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Research Article

A Bibliometric Analysis Examining the Impact of AI Adoption on Psychological Safety of Employees

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ABSTRACT

Introduction: The integration of artificial intelligence (AI) in the workplace, rapidly transforming the organizational functions and deeply impacts the employees and managers. This organizational change due to advanced technology raise the crucial questions about employee's future and well-being. The present study explores how an AI-integrated applications influence financial and HR managers and employee's psychological safety and work-life balance

Design/ Research Methodology Our study employs bibliometric analysis. Bibliometric review was conducted using PRISMA approach. The research articles for the bibliometric analysis were retrieved through SCOPUS databased, covering the period range from 2011 to 2025. Biblioshiny software was used to conduct the analysis.

Results: The outcome of the study reveals that USA and China lead AI adoption related research. Thematic analysis identifies four main themes include AI's transformative impact, psychological safety, ethical concerns, and the balance between technological advancement and employee well-being.

Conclusions: Existing literature emphasize the importance for organizations to adopt supportive strategies that mitigate the potential negative impacts of AI on employee well-being. At the same time, these strategies should harness AI's benefits to enhance workplace autonomy, improve job satisfaction, and foster AI-driven innovation by encouraging employee creativity and self-efficacy.

Keywords: AI-Adoption, Psychological safety, Bibliometric Analysis, PRISMA framework, SCOPUS database

INTRODUCTION

Employee well-being (EWB) is perceived as a comprehensive and integrative approach which covers tangible components like income and social benefits, whereas the intangible factors are constituted with the factors of a sense of fitting, job fulfilment, motivation, and emotional safety (Rath & Harter, 2010). In addition, psychological safety (PS) is the beliefs possessed by one to express ideas, manage risks, and voice anxieties irrespective of fearing from the negative outcomes (Edmondson, 1999). Moreover, these elements play a crucial role in shaping employees' overall performance but regulate their personal, family, and social accomplishment by emphasising overall employee well-being (Chari et al., 2018). Due to the technological advancements influencing transformation in societal perspective, worker well-being by valuing their sense of security and trust in the workplace (Nazareno & Schiff, 2021).

Artificial intelligence (AI) has emerged as a revolutionary factor across the business landscape. It has been done by redesigning work environments and reevaluating the employee experiences. In addition, factors like AI-backed automation, workforce shift, job reshuffle, skill restructuring along with the raising demand for new competencies delivers high number of challenges in the modern work environment (Didem & Anke, 2021; Nazareno & Schiff, 2021; Peters, 2017). Although AI can allow the employees to emphasise on the strategic along with the analytical responsibilities by plummeting repetitive work; it increases anxieties about job security and workplace steadiness (Hagel, 2018; Stamate et al., 2021). Hence, it can be said that AI has a dual influence for enhancing the employee

well-being, upsurging job fulfilment. Moreover, it helps in falling stress and rising a better work-life balance with the engagement of uncertainties for affecting negatively in the workplace.

This piece of research observes the influence of AI-backed implementation within the field of financial along with the HR managers, concentrating on how the modern technologies are influenced employees' psychological safety. This helps in balancing the activities across work-life and raising the entire well-being by relying on psychological safety. The research implies a hybrid strategy in the methodological perspective by including bibliometric along with content analysis. Datasets for the bibliometric study was retrieved from the Scopus database, we identified 62 articles for examining bibliometric studies which allowed us in addressing publication tendencies, leading authors, and key research themes. To complement the analysis, the researcher has performed a content evaluation by connecting to the needs of inclusion criteria, selecting 25 research articles that delve deeper into existing research gaps to give direction for performing future research.

This evaluation is steered by the below questions which crucial from the research point of view:

- What are the circulating trends in AI-adoption, psychological safety and EWB (employee well-being)?
- What are the topmost nations have contributing to this field?
- Who are the authors in the top-cited category for study on AI-adoption, psychological safety (PS) and EWB?
- Which journals are leading in publishing research on this topic?
- What are the most frequently used keywords in AI-adoption, PS and EWB?
- What future research directions are recommended?

This study's findings act as a foundation for the future investigators for exploring AI's evolving role in proficient surroundings. Apart from that, these understandings can help the decision-makers, particularly for the managers in the human resource field to have an in-depth interpretation of AI's implications. These concepts can allow the organizations to harness AI by not identifying that as a disruptive force rather than a tool to grow the employee performance along with their well-being. The research articles is systematically organized as follows- First section

The following sections will outline the methodology to perform the tasks of data collection along with analysis. In addition, the results are presented in the bibliometric and content analyses and discuss the broader implications of these findings. The article concludes by giving a summary of important contributions and delivering suggestions for future research.

2.0 Relevance of the study:

Due to the extreme emergence of artificial intelligence across the business organizations, it has raised attention across wider environments although it lacks the insights from updated research which impacts on PS and EWB. The objective of the present study, particularly focus on the influence of AI's in business organization by engaging its effectiveness on the work life balance of the employers along with the psychological safety.

The application AI across human resources and finance is important due to different segmentations. At first, finance requires a stressful environment in which accuracy with along high speed is noteworthy (Gao et al., 2024). Similarly, HR department requires AI tools to improve employee engagement, reduce workloads and administrative work, additionally, AI for HR tools support employees in all aspects: from recruitment to employee retention (Sharma and Sengupta, 2023). AI technologies like algorithmic trading along with risk regulating operation reduce work-pressures to help the employees in accomplishing a fruitful balance across the work-life settings (Jain, 2021). Secondly, AI allows financial managers and HR managers to work effectively by raising flexibility in handling responsibilities across personal along with professional settings. Moreover, AI plays a vital role in efficient introduce stress, like professional uncertainty and adapting to incessant upskilling. However, it is crucial for business organization to encourage the philosophy of psychological safety and when AI models support psychological safety by introducing data-driven insights, reduce human error and encourage a philosophy to innovate and learn across business environment. So, it allows the employees to feel empowerment by becoming less nervous for the errors and develop a protected environment to make important decisions and grow collaborations effectively.

