain imaging, all of which warrant further exploration [31]. Scholars concur that addressing lingering methodological and conceptual challenges is paramount for future research in meditation [32-35].

Implications and Benefits for Scholars, Practitioners, and Consumers

For practice, the research on Sahaja Yoga Meditation (SYM) and general meditation studies unveils the intricate landscape of meditation techniques, emphasizing their potential to enhance awareness, consciousness, and inner tranquility while mitigating stress and anxiety. This understanding underscores the need and importance of incorporating different meditation practices into daily lifestyles and routines for individuals seeking holistic well-being. Practitioners can benefit from the insights gained through bibliometric analysis by integrating diverse meditation techniques into their practice routines, tailored to their specific needs and objectives. Additionally, understanding the multidimensional nature of meditation can guide practitioners in selecting suitable

methodologies and approaches to maximize the benefits of meditation in their lives.

In terms of research, the findings of the present study provide important and valuable direction and insights into the evolving trends and research priorities within the fields of Sahaja Yoga Meditation and general meditation. Scholars can leverage bibliometric analysis to identify gaps in existing knowledge, emerging research areas, and interdisciplinary connections, thereby guiding future research endeavors. By focusing on key themes such as mental health, neurological aspects, and therapeutic applications, researchers can contribute to the advancement of scientific understanding and evidence-based practices in meditation. Moreover, by exploring co-occurrence patterns and citation networks, researchers can identify influential works and establish collaborative networks to foster innovation and interdisciplinary collaboration in meditation research.

For prevention, the research underscores the potential therapeutic applications of Sahaja Yoga Meditation and general meditation in promoting mental health and well-being. Policymakers and healthcare professionals can utilize these insights to advocate for the integration of meditation practices into prevention and intervention programs targeting stress-related disorders, anxiety, and depression. By promoting the adoption of meditation as a preventive measure, policymakers can contribute to the overall resilience and mental well-being of communities, thereby reducing the burden on healthcare systems and improving quality of life for individuals.

In terms of policy, the findings highlight the importance of incorporating meditation research into policy development and funding decisions. Policymakers can use bibliometric analysis to assess and know the significant impact of research on Sahaja Yoga Meditation and general meditation on society and healthcare. By allocating resources to support meditation research and implementation initiatives, policymakers can facilitate the widespread adoption of meditation practices and promote population-level mental health and well-being. Additionally, policymakers and academic administrators can collaborate with other academicians' researchers and stakeholders to develop evidence-based guidelines and recommendations for the integration of meditation into different fields, including education, healthcare, and workplace settings, thereby maximizing the public health benefits of meditation practices.

For scholars, this paper provides an overview of the research landscape in Sahaja Yoga Meditation (SYM) and general meditation studies. By employing bibliometric analysis techniques, it offers insights into the trends, influential authors, key concepts, and interdisciplinary connections within these fields. Scholars can utilize this information to identify gaps in knowledge, understand emerging trends, and prioritize areas for further investigation. Moreover, the paper highlights the importance of addressing methodological and conceptual challenges in meditation-related research, providing directions to conduct further research and enhancing the rigor of scientific inquiry.

Practitioners of Sahaja Yoga Meditation and other meditation techniques are benefited from the result of this research by gaining a deeper understanding of the concept of the scientific underpinnings and therapeutic applications

of meditation practices. The paper elucidates the neurological aspects of meditation, including its effects on cognitive processes, and its significant therapeutic positive effect for mental health and well-being. By exploring the multidimensional nature of meditation research, practitioners can enrich their knowledge and enhance their practice by incorporating evidence-based approaches.

Consumers, including policymakers and funding agencies, can use the findings of this paper to make informed decisions regarding the promotion of meditation research and its integration into healthcare and wellness initiatives. By understanding the influence of research conducted on Sahaja Yoga Meditation and meditation in general, policymakers can allocate resources more effectively and develop policies that support the advancement of meditation-related studies. consumers can significantly gain valuable insights into the broader implications and applications of meditation practices across different fields, that includes psychology, neuroscience, and spirituality.

Limitations

While the research paper on "The Scholarly Landscape of Sahaja Yoga Meditation and Meditation Studies: A Bibliometric Analysis" provides an important overview of the bibliometric landscape surrounding Sahaja Yoga Meditation (SYM) and general meditation research, several limitations hinder the depth and applicability of its findings. Firstly, the reliance on bibliometric analysis inherently constrains the study to existing publications and citations, potentially overlooking emerging or non-mainstream research avenues that may not yet be widely recognized or cited. This limitation is particularly pertinent in a rapidly evolving field like meditation research, where innovative approaches and alternative perspectives continually emerge. Moreover, the focus on quantitative metrics such as citation counts and keyword co-occurrences may overlook the qualitative aspects of research, such as the depth of insight provided or the methodological rigor employed. A comprehensive understanding of meditation research requires not only quantitative assessments but also qualitative evaluations of the research content and methodologies employed.

Furthermore, the analysis primarily centers on research output and collaboration patterns within the academic community, neglecting the perspectives and experiences of practitioners or individuals directly involved in meditation practices. This oversight limits the study's applicability, as it fails to capture the real-world impact and implications of meditation research on practitioners' lives and well-being. Additionally, the study's narrow scope, focusing predominantly on Sahaja Yoga Meditation and general meditation research, overlooks the rich diversity of meditation practices and contemplative traditions worldwide. Alternative forms of meditation may offer unique insights and approaches that could enrich the field, but these are not adequately included and represented in the analysis.

Moreover, while the paper acknowledges the interdisciplinary nature of meditation research, it predominantly emphasizes connections with neuroscience and health sciences, potentially overlooking potential intersections with fields such as philosophy, anthropology, or religious studies.

Meditation practices have deep cultural, historical, and philosophical roots that extend beyond their neurological or therapeutic aspects, and a more comprehensive analysis should acknowledge and explore these interdisciplinary connections. The research based on bibliometric analysis does not address biases or limitations inherent in bibliometric analysis, including the influence of publication and citation practices, language barriers, or disparities in research funding and accessibility. These biases may impact the generalizability and reliability of the findings, highlighting the need for cautious interpretation and complementing bibliometric analysis with other research methods.

CONCLUSIONS

The paper's findings shed light on the intricate landscape of Sahaja Yoga Meditation research and general meditation research. It underscores the multidimensional nature of these fields, encompassing diverse populations, demographic factors, neurological aspects, therapeutic applications, and research methodologies. Researchers can apply these findings to navigate the research landscape, identify emerging trends, and chart future directions for meditation-related studies. Overall, the paper provides a valuable and important contribution to the area of meditation research through comprehensive bibliometric analysis and network visualization.

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