## Work-Life Balance in the Hybrid Era: A Global Bibliometric Study

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#### **ABSTRACT**

This study conducts a comprehensive bibliometric analysis to map global research trends on work-life balance in the hybrid era, using data indexed in Scopus and visualized through VOSviewer. The findings indicate that work-life balance, hybrid work, and remote work constitute the core thematic anchors of the field, supported by interconnected topics such as employee well-being, job satisfaction, productivity, and flexible work arrangements. Network, density, and overlay visualizations reveal growing scholarly attention to psychosocial dimensions of hybrid work, particularly issues related to mental health, employee engagement, and decision-making in digitally mediated workplaces. Collaboration patterns show strong contributions from the United States, India, and European countries, while institutional and author networks remain fragmented, suggesting opportunities for more integrated global research. Citation analysis highlights influential studies that have redefined hybrid work practices and emphasized sustainable organizational models. Overall, the study demonstrates that hybrid work has evolved into a multidimensional research domain that requires interdisciplinary collaboration to address emerging challenges in well-being, organizational adaptation, and digital transformation. The insights provide a foundational understanding of the field and identify future research directions for developing resilient and human-centered hybrid work systems.

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### 1. INTRODUCTION

The global transition toward hybrid work models has accelerated rapidly since the COVID-19 pandemic reshaped organizational structures, employee expectations, and digital labor practices. The pandemic served as a catalyst that forced governments, industries, and institutions to rethink traditional workplace configurations and adopt more flexible arrangements that combine remote and on-site work [1], [2]. As organizations

progressively implement hybrid systems, discussions on productivity, employee well-being, digital competence, and organizational sustainability continue to surge across academic and professional domains [3], [4]. Within this shifting paradigm, work–life balance has emerged as a central topic of inquiry, reflecting its crucial role in shaping occupational health, job satisfaction, and long-term organizational resilience. As highlighted by influential studies such as [5], [6], the "new normal" has fundamentally

redefined the boundaries between personal and professional life, creating both opportunities and challenges for employees navigating hybrid environments.

Technological development further intensifies this transformation. The rapid digital platforms, adoption of virtual communication tools, and AI-assisted systems has created unprecedented flexibility for knowledge workers while simultaneously complicating the management of digital fatigue, work intensification, and the erosion of spatial-temporal boundaries of work [7], [8]. Literature indicates a growing tension between the autonomy provided by digital work arrangements and the increased expectations for constant responsiveness, raising concerns about employee well-being. This duality is evident in contemporary research trends that examine hybrid work through lenses such as digital work behavior, well-being, psychological and technology interactions. Studies by [5], [6] underscore the complexity of maintaining well-being amid heightened technological dependence in remote and hybrid workplaces.

At the same time, the discourse on hybrid work is increasingly intersecting with sustainability agendas. Organizations are moving beyond short-term operational adaptation toward long-term transformation that integrates environmental responsibility, social well-being, and economic viability. Hybrid work has been positioned as a potential contributor to sustainable work environments by reducing commuting emissions, decentralizing workspace needs, and enabling more inclusive labor markets. Evidence from hybrid workforce studies such as [9], [10] suggests that hybrid arrangements may support organizational sustainability when effectively designed and managed. However, disparities in digital access, uneven managerial support, and culturally embedded norms continue to challenge the universal adoption of hybrid systems.

Given these evolving trends, scholarly attention toward work-life balance within the hybrid era has intensified globally. This is reflected in bibliometric network,

overlay, and density visualizations, which indicate expanding and diversifying knowledge clusters associated with themes such as remote work, digitalization, employee hybrid models, well-being, and postpandemic labor dynamics. The rapid accumulation research output of across countries and institutions further demonstrates the global relevance of this topic. Bibliometric mapping is therefore essential for synthesizing research development, identifying influential scholars, and uncovering thematic patterns that shape the scientific landscape of hybrid work and work-life balance. Such an approach allows researchers to trace conceptual evolution, evaluate research impact, and identify emerging opportunities for advancing interdisciplinary inquiry.

