

A Global Bibliometric and Theoretical Mapping of Job Stress Research from 2010 to 2020

¹ Daniel Kofi Adebayo

¹ Department of Management and Organization, University of Ghana, Ghana

Received: 21th Oct 2025 | Received Revised Version: 29th Oct 2025 | Accepted: 05th Nov 2025 | Published: 19th Nov 2025

Volume 01 Issue 01 2025 | Crossref DOI: 10.64917/ajmscr/V01I01-004

Abstract

Job stress has emerged as one of the most significant occupational health challenges of the twenty first century, influencing employee wellbeing, organizational performance, and societal productivity. Despite the exponential growth of academic publications on job stress across disciplines such as medicine, social sciences, and business management, there remains limited integrative understanding of how this body of knowledge has evolved, how it is structured, and what intellectual patterns dominate the field. The present study undertakes a comprehensive bibliometric and theoretical analysis of job stress research published between 2010 and 2020, drawing on 851 documents retrieved from the Scopus database. Using principles of informetrics and scientometrics, the study identifies publication trends, influential authors, dominant institutions, thematic clusters, and geographical distributions of knowledge production. A network of 62 keywords was extracted and classified into 10 clusters, revealing that effort reward imbalance, gender, and job strain are the most recurrent conceptual anchors of job stress research. Citation analysis further shows that 24 countries met the minimum threshold of eight citations, with the United Kingdom emerging as the most influential country in terms of citation impact. The analysis also indicates that medicine, social sciences, and business management and accounting constitute the most prominent disciplinary homes of job stress research, reflecting the interdisciplinary nature of the phenomenon. Institutional analysis demonstrates that Islamic Azad University has produced the largest number of publications, while Lambert E G is identified as the most prolific author in the dataset. Beyond mapping the intellectual structure of the field, the study engages deeply with theoretical models of job stress, including effort reward imbalance theory, job strain theory, and coping based frameworks, situating the bibliometric findings within a broader conceptual narrative. By integrating bibliometric evidence with theoretical interpretation, the study provides both a cartography of existing scholarship and a roadmap for future research. The results offer important implications for researchers, policy makers, and practitioners by highlighting underexplored themes, methodological gaps, and geographical imbalances in job stress research. Limitations related to database coverage and the exclusive use of Scopus are acknowledged, and future research directions are proposed, including the use of Web of Science and other databases to validate and extend the present findings. Overall, this research represents one of the first systematic bibliometric investigations of job stress literature and contributes to a more coherent and cumulative understanding of how the field has developed over time.

Keywords: Job stress, bibliometric analysis, scientometrics, occupational health, keyword networks, citation analysis.

© 2025 Daniel Kofi Adebayo. This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0). The authors retain copyright and allow others to share, adapt, or redistribute the work with proper attribution.

Cite This Article: Daniel Kofi Adebayo. 2025. A Global Bibliometric and Theoretical Mapping of Job Stress Research from 2010 to 2020. American Journal of Medical Sciences and Clinical Research 1, 1, 21-30. <https://doi.org/10.64917/ajmscr/V01I01-004>

1. Introduction

Job stress has become a defining feature of contemporary

work life, cutting across occupational groups, national boundaries, and organizational contexts. The rapid pace of technological change, increasing job insecurity, growing

performance pressures, and the blurring of boundaries between work and personal life have collectively intensified the experience of stress at work. Scholars and practitioners alike have long recognized that job stress is not merely an individual psychological issue but a systemic organizational and social problem with far reaching consequences for productivity, health, and wellbeing. Empirical studies have linked job stress to a wide range of negative outcomes including burnout, depression, cardiovascular disease, absenteeism, reduced job performance, and turnover intentions, making it one of the most critical areas of inquiry in occupational health and organizational behavior.

Within this broad research landscape, multiple theoretical perspectives have been developed to explain how and why job stress arises. Prominent among these are the job strain model, which focuses on the interaction between job demands and decision latitude, and the effort reward imbalance model, which emphasizes the perceived imbalance between the effort invested by employees and the rewards they receive in return. Coping based theories further highlight the role of individual and organizational resources in moderating the impact of stressors on outcomes. These theoretical traditions have generated a vast and diverse literature, spanning medicine, psychology, sociology, management, and public health.

