

## Trends and Relationships Between Work-Life Balance and Employee Performance: A Scientometric Analysis

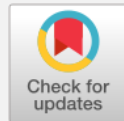
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### ABSTRACT

This study employs a scientometric approach to analyze trends and relationships between work-life balance (WLB) and employee performance. The data were sourced from the Scopus database using the keywords "Work-Life Balance" AND "Employee Performance," resulting in the analysis of 449 articles. The study examines research trends, collaboration networks, topic mapping, and the evolution of research themes from 1994 to 2023. Bibliometric mapping and data visualization were conducted using VOSviewer, RStudio, and CiteSpace. The findings reveal that WLB is a critical factor in employee satisfaction and engagement, directly contributing to improved organizational performance. The COVID-19 pandemic has accelerated the adoption of remote work models, underscoring the significance of flexible working arrangements and effective HR management in achieving optimal WLB. Work autonomy and WLB are shown to have a substantial impact on job satisfaction and employee performance. A comprehensive strategy that integrates organizational support with individual well-being is essential to fostering a productive and satisfied workforce. This research provides a robust theoretical foundation for HR models. Practically, organizations should implement strategies that prioritize both organizational support and employee well-being to enhance workforce productivity. The telecommuting models and flexible arrangements that gained prominence during the COVID-19 pandemic should be permanently embedded into organizational policies. Future research should explore the relationship between WLB and various dimensions of employee performance within a broader context, taking into account cultural and industry-specific variations.

**Keywords:** *Bibliometric Visualization; Employee Performance; Post-Pandemic Trends; Remote Work; Work-Life Balance*

## 1. Introduction

The relationship between work-life balance (WLB) and employee performance is diverse and influenced by a variety of factors, as evidenced by several studies (Dilhani & Dr. Dayarathna, 2017; Dousin et al., 2021; Duan & Deng, 2024; Irfan et al., 2023; Ortiz-Bonnin et al., 2023). Research shows that WLB significantly impacts job performance, with technological knowledge at risk moderating these relationships during the pandemic period, highlighting the need for a healthy work environment that leverages new technological advances while managing associated risks (Borgia et al., 2022). Satisfaction with WLB, combined with satisfaction with an organization's response to a crisis such as COVID-19, improves well-being and subjective performance, suggesting that organizational support during a crisis is critical (Ortiz-Bonnin et al., 2023). In digital work settings, WLB mediates the relationship between intrinsic needs and job performance, with the need for achievement and autonomy playing an important role (Duan & Deng, 2024).

Conversely, a poor WLB can lead to job burnout, negatively impacting project performance, although organizational support can mitigate this effect (Irfan et al., 2023). In specific industries, such as in Malaysia, organizational time demands and managerial support are positively correlated with job performance, emphasizing the importance of a supportive work-family culture (Rahim et al., 2022). Among nurses in Malaysia, WLB practices such as flexible working hours and supportive supervision increase job satisfaction and reduce intention to leave, underlining the role of well-being in performance (Dousin et al., 2021). In Sri Lanka's clothing sector, family-supportive work provisions significantly improved employee performance, although policies on parenting and pregnancy showed no significant impact (Dilhani & Dr. Dayarathna, 2017).

In addition, organizational support for work-family balance positively affects work engagement, which in turn improves performance (Žnidaršič & Bernik, 2021). The young professional experience and the hospitality industry's focus on job attachment and organizational commitment further illustrate WLB's moderating role in retaining employees and improving performance (Dousin et al., 2021; Žnidaršič & Bernik, 2021). Collectively, past studies have underscored that effective WLB practices are critical to improving employee performance across a variety of contexts and industries (Rifaid et al., 2023; Yusuf & Maizar, 2023).

Research shows that WLB practices not only improve employee health and well-being but also have a positive impact on organizational productivity and performance (Zheng et al., 2015). In the construction industry, despite high demands and productivity priorities, WLB practices can bridge the gap between discourse and practice, ultimately benefiting both employees and organizations (Shafiq et al., 2019). In SME auditing Spanish accounting, certain WLB practices, such as time reduction and flexible working arrangements, have been shown to improve financial results, suggesting that strategic implementation of these practices can yield positive business outcomes (Mahfoozi et al., 2018). In the healthcare sector, WLB practices have been associated with better organization, patient care, and employee outcomes, with reduced employee turnover intent mediating these effects (Odrizola & Baraibar-Diez, 2018).

In addition, the perception gap between managers and employees regarding WLB access may affect the uptake and effectiveness of this practice, highlighting the need for alignment in perceptions to maximize benefits (Martínez-León et al., 2019). High-performance HR practices, including consistent WLB initiatives, contribute to better employee role performance and a shared perception of procedural fairness, which is critical to maintaining a motivated workforce (Shafiq et al., 2019). On the other hand, diversity-focused HR practices that foster a climate of inclusiveness and relational attachment among employees also improve individual performance, demonstrating the broader applicability of WLB practices in diverse settings (McCluney et al., 2017). Finally, the implementation of high-performance work systems (HPWS) in industries such as aged care shows that WLB practices contribute to workplace order and predictability, further supporting positive employee experience and performance (Wattoo et al., 2020).

Analyzing current trends and the relationship between WLB and employee performance is critical due to the evolving nature of the work environment, especially post-pandemic. Studies show that WLB significantly affects employee performance, with flexible work arrangements, leave policies, and career advancement opportunities improving job quality and satisfaction (Campo et al., 2021). The shift to remote work has led to mixed opinions among employees, with some experiencing higher productivity and convenience while others need help managing professional and personal commitments simultaneously (Kurniasari & Dewi, 2023). Research shows that WLB and quality of work life positively affect employee performance, with gender playing a moderating role (Nelson & Angellius, 2023).

In addition, leadership and religiosity significantly improve employee engagement and performance, although high-performance work practices and WLB do not always mediate this relationship effectively (Karoso et al., 2022). Organizational commitment also mediates the relationship between work environment, quality of work life, and employee performance, highlighting the importance of supportive work culture (Majumder & Biswas, 2023; Mudiono et al., 2021). The pandemic has intensified the focus on WLB, with research showing a significant increase in related research and its impact on employee performance (Madogwhe & Omogero, 2023). Effective WLB practices, such as ICT, flexi-time, and leave policies, have been shown to improve employee performance in educational institutions (Ahmad et al., 2022).

Conversely, excessive workload and work stress negatively impact WLB and employee performance, emphasizing the need for balance to reduce stress and increase productivity (Dwitanti et al., 2023). Employee engagement, closely linked to WLB, is critical to organizational success, as engaged employees demonstrate higher performance and loyalty (Abiodun Solihu et al., 2023). Therefore, continuous analysis of WLB trends and their relationship to employee performance is essential to developing strategies that foster a productive and satisfied workforce, ultimately benefiting organizational outcomes.

The research is particularly relevant to demographic and social changes, such as the rise of Millennials and Generation Z, who have different values and expectations about work and personal life. Understanding these needs can help organizations meet the needs and expectations of a younger workforce, improving employee retention and satisfaction (Tjahjono & Yuliza, 2022). The COVID-19 pandemic has accelerated the adoption of telecommuting and flexible work models (Rahmawaty et al., 2022), which directly impacts WLB. Therefore, it is essential to reassess the relationship between WLB and employee performance, considering dynamic changes in the work environment by analyzing past literature.

A scientometric analysis is an essential tool for understanding research trends, publication patterns, and the influence of a topic in academic literature. This is useful in the study of WLB's

work-life balance and employee performance. By examining the evolution of publications, geographic distribution, and contributions from various authors and institutions, scientometric analysis provides a comprehensive picture of the depth and gaps of research. The impact of research on WLB and employee performance can be measured through the number of citations and other indicators that demonstrate the recognition and use of research by the academic community. This helps identify critical research and leading researchers who have contributed significantly to our understanding of the relationship between WLB and employee performance. The scientometric analysis also helps identify scientific collaborations and networks of researchers, thus enabling us to identify centers of research excellence and potential future collaborations that can enhance and broaden our understanding of WLB and employee performance. Scopus, one of the largest and most respected bibliographic databases, provides a solid basis for this scientometric analysis to ensure accurate and comprehensive data.

A review of existing extant literature has failed to articulate the debate between work-life balance (WLB) and employee performance. Accordingly, this study will challenge the dominant perspectives on the relationship between work-life balance (WLB) and employee performance. It is assumed that a narrow focus on specific cultural and industrial contexts, such as the healthcare or education sectors, has constrained previous research. Consequently, the potential influence of other cultural and industrial variations on this relationship has not been fully explored. Secondly, while the global pandemic has demonstrated the value of remote and flexible working arrangements, research on the integration of these changes into long-term organizational policies is limited. Thirdly, there is a discrepancy between the perceptions of managers and employees regarding the accessibility of work-life balance (WLB) policies, which may impact their efficacy. However, few studies have investigated strategies for addressing this issue. Fourthly, the majority of research concentrates on general employee performance, such as productivity and job satisfaction, without investigating the influence of work-life balance (WLB) on more specific performance dimensions, including innovation, creativity, and collaboration.

Furthermore, the role of technology in WLB settings, particularly the impact of excessive technology use, has been under-researched. Finally, many studies have only focused on the short-term impact of WLB, especially during the pandemic, without evaluating its long-term impact on organizational performance. These gaps suggest that there is still scope for further research that can contribute significantly to the development of Work-Life Balance theory and practice in various contexts.

This research highlights its novelty by using a scientometric approach to analyze trends and relationships between work-life balance (WLB) and employee performance. This research explicitly addresses gaps in the existing WLB literature by integrating the COVID-19 pandemic as a contextual variable, using a comprehensive bibliometric methodology with VOSviewer, RStudio, and CiteSpace, emphasizing cultural and industry dimensions, addressing modern work dynamics, in particular remote working and flexible arrangements, and using state-of-the-art data analysis tools. By bridging these gaps, this research provides contextual, methodological, and practical insights relevant to the evolving world of work.

## **2. Research Methodology**

This study uses a scientometric approach to analyze trends and relationships between WLB and employee performance. The study used literature sourced from the Scopus database (Zhu & Liu, 2020). This research aims to identify trends, lead authors, influential institutions, and the development of scientific work in the field (Lawelai et al., 2023). Scopus is widely known for its comprehensive coverage of peer-reviewed literature in various fields (Schotten et al., 2017),

making it a suitable base for conducting a thorough literature review. The use of Scopus facilitates a detailed examination of the development and dissemination of research results related to WLB and employee performance.

