

Occupational Stress among employees in India: A Bibliometric Analysis

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Abstract:

Purpose: The present study conducts a bibliometric analysis of research publications on “Occupational Stress” or “Job Stress” in India, indexed in the Scopus database. 417 were retrieved out of which 380 results were found during 2010 to 2026. Using predefined keywords and systematic search strategies, relevant documents were retrieved and analyzed to examine publication trends, authorship patterns, institutional contributions, source journals, highest number of citations, highest number of publication country wise. Bibliometric indicators and visualization techniques were employed to map the evolution and thematic structure of the field.

Methodology/Approach: the bibliometric study includes Scopus database for analyzing the large amount of data. A software named VOS viewer is used to present network mapping of keyword co-occurrence, co-authorship, citation network analysis.

Findings: The study helped in finding various aspects like most prolific journal, most cited paper, universities published maximum number of papers on the given study. The study shows highest number of publications in the year 2025, study shows India is the largest country for publishing the document in the given domain. The highest number of citations received is 262 in the journal Asian Journal of Psychiatry. Furthermore, the most prolific author on the given domain is Qureshi H.

Originality/Value: Occupational stress has become a critical concern in contemporary workplaces, particularly in rapidly developing economies such as India. In the Indian context, occupational stress has gained increasing attention due to the country’s dynamic economic growth, expanding service sector, and competitive corporate environment. The bibliometric analysis provides a clear scenario in studies conducted on occupational stress among employees in India. The research provide future scope to the researcher and guide them for conducting research in accordance to the need.

Keywords: Occupational stress or job stress and India

1. Introduction

(Sopiah2, 2022) Occupational stress refers to the psychological and physiological strain experienced by employees due to job demands that exceed their capacity or resources. It arises from factors such as workload, role ambiguity, lack of control, and workplace conflicts. Researchers describe occupational

stress as a significant organizational issue affecting employee productivity, mental health, and overall organizational performance. (Maulik, 2017) Workplace stress is defined by the World Health Organization as ‘the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities and which challenge their ability to cope’, and elaborated that it can be caused ‘by poor work organization. Research conducted on industrial workers in India found that **18–36% of employees experienced anxiety and stress symptoms**, indicating a substantial mental health burden in the workplace.

(Occupational Stress on Employees in Information Technology Organizations, 2024) In India, occupational stress has become a growing concern across both public and private sectors. Rapid economic growth, increased competition, and organizational restructuring have intensified work demands. Research indicates that a large proportion of employees experience work-related stress due to heavy workload, long working hours, and high performance expectations

(Zhang, Huang, Wang, Lan, & Zhang, 2021) Occupational stress is the process by which workplace psychological experiences and demands (stressors) produce both short- and long-term changes (strains) in mental and physical health

The purpose of this study to generate the model for the researcher to conduct further studies. Following research questions were taken in to consideration while conducting the research:

RQ1. How many articles been published on occupational stress?

RQ2. The author who has published highest number of documents on occupational stress?

RQ3. Analyzing the documents which has received highest number of citations?

RQ4. Identification of the journal which has published highest number of documents on occupational stress in employees?

RQ 5. What is the ratio of research article publishing that involves collaboration between countries?

RQ 6. Which affiliations and countries have the most productivity?

RQ7. Which authors' keywords are most commonly used in the domain of occupational stress, Employees and India?

To address these questions, the present study used bibliometric analysis.

2. Literature Review

Occupational Stress among Employees in India

Occupational stress refers to the psychological and physiological strain experienced by employees due to job demands that exceed their capacity or resources. It arises from factors such as workload, role ambiguity, lack of control, and workplace conflicts. Researchers describe occupational stress as a significant organizational issue affecting employee productivity, mental health, and overall organizational performance.

Research Methodology

(Sushma, Malhan, & Kumar, 2025) The analysis commenced by retrieving and compiling document publishing data from the Scopus database on February 2, 2026. The Scopus database was used to search for document articles about the research topic “Occupational Stress and employees in India” Two type of analysis incorporated in the given study i.e. Performance analysis and Science mapping. Performance analysis is done with the help of MS Excel where as Science mapping done with help of VosViewer

2.1 Extraction of Information from literature review:

(Yadav, et al., 2025)The present bibliometric study performed a broad search of various repositories and multiple publishers for literature on occupational stress and job satisfaction. As mentioned in Figure 1, information is collected by a three-steps model i.e., identification, screening and inclusion. Information is collected from Scopus database given the search query as ((“Occupational Stress” Or “Job Stress”) and (“Employee”) and (“India”)). The study has considered the particular time limit from 2010 to 2026. The searches are conferred within article title, abstract and keywords.