Despite the proliferation publications on hybrid work and work-life balance, the literature remains dispersed across multiple disciplines—including psychology, management, sociology, information systems, and labor studiesfragmentation creating that challenges scholars seeking a holistic understanding of the field. A systematic bibliometric approach offers a rigorous means of mapping structures, intellectual examining collaboration patterns, and identifying influential works that shape theoretical and practical developments; thus, by analyzing citation networks, co-authorship relationships, and thematic density, this study provides an integrated overview of global research trajectories in the hybrid era. Accordingly, the study aims to conduct a comprehensive bibliometric analysis of global research on work-life balance in the hybrid era, focusing on major trends, influential publications, emerging thematic directions, and through visualizations of networks, overlays, and density patterns, it reveals how hybrid work has reshaped scholarly perspectives on labor, well-being, and digital transformation. The findings ultimately serve as a conceptual foundation future theoretical refinement organizational practices support that

sustainable and human-centered hybrid work environments.

#### 2. METHODS

## 2.1 Research Design

The research design follows the standard workflow of bibliometric studies, comprising (1) data extraction, (2) data cleaning and normalization, (3) performance analysis, and science-mapping (4)visualization. This design allows both descriptive statistical evaluation of literature and structural mapping conceptual and collaborative networks within the field. The methodological approach is aligned with contemporary bibliometric practices that emphasize co-occurrence citation impact, networks, temporal evolution, and density mapping of research themes.

## 2.2 Data Source and Retrieval Process

The data used in this study were retrieved from the Scopus database, which is recognized for its broad disciplinary coverage and rigorous indexing standards. Scopus was selected as the main source due to its comprehensive bibliographic metadata, enabling robust analysis of citation patterns, author affiliations, keyword networks, and country contributions. Using keywords related to hybrid work, work-life balance, remote working, post-pandemic workplace, and digital labor, the search strategy was designed to capture global publications relevant to the hybrid era. The search period included all available publications indexed up to the year 2025. The final dataset consists of articles, conference papers, reviews, and book chapters that directly discuss hybrid work arrangements work-life balance and dynamics.

## 2.3 Data Cleaning and Standardization

Before analysis, the data underwent rigorous cleaning to ensure accuracy and minimize potential bias, which included standardizing author names to resolve

variations in spelling and inconsistent initials that could fragment authorship clusters; harmonizing keywords by consolidating synonymous terms such as "work-life balance," "work life balance," "hybrid work," and "remote work" for more precise conormalizing mapping; occurrence institutional affiliations by merging various name formats into unified entries to clarify collaboration networks; and removing duplicate records to prevent inflation of citation counts and distortions in network Collectively, these procedures analyses. ensured that the dataset provided a valid and reliable foundation for subsequent quantitative evaluations and sciencemapping visualizations.

# 2.4 Bibliometric Analysis Techniques

The bibliometric analysis consisted of two major components: performance analysis and science-mapping visualization. The performance analysis examined publication trends, influential works, and citation patterns, identifying highly cited studies such as Vyas (2022), Chafi et al. (2022), Hopkins & Bardoel (2023), and Yang et al. (2023) using citation counts from Scopus. These seminal provided the conceptual theoretical foundation for understanding how hybrid work and work-life balance scholarship has evolved. Meanwhile, the science-mapping visualization utilized VOSviewer software to explore structural relationships within the research landscape through multiple visual outputs, including network visualization to identify keyword clusters, overlay visualization to capture temporal evolution of themes, density visualization to highlight areas of intense research focus, co-authorship networks to map researcher collaborations, and country visualizations geographical to reveal contributions and international partnerships. Together, these tools produced multidimensional and comprehensive view of the intellectual and collaborative dynamics shaping the hybrid work literature.

The interpretation of these bibliometric outputs was guided by social

network theory, thematic evolution principles, and knowledge-diffusion frameworks commonly used in sciencemapping studies. Each visualization was examined in relation to the strength and relevance of keyword clusters, the citation performance of foundational works, patterns collaboration across countries institutions, and the emergence of new thematic directions within the hybrid era. This integrative approach ensured that

findings extended beyond descriptive patterns, offering analytically meaningful insights into how hybrid work research has developed conceptually, empirically, and collaboratively within the broader discourse on work–life balance.