For systematic collection and analysis of relevant literature, Scopus databases are searched with the keywords “*Work-Life Balance*” AND “*Employee Performance*” by selecting data based on Subject Area (*Business, Management and Accounting*), Publication Stage (*Final*), Language (*English*), Source type (*Journal*), Document types (*Article*). The stages in the results of excluding and including data are explained in **Figure 1**. Further, resulting data sets are exported in CSV format. This data is then imported into VOSviewer, RStudio, and CiteSpace for visualization and analysis. These tools are integral to the methodological framework of scientific review and allow researchers to visualize patterns, map bibliometric networks, and synthesize data efficiently. The use of VOSviewer, RStudio, and CiteSpace helps improve the understanding of the collected literature (Guo et al., 2023), thus enabling a more comprehensive analysis of data retrieved from Scopus.

The tools employed in this research are based on the approach above. VOSviewer is utilized to visualize bibliometric networks, including relationships between authors, institutions, or research topics. This facilitates the identification of influences and patterns of collaboration in the field of work-life balance (WLB) and employee performance. Secondly, RStudio was employed for the comprehensive analysis of keyword trends and topic evolution. Thirdly, CiteSpace was utilized for citation data analysis and the detection of topic spikes that are trending. These tools assist in understanding thematic connections in the literature and in identifying emerging themes.

This methodological approach is consistent with standard practice in data collection and analysis in scientometric research and emphasizes the importance of visual tools in data extraction and synthesis. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology is used to determine the stages of data screening and selection (X. Wang et al., 2019). Only peer-reviewed papers published in English within the last 30 years (from January 1, 1994, to December 31, 2023) were included in this review. These criteria ensure the inclusion of high-quality and relevant literature that reflects the current discourse on WLB and employee performance. By following PRISMA’s guidelines, the study provided a transparent and repeatable selection process, thereby increasing the credibility and reliability of the findings.

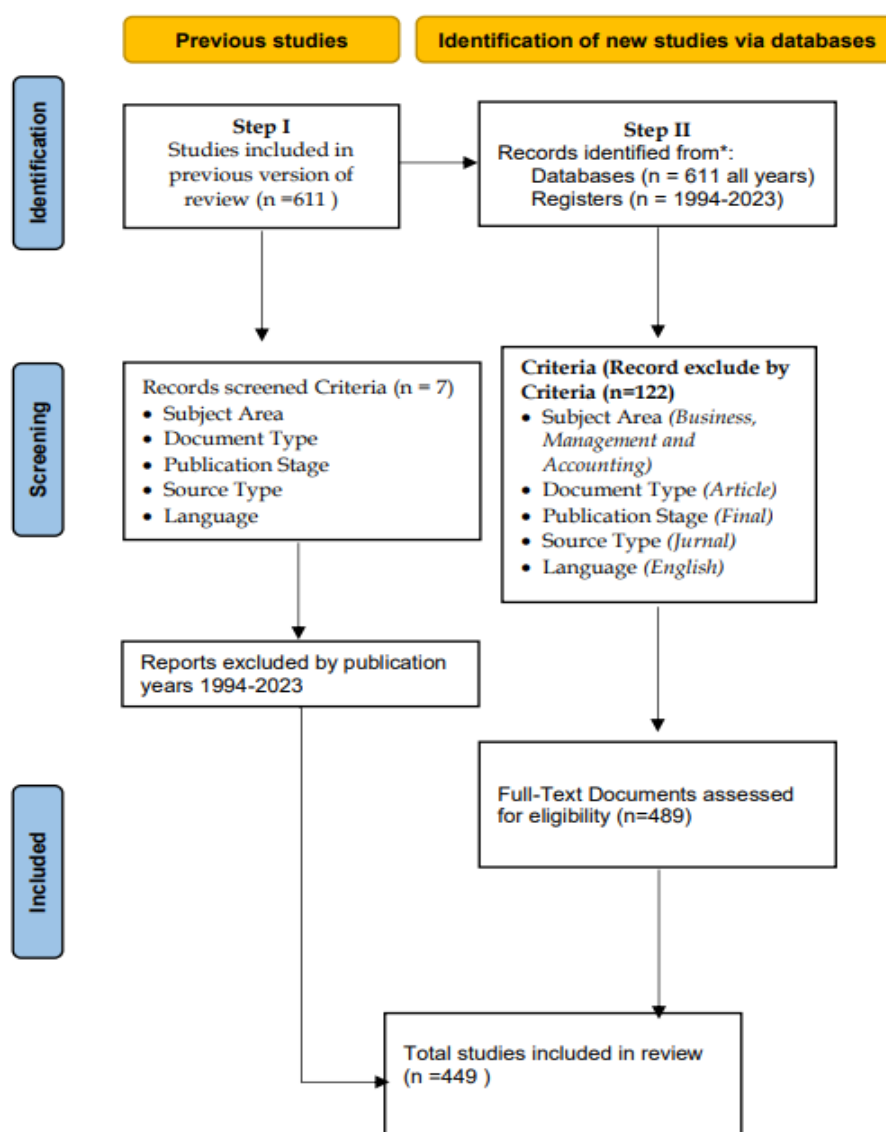
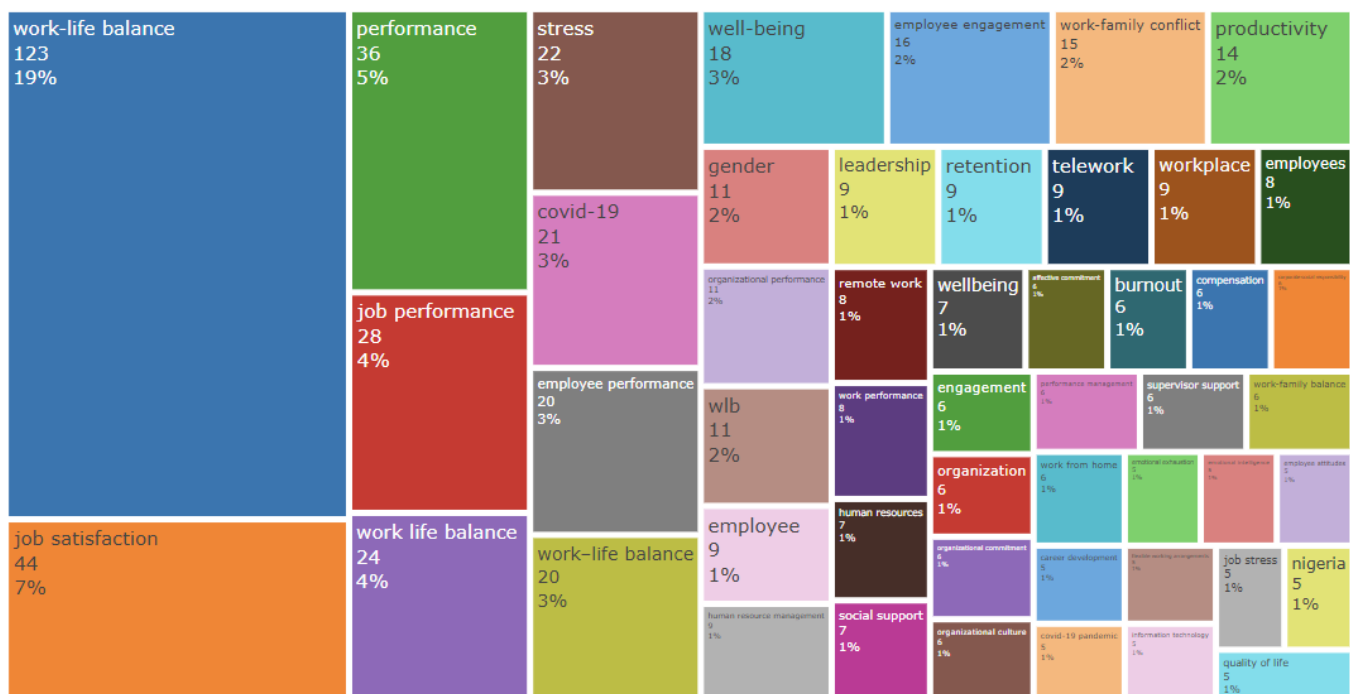


Figure 1. PRISMA chart modified article selection process in a systematic review  
Source: (X. Wang et al., 2019)

### 3. Results and Discussion

#### 3.1. Result Research Trends

RStudio and CiteSpace are beneficial essential tools for comprehensively analyzing research trends in work-life balance (WLB) and employee performance (Kişi, 2023). RStudio, equipped with tools such as Bibliometrics, facilitates the identification and visualization of keyword patterns in scientific publications, offering insight into the frequency and trend of specific terms (Zardari et al., 2022). On the other hand, CiteSpace serves as a valuable visualization tool for analyzing citation data (Prakoso et al., 2023). Determining keywords with spikes in citations is essential for revealing topics that are gaining prominence and influence in the scientific community. By integrating RStudio and CiteSpace, the study can gain a holistic understanding of research dynamics, evolution, and thematic connections in the areas of work-life balance and employee performance, enabling the identification of emerging areas of interest and the evolution of key concepts in the field.



**Figure 2. Keyword Overview**  
Source: Data processing using Rstudio

**Figure 2** shows research trends in WLB and employee performance, revealing a growing focus on interactions between professional and personal lives, especially in the wake of the COVID-19 pandemic. The emergence of terms such as “work-life balance,” “job satisfaction,” and “employee engagement” in recent research underscores the critical role that WLB plays in increasing employee satisfaction and engagement, which is directly linked to improved organizational performance (J. Wood et al., 2020; Yadav et al., 2022). The pandemic has accelerated the adoption of remote work models, making terms like “remote working” prevalent in the discourse and reflecting significant changes in work dynamics impacting WLB (Gruber et al., 2021; Johnson et al., 2018).

Despite these changes, challenges such as stress, burnout, and emotional exhaustion remain prominent, pointing to ongoing mental health issues that need to be addressed (Mäkelä et al., 2023; Shirmohammadi, Chan Au, et al., 2022). Research has shown that flexible work arrangements and organizational support, including supervisor support and effective human resource management (HRM), are essential in helping employees achieve a better work-life balance (Kumar et al., 2023). For example, the “work-life balance machine” model suggests that maintaining balance in work-life systems involves managing various elements, resources, and forces in work-life cognitive systems (Fan et al., 2021).