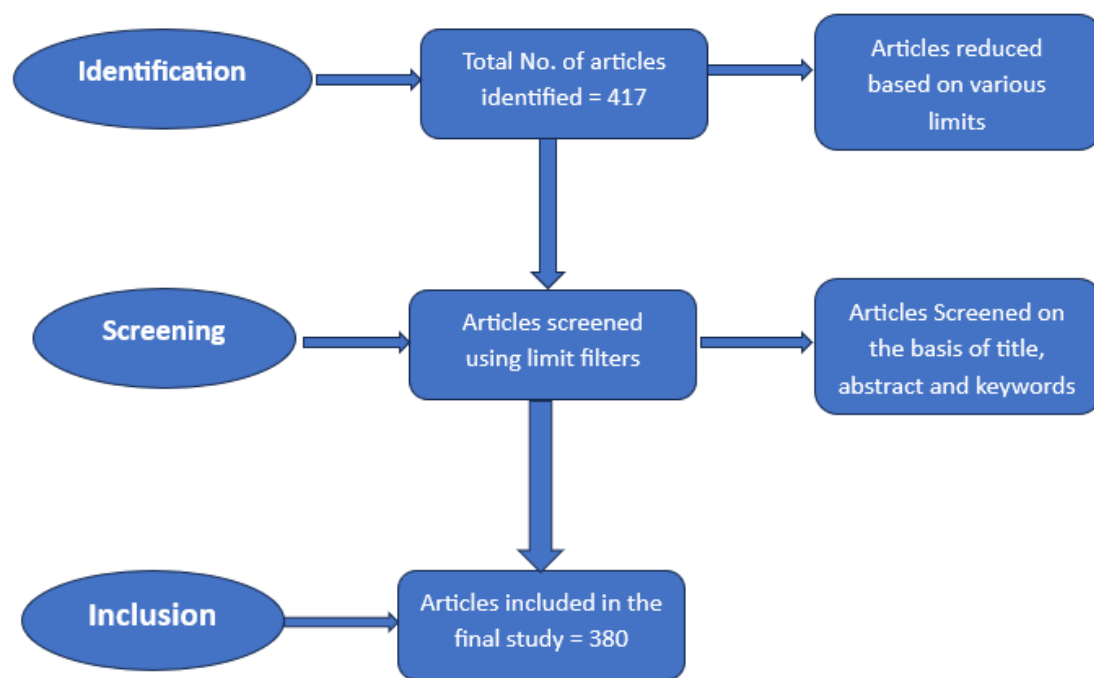


Figure: 1 (Source: Author’s development)

1. Identification

The first stage involved identifying relevant publications from the Scopus database, which is recognized as one of the largest and most comprehensive repositories of peer-reviewed literature. A systematic search was conducted using the keywords “Occupational Stress” OR “Job Stress” AND “India.” These keywords were applied to retrieve publications related to occupational stress in the Indian context.

The initial search resulted in 417 articles, which formed the preliminary dataset for further analysis.

2. Screening

In the second stage, the retrieved publications were screened using various limit filters available in the database. These filters helped refine the dataset to ensure relevance and quality. The screening process included limiting the results based on criteria such as document type, language, subject area, and publication stage where necessary.

Subsequently, the remaining articles were further evaluated by reviewing their titles, abstracts, and keywords to confirm their relevance to the topic of occupational stress among employees in India. Articles that were not directly related to the research focus or did not meet the inclusion criteria were excluded during this step.

3. Inclusion

After the screening process, the final dataset consisted of 380 articles, which were considered relevant for the bibliometric analysis. These selected publications were then used for further examination of research trends, including annual publication output, authorship patterns, institutional contributions, citation analysis, and keyword co-occurrence.

The structured approach followed in the identification, screening, and inclusion stages ensured the reliability and relevance of the dataset used in the study. The final dataset of 380 articles provided the basis for mapping the development and research patterns of occupational stress studies in India.

(Dolhey, 2019) Further, a classification of these papers is provided on the basis of: journals with maximum publications; year wise publication; most cited papers; most prolific authors; most prolific countries and institutions; co-authorship network analysis; inter country co-authorship network analysis; and keywords co-occurrences network analysis

- journals with maximum publications;
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- keywords co-occurrences network analysis.

For co-authorship network analysis, inter country co-authorship network analysis and keywords co-occurrences network analysis, the VOS Viewer 1.6.9 software was used. VOSviewer is a free software tool which is used for creating maps based on network data. It also helps in visualizing and exploring these maps

3. Research Findings

3.1 Performance Analysis

3.1.1 Per Year Publications:

The bar chart shows the number of publications across different years. Overall, there is a general upward trend in publication output despite some fluctuations. The lowest number of publications appears in 2014 (18) and 2017 (19), while the numbers gradually increase in later years. A stable level of 30 publications is observed in 2019, 2020, and 2023. The output rises further to 36 in 2022 and 40 in 2021, reaching the highest point in 2025 with 41 publications. Although there is a slight drop in 2024 (27), the overall trend indicates growing research productivity over time.

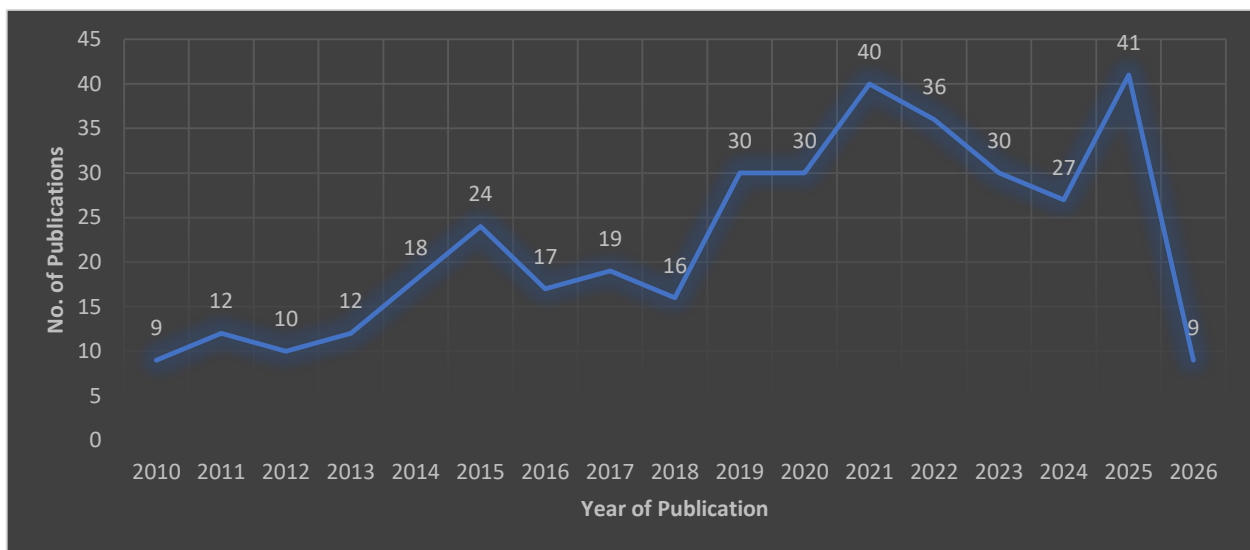


Figure:2 Per year publication (Source: Author's development)

3.1.2 Publication of Authors:

The bar chart shows the number of publications contributed by different authors. Qureshi, H. has the highest number of publications with 9, making them the most productive author in the dataset. Frank, J. and Lambert, E.G. follow closely with 8 publications each.

