Artificial Intelligence in the Workplace and Employee Wellbeing: A Blibioshiny-Driven Bibliometric Exploration

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Abstract
Artificial intelligence (AI) is increasingly integrated into workplaces, shaping recruitment, performance management, task automation, and health monitoring. While AI adoption offers potential benefits such as reduced routine workload, improved engagement, and enhanced wellbeing, it also raises concerns about stress, job insecurity, and ethical risks. Despite growing attention, the literature on AI and employee wellbeing remains fragmented, with limited systematic efforts to map its development. This study applies a bibliometric analysis of publications indexed in Scopus between 2015 and 2025. Using Bibliometrix and Biblioshiny, the analysis examines trends in publication output, influential authors, journals, institutions, and countries, as well as thematic patterns in the field. Findings indicate a sharp growth in research output, with a small number of highly cited studies exerting disproportionate influence. Institutional and geographical analysis shows concentration in leading universities and research clusters, while keyword mapping reveals persistent focus on AI and human-centred issues. The study contributes by providing an integrated overview of how research in this area has evolved and where gaps remain. Future research should extend beyond fragmented case studies and explore contextual conditions that shape whether AI supports or undermines employee wellbeing.

*Keywords***:** *Artificial intelligence, Bibliometric Analysis, Employee wellbeing, Workplace Technology.*

1. Introduction

The integration of artificial intelligence (AI) into the workplace has become one of the defining changes in contemporary employment. Organisations increasingly adopt AI-driven tools for recruitment, performance evaluation, task automation, and decision support. These changes go beyond efficiency, raising critical questions about their effects on employees' wellbeing. Existing studies highlight both positive and negative outcomes. On one side, AI reduces repetitive workloads, supports decision-making, and enables new forms of professional growth, contributing to greater engagement and satisfaction. On the other, it introduces risks of technostress, job insecurity, and surveillance, often eroding trust and creating uncertainty about future employment (Meijerink et al., 2021).

Despite this growing interest, the literature remains fragmented. Researchers such as Čaić et al. (2019) and Meijerink et al. (2021) argued that most studies are industry specific and focus on narrow outcomes, eventually making it difficult to draw general conclusions. Positive outcomes are often studied in isolation, while risks are analysed without considering organisational or cultural contexts. Recent work stresses that AI's impact depends on management practices, industry, and policy frameworks, but there has been little effort to synthesise findings systematically. As a result, the academic conversation lacks an integrated picture of how this area has developed, who the leading contributors are, and which themes dominate the discussion.

This study addresses these gaps by applying a bibliometric analysis of publications from 2015 to 2025, with a focus on AI, workforce transformation, and employee wellbeing. Rather than providing a purely descriptive overview, the analysis examines patterns of growth, influence, and thematic focus. The study is guided by two questions:

RQ1: How has research on AI and employee wellbeing developed over time in terms of publication output, influence, and thematic focus?
RQ2: Which authors, journals, institutions, and countries have been most influential in shaping this field, and what does this reveal about its intellectual and geographical structure?

By addressing these questions, the study contributes to clarifying the state of knowledge, identifying areas of consensus and divergence, and highlighting directions for future research on AI and employee wellbeing.

2. Literature Review

2.1 Positive Impacts of AI on Employee Wellbeing
A growing body of research highlights how AI can support employees by reducing administrative workloads, enhancing productivity, and enabling new forms of learning and development. Dabirian et al. (2017) emphasise AI's role as an augmentation tool that complements rather than replaces human effort. In customer service, Prentice & Nguyen (2020) show that AI-based systems improve decision quality and performance. In healthcare, Doraiswamy et al. (2020) demonstrates that AI-assisted diagnostics reduce clinician strain while improving patient outcomes. Wang et al (2019) extend this argument by showing that hybrid intelligence fosters innovation and increases employee satisfaction in decision-making.

AI has also been applied directly to wellbeing support. Adaptive learning platforms promote professional growth, consistent with García-Martínez et al. (2023), while Bankins et al. (2024) argue that AI-assisted job redesign strengthens engagement by aligning tasks with employees' skills. Together, these studies show that AI, when deployed thoughtfully, can enhance job satisfaction, learning, and wellbeing.