The proliferation of studies on job stress over the past several decades has created both opportunities and challenges. On one hand, the growing volume of research reflects the increasing recognition of job stress as a critical societal issue. On the other hand, the sheer scale and diversity of the literature make it difficult for researchers to gain a comprehensive overview of what has been studied, where the intellectual centers of gravity lie, and which themes and methods dominate the field. Traditional narrative reviews, while valuable, are often limited in scope and subject to the biases of individual reviewers. As a result, there is a growing need for systematic, data driven approaches that can map the structure and evolution of scientific fields in a transparent and replicable manner.

Bibliometric analysis, rooted in the traditions of informetrics and scientometrics, offers such an approach. By quantitatively analyzing patterns of publication, citation, and keyword usage, bibliometric methods enable researchers to identify influential works, authors, institutions, and themes within a given body of literature. The theoretical foundations of bibliometrics were laid by scholars such as Garfield, who pioneered citation indexing as a tool for tracing the history and impact of scientific ideas, and Egghe and Rousseau, who formalized the

mathematical and conceptual basis of informetrics (Garfield, 2009; Egghe and Rousseau, 1990). Subsequent work has expanded these ideas into a rich methodological toolkit that includes co citation analysis, co word analysis, and network visualization techniques (DeLooze and Lemarie, 1997; Bastian et al., 2009).

In recent years, bibliometric approaches have been applied to a wide range of scientific domains, from biotechnology to environmental science, and from life sciences to library and information studies (Dalpe, 2002; Grandjean et al., 2011; Barth et al., 2014; Derrick et al., 2012). These studies have demonstrated the power of bibliometrics to reveal the hidden structures of knowledge production, such as the Matthew effect in scientific publishing, whereby highly cited authors and institutions tend to attract disproportionately more attention (Grandjean et al., 2011). Despite the success of these methods in other fields, their application to job stress research has been surprisingly limited.

The present study addresses this gap by conducting one of the first comprehensive bibliometric analyses of job stress literature. Drawing on 851 papers published between 2010 and 2020 and indexed in the Scopus database, the study seeks to answer several interrelated questions. How has the volume of job stress research evolved over time, and when did scholarly interest peak? Which authors, institutions, and countries have contributed most to the field, and how are they interconnected through citation networks? What are the dominant conceptual themes, as revealed by keyword co occurrence patterns, and how are these themes organized into clusters of related ideas? Finally, what theoretical and practical implications can be drawn from these patterns for the future development of job stress research?

Addressing these questions is not merely an exercise in academic cartography. Understanding the structure and dynamics of job stress research has direct implications for how new studies are designed, how interventions are developed, and how policies are formulated. For example, if certain populations, sectors, or regions are underrepresented in the literature, this may indicate blind spots that need to be addressed. Similarly, if particular theoretical models dominate the field to the exclusion of alternative perspectives, this may constrain innovation and limit the explanatory power of research.

The relevance of job stress research is further underscored by empirical evidence from national and international agencies. Data from the Health and Safety Executive in Great Britain indicate that work related stress, depression,

and anxiety account for a substantial proportion of occupational illnesses, highlighting the economic and human costs of unmanaged stress at work (National Statistics, 2018). Reports from organizations such as the Mental Health Foundation similarly emphasize the growing prevalence of stress and the challenges individuals face in coping with it in modern societies (Mental Health Foundation, 2018). These real world concerns provide a powerful backdrop for the academic study of job stress and underscore the need for a coherent and cumulative research agenda.

At the same time, the job stress literature is characterized by significant heterogeneity in terms of methods, populations, and theoretical frameworks. Studies range from cross sectional surveys of nurses in tertiary hospitals in China (Li et al., 2017) to qualitative investigations of work home conflict among Indian journalists (Miglani and Brar, 2017), and from doctoral dissertations on women in the Indian banking sector (Ramanathan, 2014) to global conceptual analyses of work stress as a worldwide problem (Senova and Antosova, 2014). This diversity is both a strength and a challenge. It reflects the multifaceted nature of job stress, but it also makes it difficult to integrate findings into a coherent whole.

Bibliometric analysis provides a way to navigate this complexity by focusing on patterns rather than individual studies. By examining how often particular keywords co occur, how frequently authors cite one another, and how publication outputs are distributed across countries and institutions, bibliometrics can reveal the underlying architecture of a research field. For instance, co word analysis, as developed by DeLooze and Lemarie, treats keywords as indicators of conceptual content and maps their relationships to identify clusters of related ideas (DeLooze and Lemarie, 1997). When applied to job stress literature, such analysis can show whether the field is organized around a few dominant paradigms or a more fragmented set of themes.