### 3. RESULTS AND DISCUSSION

3.1 Co-Authorship and Institutional Collaboration

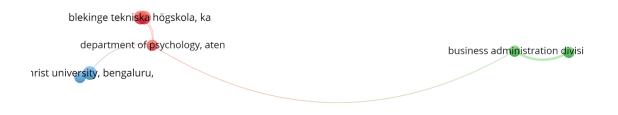




Figure 1. Affiliation Visualization Source: Data Analysis Result, 2025

The co-authorship mapping indicates that research collaboration on work-life balance hybrid work remains within several institutional concentrated clusters, as shown in the affiliation visualization. Three dominant groups are visible: European institutions such Blekinge Tekniska Högskola, which focus on psychological well-being and organizational behavior; Asian institutions such as Christ University Bengaluru, which contribute actively to psychological and behavioral perspectives on hybrid work; and business administration institutions that engage with themes of human resource management and productivity. The noticeable distance among nodes suggests that institutional collaboration is still fragmented, indicating that hybrid work research is advancing within isolated disciplinary domains rather than through a unified, cross-institutional structure. Therefore, strengthening inter-institutional collaboration—particularly across psychology, management, and digital work is crucial for generating more comprehensive and interdisciplinary insights

### 3.2 Author Collaboration Map

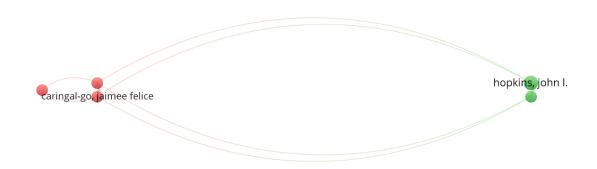




Figure 2. Author Visualization Source: Data Analysis Result, 2025

The author collaboration network reveals two major clusters of researchers who play significant roles in shaping the field: the first centers on Caringal-Go, Jaimee Felice, whose work focuses on well-being, remote work experiences, and psychosocial challenges, demonstrating strong internal collaboration and thematic coherence; while the second is led by Hopkins, John I., whose influential studies on the design and sustainability of hybrid work models connect multiple collaborative pathways and indicate

substantial theoretical impact. Overall, author collaboration remains moderately connected but uneven, as most partnerships occur within geographically and institutionally homogeneous groups, suggesting that global integration across authors is still limited and highlighting opportunities for broader international cooperation to deepen perspectives on digital well-being, flexible work arrangements, and organizational transformation

## 3.3 Country Collaboration Network





Figure 3. Country Visualization Source: Data Analysis Result, 2025

The country-level co-authorship map demonstrates that hybrid work research is dominated by high-income and research-intensive countries, with the United States emerging as the largest and most central node, underscoring its role as a primary knowledge producer and collaboration hub, while India and Australia form strong network connections that reflect their growing interest in digital labor practices, employee well-being, and hybrid workforce management. Other countries—including Canada, Switzerland, Italy, and Spain—are well integrated into the broader network and

contribute actively to studies on productivity, teleworking, and organizational adaptation, whereas Turkey appears as an outlying yet connected node, indicating emerging participation but lower collaboration intensity. Indonesia is also represented but with limited connectivity, pointing to the need for stronger international partnerships to enhance its presence in global hybrid work scholarship. Overall, the structure suggests that research on hybrid work is largely driven by Western and Asian knowledge centers, leaving considerable room for expansion across developing regions