2.2 Risks and Challenges of AI in the Workplace
Despite these benefits, significant risks accompany AI adoption. Automation threatens job stability, particularly for routine roles. Badri et al. (2018) argue that widespread AI-driven automation displaces workers, while Lee et al. (2022) and Nazareno & Schiff (2021) report that such displacement drives anxiety and insecurity. Brougham and Haar (2020) caution that while reskilling is possible, access is unequal, potentially worsening workforce inequality.

Digital strain also emerges as a recurring concern. Cheng et al. (2022) find that AI-enabled monitoring increases cognitive load, encourages constant performance pressure, and blurs boundaries between personal and professional life. Surveillance applications raise ethical questions, with Meijerink et al. (2021) and McClure (2017) documenting biases in AI recruitment tools and Flores-Viva et al. (2023) warning about declining organisational trust when AI is linked to invasive monitoring. Together, these findings show that AI can erode wellbeing through stress, job insecurity, and reduced autonomy.

2.3 Contextual and Integrative Perspectives
More recent scholarship stresses that AI's impact on wellbeing is shaped by organisational, cultural, and policy contexts. Brougham & Haar (2020) show that outcomes vary across industries and depend on management practices. Khogali & Mekid (2023) argue that AI contributes positively when embedded within ecosystems that promote upskilling, ethical practices, and employee voice.

These findings suggest that AI's effects are not universal but contingent on the conditions under which it is implemented.

Overall, two perspectives dominate the literature. One highlights AI's potential to enhance productivity, learning, and wellbeing; the other underscores risks related to stress, insecurity, and ethics. Current research remains fragmented, with positive and negative outcomes often studied separately. This gap underscores the need for integrative approaches that evaluate both sides systematically, offering guidance for organisations on how to implement AI in ways that balance innovation with employee wellbeing.

3. Methodology

3.1 Data Collection
Bibliometric data were retrieved from Scopus, which was selected for its comprehensive coverage of peer-reviewed journals across management, psychology, and information systems. The search combined keywords related to "artificial intelligence," "work," "workplace," and "employee wellbeing." Only English-language publications between 2015 and 2025 were included. The final dataset consisted of full records with cited references, exported in CSV format.

3.2 Dataset Overview
The bibliometric search returned 568 publications on AI and employee wellbeing, published between 2015 and 2025. Annual output has grown steadily, with a notable rise after 2019, reflecting the accelerated integration of AI tools in workplaces and the parallel growth of scholarly attention. The dataset covers contributions from multiple disciplines, including management, computer science, psychology, and sociology, which illustrates the interdisciplinary nature of the topic.

3.3 Analytical Approach
Analyses were carried out using the Bibliometrix R package (Aria & Cuccurullo, 2017) and its Biblioshiny web interface. The study applied descriptive bibliometrics to track publication trends, citation patterns, and influential sources. Network analysis was used to examine co-authorship, institutional collaboration, and keyword co-occurrence, providing insight into the intellectual and social structure of the field.

3.4 Validity, Reliability, and Limitations
Reliability was strengthened by using a widely adopted bibliometric tool, reporting parameter settings transparently, and checking stability across different configurations. Limitations include reliance on a single database (Scopus), which may exclude regional studies, and restricting publications to English, which introduces language bias. Bibliometric methods capture structural and thematic patterns but do not provide deep conceptual interpretation, which may require complementary qualitative review.

4. Result

4.1 Publication Trends
Between 2015 and 2025, research on AI and employee wellbeing exhibited a consistent upward trajectory. The number of publications expanded from three articles in 2015 to a peak of 237 in 2025, reflecting the growing scholarly attention to this field (Figure 1a and 1b). Citation dynamics followed a different pattern, with the highest average citations per year recorded in 2018, reaching a mean of 13.21. The second peak for citation dynamics was observed in 2020. The average citations per year for 2020 is 7.24. These peaks were largely driven by a small group of highly cited

publications that introduced influential frameworks on AI in the workplace which shaped the subsequent research and attracting sustained attention (Figure 1c).