The present study builds on these methodological traditions to offer a detailed and theoretically informed mapping of job stress research from 2010 to 2020. This period was chosen because it represents a decade of significant growth and diversification in the field, coinciding with broader social and economic changes that have reshaped the nature of work. The finding that scholarly interest in job stress peaked in 2016, followed by fluctuations in subsequent years, provides an intriguing temporal pattern that invites further interpretation.

In framing this study, it is important to emphasize that bibliometric analysis is not an end in itself but a means to deeper understanding. The quantitative patterns revealed by citation counts and keyword networks must be interpreted in light of substantive theories and empirical realities. Accordingly, this article integrates bibliometric findings with theoretical perspectives on job stress, including effort reward imbalance, job strain, and coping models, to provide a richer and more nuanced account of the field.

By doing so, the study makes several contributions. First, it provides a comprehensive overview of job stress research as indexed in Scopus, identifying key actors, institutions, and themes. Second, it demonstrates the utility of bibliometric methods for occupational health research, encouraging their wider adoption. Third, it highlights theoretical and empirical gaps that can guide future research. In an era of increasing concern about the impact of work on mental and physical health, such integrative and systematic approaches are not only academically valuable but socially necessary.

2. Methodology

The methodological foundation of this study lies in the principles of bibliometrics, informetrics, and scientometrics, which collectively provide quantitative tools for analyzing patterns in scientific communication. Bibliometrics focuses on the measurement of texts and their associated metadata, such as authorship, citations, and keywords, while informetrics extends this analysis to the broader domain of information production and use (Egghe and Rousseau, 1990; Bar Ilan, 2008). Scientometrics, in turn, applies these methods specifically to the study of science as a social and cognitive enterprise, examining how knowledge is created, disseminated, and validated within scholarly communities (Garfield, 2009; Glanzel, 1996).

To conduct a bibliometric analysis of job stress research, a comprehensive dataset of relevant publications was required. The Scopus database was selected as the primary source because of its broad coverage of peer reviewed journals across disciplines and its robust tools for citation tracking and keyword indexing. Scopus has been widely used in bibliometric studies and is considered one of the most reliable databases for capturing global research output (Bar Ilan, 2010; Ellegaard and Wallin, 2013).

The search strategy focused on retrieving all documents related to job stress published between 2010 and 2020. Keywords such as job stress, work stress, occupational stress, and related terms were used to identify relevant

records. The resulting dataset comprised 851 papers, including articles, reviews, conference papers, and other document types. This time span was chosen to capture a decade of research activity that reflects contemporary concerns about work and stress in a rapidly changing global economy.

Once the dataset was assembled, several layers of analysis were conducted. First, descriptive bibliometric indicators were calculated to examine publication trends over time, document types, subject areas, and institutional affiliations. These indicators provide a basic overview of the field, showing how many papers were published each year, which disciplines contributed most, and which organizations were most active.

Second, citation analysis was performed to assess the impact and influence of different authors, institutions, and countries. Citation counts are widely used as a proxy for scholarly impact, reflecting how often a given work is referenced by subsequent studies (Frandsen and Rousseau, 2005; Herther, 2009). While citations are not a perfect measure of quality or importance, they provide a useful indicator of visibility and recognition within the scientific community. In this study, a threshold of eight citations was used to identify the most influential countries, resulting in a subset of 24 countries that met this criterion.

Third, keyword analysis was conducted to map the conceptual structure of job stress research. Keywords are chosen by authors to represent the main topics of their papers and are therefore a valuable source of information about the thematic content of the literature. Following established methods in co word analysis, the most frequently occurring keywords were extracted and their co occurrence patterns were examined (DeLooze and Lemarie, 1997). A total of 62 keywords were selected for detailed analysis, based on their frequency and relevance.

These 62 keywords were then organized into a network, in which each keyword is represented as a node and co occurrences between keywords are represented as links. The strength of a link reflects how often two keywords appear together in the same document, indicating a conceptual relationship. To identify clusters of related keywords, network analysis techniques were applied, drawing on the principles of graph theory and community detection algorithms. Software such as Gephi has been widely used for such purposes, enabling researchers to visualize and analyze complex networks of scientific concepts (Bastian et al., 2009).

The clustering process resulted in the identification of 10 distinct clusters, each representing a group of keywords that frequently co occur and thus reflect a coherent thematic area within job stress research. These clusters were assigned different colors for visualization purposes, although no visual representations are included in this article in accordance with the specified constraints. The largest cluster, consisting of 11 items, included key concepts such as effort reward imbalance, gender, and job strain, which were found to be the most frequently occurring keywords in the entire dataset.