## 3.4 Keyword Network Analysis

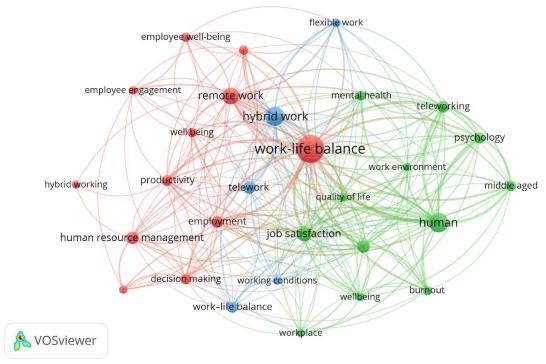


Figure 4. Network Visualization Source: Data Analysis Result, 2025

The keyword co-occurrence network reveals a multidimensional thematic structure in hybrid work research, with the largest nodes-work-life balance, hybrid work, remote work, job satisfaction, and humanindicating their central roles in the field. Three major clusters emerge: the Employee Well-Being and Psychological Outcomes cluster, which includes terms such as employee wellburnout, employee being, engagement, mental health. and decision making, highlighting growing concerns about digital fatigue and psychosocial challenges in remote and hybrid environments; and the Work Models and Productivity encompassing hybrid work, telework, remote work, productivity, and flexible work, which reflects increasing interest in how hybrid

arrangements reshape job structures, workflows, and organizational performance.

The third cluster, Human Organizational Conditions, includes job satisfaction, working conditions, workplace, work environment, and quality of life, emphasizing the relationship between employee experiences and organizational policies in hybrid settings. Together, these clusters form an interconnected thematic landscape in which work-life balance serves as the central node linking psychological wellbeing, flexible work models, organizational conditions. Its position at the core of the network confirms that work-life balance remains the primary conceptual anchor in global hybrid work scholarship.

3.5 Density Visualization flexible work employee well-being employee engagement remote work mental health teleworking hybrid work well being psychology work-life balance hybrid working middle aged telework quality of life employment human job satisfaction human resource management decision making working conditions burnout wellbeing work-life balance workplace **VOSviewer** 

## Figure 5. Density Visualization Source: Data Analysis Result, 2025

The density map indicates that the highest concentration of research centers on work-life balance and remote work, shown by the bright yellow areas in the visualization, which function as major hubs attracting substantial academic attention. Surrounding topics such as job satisfaction, hybrid working, teleworking, human resource management, and mental health also appear

with notable, though comparatively lower, intensity, reflecting their supportive but secondary roles in the broader research landscape. In contrast, peripheral themes like middle aged, burnout, and quality of life appear with much lower density, suggesting that these areas remain relatively underexplored important and present opportunities for future investigation.

## 3.6 Overlay Visualization (Temporal Evolution)

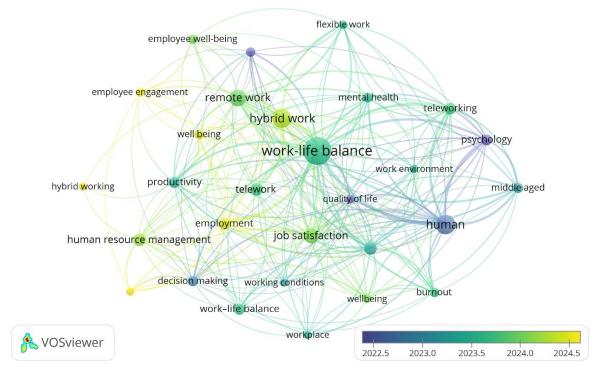


Figure 6. Overlay Visualization Source: Data Analysis Result, 2025

The overlay visualization illustrates the evolution of research themes from 2022 to 2025, with blue tones indicating earlier studies and yellow tones representing more recent topics. The temporal pattern shows that earlyphase studies in 2022 focused on telework, job satisfaction, psychology, and human resource management, followed by mid-phase themes in 2023 such as hybrid work, remote work, and productivity. More recent research trends emerging in 2024–2025 highlight employee

well-being, flexible work, decision making, and employee engagement. This progression reflects a clear shift from examining structural and operational mechanisms of remote work toward addressing more human-centered issues encompassing well-being, emotional health, and the dynamics of employee engagement within hybrid work environments.