Detels, R. contributed 5 publications, while Madhu, G. and Mahapatra, T. each have 4 publications. The remaining authors—Babu, G.R., Bora, S., Chakrabarti, D., and Chatterjee, A.—each contributed 3 publications, representing the lowest contribution group in the chart.

Overall, the graph indicates that a small number of authors contribute a larger share of publications, while several others have relatively moderate contributions.

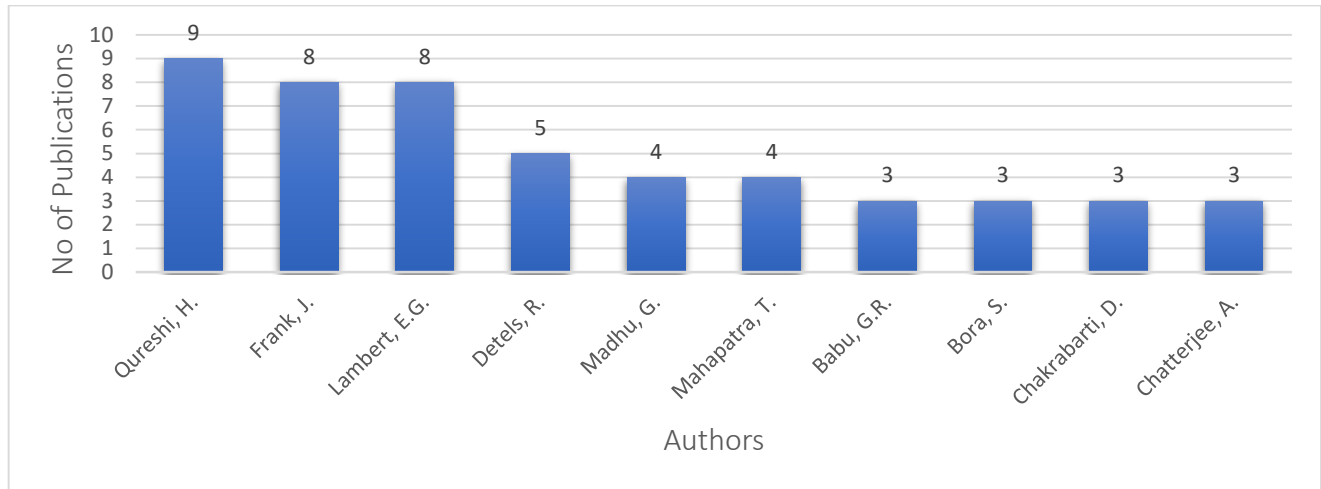


Figure:3 Author publication (Source: Author's development)

3.1.3 Publication with affiliated institution

The bar chart shows the number of publications produced by researchers affiliated with different institutions. Manipal Academy of Higher Education records the highest contribution with 13 publications, indicating strong research output. The lowest but comparable contributions (6 publications each) are from Postgraduate Institute of Medical Education and Research, University of Nevada, Reno, and University of Kashmir. A moderate level of contribution comes from Christian Medical College, Vellore and University of Cincinnati with 8 publications each. Amity University (11) and National Institute of Mental Health and Neurosciences (10) also demonstrate significant scholarly productivity. The distribution suggests that research publications are spread across multiple national and international institutions, with a few leading universities contributing slightly more, while the rest maintain consistent but moderate research output.

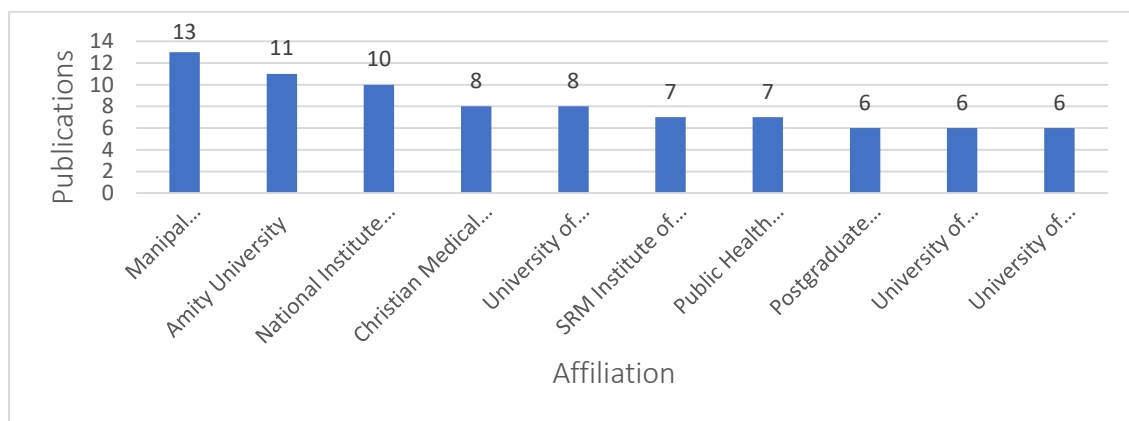


Figure:4 Publication with affiliated institution (Source: Author's development)

3.1.4 Country-wise distribution of publications

The world map illustrates the country-wise distribution of publications. India shows the highest research contribution (339 publications), indicating a strong concentration of scholarly output from this region. The United States follows with 32 publications, representing the second-largest contribution. Moderate contributions are observed from Australia and Saudi Arabia with 8 publications each. Canada records 7 publications, showing a smaller but notable presence. The research output is highly concentrated in India, while a smaller yet diverse international contribution comes from countries such as the United States, Australia, Saudi Arabia, and Canada. This pattern suggests that the study or dataset is primarily driven by Indian institutions with limited but meaningful global collaboration.