In addition, employee engagement affects employee performance (Fotiadis et al., 2019). The pandemic has also exposed the importance of communication functions and the role of organizational policies in supporting remote work, which is essential for maintaining productivity and job satisfaction during involuntary work-from-home scenarios (Staniec et al., 2023). Overall, the interrelated aspects of WLB and employee performance emphasize the need for a comprehensive strategy that addresses organizational support and individual well-being to foster a productive and satisfied workforce.

**Table 1. Top 10 Keywords with the Strongest Citation**

Keywords	Year	Strength	Begin	End	1994 - 2023
emotional intelligence	2013	2.76	2013	2017	
psychology	1998	3.93	2016	2020	
work-life balance	2014	3.52	2017	2018	
middle-aged	2006	4.16	2018	2020	
work engagement	2018	3.45	2018	2018	
employee performance	2019	3.43	2019	2021	
covid-19	2021	5.01	2021	2023	
working conditions	2003	3.32	2021	2023	
work from home	2021	2.85	2021	2023	
telecommuting	2021	2.85	2021	2023	

Source: Data processing using CiteSpace

**Table 1** shows some of the keywords with the most robust citation boom from 1994 to 2023, revealing significant trends in research focus over the years. Emotional intelligence experienced an explosion of citations from 2013 to 2017, reflecting the growing importance of emotional intelligence in the study of psychology and organizations during the period (Lopes, 2018). The keyword psychology experienced a substantial spike in citations from 2016 to 2020, indicating widespread interest in the field and its various sub-disciplines (Donaldson et al., 2019). Work-life balance exploded from 2017 to 2018, highlighting growing concern for employee well-being and its impact on productivity (Sirgy & Lee, 2018).

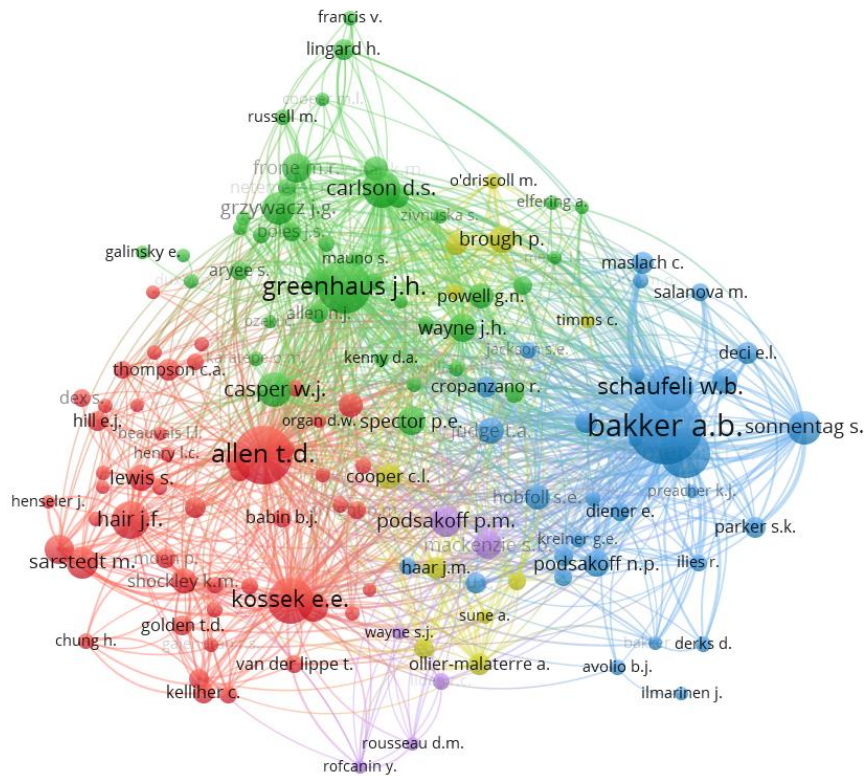
Furthermore, the topic of work engagement exploded in 2018, underscoring its critical role in employee performance and organizational success (Schaufeli, 2018). Employee performance experienced an explosion from 2019 to 2021, reflecting its centrality in HR and organizational behavior studies (Diamantidis & Chatzoglou, 2019). The COVID-19 buzzword experienced its most robust boom from 2021 to 2023, dominating research on WLB and employee performance studies due to the global impact of the pandemic (Campo et al., 2021). Working conditions also experienced a surge from 2021 to 2023 due to the effects of the pandemic on the environment and workplace policies (Llop-Gironés et al., 2021). Working from home and telecommuting both experienced booms from 2021 to 2023, reflecting the shift towards remote work and its implications for productivity and work-life balance during the pandemic (Shirmohammadi, Au, et al., 2022). This trend illustrates how external events such as the COVID-19 pandemic can significantly affect research priorities and citation patterns in various fields.

### 3.2. Network Analysis and Research Collaboration

To analyze research networks and collaborations in the field of WLB and employee performance, VOSViewer software is used to visualize influential authors, journals, and countries in this research domain. By examining citation frequency and collaborative relationships, influential authors can be identified, demonstrating their central role in shaping the direction of the research (Gölgeci et al., 2022; Mitrović et al., 2023). Furthermore, by analyzing publication data, the contributions of major journals on WLB and employee performance can be identified, providing a significant platform for knowledge dissemination in the field. This analysis highlights the most influential journals and their role in advancing research and fostering academic discussions on the interplay between work-life balance and



employee performance (Amado et al., 2018). Through author affiliations and patterns of international collaboration, the most influential countries in this field of research can be determined, highlighting major research centers and showcasing global research interactions (Lawelai, 2023). This comprehensive analysis provides a deeper understanding of the research landscape, identifying key players in WLB reviews and employee performance.



**Figure 3. Citation network with authors**  
Source: Data processing using VOSviewer

Figure 3 describes some of the most influential authors based on their high citation counts and strong network relationships, demonstrating their significant influence in the field. Arnold B. Bakker is the most influential author, known for his extensive research on burnout, engagement, and WLB, which serves as a primary reference for other researchers (Bakker et al., 2023). Tammy D. Allen has made significant contributions to understanding work-family conflict and the organizational interventions that help achieve and sustain WLB (Allen et al., 2020). Jeffrey H. Greenhaus, focusing on the dynamics between work and personal life, provides insights into improving work balance and satisfaction (Greenhaus & Kossek, 2014).

Furthermore, Evangelia Demerouti has extensively researched the Job Demands-Resources model, significantly contributing to an understanding of how job and resource demands affect burnout and engagement (Demerouti & Bakker, 2023). Ellen E. Kossek is a leading researcher in work-life policy and flexibility, shaping organizational policies to support employee well-being (Kossek et al., 2023). Wilmar B. Schaufeli, known for his work on burnout and engagement, contributed to the development of the concept of engagement that became central to WLB studies (Schaufeli et al., 2019). Carlson et al. and Harrison and Hair focused on role conflict and work-family balance. They were recognized for their contributions to research methodology and data analysis in the WLB study (Carlson et al., 2014; Harrison & Hair, 2017). The findings of

this study provide an essential foundation for ongoing research in WLB and employee performance, demonstrating their significant impact on the ground.

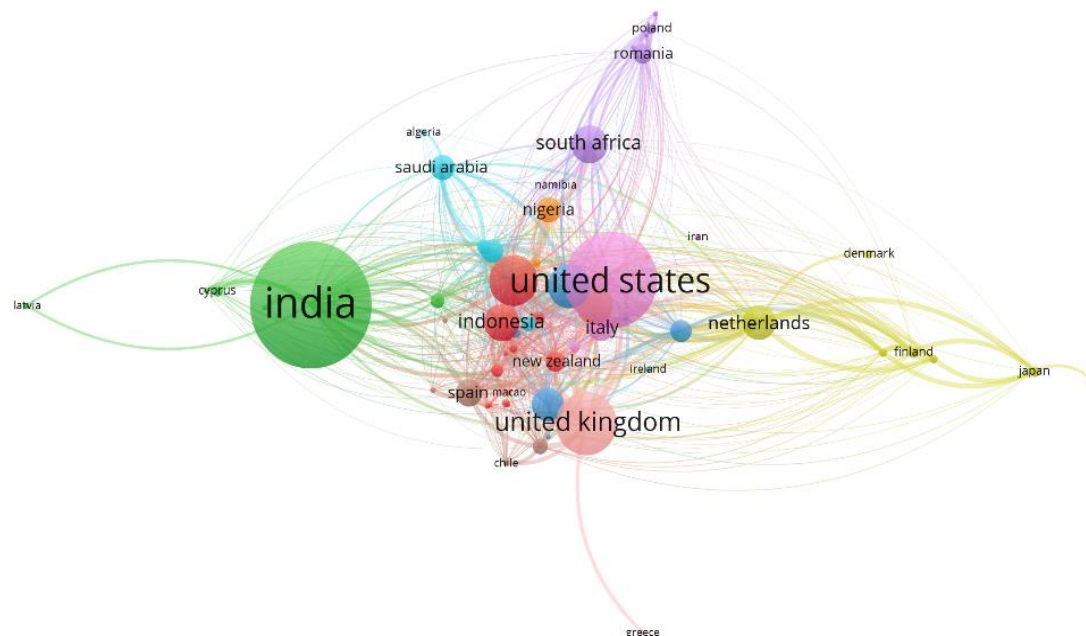
**Table 2. Journals with the most documents by citations**

Journal	Document	Citation	Link Strength
<b>International Journal of Environmental Research and Public Health</b>	13	413	37
<b>Personnel Review</b>	10	274	170
<b>Frontiers in Psychology</b>	9	136	37
<b>Sustainability</b>	8	184	29
<b>Asia Pacific Journal of Human Resources</b>	7	396	93
<b>Employee Relations</b>	7	126	66
<b>Industrial and Commercial Training</b>	6	101	20
<b>Journal of Occupational Health Psychology</b>	6	509	89
<b>SA Journal of Human Resource Management</b>	6	48	34
<b>International Journal of Human Resource Management</b>	5	174	46

Source: Data processing using VOSviewer

**Table 2** shows the significant influence of several major journals, which are frequently cited and have strong connections in research networks. The International Journal of Environmental Research and Public Health is highly influential, covering a broad spectrum of topics related to the environment and public health, including WLB and employee performance, as reflected in the high number of citations (Beckel & Fisher, 2022). Personnel Review also plays a central role in the WLB research community, focusing on HR policies and practices that support WLB, making it an essential resource for researchers and practitioners (Martínez-León et al., 2019). Frontiers in Psychology contributes significantly to the psychological understanding of WLB and employee performance, addressing aspects such as stress management, burnout, and employee well-being (Lucia-Casademunt et al., 2018).