### 3.7 Citation Impact Analysis

Table 1. The Most Impactful Literatures

Citations	Authors and year	Title
217	Vyas, L. (2022)	"New normal" at work in a post-COVID world: work-life balance and labor markets
211	Chafi, M.B., Hultberg, A., Yams, N.B. (2022)	Post-pandemic office work: Perceived challenges and opportunities for a sustainable work environment
97	Hopkins, J., Bardoel, A. (2023	The Future Is Hybrid: How Organisations Are Designing and Supporting Sustainable Hybrid Work Models in Post-Pandemic Australia
83	Yang, E., Kim, Y., Hong, S. (2023)	Does working from home work? Experience of working from home and the value of hybrid workplace post-COVID-19
71	Juchnowicz, M., Kinowska, H. (2021)	Employee well-being and digitalwork during the COVID-19 pandemic

Citations	Authors and year	Title
64	Gifford, J. (2022)	Remote working: unprecedented increase and a developing research agenda
64	Butler, D., Holloway, L. (2016)	Technology and Restructuring the Social Field of Dairy Farming: Hybrid Capitals, 'Stockmanship' and Automatic Milking Systems
60	Boyer, K. (2010)	Of care and commodities: Breast milk and the new politics of mobile biosubstances
40	Smite, D., Christensen, E.L., Tell, P., Russo, D. (2023)	The Future Workplace: Characterizing the Spectrum of Hybrid Work Arrangements for Software Teams
38	Sampat, B., Raj, S., Behl, A., Schöbel, S. (2022)	An empirical analysis of facilitators and barriers to the hybrid work model: a cross-cultural and multi-theoretical approach

Source: Scopus, 2025

The citation analysis in Table 1 highlights the foundational and highly influential works that have shaped global understanding of work-life balance and hybrid work in the post-pandemic era. The most cited article, Vyas (2022), dominates the field by redefining work-life balance and labor market dynamics under the "new normal," offering essential conceptual grounding for subsequent studies. Close behind, Chafi et al. (2022) explores employees' challenges and perceived opportunities within post-pandemic office settings, contributing significantly to discussions on sustainable work environments. Hopkins and Bardoel (2023) further advance the literature by examining how organizations design and support sustainable hybrid work models in Australia, establishing a practical and strategic framework that many later studies adopt. Research by Yang et al. (2023) enriches the discourse through empirical insights on the effectiveness and experiential value of working from home, while Juchnowicz and Kinowska (2021) emphasize employee wellbeing and the complexities of digital work during the COVID-19 pandemic. Earlier foundational works such as Gifford (2022) on the unprecedented rise of remote work and Butler & Holloway (2016) on technological restructuring underscore the long-standing intersections between digitalization and labor. Contributions by Boyer (2010) provide socio-cultural perspectives that, although not directly tied to hybrid work, influence broader discussions about care, mobility, and commodification within digitally mediated

systems. Recent studies like Smite et al. (2023) and Sampat et al. (2022) expand the landscape by classifying hybrid work arrangements and examining cross-cultural facilitators and barriers, respectively, reflecting a shift toward more nuanced, multi-theoretical, and globally comparative analyses. Collectively, these highly cited works form the intellectual backbone of hybrid work scholarship, bridging conceptual, empirical, and sociotechnical dimensions that continue to guide contemporary research.

## Discussion

The combined findings from the bibliometric visualizations and citation analyses reveal several overarching insights into the current state of hybrid work research. Author and institutional collaborations remain fragmented but show signs of increasing global connectivity, with the United States, India, and Europe emerging as dominant contributors due to their wellestablished research infrastructures. However, the potential for expanding collaboration to underrepresented regions remains significant. The keyword network highlights the centrality of work-life balance as both a conceptual and empirical anchor, with growing scholarly attention toward psychological well-being, digital stress, and employee engagement-indicating a clear human-centered shift in the evolution of hybrid work scholarship. The temporal progression of themes further demonstrates a transition from early technical and logistical inquiries surrounding teleworking toward more sophisticated explorations of well-being, decision-making, and sustainable organizational practices, reflecting the maturation of hybrid work frameworks as organizations adjust to post-pandemic realities.

Highly cited works emphasize the importance of integrating employee wellbeing into hybrid work design, underscoring the need for organizations to balance flexibility with mental health support, equitable workloads, and inclusive cultural policies. Collectively, the findings reinforce that hybrid work represents more than a structural or technological adjustment; it signifies a profound organizational and societal transformation that demands multidisciplinary perspectives integrating psychology, management, digital technology, and human resource development. Future research should further investigate crosscultural differences, long-term well-being implications, and innovative hybrid models that support both productivity and human sustainability.