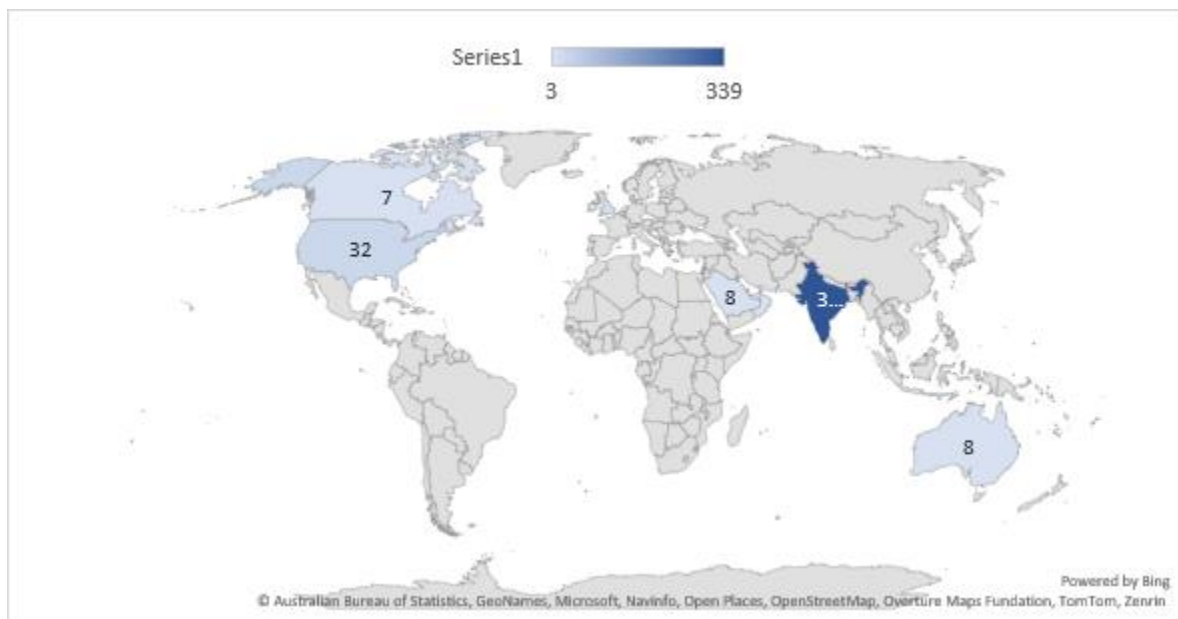


Figure:5 Country-wise distribution of publications (Source: Author's development)

3.1.5 Type and Number of Documents

The chart shows that journal articles dominate the publication output, accounting for 305 documents, which is far higher than any other category. This indicates that research findings are primarily disseminated through journal publications. Other document types contribute only a small share: Letters (19) and Reviews (18) follow distantly, while Conference Papers (12) and Book Chapters (10) represent moderate contributions. Notes (8) and Editorials (6) are limited, and Books (1) and Errata (1) are minimal. Overall, the data highlights a strong preference for journal articles as the main medium of scholarly communication.

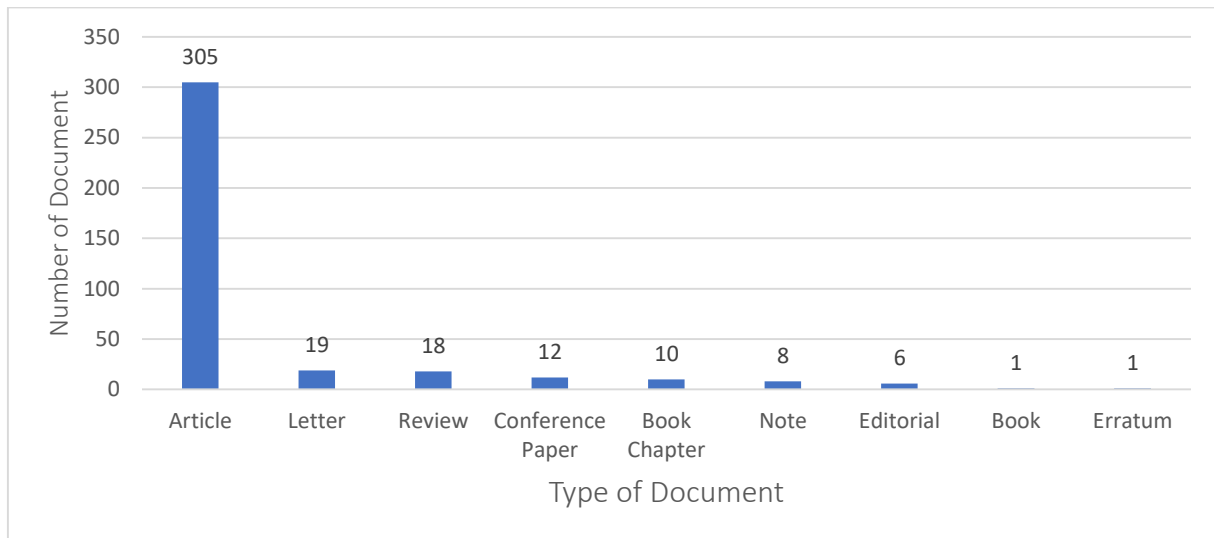


Figure:6 Type and Number of Documents (Source: Author's development)

3.2 Science Mapping

3.2.1 Author Citation

The table highlights both research productivity and impact of authors. Qureshi Hanif leads in productivity with 9 publications and the highest total citations (301). Frank, James and Lambert, Eric G. follow with 8 papers each and 284 citations. Dhar, Rajib Lochan shows the highest impact ($TC/Y = 69$) despite having only 3 publications. Venugopal, Vidhya also demonstrates strong citation impact. The remaining authors have moderate output with comparatively lower citation influence. Overall, the data shows that some authors excel in publication volume, while others stand out in citation impact.