In addition to keyword analysis, the study examined authorship patterns to identify the most prolific and influential contributors to the field. Author names were extracted from the dataset and their publication counts and citation counts were calculated. Lambert E G emerged as the most prolific author in terms of number of publications on job stress during the period under review.

Institutional analysis was conducted by examining the affiliations of authors and aggregating publication counts by institution. This revealed that Islamic Azad University had produced the highest number of job stress publications, highlighting its central role in the field.

Geographical analysis was performed by mapping the countries associated with author affiliations and calculating their citation impact. As noted earlier, 24 countries met the minimum citation threshold, with the United Kingdom achieving the highest total number of citations. This finding suggests that, despite not necessarily producing the largest volume of publications, the United Kingdom has had a particularly strong influence on the global discourse on job stress.

Throughout the analysis, care was taken to adhere to established standards and best practices in bibliometric research. Issues such as data cleaning, disambiguation of author names, and normalization of institutional affiliations were addressed to the extent possible, recognizing that bibliometric data can be affected by inconsistencies and errors in database records (Glanzel and Schoepflin, 1994; Glanzel, 1996).

It is also important to acknowledge the methodological limitations inherent in this approach. By relying solely on the Scopus database, the study may have excluded relevant publications indexed in other databases such as Web of Science or Google Scholar. Different databases have different coverage and indexing practices, which can affect bibliometric results (Bar Ilan, 2010). However, the use of a

single, well established database ensures internal consistency and comparability within the dataset.

Another limitation relates to the interpretation of citations and keywords. Citations can be influenced by factors such as self citation, disciplinary norms, and the age of publications, while keywords may vary in specificity and consistency across authors. Despite these limitations, bibliometric analysis remains a powerful tool for revealing broad patterns and trends that would be difficult to detect through manual review alone.

By combining descriptive indicators, citation analysis, and keyword network analysis, the methodology of this study provides a multi dimensional view of job stress research. This integrated approach allows for a rich and nuanced understanding of how the field has developed over time, who its key contributors are, and what conceptual frameworks dominate its discourse.

3. Results

The bibliometric analysis of 851 job stress publications indexed in Scopus between 2010 and 2020 reveals a complex and dynamic research landscape characterized by temporal fluctuations, disciplinary diversity, and uneven geographical distribution. One of the most striking findings concerns the temporal pattern of publication output. The number of papers on job stress increased steadily from 2010 onwards, reflecting a growing recognition of the importance of stress in modern workplaces. This upward trend culminated in a peak in 2016, when scholarly interest in job stress reached its highest point. After 2016, the volume of publications exhibited a pattern of random increases and decreases, suggesting that while job stress remained an important topic, it no longer experienced the same sustained growth in attention as in the earlier part of the decade.

This peak in 2016 can be interpreted in several ways. It may reflect heightened awareness of mental health issues in the workplace during that period, driven by economic uncertainties, technological changes, and increased public discourse on wellbeing. It may also be related to the maturation of key research programs and the publication of influential studies that stimulated further work. Regardless of the underlying causes, the temporal pattern highlights the dynamic nature of job stress research and underscores the value of longitudinal bibliometric analysis for capturing such trends.

In terms of document types, the majority of publications on job stress were found to be articles, indicating that empirical and theoretical journal papers constitute the primary mode

of knowledge dissemination in this field. This predominance of articles is consistent with broader patterns in the social and health sciences, where peer reviewed journals serve as the main vehicles for scholarly communication (Derrick et al., 2012). Other document types, such as conference papers and reviews, were present but played a relatively smaller role.

Disciplinary analysis shows that job stress research is inherently interdisciplinary. The top research areas associated with job stress include medicine, social sciences, and business management and accounting. This distribution reflects the multifaceted nature of job stress as both a health issue and an organizational phenomenon. Medical research often focuses on the physiological and psychological consequences of stress, such as cardiovascular disease, anxiety, and depression, while social sciences examine the social and structural determinants of stress, including gender, work family conflict, and organizational culture. Business and management studies, in turn, explore the implications of stress for job performance, productivity, and organizational effectiveness.

The prominence of medicine as a research area underscores the recognition of job stress as a significant public health concern. Studies such as those by Li et al. (2017), which examine the relationship between work stress, coping, and job performance among nurses, illustrate how medical and health services research contributes to our understanding of stress in specific occupational contexts. Similarly, the inclusion of social sciences reflects the importance of sociological and psychological perspectives in analyzing how stress is experienced and managed by individuals and groups.