Sustainability explores how sustainability practices in the workplace can support WLB and employee performance, emphasizing WLB's role in organizational sustainability (Gálvez et al., 2020). The Asia Pacific Journal of Human Resources addresses region-specific WLB issues, contributing to global discussions with frequently referenced research (Koon, 2022). These journals collectively provide a comprehensive understanding of WLB and its impact on employee performance, underscoring the importance of a supportive workplace culture and sustainable HR practices in improving employee well-being and productivity.

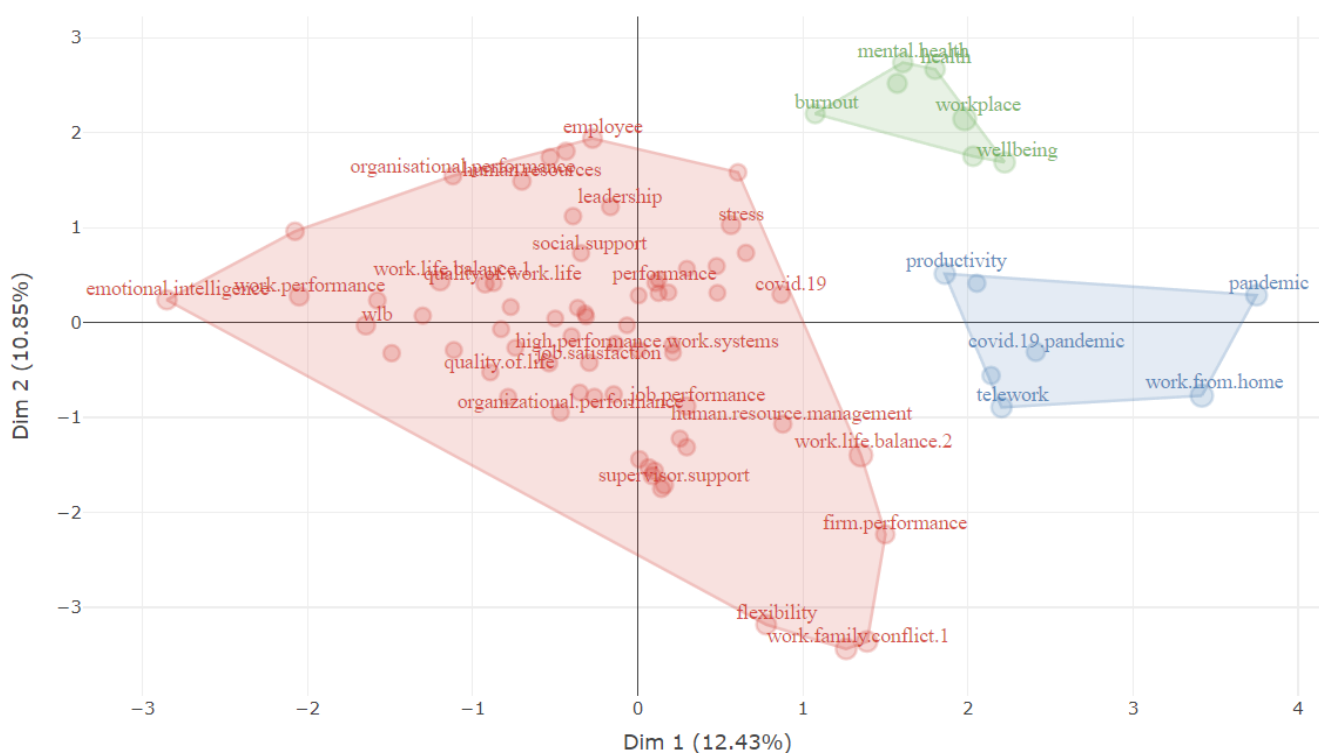


**Figure 4. Publication Network in different countries**  
Source: Data processing using VOSviewer

**Figure 4** describes countries contributing significantly to global research networks. India, with 88 documents and 669 citations, is the primary reference in the WLB literature, highlighting the importance of organizational culture, salaries, workload, and working hours in influencing WLB in the construction industry (Chaudhuri et al., 2020). In addition, the visualization shows how often countries (with at least ADD citations) are cited in the same article. The node represents the state, while the connection reflects the shared citation relationship. Countries with larger nodes have more citations. The strength of the relationship shows how often they are quoted together. Frequently referenced countries are usually grouped in nodes of the same color.

### 3.3. Research Topic Mapping

Mapping a research topic using conceptual structure maps and cluster visualization is a practical approach to understanding the academic research environment and uncovering key trends, patterns, and themes in a particular field (Basnet et al., 2023; Marrone & Linnenluecke, 2020). This process involves the use of tools such as RStudio for data processing and CiteSpace to visualize the cluster network of research topics.



**Figure 5. Conceptual Structure Map**  
Source: Data processing using RStudio

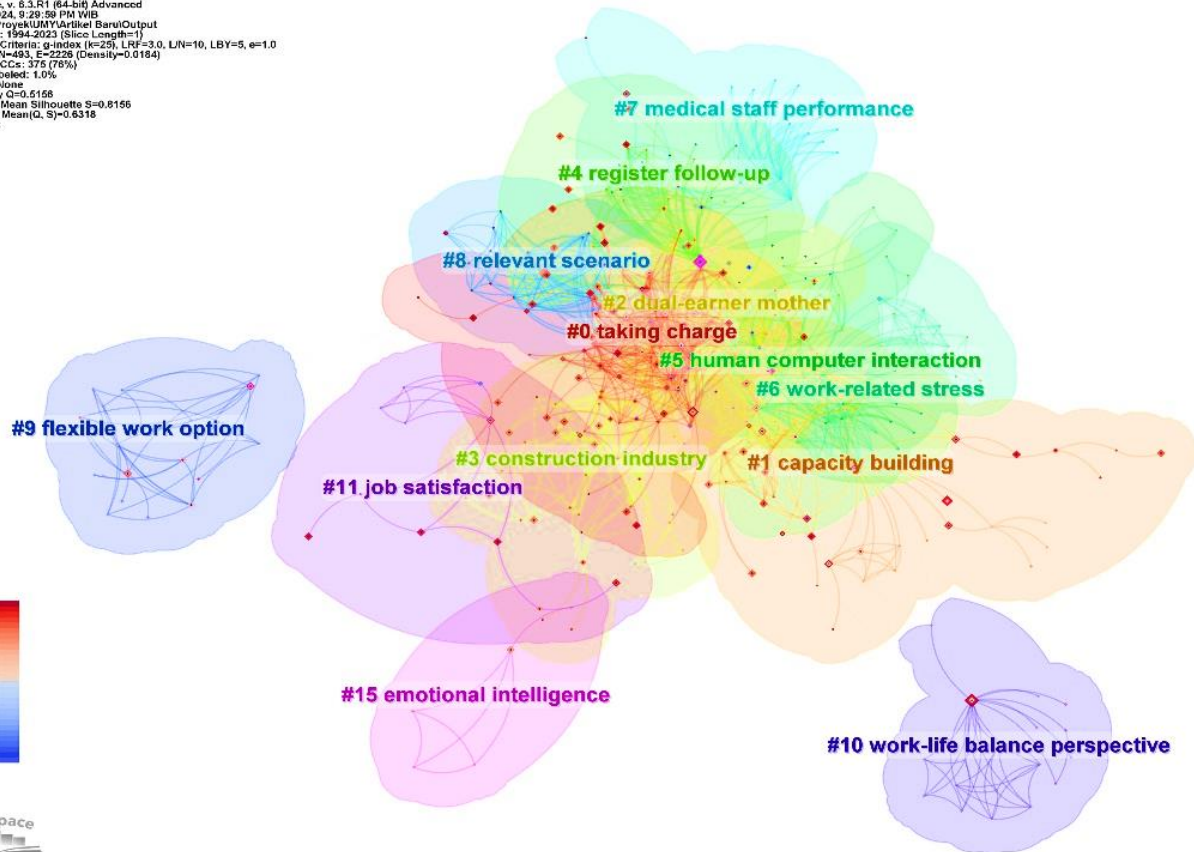
The first cluster (in red), which focuses on “work-life balance” and its various influences, highlights the complex interplay between personal and professional domains. Work-life balance is an essential aspect of personal and professional life, affecting job satisfaction, stress reduction, and employee engagement (Brough & Boase, 2019). Policies to improve organizational well-being and commitment can enhance this balance. Work-family conflict and enrichment also play a role, with enrichment promoting balance (Wayne et al., 2020). Excessive workloads and time pressures can exacerbate conflict, while job resources such as autonomy and workplace support can improve them. Socio-economic contexts, such as welfare regimes, also shape work-life balance and engagement (Thanem & Elraz, 2022). The results of this study emphasize that work-life balance is a multifaceted construct that is influenced by individual, organizational, and social factors.

The second cluster (blue) covers topics related to drastic changes in work patterns due to the COVID-19 pandemic. Topics such as teleworking, working from home, the COVID-19 pandemic and remote working show a focus on the pandemic’s impact on the way we work. The COVID-19 pandemic has had a significant impact on work patterns, especially telework and remote work. Studies show that teleworking has a positive effect on social well-being, work-family balance, and task-technology suitability, affecting teleworking performance and career engagement post-pandemic (Aleem et al., 2023). The shift to telework has also led to changes in travel behavior, with a negative impact on commutation time and a positive impact on leisure travel time (Hostettler Macias et al., 2022). The results of this study emphasize differences in telework use among local employees based on demographics, with the support of leaders and organizations playing a role in reducing gender-related disparities.