4.2 Productive Authors, Journals, and Institutions

The analysis in Figure 1d) identified Mg Herlina Maria Grace and several unidentified authors as the most productive contributors, each publishing 4 articles in the field. This is followed by AM Sherrill Andrew MB, B Kim Byungjik, CW Wiese Christopher William, G Manoharan Geetha, Zhao Hairong and J Lee Julak with 3 publications each. These authors have played a central role in shaping research on AI implementation and its impact on employee wellbeing. The journals with the highest number of publications were Lecture Notes in Computer Science, International Journal of Environmental Research and Public Health, and Lecture Notes in Network and System (Figure 2a)). These outlets serve as primary platforms for research on AI in organisational settings and employee outcomes.

The institutional analysis in Figure 2b) revealed that research activity was concentrated in a small set of universities. The Lovely Professional University, Amity University, and Bina Nusantara University emerged as the leading contributors in terms of publication output, each producing more than 13 articles during the period of 2015 to 2025. As such, these institutions not only generated substantial output but also played a central role in collaborative networks by linking with partners from contries across multiple regions. Meanwhile, geografically, the majority of publications originated from India, USA, and China, which together accounted for more than half of the total output. The collaboration world map (Figure 2d)) showed strong cross-country partnerships, with particularly dense links between India and USA. Emerging contributions from contries such as Argentina, Azerbaijan, Cameroon, Chille, Colombia, Croatia, Cyprus, Israel, Monaco, Peru and Philliphines (Figure 3a)) suggest that the field is gaining traction in developing regions, even though their outputs remain comparatively smaller.

4.3 Conceptual Structure and Thematic Patterns
Keyword co-occurrence analysis (Figure 3b)) revealed a relatively simple conceptual structure, with two dominant clusters. The first cluster centred on "artificial intelligence", linking terms such as automation, algorithms, and digital transformation. The second cluster was organised around "human", and included terms associated with wellbeing, stress, engagement, and organisational outcomes. The limited number of clusters suggests that research in this area remains thematically concentrated, with most studies framing discussions around the interaction between AI technologies and human factors at work. This highlights the continuing emphasis on balancing technological adoption with employee wellbeing in scholarly discourse.

4.4 Collaboration Networks
Author-level collaboration networks (Figure 3c)) revealed several tightly knit research groups, often clustered around leading institutions (Figure 3d)). International collaboration in Figure 4a) was strongest between USA and United Kingdom, with multiple co-authored papers reflecting cross-border research partnerships. Country-level analysis demonstrated that developed economies dominated output and collaboration, though contributions from emerging regions including Malaysia have been steadily increasing.

a)

Year	Articles
2015	3
2016	4
2017	5
2018	6
2019	14
2020	21
2021	24
2022	28
2023	64
2024	162
2025	237

b)

c)

d)

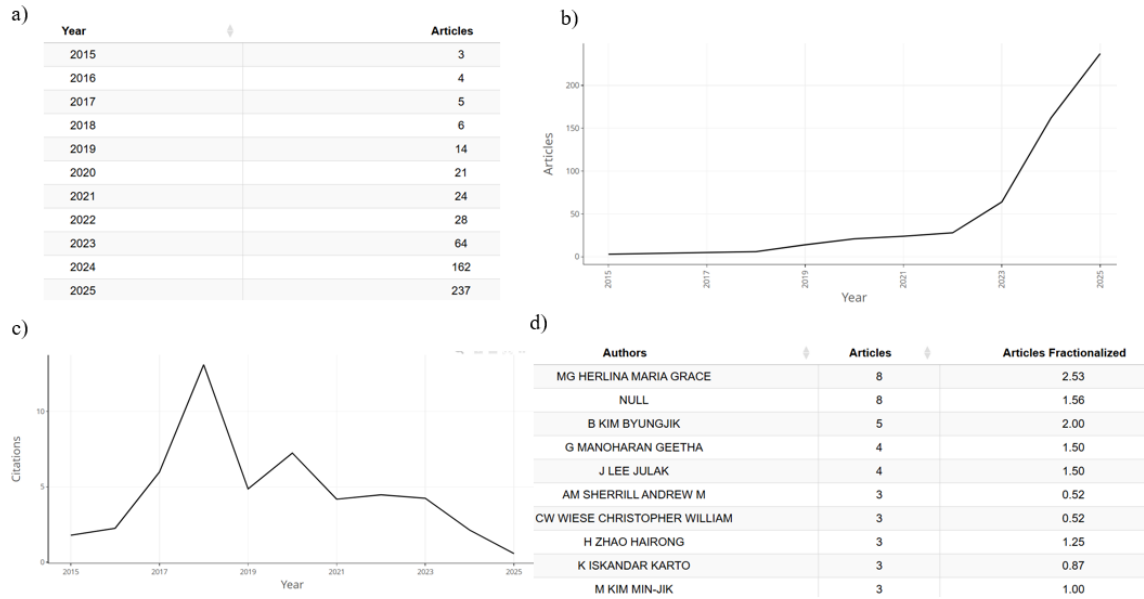| Authors	Articles	Articles Fractionalized
MG HERLINA MARIA GRACE	8	2.53
NULL	8	1.56
B KIM BYUNGJIK	5	2.00
G MANOHARAN GEETHA	4	1.50
J LEE JULAK	4	1.50
AM SHERRILL ANDREW M	3	0.52
CW WIESE CHRISTOPHER WILLIAM	3	0.52
H ZHAO HAIRONG	3	1.25
K ISKANDAR KARTO	3	0.87
M KIM MIN-JIK	3	1.00