Author	Documents	Citations	TC/Y
Qureshi Hanif	9	301	33
Frank, James	8	284	36
Lambert, EricG.	8	284	36
Dhar, Rajib Lochan	3	206	69
Venugopal, Vidhya	3	155	52
Das, Banibrata	3	78	26
Madhu, G.	4	51	13
Ghosh, Tirthankar	3	50	17
Baby, Tiju	3	45	15
Renjith, Vadakkapaikkadu Ravindran	3	45	33

Table No 1 Author citation

3.2.2 Country-wise distribution of research publications and citation

The image represents a country collaboration/network visualization generated using VOSviewer. Each node represents a country involved in the research field, and the size and central placement of nodes indicate their level of contribution and connectivity. India leads significantly with 339 documents and 3562 citations, indicating the highest research productivity and influence in the dataset. The United States

ranks second with 33 publications and 689 citations, showing strong research impact despite fewer papers than India. Bangladesh has only 3 documents but 382 citations, reflecting a high citation impact per publication. The United Kingdom (13 documents, 373 citations) and Australia (9 documents, 347 citations) demonstrate notable research contributions. Denmark, United Arab Emirates, and Canada show moderate publication output with reasonable citation counts. Nepal has the lowest presence with 3 documents and 57 citations. India dominates in research output, while some countries with fewer publications—such as Bangladesh, the UK, and Australia—show relatively strong citation impact. The visualization highlights India as the central hub of research collaboration, supported by partnerships with developed and developing countries, indicating an expanding international research network in this domain

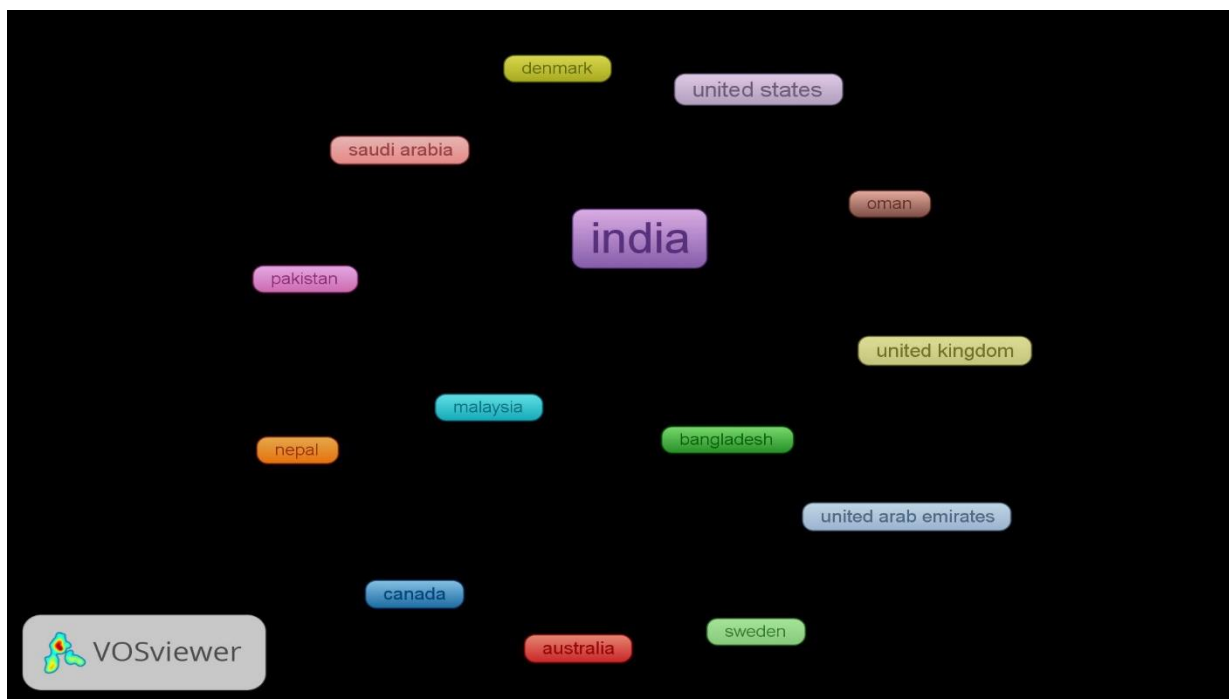


Figure: 7 Country-wise distribution of research publications and citation

Source: Authors' Development using VOSviewer

3.2.3 Country wise institutional collaboration and publication timeline

The image represents an overlay visualization map generated using the software VOSviewer, showing the institutional collaboration and publication timeline in a research field.

Amity University Noida appears as the largest node, indicating that it has the highest research output and strongest contribution in the selected research area. The reddish color suggests that a significant portion of its publications are recent (around 2022–2024), indicating growing and current research activity. Several institutions appear as moderate-sized nodes, reflecting notable research participation and collaboration, including:

- Public Health Foundation of India
- Christ University Bengaluru

- Chitkara University Punjab
- O. P. Jindal Global University

These institutions contribute to the research network and indicate multi-institutional involvement in the field. The map also shows the presence of global institutions such as University of Cincinnati and National Institute of Mental Health. Their presence reflects international collaboration and cross-country academic engagement, suggesting that the research field has global relevance.