Authorship analysis reveals that a relatively small number of scholars have made particularly significant contributions to the field. Lambert E G stands out as the most prolific author in terms of number of publications on job stress during the period under review. Prolific authors often play a key role in shaping research agendas, mentoring junior scholars, and building networks of collaboration that sustain the growth of a field (Grandjean et al., 2011). The prominence of Lambert E G thus indicates not only individual productivity but also the potential influence of that author on the direction of job stress research.

Institutional analysis further highlights the uneven distribution of research activity across organizations. Islamic Azad University emerged as the institution with the highest number of job stress publications. This finding suggests that the university has invested significant

resources and intellectual capital in this area, possibly through dedicated research groups or doctoral programs focused on occupational health and organizational behavior. The concentration of output in a single institution also illustrates the Matthew effect in scientific publishing, whereby institutions that are already active and visible in a field tend to attract more funding, students, and collaborations, further reinforcing their dominance (Grandjean et al., 2011).

Geographical analysis based on citation data provides insights into the global distribution of influence in job stress research. Of the countries represented in the dataset, 24 met the threshold of having at least eight citations. Among these, the United Kingdom was found to have the highest number of citations, indicating that research produced by UK based scholars has had a particularly strong impact on the field. This high citation count may be related to the United Kingdom's long tradition of occupational health research, as well as the availability of high quality national data on work related stress and mental health, such as those provided by the Health and Safety Executive (National Statistics, 2018).

The prominence of the United Kingdom in citation impact also reflects the broader patterns of knowledge production and dissemination in global science, where certain countries and regions enjoy greater visibility and influence due to factors such as language, funding, and institutional infrastructure (Bar Ilan, 2010; Glanzel, 1996). At the same time, the presence of 24 countries meeting the citation threshold indicates that job stress research is truly international in scope, with contributions from diverse cultural and economic contexts.

Perhaps the most conceptually rich findings of the study come from the keyword network analysis. A total of 62 keywords were selected for detailed examination and organized into 10 clusters based on their co occurrence patterns. The largest cluster, consisting of 11 items, included key terms such as effort reward imbalance, gender, and job strain. These keywords were found to be the most frequently occurring in the entire dataset, highlighting their centrality to the field.

The prominence of effort reward imbalance reflects the widespread influence of this theoretical model in job stress research. According to this model, stress arises when there is a perceived mismatch between the effort an employee invests in their work and the rewards they receive in return, whether in the form of salary, recognition, or career opportunities. Empirical studies have repeatedly shown that

such imbalances are associated with adverse health and performance outcomes, making the model a powerful framework for understanding stress in contemporary workplaces.

Gender also emerged as a highly recurrent keyword, indicating that researchers have paid considerable attention to differences in how men and women experience and cope with job stress. This focus is consistent with studies such as Ramanathan (2014), which examined job stress among women employees in the Indian banking sector, and Fong (2019), which explored gender representation in media contexts. Gendered expectations, roles, and inequalities can shape exposure to stressors and access to resources, making gender a crucial dimension of job stress research.

Job strain, another key term in the largest cluster, reflects the enduring influence of the job strain model, which conceptualizes stress as a function of high job demands and low decision latitude. The frequent co occurrence of job strain with other keywords suggests that this model continues to provide a foundational framework for many empirical studies, even as new perspectives and constructs are introduced.

The remaining clusters, although smaller, represent additional thematic areas within the field, such as coping strategies, work home conflict, mental health outcomes, and organizational factors. Together, these clusters paint a picture of a field that is both theoretically grounded and empirically diverse, with multiple lines of inquiry intersecting around the central problem of job stress.

Overall, the results of the bibliometric analysis provide a detailed map of the job stress research landscape from 2010 to 2020. They reveal not only who has contributed most to the field and where those contributions have come from, but also how the conceptual structure of the literature is organized around a set of core themes and theoretical models. These findings set the stage for a deeper discussion of their implications for theory, practice, and future research.

4. Discussion

The findings of this bibliometric and theoretical mapping of job stress research invite a rich and multifaceted discussion that connects empirical patterns to broader intellectual and practical concerns. At the most general level, the results confirm that job stress is a highly salient and globally researched phenomenon, one that cuts across disciplinary, institutional, and national boundaries. The identification of 851 publications over a single decade underscores the

intensity of scholarly engagement with this topic, reflecting both the prevalence of stress in modern work environments and the complexity of its causes and consequences.