Figure 1a): Annual Scientific Production (Table)
Figure 1b): Annual Scientific Production (Plot)
Figure 1c): Average Citations Per Year
Figure 1d): Most Relevant Authors

a)

b)

Affiliation	Articles
LOVELY PROFESSIONAL UNIVERSITY	17
AMITY UNIVERSITY	13
BINA NUSANTARA UNIVERSITY	13
NOTREPORTED	11
KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY	9
CHANDIGARH UNIVERSITY	8
GRAPHIC ERA DEEMED TO BE UNIVERSITY	8
NATIONAL UNIVERSITY OF SINGAPORE	7

c)

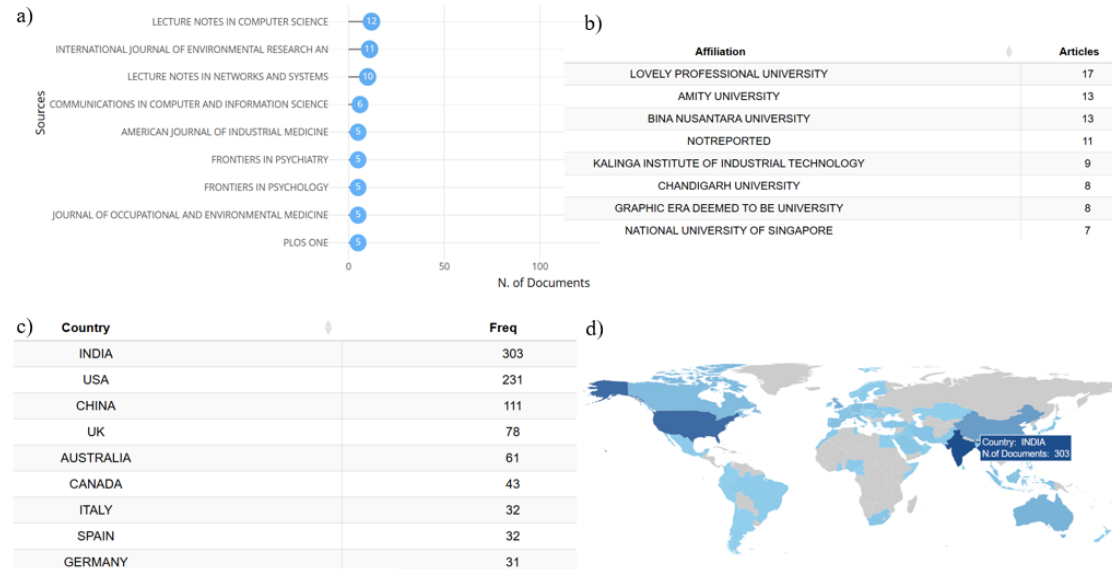| Country	Freq
INDIA	303
USA	231
CHINA	111
UK	78
AUSTRALIA	61
CANADA	43
ITALY	32
SPAIN	32
GERMANY	31

d)