The third cluster (green) focuses on employee well-being and wellness, covering workplace dynamics, burnout, mental health, and hybrid work. The COVID-19 pandemic has led to

remote work, which is affecting mental and physical health. Workplace wellbeing programs have evolved to address social issues and produce ‘fit for work’ employees (Tuzovic & Kabadayi, 2021). Organizational inequalities and mental health costs are significant, and workplaces play an essential role in promoting mental health (Follmer & Jones, 2018). Leadership interventions that promote health-oriented behaviors have shown positive effects on employee well-being. Work-life conflicts and organizational strategies that allow psychological release are also important factors (T. Wang et al., 2021). Integrated health initiatives that consider broader socioeconomic impacts are significant in high-stress environments.

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 WoS: D:\Proyek\IJM\Artikel Baru\Output  
 Timespan: 1994-2023 (Slice Length=1)  
 Selection Criteria: g-index (k=25, LRF=3.0, LBY=10, LBY=5,  $\phi=1.0$ )  
 Network: N=493, E=2226 (Density=0.0184)  
 Largest CCs: 375 (76%)  
 Nodes Labeled: 1.0%  
 Pruning: None  
 Modularity Q=0.5166  
 Weighted Mean Silhouette S=0.8166  
 Harmonic Mean(Q, S)=0.6316  
 Excluded:



**Figure 6. Research Topic**  
 Source: Data processing using CiteSpace

The first largest cluster (#0 taking charge) has 60 topics and a silhouette value of 0.662. The study found that the most cited topics in this cluster were job performance, health status, diary studies, angiotensin receptor antagonists, and midlife. The risks of technological knowledge can significantly affect the relationship between work-life balance and job performance, emphasizing the need for a healthy work environment that considers the risks associated with new technologies (Borgia et al., 2022). Studies have highlighted the importance of maintaining a balance between work and personal life, as it negatively relates to work demands, turnover intentions, and psychological strain while positively affecting family and job satisfaction (Wong et al., 2023). In addition, unhealthy lifestyle behaviors, such as poor eating habits, can cause emotional and physical strain, ultimately affecting job performance negatively, with emotional stability moderating this relationship (Cho & Kim, 2022). Therefore, promoting work-life

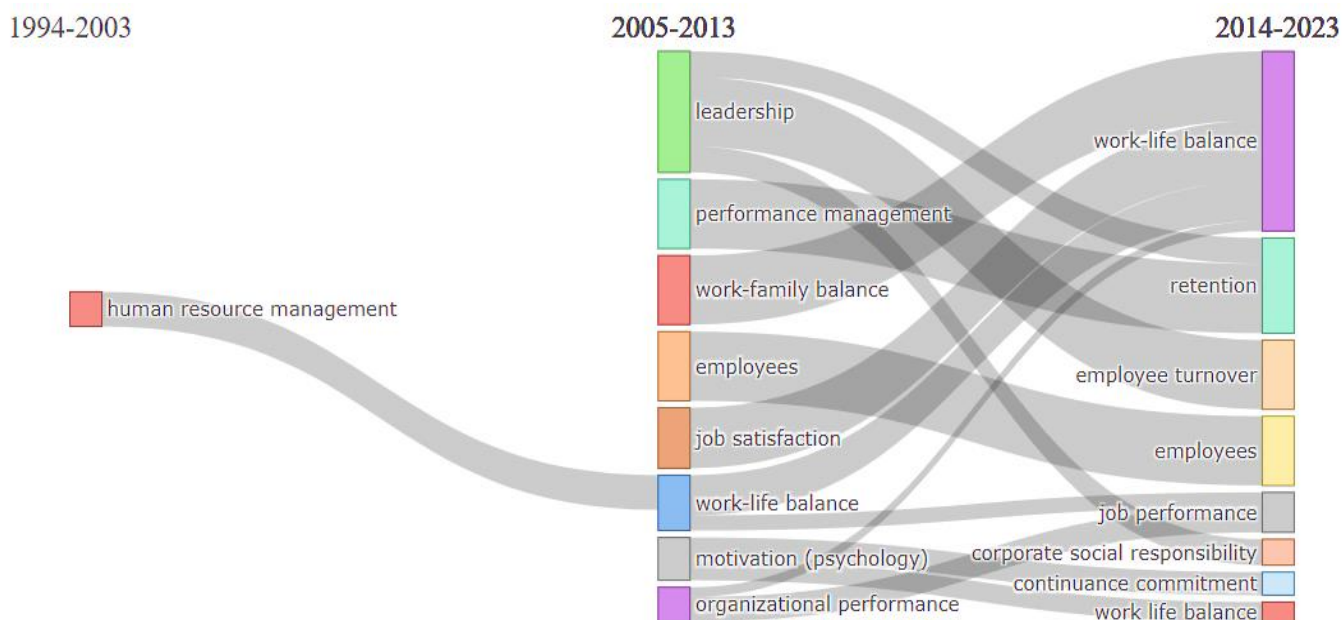
balance and healthy lifestyle choices is essential to improve employee performance and well-being.

The second largest cluster (#1 capacity building) has 44 topics and a pedigree value of 0.78. The study found that the most cited topics in this cluster were healthcare organization, work environment, health workforce management, and employee engagement. WLB is essential for improving employee performance and engagement in healthcare organizations. Factors such as safety culture, teamwork, and job resources significantly affect employee engagement and job satisfaction (Björk-Fant et al., 2023; Fadhilaini et al., 2021). The link between work-life balance and work engagement is positive across different welfare states in Europe, with variations described by welfare regimes (Cantarelli et al., 2023). The COVID-19. The pandemic has highlighted the importance of engagement in the workplace, emphasizing the impact of personal and occupational resources on frontline healthcare workers (Ashfaq et al., 2023). Therefore, healthcare managers can unlock the potential to improve employee performance and well-being by managing the factors that drive work engagement.

The third largest cluster (#2 dual-earner mother) has 38 topics and a silhouette value of 0.693. The study found that the most cited topics in this cluster were employment, public health, employees, careers, and health surveys. WLB and personal life are critical to employee performance and public health, and comprehensive measuring tools are needed for a wide range of sectors, including health professionals (Alameddine et al., 2023). Research shows a positive relationship between work-life balance and work engagement in European countries affected by well-being regimes (Björk-Fant et al., 2023). The socio-economic context affects well-being in the workplace. Work-life conflicts affect self-reported health among working adults, emphasizing the need for work-life balance to prevent adverse health effects (Wong et al., 2023). By promoting work-life balance, it can improve employee performance, public health, and career satisfaction.

### 3.4. The Evolution of Research Topics

Sankey diagrams visualize the evolution of research topics, allowing researchers to track shared interests in stand-alone subjects, modeling issues, and neural networks predicting future trends (Harikandeh et al., 2023). RStudio extracts topics and maps word-topic relationships, providing insight into topic intensity and evolution. This methodology offers a comprehensive view of the research field.



**Figure 7. Theme Evolution of work-life balance (WLB) and employee performance from 1994 to 2023**

Source: Data processing using RStudio

**Figure 7** describes the thematic evolution of work-life balance (WLB) and employee performance from 1994 to 2023, reflecting significant changes in focus areas in HRM. During the period from 1994 to 2003, HR mainly concentrated on essential aspects such as employee engagement and job satisfaction, which are very important for maintaining work performance and satisfaction among staff (S. Wood, 1999). From 2005 to 2013, the focus expanded to include leadership, performance management, work-family balance, and motivation, highlighting the importance of aligning high-performance work practices (HPWP) with job performance through mechanisms such as people-job fit (Buller & McEvoy, 2012). This era also saw an increased emphasis on organizational performance and the relational nature of employee engagement, underscoring the dynamic interaction between individual well-being and organizational outcomes (Eby et al., 2012).

In the period from 2014 to 2023, themes are evolving to address more complex issues such as employee retention, turnover, and corporate social responsibility (CSR). Studies so far emphasize the critical role of sustainable WLB practices in reducing turnover intentions and improving job performance, especially in the context of external job opportunities and the increasing prevalence of post-COVID-19 hybrid work models (Ayoko et al., 2021; Raghavan et al., 2021). The integration of WLB with organizational responses to crises, such as pandemics, further demonstrates the need to safeguard employee well-being and performance (Newman et al., 2022). In addition, the role of HR analytics in linking HR practices to organizational performance is becoming more transparent, reflecting a data-driven approach to understanding and improving employee outcomes (Marler & Boudreau, 2017). Overall, the thematic evolution underscores the growing recognition of the multifaceted nature of WLB and its critical impact on individual and organizational performance across different periods.

The relationship between thematic clusters such as work-life balance (WLB) and its implications for employee performance can be reinforced through the implementation of several strategic approaches that are supported by research findings. The application of

scientometric analysis represents a valuable methodology for the mapping of trends and the identification of relationships between topics pertaining to work-life balance (WLB) and employee performance. The utilization of tools such as VOSviewer and CiteSpace enables the visualization of collaboration patterns among researchers and the identification of pivotal themes. In the context of work-life balance (WLB), theoretical models such as the Job Demands-Resources (JD-R) model have demonstrated that work autonomy, organizational support, and WLB can enhance employee satisfaction and performance. Moreover, research indicates that the implementation of work-life balance (WLB) must be tailored to specific cultural and industrial contexts. For instance, the healthcare sector necessitates greater flexibility in working hours with the objective of reducing workload and enhancing employee well-being.

Furthermore, organizations must enhance internal support through the implementation of supportive supervision and flexible policies to mitigate work-related stress, as evidenced by related research. Nevertheless, the efficacy of WLB policies is frequently constrained by a discrepancy in perceptions between managers and employees regarding their accessibility. It is, therefore, important to ensure that communication is aligned in order to maximize the positive impact of these policies. Furthermore, the continuous incorporation of WLB policies into organizational frameworks, such as flexible working or telecommuting models that emerged following the advent of the pandemic, can facilitate the attainment of a sustainable work-life balance. The utilization of data-driven evaluations is also instrumental in gauging the impact of WLB on employee performance, enabling organizations to identify optimal practices and address areas necessitating improvement. By adopting this approach, organizations can establish a work environment that fosters employee productivity and satisfaction, as evidenced by recent studies.

### **3.5. Implications of Findings for Human Resource Management (HRM) Practice and Policy Making**

The practical implications of the findings pertain to the ways in which the research results can be applied in human resource management (HRM) practice and organizational policy making. The findings on the importance of work-life balance (WLB) provide a rationale for the development of policies that facilitate flexible working hours, hybrid working arrangements, or mental health programmes for employees, with the objective of enhancing their productivity and engagement. Furthermore, companies may utilize these findings to develop pertinent policies, such as the provision of remote working facilities, the adjustment of workloads, or the limitation of technology usage outside of working hours.