One of the most important theoretical implications of the study lies in the dominance of certain conceptual frameworks, particularly effort reward imbalance and job strain. The fact that these constructs emerged as the most frequently occurring keywords and formed the core of the largest thematic cluster suggests that they have become paradigmatic lenses through which job stress is understood. This dominance can be interpreted in two contrasting ways. On one hand, it indicates that these models have proven robust and versatile across a wide range of contexts, from healthcare to banking and from journalism to industrial settings. Their ability to integrate psychological, social, and economic dimensions of work makes them particularly attractive to researchers seeking comprehensive explanations of stress.

On the other hand, the centrality of these models may also point to a certain degree of theoretical inertia within the field. When a small number of frameworks dominate scholarly discourse, there is a risk that alternative perspectives and novel constructs may be marginalized. For example, emerging issues such as digitalization, remote work, and the gig economy may generate new forms of stress that are not fully captured by traditional models of job demands and rewards. The bibliometric evidence, by highlighting the relative prominence of established keywords, thus raises important questions about the capacity of the field to adapt to changing realities.

The prominence of gender as a key theme further illustrates both the strengths and limitations of current research. Gender sensitive analyses have enriched our understanding of how social roles, expectations, and inequalities shape the experience of stress. Studies of women in sectors such as banking and media, for instance, have revealed how work family conflict, discrimination, and glass ceiling effects can exacerbate stress levels (Ramanathan, 2014; Miglani and Brar, 2017). At the same time, the focus on gender often remains binary and may not fully account for the diversity of identities and experiences in contemporary workplaces. The bibliometric patterns suggest that while gender is recognized as important, there is room for more nuanced and intersectional approaches that consider how gender interacts with other factors such as age, ethnicity, and socioeconomic status.

The geographical distribution of citations, with the United Kingdom emerging as the most influential country, also has

important implications. The high citation impact of UK based research likely reflects a combination of factors, including strong traditions of occupational health scholarship, well developed data infrastructures, and the prominence of English as the dominant language of scientific communication. Reports such as those produced by the Health and Safety Executive provide a rich empirical foundation for academic studies and contribute to the international visibility of UK research (National Statistics, 2018).

However, the concentration of citation impact in a small number of countries raises concerns about global equity and representation in job stress research. Work conditions, cultural norms, and institutional arrangements vary widely across the world, and stressors that are salient in one context may be less relevant in another. If research from certain regions is underrepresented or under cited, this can lead to a skewed understanding of job stress that reflects the experiences of only a subset of the global workforce. The presence of 24 countries meeting the citation threshold indicates some degree of diversity, but the dominance of a few countries suggests that there is still a need to amplify voices and perspectives from less visible regions.

The institutional dominance of Islamic Azad University in terms of publication volume similarly invites both recognition and critical reflection. On one level, the high output of this institution demonstrates its commitment to job stress research and its capacity to support sustained scholarly activity. On another level, it highlights how research productivity can be concentrated in particular organizational hubs, potentially shaping the agendas and priorities of the field. Institutional concentration may foster depth and specialization, but it can also limit the diversity of approaches if certain methodological or theoretical traditions become entrenched.

From a methodological perspective, the study illustrates the power of bibliometric tools to reveal patterns that would be difficult to discern through traditional literature reviews. The identification of 10 keyword clusters, for example, provides a clear picture of how the field is organized around interconnected themes. Such clustering reflects the cognitive structure of job stress research, showing how concepts coalesce into recognizable subfields. This kind of mapping is particularly valuable for new researchers entering the field, as it helps them locate their work within the broader intellectual landscape.

At the same time, bibliometric methods have inherent limitations that must be acknowledged. Citation counts,

while useful, do not capture all dimensions of scholarly influence. Highly cited papers may be cited for negative as well as positive reasons, and newer or more specialized studies may have less time or opportunity to accumulate citations. Keywords, similarly, depend on authors' choices and may not fully represent the content of their work. Despite these limitations, the convergence of multiple indicators in this study lends confidence to the overall patterns observed.

The findings also have practical implications for organizations and policymakers. The centrality of effort reward imbalance and job strain suggests that interventions aimed at improving the balance between work demands and rewards, as well as enhancing employee autonomy and control, are likely to be effective in reducing stress. Evidence from studies of nurses, journalists, and other occupational groups supports the importance of organizational practices that promote fairness, recognition, and work life balance (Li et al., 2017; Miglani and Brar, 2017). Policymakers can use this knowledge to design regulations and guidelines that encourage healthier work environments.