### 4. CONCLUSION

The bibliometric analysis provides a comprehensive overview of global research developments on work-life balance within the hybrid work era, revealing that work-life balance functions as the central node connecting key themes such as hybrid work, remote work, job satisfaction, and employee well-being. Although research output has expanded significantly since the COVID-19

pandemic, collaboration across institutions and authors remains limited, indicating a need for stronger interdisciplinary and international partnerships. Countries such as the United States, India, Australia, and several European nations dominate the collaborative network, reflecting their substantial influence shaping hybrid work scholarship. Temporal trends further demonstrate a shift from structural and logistical concerns associated with remote work toward deeper exploration of human-centered including mental health, burnout, flexible work decisions, and employee engagement. Influential publications reinforce importance of designing hybrid work models that prioritize well-being and sustainable organizational practices, highlighting that hybrid work is not merely a technical or operational adjustment, but a transformation with significant social and psychological dimensions.

Overall, this study concludes that hybrid work research is evolving toward a more holistic understanding of digital work environments, integrating organizational, technological, and human perspectives. Future research should expand cross-cultural comparisons, investigate long-term wellbeing outcomes, and explore innovative hybrid models that balance technological efficiency with human sustainability. Such efforts will support the development of resilient, inclusive, and adaptive work systems capable of meeting the demands of an increasingly dynamic global workplace.

#### REFERENCES

- [1] G. M. Agraz-Boeneker and ..., "Heterogeneity and the Origin of the Founding Team: How the Concepts Relate and Affect Entrepreneurial Behavior," *Entrep.* ..., 2018, doi: 10.1007/978-3-319-89336-5\_3.
- [2] B. W. Respati, M. Ihwanudin, and M. Kurniawati, "Pengaruh Kualitas Kehidupan Kerja dan Keseimbangan Kehidupan Kerja Terhadap Performa Karyawan: Peran Mediasi Kepuasan Kerja," *J. Manajerial*, vol. 10, no. 02, p. 179, 2023, doi: 10.30587/jurnalmanajerial.v10i02.5363.
- [3] A. Ramachandran and D. C. V. K. Prasad, "Factors associated with employee retention," Int. J. Res. Hum. Resour. Manag., vol. 4, no. 2, pp. 21–24, 2022, doi: 10.33545/26633213.2022.v4.i2a.109.
- [4] M. Yunus *et al.*, "Unlocking the Power of Employee Engagement: Unveiling the Key Indicators in Public Sector Organizations," *J. Manaj. Pelayanan Publik*, vol. 7, no. 1, p. 275, 2023, doi: 10.24198/jmpp.v7i1.48894.
- [5] A. A. Solihu, I. Iyobhebhe, and A. S. K. Sam, "The Impact of work-life balance on employee work quality improvement in Nigeria," *Eur. J. Hum. Resour.*, vol. 7, no. 1, pp. 46–65, 2023.
- [6] D. Iskandar and I. A. Vidada, "The Effect of Work-Life Balance and Work Environment on Employee Job Satisfaction," Golden Ratio Data Summ., vol. 4, no. 2, pp. 688–693, 2024.
- [7] U. F. P. Sulistyo and S. Ali, "Kompensasi, Kepuasan Kerja Dan Work–Life Balance Terhadap Loyalitas Karyawan," Veteran Econ. Manag. Account. Rev., vol. 1, no. 2, pp. 62–73, 2023.
- [8] L. A. Akobo and J. Stewart, "Contextualising work–life balance: a case of women of African origin in the UK," *Ind. Commer. Train.*, vol. 52, no. 3, pp. 133–153, 2020.
- [9] Y.-Y. Hsu, C.-H. Bai, C.-M. Yang, Y.-C. Huang, T.-T. Lin, and C.-H. Lin, "Long hours' effects on work-life balance and satisfaction," *Biomed Res. Int.*, vol. 2019, 2019.
- [10] D. Soelistya, "Enhancing Work Life Balance for Improved Employee Performance: The Mediating Role of Workplace Environment," Pros. Semin. Nas. Forum Manaj. Indones. - e-ISSN 3026-4499, vol. 2, pp. 21–35, Nov. 2024, doi: 10.47747/snfmi.v2i1.2293.