Temporal Research Trends

- Blue/Purple nodes (2014–2017) represent earlier contributors to the research area.
- Green/Yellow nodes (2018–2020) indicate growing research activity.
- Orange/Red nodes (2021–2024) show recent and emerging research contributions, particularly from institutions like Amity University.

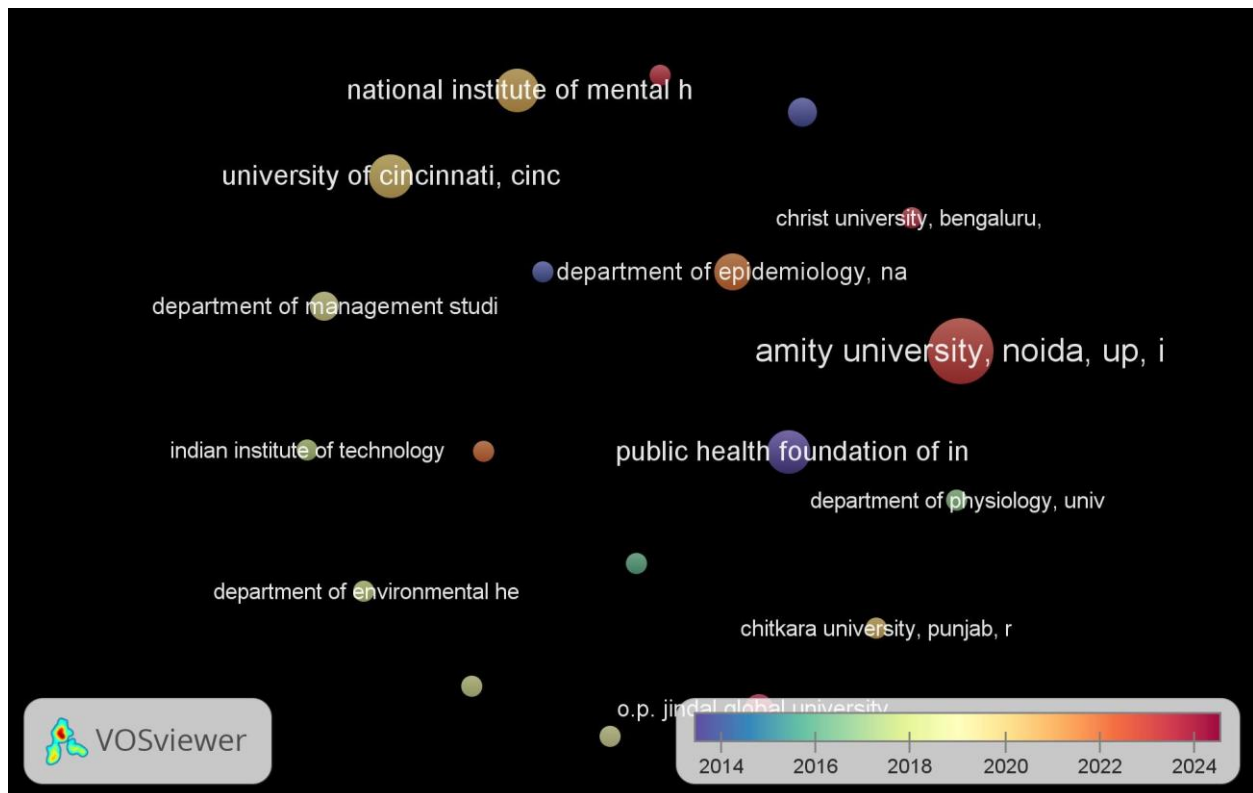


Figure:8 Institutional collaboration and publication timeline

Source: Authors' Development using VOSviewer

3.2.4 Source Citation

The map displays different academic journals where the research documents in the dataset have been published. Each colored node represents a journal, and the size of the node indicates the relative frequency or influence (number of publications or citations) associated with that journal in the dataset. The map displays different academic journals where the research documents in the dataset have been published. Each colored node represents a journal, and the size of the node indicates the relative frequency or

influence (number of publications or citations) associated with that journal in the dataset. This suggests that the topic under study is closely aligned with occupational health, workplace environment, and public health research. Several other journals appear moderately sized, indicating notable but smaller contributions. The VOSviewer visualization indicates that the research output in the dataset is primarily concentrated in occupational health and medical journals, with the Indian Journal of Occupational and Environmental Medicine emerging as the most influential publication source. At the same time, the presence of psychiatry, epidemiology, environmental science, and management journals demonstrates that the research field is highly interdisciplinary and internationally disseminated.



Figure 9 Source Citation (Authors' Development using VOSviewer)

3.2.5 Coauthor and organization relationship

The graph shows that Amity University, Noida, UP, India has the highest number of documents, which explains why it appears at the center of the density map with the brightest yellow region. In VOSviewer density visualization, yellow indicates the highest research productivity and influence. Therefore, Amity University acts as the primary research hub in this institutional collaboration network. The data indicates several institutions with moderate document output and collaboration strength, which correspond to the orange and green density regions around the center in the map. These include:

- National Institute of Mental Health and Neurosciences (NIMHANS), India
- University of Cincinnati, USA
- Public Health Foundation of India, New Delhi
- Department of Epidemiology, National Institute of Mental Health
- UCLA Fielding School of Public Health

The Excel data also shows contributions from specialized departments, which appear as smaller nodes in the visualization:

- Department of Management Studies (IIT)
- Department of Environmental Health Engineering
- Department of Psychiatry (Christian Medical College)
- Department of Physiology (University of Calcutta)
- Department of Family & Community Medicine (AIIMS)

These departments contribute specific research outputs but have limited collaboration links, which is reflected in their lower density areas (green/blue regions).