Furthermore, work-life balance policies can contribute to reducing employee turnover and enhancing retention through the implementation of initiatives such as flexible leave, childcare assistance, or wellness programmes. Furthermore, the implications extend to the adaptation of WLB policies to address challenges inherent to specific industries. For instance, flexible working hours may be implemented in the healthcare sector to mitigate medical burnout, while family-friendly work schedules could be adopted in the manufacturing sector.

In light of the increased prevalence of remote working during the pandemic, these findings can be employed to develop a long-term telecommuting policy that reconciles the interests of organizations and employees. In conclusion, the implementation of policies based on these findings has the potential to foster a work culture that is conducive to employee well-being, enhance employee loyalty, and ultimately improve organizational performance.



#### **4. Conclusion**

The results of this study emphasize that WLB is an essential factor in employee satisfaction and engagement, which is directly related to improved organizational performance. The COVID-19 pandemic has accelerated the adoption of remote work models, highlighting the importance of flexible working arrangements and effective HR management to achieve a better WLB. Work autonomy and WLB significantly impact job satisfaction and employee performance. A comprehensive strategy that addresses organizational support and individual well-being is needed to foster a productive and satisfied workforce. The COVID-19 pandemic has also impacted work patterns, especially telecommunications and remote working, positively affecting social well-being, work-family balance, and compatibility between tasks and technology. Promoting WLB can improve employee performance, public health, and career satisfaction in various sectors, including health. HR has evolved from focusing on employee engagement and job satisfaction to concentrating on leadership, performance management, work-family balance, and motivation.

This research contributes significantly to the literature on WLB and employee performance and offers a solid theoretical foundation for HR models. Emphasizing the impact of job autonomy and WLB on job satisfaction and performance, reinforcing theories of motivation and job satisfaction. The study also highlights the evolution of HRM, including aspects such as leadership, performance management, and work-family balance. In practice, organizations should adopt a comprehensive strategy that includes organizational support and individual well-being to create a productive workforce. The adoption of telecommunications models and flexible arrangements, accelerated by the COVID-19 pandemic, must be more permanently embedded in organizational policies.

Future research should examine the relationship between work-life balance (WLB) and employee performance with significant scope for further investigation. For example, a large number of previous studies have concentrated on developed countries. As a result, regional variations in the implementation of work-life balance (WLB) in developing countries, such as Indonesia, are still poorly understood. Furthermore, the long-term impact of hybrid working models on WLB and employee performance remains under-researched, especially in the context of post-pandemic adaptation. Furthermore, the informal sector and creative industries, such as start-ups or freelancers, are underrepresented in these studies despite their distinctive working patterns. In addition, cross-cultural research examining the impact of cultural values on the dimensions of work-life balance (WLB) and gender-based research investigating equitable implementation of WLB could provide valuable insights into policy effectiveness in diverse contexts. Such studies can contribute to the existing knowledge of WLB by offering a more specific and relevant focus.

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The authors have declared no potential conflicts of interest concerning this article's research, authorship, and/or publication.

## References

- Abiodun Solihu, A., Iyobhebhe, I., & Sam, A. S. K. (2023). The Impact of Work-Life Balance on Employee Work Quality Improvement in Nigeria. *European Journal of Human Resource*, 7(1), 46–67. <https://doi.org/10.47672/ejh.1516>
- Ahmad, A. M., Handaru, A. W., & Usman, O. (2022). The Effect of Workload, Work Stress and Work-Life Balance On Employee Performance (Case Study On Startup Employees In Jakarta). *Devotion: Journal of Research and Community Service*, 3(14), 2749–2757. <https://doi.org/10.36418/dev.v3i14.336>
- Alameddine, M., Al-Yateem, N., Bou-Karroum, K., Hijazi, H., Al Marzouqi, A., & Al-Adawi, S. (2023). Measurement of Work-Life Balance: A Scoping Review with a Focus on the Health Sector. *Journal of Nursing Management*, 2023, 1–10. <https://doi.org/10.1155/2023/3666224>
- Aleem, M., Sufyan, M., Ameer, I., & Mustak, M. (2023). Remote work and the COVID-19 pandemic: An artificial intelligence-based topic modeling and a future agenda. *Journal of Business Research*, 154, 113303. <https://doi.org/10.1016/j.jbusres.2022.113303>
- Allen, T. D., French, K. A., Dumani, S., & Shockley, K. M. (2020). A cross-national meta-analytic examination of predictors and outcomes associated with work–family conflict. *Journal of Applied Psychology*, 105(6), 539–576. <https://doi.org/10.1037/apl0000442>
- Amado, A., Cortez, P., Rita, P., & Moro, S. (2018). Research trends on Big Data in Marketing: A text mining and topic modeling based literature analysis. *European Research on Management and Business Economics*, 24(1), 1–7. <https://doi.org/10.1016/j.iiedeen.2017.06.002>
- Ashfaq, F., Abid, G., Ilyas, S., & Binte Mansoor, K. (2023). Perceived organisational support and work engagement among health sector workers during the COVID-19 pandemic: a multicentre, time-lagged, cross-sectional study among clinical hospital staff in Pakistan. *BMJ Open*, 13(6), e065678. <https://doi.org/10.1136/bmjopen-2022-065678>
- Ayoko, O. B., Caputo, A., & Mendy, J. (2021). Management research contributions to the COVID-19: a bibliometric literature review and analysis of the contributions from the Journal of Management & Organization. *Journal of Management & Organization*, 27(6), 1183–1209. <https://doi.org/10.1017/jmo.2021.70>
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023). Job demands–resources theory: Ten years later. *Annual Review of Organizational Psychology and Organizational Behavior*, 10(1), 25–53.
- Basnet, N., Wouters, A., & Kusurkar, R. (2023). Timeline Mapping as a Methodological Approach to Study Transitions in Health Professions Education. *International Journal of Qualitative Methods*, 22. <https://doi.org/10.1177/16094069221148868>
- Beckel, J. L. O., & Fisher, G. G. (2022). Telework and Worker Health and Well-Being: A Review and Recommendations for Research and Practice. *International Journal of Environmental Research and Public Health*, 19(7), 3879. <https://doi.org/10.3390/ijerph19073879>
- Björk-Fant, J. M., Bolander, P., & Forsman, A. K. (2023). Work–life balance and work engagement across the European workforce: a comparative analysis of welfare states. *European Journal of Public Health*, 33(3), 430–434. <https://doi.org/10.1093/eurpub/ckad046>
- Borgia, M. S., Di Virgilio, F., La Torre, M., & Khan, M. A. (2022). Relationship between Work-Life Balance and Job Performance Moderated by Knowledge Risks: Are Bank Employees Ready? *Sustainability*, 14(9), 5416. <https://doi.org/10.3390/su14095416>
- Brough, P., & Boase, A. (2019). Occupational stress management in the legal profession:

- Development, validation, and assessment of a stress-management instrument. *Australian Journal of Psychology*, 71(3), 273–284. <https://doi.org/10.1111/ajpy.12244>
- Buller, P. F., & McEvoy, G. M. (2012). Strategy, human resource management and performance: Sharpening line of sight. *Human Resource Management Review*, 22(1), 43–56. <https://doi.org/10.1016/j.hrmr.2011.11.002>
- Campo, A. M. D. V., Avolio, B., & Carlier, S. I. (2021). The Relationship Between Telework, Job Performance, Work–Life Balance and Family Supportive Supervisor Behaviours in the Context of COVID-19. *Global Business Review*. <https://doi.org/10.1177/09721509211049918>
- Cantarelli, P., Vainieri, M., & Seghieri, C. (2023). The management of healthcare employees' job satisfaction: optimization analyses from a series of large-scale surveys. *BMC Health Services Research*, 23(1), 428. <https://doi.org/10.1186/s12913-023-09426-3>
- Carlson, D. S., Hunter, E. M., Ferguson, M., & Whitten, D. (2014). Work–Family Enrichment and Satisfaction. *Journal of Management*, 40(3), 845–865. <https://doi.org/10.1177/0149206311414429>
- Chaudhuri, S., Arora, R., & Roy, P. (2020). Work–Life balance policies and organisational outcomes – a review of literature from the Indian context. *Industrial and Commercial Training*, 52(3), 155–170. <https://doi.org/10.1108/ICT-01-2019-0003>
- Cho, S., & Kim, S. (2022). Does a healthy lifestyle matter? A daily diary study of unhealthy eating at home and behavioral outcomes at work. *Journal of Applied Psychology*, 107(1), 23–39. <https://doi.org/10.1037/apl0000890>
- Demerouti, E., & Bakker, A. B. (2023). Job demands-resources theory in times of crises: New propositions. *Organizational Psychology Review*, 13(3), 209–236. <https://doi.org/10.1177/20413866221135022>
- Diamantidis, A. D., & Chatzoglou, P. (2019). Factors affecting employee performance: an empirical approach. *International Journal of Productivity and Performance Management*, 68(1), 171–193. <https://doi.org/10.1108/IJPPM-01-2018-0012>
- Dilhani, W. G. N., & Dr. Dayarathna, N. W. K. D. K. (2017). Impact of Work Life Balance Practices on Employee Performance of Female Machine Operators on the Sri Lankan Apparel Sector. *Human Resource Management Journal*, 4(1). <https://doi.org/10.31357/hrmj.v4i1.2858>
- Donaldson, S. I., Lee, J. Y., & Donaldson, S. I. (2019). Evaluating Positive Psychology Interventions at Work: a Systematic Review and Meta-Analysis. *International Journal of Applied Positive Psychology*, 4(3), 113–134. <https://doi.org/10.1007/s41042-019-00021-8>
- Dousin, O., Collins, N., Bartram, T., & Stanton, P. (2021). The relationship between work-life balance, the need for achievement, and intention to leave: Mixed-method study. *Journal of Advanced Nursing*, 77(3), 1478–1489. <https://doi.org/10.1111/jan.14724>
- Duan, S. X., & Deng, H. (2024). Intrinsic Needs and Job Performance in Digital Work: The Mediating Role of Work-Life Balance. *IEEE Transactions on Engineering Management*, 71, 7892–7900. <https://doi.org/10.1109/TEM.2022.3218925>
- Dwitanti, E., Murwani, F. D., & Siswanto, E. (2023). the Effect of Work-Life Balance on Employee Performance Through Work Stress and Workload. *International Journal of Business, Law, and Education*, 4(2), 569–586. <https://doi.org/10.56442/ijble.v4i2.211>
- Eby, de T., Turner, L., & Allen, T. D. (2012). New Frontiers: An Integrative Perspective on How Relationships Affect Employee Attitudes, Behavior, and Well-being. In *Personal Relationships* (pp. 437–458). Routledge. <https://doi.org/10.4324/9780203123034-33>
- Fadhilaini, C. R., Tjahjono, H. K., & Susanto, S. (2021). Improving Employee Engagement of