Figure 2a): Most Relevant Sources (Plot)
Figure 2b): Most Relevant Affiliations
Figure 2c): Top Countries' Scientific Production (Table)
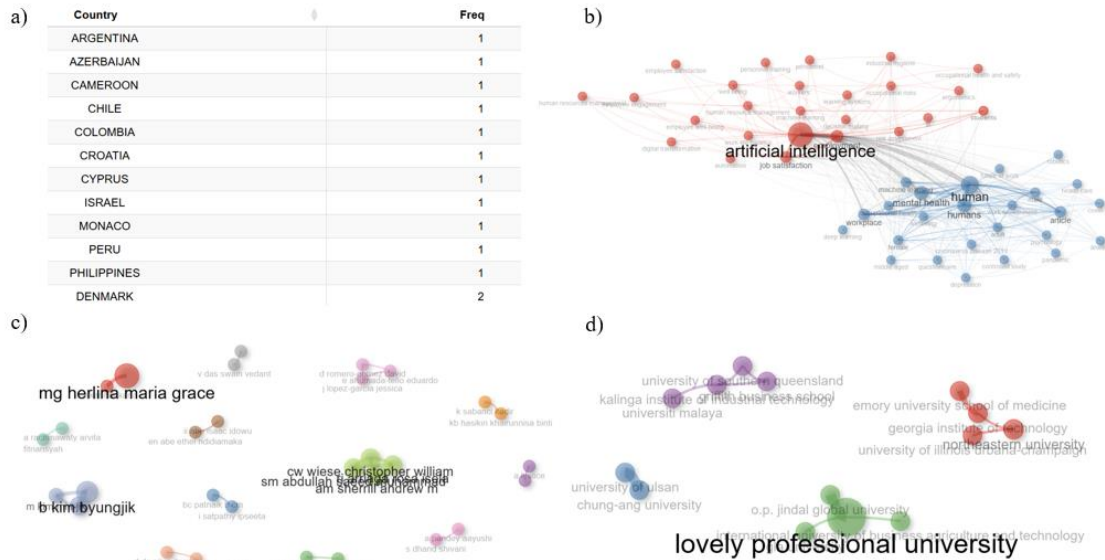Figure 2d): Countries' Scientific Production (Plot)

Figure 3a): Bottom Countries' Scientific Production (Table)
Figure 3b): Co-occurrence Network by Author Keywords
Figure 3c): Authors Collaboration Network
Figure 3d): Institutions Collaboration Network

5. Conclusion and Future Recommendations

This study addressed two research questions. For RQ1, the analysis showed that research themes and collaboration patterns in AI and employee wellbeing have developed steadily over the past decade. Publication trends demonstrated a consistent rise in output, reflecting the growing importance of the topic. Keyword co-occurrence revealed that research remains concentrated around two clusters; artificial intelligence and human factors. This indicates that the field is still largely framed through technology adoption and wellbeing impacts. Collaboration networks further highlighted that a small number of institutions and countries dominate knowledge production, while many remain peripheral. These findings justify that the field is still in a developmental stage, with opportunities for broader thematic integration and stronger international collaboration.

For RQ2, the results identified leading authors, sources, and references that have consistently shaped the debate. Citation analysis showed that influential works primarily come from management, psychology, and information systems journals, with highly cited authors bridging technical and organisational perspectives. Institutional and geographical mapping underscored that research activity is concentrated in universities from high-income countries. This concentration suggests that the knowledge base is still uneven, with limited perspectives from developing regions. Addressing this gap will be crucial for achieving a more inclusive understanding of how AI adoption affects wellbeing across different cultural and economic contexts.

Based on these insights, future research should expand thematically beyond the two dominant clusters to explore underdeveloped intersections such as ethical governance, fairness in algorithmic management, and sector-specific wellbeing outcomes. More cross-disciplinary work that integrates organisational behaviour, computer science, and occupational health will enrich conceptual depth. Researchers should also pursue collaborations across regions to diversify perspectives and avoid geographical concentration. Complementing bibliometric evidence with qualitative or mixed-

method approaches could further contextualise the findings, helping to bridge structural patterns with current workplace experiences.

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