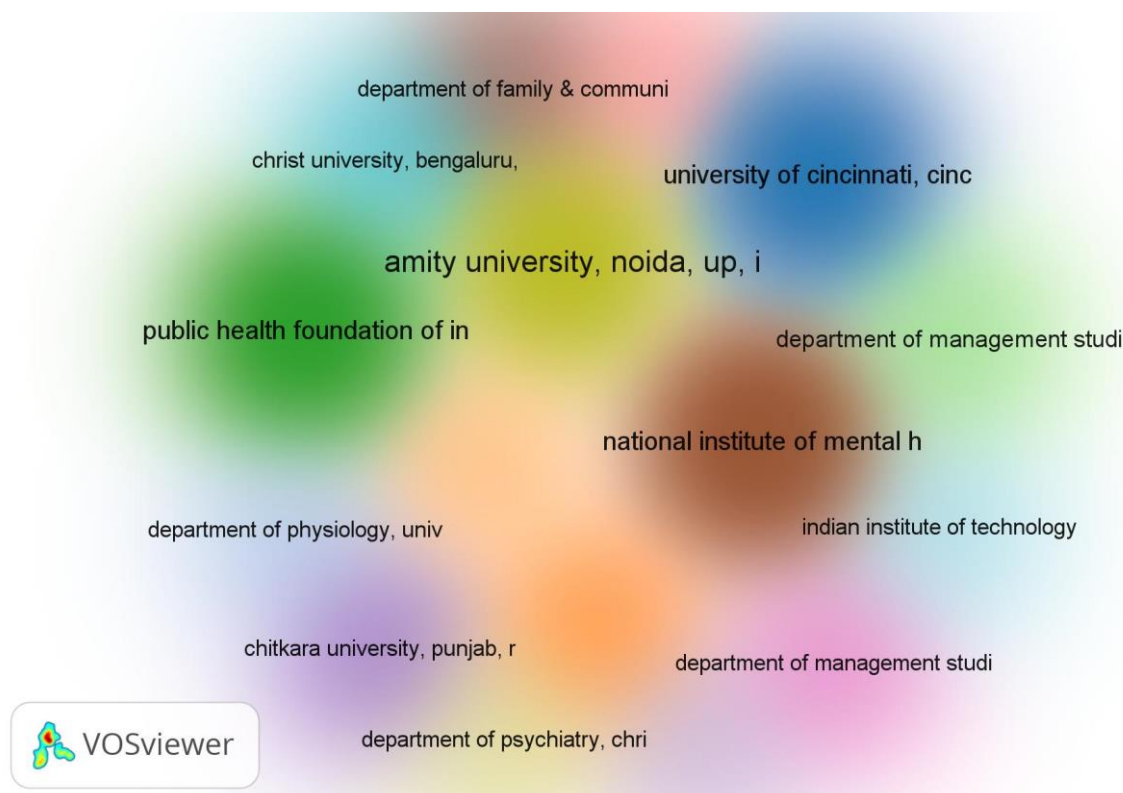


Figure 10: Coauthor and organization relationship (Authors' Development using VOSviewer)

3.2.6 Coauthor Relationship

The authors Hanif Qureshi, Eric G. Lambert, and James Frank appear as the largest and centrally positioned nodes, indicating that they are the most influential contributors in the dataset. Their central location suggests that they have multiple collaborative connections with other researchers. thicker link is visible between Eric G. Lambert and James Frank, indicating a strong co-authorship relationship between these two scholars. Similarly, Hanif Qureshi also shows strong collaborative links with both Lambert and Frank, forming the core collaboration group within the network. Other authors such as Nancy Lynne

Hogan, Brad W. Smith, Andrew J. Myer, and Charles Frank Klahm IV appear as smaller nodes located around the central cluster. Their position suggests that they contribute to the research network but have fewer publications or fewer collaborative links compared to the central authors. The network shows a hub-and-spoke structure, where the central authors (Qureshi, Lambert, and Frank) act as collaboration hubs, connecting several other authors. This indicates that much of the research output in the dataset is driven by a small group of leading scholars who collaborate frequently with other researchers.