- Muhammadiyah Teachers with Organizational Trust, Distributive Justice, and Psychological Empowerment. *The Winners*, 22(2).  
<https://doi.org/10.21512/tw.v22i2.7085>
- Fan, Y., Potočnik, K., & Chaudhry, S. (2021). A process-oriented, multilevel, multidimensional conceptual framework of work-life balance support: A multidisciplinary systematic literature review and future research agenda. *International Journal of Management Reviews*, 23(4), 486–515. <https://doi.org/10.1111/ijmr.12254>
- Follmer, K. B., & Jones, K. S. (2018). Mental Illness in the Workplace: An Interdisciplinary Review and Organizational Research Agenda. *Journal of Management*, 44(1), 325–351. <https://doi.org/10.1177/0149206317741194>
- Fotiadis, A., Abdulrahman, K., & Spyridou, A. (2019). The Mediating Roles of Psychological Autonomy, Competence and Relatedness on Work-Life Balance and Well-Being. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.01267>
- Gálvez, A., Tirado, F., & Martínez, M. J. (2020). Work-Life Balance, Organizations and Social Sustainability: Analyzing Female Telework in Spain. *Sustainability*, 12(9), 3567. <https://doi.org/10.3390/su12093567>
- Gölgeci, I., Ali, I., Ritala, P., & Arslan, A. (2022). A bibliometric review of service ecosystems research: current status and future directions. *Journal of Business & Industrial Marketing*, 37(4), 841–858. <https://doi.org/10.1108/JBIM-07-2020-0335>
- Greenhaus, J. H., & Kossek, E. E. (2014). The Contemporary Career: A Work-Home Perspective. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 361–388. <https://doi.org/10.1146/annurev-orgpsych-031413-091324>
- Gruber, J., Prinstein, M. J., Clark, L. A., Rottenberg, J., Abramowitz, J. S., Albano, A. M., Aldao, A., Borelli, J. L., Chung, T., Davila, J., Forbes, E. E., Gee, D. G., Hall, G. C. N., Hallion, L. S., Hinshaw, S. P., Hofmann, S. G., Hollon, S. D., Joormann, J., Kazdin, A. E., ... Weinstock, L. M. (2021). Mental health and clinical psychological science in the time of COVID-19: Challenges, opportunities, and a call to action. *American Psychologist*, 76(3), 409–426. <https://doi.org/10.1037/amp0000707>
- Guo, Y., Cai, S., Deng, J., Li, J., Qiu, L., Sun, Q., Cui, Y., Li, L., Yu, L., Yin, H., Sun, Z., & Zuo, L. (2023). Trends and hotspots of acupuncture for allergic rhinitis: A bibliometric analysis from 2002 to 2022. *Complementary Therapies in Medicine*, 78, 102984. <https://doi.org/10.1016/j.ctim.2023.102984>
- Harikandeh, S. R. T., Aliakbary, S., & Taheri, S. (2023). An embedding approach for analyzing the evolution of research topics with a case study on computer science subdomains. *Scientometrics*, 128(3), 1567–1582. <https://doi.org/10.1007/s11192-023-04642-4>
- Harrison, D. E., & Hair, J. F. (2017). The Use of Technology in Direct-Selling Marketing Channels: Digital Avenues for Dynamic Growth. *Journal of Marketing Channels*, 24(1–2), 39–50. <https://doi.org/10.1080/1046669X.2017.1346979>
- Hostettler Macias, L., Ravalet, E., & Rérat, P. (2022). Potential rebound effects of teleworking on residential and daily mobility. *Geography Compass*, 16(9). <https://doi.org/10.1111/gec3.12657>
- Irfan, M., Khalid, R. A., Kaka Khel, S. S. U. H., Maqsoom, A., & Sherani, I. K. (2023). Impact of work-life balance with the role of organizational support and job burnout on project performance. *Engineering, Construction and Architectural Management*, 30(1), 154–171. <https://doi.org/10.1108/ECAM-04-2021-0316>
- Johnson, J., Hall, L. H., Berzins, K., Baker, J., Melling, K., & Thompson, C. (2018). Mental healthcare staff well-being and burnout: A narrative review of trends, causes,

- implications, and recommendations for future interventions. *International Journal of Mental Health Nursing*, 27(1), 20–32. <https://doi.org/10.1111/inm.12416>
- Karoso, S., Riinawati, R., Ilham, R. N., Rais, R. G. P., & Latifa, D. (2022). Analyzing the Relationship of Work Environment and Quality of Work Life on Employee Performance: The Mediating Role of Organizational Commitment. *Journal of Madani Society*, 1(3), 167–173. <https://doi.org/10.56225/jmsc.v1i3.140>
- Kişi, N. (2023). Bibliometric Analysis and Visualization of Global Research on Employee Engagement. *Sustainability*, 15(13), 10196. <https://doi.org/10.3390/su151310196>
- Koon, V. (2022). A multilevel analysis of work-life balance practices. *Asia Pacific Journal of Human Resources*, 60(2), 429–450. <https://doi.org/10.1111/1744-7941.12268>
- Kosseck, E. E., Perrigino, M. B., & Lautsch, B. A. (2023). Work-Life Flexibility Policies From a Boundary Control and Implementation Perspective: A Review and Research Framework. *Journal of Management*, 49(6), 2062–2108. <https://doi.org/10.1177/01492063221140354>
- Kumar, S., Sarkar, S., & Chahar, B. (2023). A systematic review of work-life integration and role of flexible work arrangements. *International Journal of Organizational Analysis*, 31(3), 710–736. <https://doi.org/10.1108/IJOA-07-2021-2855>
- Kurniasari, C. A., & Dewi, Y. E. P. (2023). The Effect Of Work-Life Balance And Quality Of Work Life On Employee Performance With Gender As A Moderating Variable. *Jurnal Pamator : Jurnal Ilmiah Universitas Trunojoyo*, 16(2), 231–246. <https://doi.org/10.21107/pamator.v16i2.19637>
- Lawelai, H. (2023). Understanding Digital Governance in Smart Cities: In-Depth Study Utilizing VOSviewer and CiteSpace. *E3S Web of Conferences*, 440, 07003. <https://doi.org/10.1051/e3sconf/202344007003>
- Lawelai, H., Iswanto, I., & Raharja, N. M. (2023). Use of Artificial Intelligence in Public Services: A Bibliometric Analysis and Visualization. *TEM Journal*, 798–807. <https://doi.org/10.18421/TEM122-24>
- Llop-Gironés, A., Vračar, A., Llop-Gironés, G., Benach, J., Angeli-Silva, L., Jaimez, L., Thapa, P., Bhatta, R., Mahindrakar, S., Bontempo Scavo, S., Nar Devi, S., Barria, S., Marcos Alonso, S., & Julià, M. (2021). Employment and working conditions of nurses: where and how health inequalities have increased during the COVID-19 pandemic? *Human Resources for Health*, 19(1), 112. <https://doi.org/10.1186/s12960-021-00651-7>
- Lopes, P. N. (2018). Thriving on Emotional Intelligence? Bridging Research and Practice. In C. R. Snyder, S. J. Lopez, L. M. Edwards, & S. C. Marques (Eds.), *The Oxford Handbook of Positive Psychology, 3rd Edition*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199396511.013.64>
- Lucia-Casademunt, A. M., García-Cabrera, A. M., Padilla-Angulo, L., & Cuéllar-Molina, D. (2018). Returning to Work after Childbirth in Europe: Well-Being, Work-Life Balance, and the Interplay of Supervisor Support. *Frontiers in Psychology*, 9. <https://doi.org/10.3389/fpsyg.2018.00068>
- Madogwhe, S., & Omogero, E. F. (2023). Work-Life Balance and Employee Performance in Higher Institution in Warri Delta State. *International Journal of Management & Entrepreneurship Research*, 5(1), 57–67. <https://doi.org/10.51594/ijmer.v5i1.437>
- Mahfoozi, A., Salajegheh, S., Ghorbani, M., & Sheikhi, A. (2018). Developing a talent management model using government evidence from a large-sized city, Iran. *Cogent Business & Management*, 5(1), 1449290. <https://doi.org/10.1080/23311975.2018.1449290>
- Majumder, S., & Biswas, D. (2023). A Bibliometric and Co-Occurrence Analysis of Work-Life Balance. *International Journal of Information Systems and Supply Chain Management*, 16(1), 1–