The interdisciplinary nature of job stress research, spanning medicine, social sciences, and management, also points to the need for integrated approaches to intervention. Stress is not solely a medical issue to be treated with individual level therapies, nor solely an organizational issue to be addressed through management practices. It is a complex phenomenon that requires coordinated action across multiple levels, from individual coping strategies to organizational policies and societal norms.

In terms of future research, the study identifies several promising directions. One important avenue is the extension of bibliometric analysis to other databases such as Web of Science and Google Scholar, which may capture additional publications and provide a more comprehensive picture of the field (Bar Ilan, 2010). Comparing results across databases can also help assess the robustness of findings and identify potential biases in coverage.

Another direction is the exploration of emerging themes that may not yet be fully visible in the keyword networks. Topics such as digital stress, remote work, and algorithmic management are likely to become increasingly important in the coming years, and researchers should be attentive to how these issues intersect with traditional models of job stress. Qualitative and mixed methods studies can complement quantitative surveys and enrich our understanding of these new forms of stress.

Finally, there is a need for greater integration of theoretical perspectives. While effort reward imbalance and job strain have proven valuable, they should not be treated as exhaustive explanations of job stress. Incorporating insights from sociology, anthropology, and critical management studies can help illuminate the power relations, cultural meanings, and institutional structures that shape stress at work. The bibliometric mapping provided by this study can serve as a foundation for such integrative efforts, guiding researchers toward both the well trodden paths and the unexplored corners of the field.

5. Conclusion

This study set out to provide a comprehensive, publication ready, and theoretically grounded bibliometric analysis of job stress research published between 2010 and 2020. By examining 851 papers indexed in the Scopus database, the research has mapped the temporal, disciplinary, geographical, and conceptual contours of a field that is central to understanding the challenges of contemporary work. The findings demonstrate that scholarly interest in job stress peaked in 2016 and has since exhibited fluctuating patterns, reflecting both the enduring relevance of the topic and the evolving priorities of researchers.

The analysis shows that job stress research is deeply interdisciplinary, with medicine, social sciences, and business management and accounting serving as its primary intellectual homes. This diversity mirrors the multifaceted nature of stress as a phenomenon that encompasses physical health, psychological wellbeing, social relations, and organizational dynamics. The identification of Lambert E G as the most prolific author and Islamic Azad University as the most productive institution highlights the role of key individuals and organizations in shaping the field, while the prominence of the United Kingdom in citation impact underscores the uneven global distribution of influence.

Perhaps the most revealing insights come from the keyword network analysis, which identified 62 key terms organized into 10 clusters. The dominance of effort reward imbalance, gender, and job strain as the most frequently occurring keywords reflects the centrality of these concepts in framing research questions and interpreting findings. These models have provided a powerful foundation for understanding job stress, but their prominence also calls for ongoing critical reflection and theoretical innovation.

By integrating bibliometric evidence with substantive theoretical discussion, this study contributes to a more coherent and cumulative understanding of job stress

research. It demonstrates that bibliometric analysis is not merely a technical exercise but a valuable tool for reflecting on the intellectual structure and trajectory of a field. The results offer practical guidance for researchers seeking to position their work, for organizations aiming to design effective interventions, and for policymakers concerned with promoting healthy and productive workplaces.

At the same time, the study acknowledges its limitations, particularly the reliance on a single database and the inherent constraints of citation and keyword based metrics. Future research that incorporates additional data sources, explores emerging themes, and embraces methodological pluralism will be essential for building on the foundation laid here.

In a world where work continues to be a central source of both meaning and strain, the study of job stress will remain a vital area of inquiry. By providing a detailed map of what has been studied, how it has been studied, and where the field is headed, this research aims to support more informed, innovative, and impactful scholarship in the years to come.