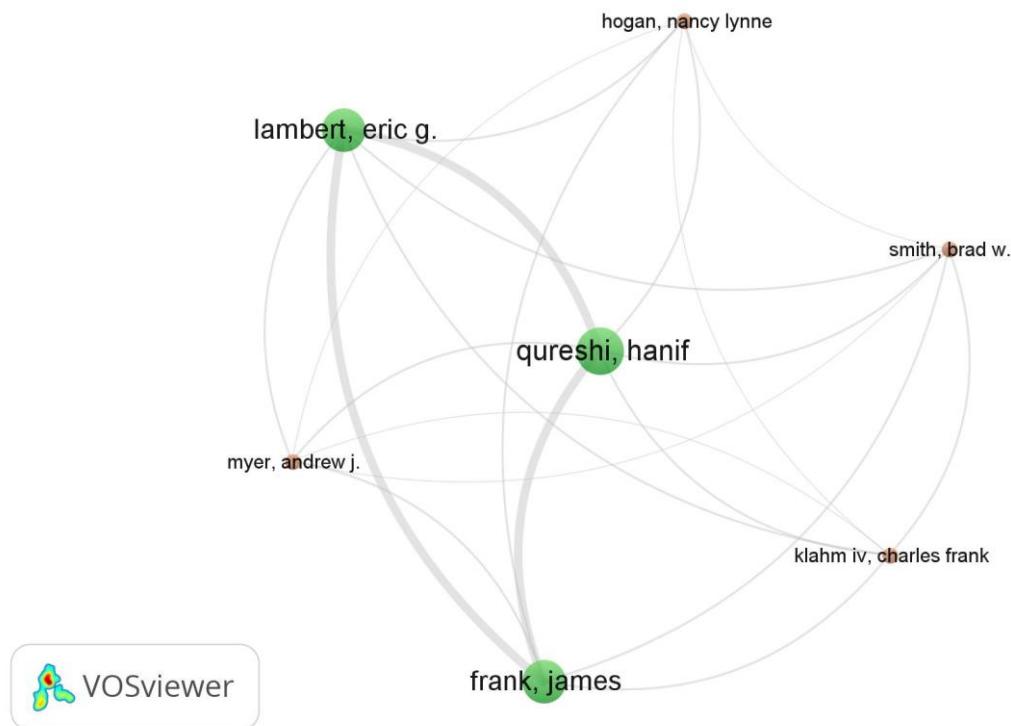


Figure: 11 Coauthor Relationship

3.2.7 Co-occurrence of all Keywords

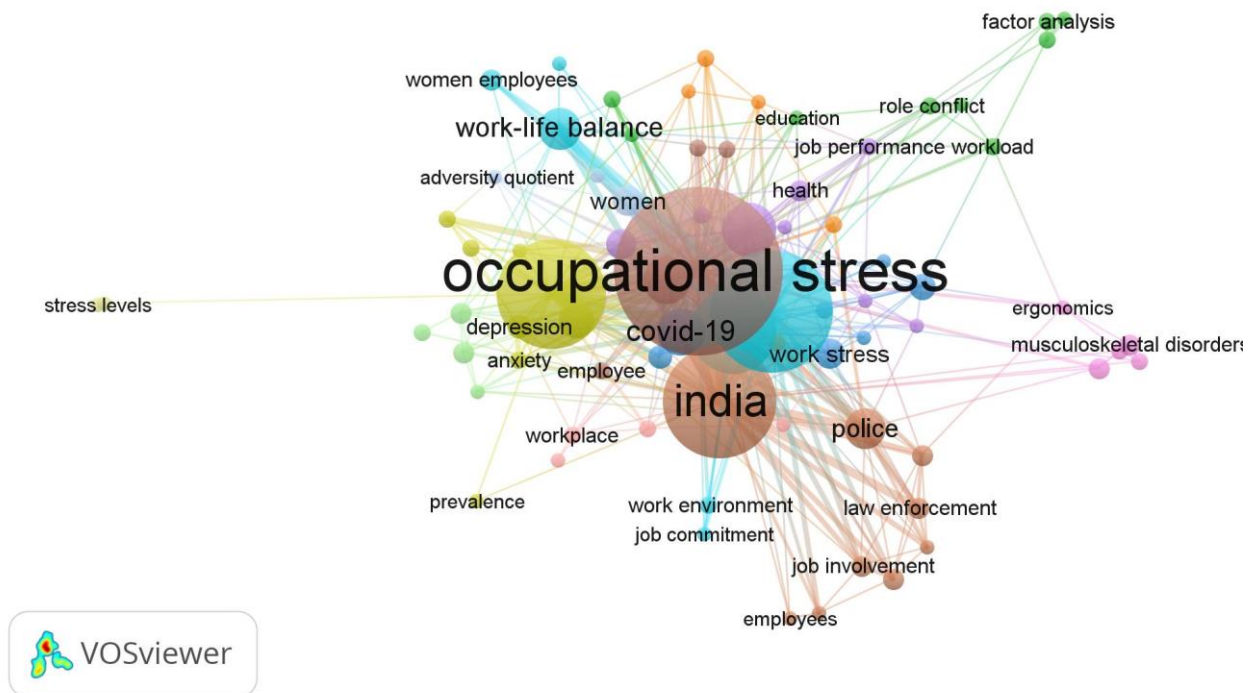
The keyword “Job Stress” appears as the largest and most central node, indicating that it is the most frequently occurring and dominant research theme in the dataset. Its central position suggests that many other topics are directly related to or studied in connection with job stress. Keywords such as “Surveys and Questionnaires,” “Surveys,” and “Major Clinical Study” appear close to the central node, indicating that most studies investigating job stress rely heavily on survey-based research methods and empirical clinical investigations. This highlights the quantitative and evidence-based nature of the research in this area. Another cluster includes terms such as “Coping Behavior,” “Coping Strategies,” “Job Commitment,” “Job Involvement,” and “Satisfaction.”

These keywords indicate that researchers are focusing on psychological responses and behavioral mechanisms employees use to manage job stress, as well as how stress influences employee attitudes and workplace engagement.

The visualization reveals that job stress is a multidimensional research topic, integrating organizational psychology, occupational health, and medical sciences. The central role of survey-based research methods,

14

occupational stress research is multidisciplinary, integrating organizational behavior, psychology, occupational health, and public health perspectives. The network highlights the strong connections between workplace factors, mental health outcomes, pandemic-related challenges, and gender-related issues, particularly within the Indian research context.



Conclusion:

The present bibliometric analysis provides a comprehensive overview of research trends on occupational stress among employees in India over the period 2010–2026. It reveals a steady growth in scholarly publications, indicating increasing academic and practical interest in workplace stress. The dominance of journal articles highlights the maturity and credibility of research in this domain. India emerges as the leading contributor, reflecting the growing concern regarding employee well-being in a rapidly developing economy. The study also identifies key authors, institutions, and journals that significantly influence the field. Citation analysis shows that while some authors contribute extensively, others achieve high impact with fewer publications. The findings further emphasize the interdisciplinary nature of occupational stress research, integrating health, psychology, and management perspectives. Keyword analysis indicates that job stress, mental health outcomes, and coping mechanisms are central research themes. The collaboration networks suggest expanding national and international research partnerships. Overall, the study offers valuable insights for researchers, policymakers, and organizations to understand research gaps and future directions. It also highlights the need for more empirical and sector-specific studies to address emerging workplace stress challenges in India.

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