11. <https://doi.org/10.4018/IJISSCM.316182>
- Mäkelä, L., Kempainen, S., Pensar, H., & Kangas, H. (2023). Working Remotely During the COVID 19-Pandemic: Work and Non-Work Antecedents of Work–Life Balance Development (pp. 69–97). <https://doi.org/10.1108/S1530-353520230000021003>
- Marler, J. H., & Boudreau, J. W. (2017). An evidence-based review of HR Analytics. *The International Journal of Human Resource Management*, 28(1), 3–26. <https://doi.org/10.1080/09585192.2016.1244699>
- Marrone, M., & Linnenluecke, M. K. (2020). Interdisciplinary Research Maps: A new technique for visualizing research topics. *PLOS ONE*, 15(11), e0242283. <https://doi.org/10.1371/journal.pone.0242283>
- Martínez-León, I. M., Olmedo-Cifuentes, I., & Sanchez-Vidal, M. E. (2019). Relationship between availability of WLB practices and financial results. *Personnel Review*, 48(4), 935–956. <https://doi.org/10.1108/PR-12-2017-0402>
- McCluney, C. L., Bryant, C., King, D. D., & Ali, A. A. (2017). Calling in Black: Dynamic Model of Racially Traumatic Events on Organizational Resourcing. *Academy of Management Proceedings*, 2017(1), 10399. <https://doi.org/10.5465/AMBPP.2017.301>
- Mitrović, I., Mišić, M., & Protić, J. (2023). Exploring high scientific productivity in international co-authorship of a small developing country based on collaboration patterns. *Journal of Big Data*, 10(1), 64. <https://doi.org/10.1186/s40537-023-00744-1>
- Mudiono, Qamari, I. N., & Tjahjono, H. K. (2021). The Meaning of Work Life Enrichment and its impact on Turnover Intention. *International Journal of Innovative Research and Scientific Studies*, 4(4), 258–268. <https://doi.org/10.53894/ijriss.v4i4.268>
- Nelson, A. N., & Angellius, V. (2023). Analysis Of the influence of work life balance, leadership, religiosity and high performance work practices on employee performance mediated by employee engagement. *Enrichment: Journal of Management*, 13(1), 248–257. <https://doi.org/10.35335/enrichment.v13i1.1242>
- Newman, A., Eva, N., Bindl, U. K., & Stoverink, A. C. (2022). Organizational and vocational behavior in times of crisis: A review of empirical work undertaken during the COVID-19 pandemic and introduction to the special issue. *Applied Psychology*, 71(3), 743–764. <https://doi.org/10.1111/apps.12409>
- Odriozola, M. D., & Baraibar-Diez, E. (2018). Do work-life balance practices mediate in the relationship between female participation and financial performance? *European Journal of Management and Business Economics*, 27(3), 249–265. <https://doi.org/10.1108/EJMBE-08-2017-0009>
- Ortiz-Bonnin, S., Blahopoulou, J., García-Buades, M. E., & Montañez-Juan, M. (2023). Work-life balance satisfaction in crisis times: from luxury to necessity – The role of organization’s responses during COVID-19 lockdown. *Personnel Review*, 52(4), 1033–1050. <https://doi.org/10.1108/PR-07-2021-0484>
- Prakoso, V., Lawelai, H., Nurmandi, A., Purnomo, E. P., & Jovita, H. (2023). Research Trends, Topics, and Insights on Network Security and the Internet of Things in Smart Cities. *Jurnal Studi Ilmu Pemerintahan*, 4(2), 191–206. <http://www.jurnal-umbuton.ac.id/index.php/jsip/article/view/4707>
- Raghavan, A., Demircioglu, M. A., & Orazgaliyev, S. (2021). COVID-19 and the New Normal of Organizations and Employees: An Overview. *Sustainability*, 13(21), 11942. <https://doi.org/10.3390/su132111942>
- Rahim, N. A. A. binti, Omar, K., Haque, A. ul, Muhammad, H., Saputra, J., & Hulu, F. (2022). Impacts of Work–Family Culture on Employee Job Performance in Achieving Sustainable

- Development Goals. *Sustainability*, 14(12), 7003. <https://doi.org/10.3390/su14127003>
- Rahmawaty, C., Putri, D. M., Lawelai, H., Nastia, N., & Sadat, A. (2022). Sub-District Government Bureaucracy and Public Services Performance During the COVID-19. *Journal of Social Politics and Governance (JSPG)*, 4(1), 54–66. <https://doi.org/10.24076/JSPG.2022v4i1.864>
- Rifaid, R., Rachman, M. T., & Suhartono, Y. (2023). Performance Analysis of the Public Works and Spatial Planning Agency in Infrastructure Development in West Nusa Tenggara, Indonesia. *Jurnal Studi Ilmu Pemerintahan*, 4(1), 143–154.
- Schaufeli, W. B. (2018). Work engagement in Europe. *Organizational Dynamics*, 47(2), 99–106. <https://doi.org/10.1016/j.orgdyn.2018.01.003>
- Schaufeli, W. B., Shimazu, A., Hakanen, J., Salanova, M., & De Witte, H. (2019). An Ultra-Short Measure for Work Engagement. *European Journal of Psychological Assessment*, 35(4), 577–591. <https://doi.org/10.1027/1015-5759/a000430>
- Schotten, M., El Aisati, M., Meester, W. J. N., Steinginga, S., & Ross, C. A. (2017). A brief history of Scopus: The world's largest abstract and citation database of scientific literature. In F. J. Cantú-Ortiz (Ed.), *Research Analytics: Boosting University Productivity and Competitiveness through Scientometrics* (pp. 31–58). Auerbach Publications. <https://doi.org/10.1201/9781315155890>
- Shafiq, M., Lasrado, F., & Hafeez, K. (2019). The effect of TQM on organisational performance: empirical evidence from the textile sector of a developing country using SEM. *Total Quality Management & Business Excellence*, 30(1–2), 31–52. <https://doi.org/10.1080/14783363.2017.1283211>
- Shirmohammadi, M., Au, W. C., & Beigi, M. (2022). Remote work and work-life balance: Lessons learned from the covid-19 pandemic and suggestions for HRD practitioners. *Human Resource Development International*, 25(2), 163–181. <https://doi.org/10.1080/13678868.2022.2047380>
- Shirmohammadi, M., Chan Au, W., & Beigi, M. (2022). Antecedents and Outcomes of Work-Life Balance While Working from Home: A Review of the Research Conducted During the COVID-19 Pandemic. *Human Resource Development Review*, 21(4), 473–516. <https://doi.org/10.1177/15344843221125834>
- Sirgy, M. J., & Lee, D.-J. (2018). Work-Life Balance: an Integrative Review. *Applied Research in Quality of Life*, 13(1), 229–254. <https://doi.org/10.1007/s11482-017-9509-8>
- Staniec, I., Kaczorowska-Spychalska, D., Kalinska-Kula, M., & Szczygiel, N. (2023). The need to work from home in higher education during the first phase of COVID-19: Employee productivity, autonomy, work relationships, job satisfaction and well-being. *JOURNAL OF INTERNATIONAL STUDIES*, 16(4), 257–280. <https://doi.org/10.14254/2071-8330.2023/16-4/17>
- Thanem, T., & Elraz, H. (2022). From stress to resistance: Challenging the capitalist underpinnings of mental unhealth in work and organizations. *International Journal of Management Reviews*, 24(4), 577–598. <https://doi.org/10.1111/ijmr.12293>
- Tjahjono, H. K., & Yuliza, Y. (2022). Analysing the Study of Organizational Justice Configuration and Social Modal on Satisfaction and Commitment. *Indonesian Journal of Multidisciplinary Science*, 1(5), 533–540. <https://doi.org/10.55324/ijoms.v2i2.104>
- Tuzovic, S., & Kabadayi, S. (2021). The influence of social distancing on employee well-being: a conceptual framework and research agenda. *Journal of Service Management*, 32(2), 145–160. <https://doi.org/10.1108/JOSM-05-2020-0140>
- Wang, T., Wu, J., Gu, J., & Hu, L. (2021). Impact of open innovation on organizational

- performance in different conflict management styles: based on resource dependence theory. *International Journal of Conflict Management*, 32(2), 199–222. <https://doi.org/10.1108/IJCMA-09-2019-0165>
- Wang, X., Chen, Y., Liu, Y., Yao, L., Estill, J., Bian, Z., Wu, T., Shang, H., Lee, M. S., Wei, D., Tian, J., Ma, B., Wang, Y., Tian, G., & Yang, K. (2019). Reporting items for systematic reviews and meta-analyses of acupuncture: the PRISMA for acupuncture checklist. *BMC Complementary and Alternative Medicine*, 19(1), 208. <https://doi.org/10.1186/s12906-019-2624-3>
- Wattoo, M. A., Zhao, S., & Xi, M. (2020). High-performance work systems and work-family interface: job autonomy and self-efficacy as mediators. *Asia Pacific Journal of Human Resources*, 58(1), 128–148. <https://doi.org/10.1111/1744-7941.12231>
- Wayne, J. H., Matthews, R., Crawford, W., & Casper, W. J. (2020). Predictors and processes of satisfaction with work-family balance: Examining the role of personal, work, and family resources and conflict and enrichment. *Human Resource Management*, 59(1), 25–42. <https://doi.org/10.1002/hrm.21971>
- Wong, K. P., Teh, P.-L., & Chan, A. H. S. (2023). Seeing the Forest and the Trees: A Scoping Review of Empirical Research on Work-Life Balance. *Sustainability*, 15(4), 2875. <https://doi.org/10.3390/su15042875>
- Wood, J., Oh, J., Park, J., & Kim, W. (2020). The Relationship Between Work Engagement and Work-Life Balance in Organizations: A Review of the Empirical Research. *Human Resource Development Review*, 19(3), 240–262. <https://doi.org/10.1177/1534484320917560>
- Wood, S. (1999). Human resource management and performance. *International Journal of Management Reviews*, 1(4), 367–413. <https://doi.org/10.1111/1468-2370.00020>
- Yadav, A., Pandita, D., & Singh, S. (2022). Work-life integration, job contentment, employee engagement and its impact on organizational effectiveness: a systematic literature review. *Industrial and Commercial Training*, 54(3), 509–527. <https://doi.org/10.1108/ICT-12-2021-0083>
- Yusuf, M., & Maizar, M. (2023). The Effect of Work Climate, Job Promotion, and Organizational Culture on the Performance of Batam Authority Employees. *Jurnal Studi Ilmu Pemerintahan*, 4(1), 211–220. <http://jurnal-umbuton.ac.id/index.php/jsip/article/view/2945>
- Zardari, S., Alam, S., Al Salem, H. A., Al Reshan, M. S., Shaikh, A., Malik, A. F. K., Masood ur Rehman, M., & Mouratidis, H. (2022). A Comprehensive Bibliometric Assessment on Software Testing (2016–2021). *Electronics*, 11(13), 1984. <https://doi.org/10.3390/electronics11131984>
- Zheng, C., Molineux, J., Mirshekary, S., & Scarparo, S. (2015). Developing individual and organisational work-life balance strategies to improve employee health and wellbeing. *Employee Relations*, 37(3), 354–379. <https://doi.org/10.1108/ER-10-2013-0142>
- Zhu, J., & Liu, W. (2020). A tale of two databases: the use of Web of Science and Scopus in academic papers. *Scientometrics*, 123(1), 321–335. <https://doi.org/10.1007/s11192-020-03387-8>
- Žnidaršič, J., & Bernik, M. (2021). Impact of work-family balance results on employee work engagement within the organization: The case of Slovenia. *PLOS ONE*, 16(1), e0245078. <https://doi.org/10.1371/journal.pone.0245078>



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