References

1. Ahmad, H. K., Parveen, S., and Ahmad, U. (2012). A study on seasonal variations of benthic community and biodiversity indices about environmental variables in disturbed ponds. *Agris On Line Papers in Economics and Informatics*, 2, 2139 to 2144.
2. Arevalo, J. P. M., and Balodi, A. B. (2019). The impact of pro social and violent video games on helping attitude a comparative study. *Journal of Content, Community and Communication*, 9, 1 to 5.
3. Ardanuy, J. (2013). Sixty years of citation analysis studies in the humanities from 1951 to 2010. *Journal of the American Society for Information Science and Technology*, 64, 1751 to 1755.
4. Bar Ilan, J. (2008). Informetrics at the beginning of the twenty first century a review. *Journal of Informetrics*, 2, 1 to 52.
5. Bar Ilan, J. (2010). Citations to the Introduction to informetrics indexed by WOS, Scopus and Google Scholar. *Scientometrics*, 82, 495 to 506.
6. Barth, M., Haustein, S., and Scheidt, B. (2014). The life sciences in German Chinese cooperation an institutional level co publication analysis. *Scientometrics*, 98, 99 to 117.
7. Bastian, M., Heymann, S., and Jacomy, M. (2009). Gephi an open source software for exploring and manipulating networks. *ICWSM*, 8, 361 to 362.
8. Dalpe, R. (2002). Bibliometric analysis of biotechnology. *Scientometrics*, 55, 189 to 213.
9. DeLooze, M. A., and Lemarie, J. (1997). Corpus relevance through co word analysis an application to plant proteins. *Scientometrics*, 39, 267 to 280.
10. Derrick, G., Jonkers, K., and Lewison, G. (2012). Characteristics of bibliometrics articles in library and information sciences and other journals. *Proceedings of the Seventeenth International Conference on Science and Technology Indicators*, 449 to 551.
11. Egghe, L., and Rousseau, R. (1990). *Introduction to informetrics quantitative methods in library documentation and information science*. New York Elsevier Science Publishers.
12. Ellegaard, O., and Wallin, J. A. (2013). Identification of environmentally relevant chemicals in bibliographic databases a comparative analysis. *SpringerPlus*, 2, 255.
13. Fong, Y. L. (2019). Gender representation and framing of Malaysian women a study of feature articles in a female magazine. *Journal of Content, Community and Communication*, 10, 29 to 38.
14. Frandsen, T. F., and Rousseau, R. (2005). Article impact calculated over arbitrary periods. *Journal of the American Society for Information Science and Technology*, 56, 58 to 62.
15. Garfield, E. (2009). From the science of science to scientometrics visualizing the history of science with HistCite software. *Journal of Informetrics*, 3, 173 to 179.
16. Glanzel, W. (1996). The need for standards in bibliometric research and technology. *Scientometrics*, 35, 167 to 176.
17. Glanzel, W., and Schoepflin, U. (1994). Little scientometrics big scientometrics and beyond. *Scientometrics*, 30, 375 to 384.
18. Grandjean, P., Eriksen, M. L., Ellegaard, O., and Wallin, J. A. (2011). The Matthew effect in environmental science publication a bibliometric analysis of chemical substances in journal articles. *Environmental Health*, 10, 8.
19. Harzing, A W. (2010). *The publish or perish book*. Melbourne Tarma Software Research.
20. Herther, N. K. (2009). Research evaluation and citation analysis key issues and implications. *The Electronic Library*, 27, 361 to 375.
21. Jaswal, V., and Chand, P. (2018). Development of survey instrument for software professionals job stress a factor and confirmatory factor analysis approach. *International Journal of Business Innovation and Research*, 17, 394 to 416.

22. Kunderagi, P. B. (2015). Work stress of employee a literature review. *International Journal of Advance Research and Innovative Ideas*, 1, 18 to 23.
23. Li, L., Ai, H., Gao, L., Zhou, H., Liu, X., Zhang, Z., and Fan, L. (2017). Moderating effects of coping on work stress and job performance for nurses in tertiary hospitals a cross sectional survey in China. *BMC Health Services Research*, 17, 1 to 8.
24. Mental Health Foundation. (2018). Stress are we coping.
25. Miglani, N., and Brar, P. (2017). Mapping the work home conflict of Indian fashion and lifestyle journalists a study of Punjab Haryana and Himachal Pradesh bureaus. *Journal of Content, Community and Communication*, 5, 7 to 14.
26. National Statistics. (2018). Work related stress depression or anxiety in Great Britain. Health and Safety Executive.
27. Ramanathan, N. (2014). Job stress an empirical investigation of women employees working in the Indian banking sector. Alagappa University.
28. Ray, T. K., Kenigsberg, T. A., and Pana Cryan, R. (2017). Employment arrangement job stress and health related quality of life. *Safety Science*, 100, 46 to 56.
29. Senova, A., and Antosova, M. (2014). Work stress as a worldwide problem in present time. *Procedia Social and Behavioral Sciences*, 109, 312 to 316.
30. Shiva, A., Narula, S., and Shahi, S. K. (2020). What drives retail investors investment decisions evidence from no mobile phone phobia and investor fear of missing out. *Journal of Content, Community and Communication*, 10, 2 to 20.