Studies shows that employees when felt assisted through the AI tools, it enables them to control work-pressures more efficiently, reduce exhaustion by maintaining a healthier balance across the work-life settings (Akter et al., 2024). Plethora of past studies reveals that AI integration in finance is helpful to remove stress by raising the productivity and enhancing entire psychological safety (PS). In the similar context AI integrate in HR (human resource) department transforming department by automating processes, enhancing decision-making, and ameliorating employee experience

Moreover, identifying this gap within the literature, the present research integrates a holistic interpretation for identifying the implementation of AI across financial and HR department, provides more psychological safety to the employees and managers of the organization

Based on the findings of this research, the researcher will be able deliver noteworthy concepts for the individuals like policymakers, educators along with the industry professionals on the barriers and scopes integrated with AI adoption in financial and HR managers. So, assessing the influence of AI-integrated applications for the comfort of financial and HR employees, the study outcomes will help in developing strategies that reduce probable drawbacks while maximizing the advantages of AI application in the finance along with the HR sector. Addressing a critical research gap, this study explores the key question: How does the AI-backed strategies influence finance and HR managers and employees PS and work-life balance?

LITERATURE REVIEW

AI adoption and psychological safety:

The procedure to integrate AI in the business operations for managing decisions and workflows is called as AI adoption. It includes both the technical implementation of AI systems and the cultural along with the behavioural shifts for leveraging AI technologies effectively. The accomplishment of AI-adoption hangs on different organizational factors such as technological willingness along with the administrative culture, administration assistance and the boldness of the employees for applying AI (Dwivedi et al., 2021). As per the concept of Venkatesh et al. (2003), the Unified Theory of Acceptance and Use of Technology (UTAUT) framework emphasises on four key influences of technology receiving: expectancy of performance, expectancy of effort, social influence and smoothing conditions. These factors are also applicable to AI adoption, as employees' insights of AI's helpfulness and comfort of usage strongly impact the willingness of the users to accept and absorb with the modern technologies (Mariani & Pérez-Vega, 2020). Moreover, administrations which delivers satisfactory resources along with training seeks strong communications to address the concerns of the employees and reducing the confrontation to AI acceptance (Shrestha et al., 2019).

Psychological safety (PS), as proposed through Edmondson (1999), indicates an environment in which employees feel comfort to express their ideas, asking questions, and admitting mistakes without fear of judgment or negative repercussions. In the context of AI adoption, psychological safety is critical because it allows employees to engage with new technologies without anxiety and fosters a culture of openness and learning (Newman et al., 2017). Research of Edmondson & Lei (2014) proposes that when employees perceived as an emotionally harmless environment, they are more expected to embrace innovation and participate in the collaborative efforts required for fruitful AI integration Furthermore, psychological safety mitigates the concern of job dislocation associated with AI to inspire employees in viewing AI as an instrument that enhances their usage irrespective of threatening their value (Amershi et al., 2019).

The connection across AI adoption and PS is mutually strengthening. Psychological safety (PS) assists the AI adoption by minimising the resistance and raising knowledge sharing to encourage experimentation (Faraj et al., 2018). Employees in an environment of being psychologically protected are highly motivated to trust AI systems, share feedback, and participate in iterative learning processes that refine AI capabilities (Zhang et al., 2021). Moreover, psychological safety enables organizations for examining the ethical worries in connection to AI like data confidentiality, algorithmic preferences and transparency by encouraging open discussion with critical inquiry (Shrestha et al., 2019). So, lacking psychological safety, employees might hesitate to disclose errors or challenge due to the AI-driven decisions which can mitigate the worth of AI-integrated systems by leading to operational jeopardies (Edmondson & Lei, 2014).

Administrations that focus on both engaging AI and being psychological protected navigate the disruptions across digital transformation. This includes creating a culture in which to employees feels empowerment and allows AI to collaborate for expressing concerns (Newman et al., 2017). So, organizations can improve their technological capabilities while maintaining employee confidence to grow their assignation. In addition, fostering a culture that prefers psychological protection is not only essential to plummeting resistance to AI but also for indorsing a attitude of continuous learning along with innovation. So, as AI is continuing to redesign workplaces by examining the human dimensions of technology adoption particularly for the psychological safety will be useful to raise the long-term administrative success.

RESEARCH METHODOLOGY

The current research has adopted a bibliometric study to align the study with the research questions. The bibliometric investigation delivers a quantitative calculation of the data, by engaging the key aspects such as tendencies of publication, persuasive writers, journals from prominent sources and keyword coincidence patterns. Whereas thematic analysis allows to deliver an in-depth examination of selected studies, helps in detecting the theoretical breaches to suggest direction future research and analyse methodological approaches across different works.

The analysis has been performed by using the datasets from Scopus. Chadegani et al., (2013) informs that Scopus is a widely accepted and reliable academic databases). To ensure a rigorous selection process, we adhered to the framework of PRISMA, popular to raise transparency and methodological robustness in literature reviews (Liberati et al., 2009)

The overall search query has included the following: (“artificial intelligence” OR “AI”) AND (“employee well-being” OR “employee health” OR “workplace stress” OR “employee satisfaction” OR “psychological safety”) AND (LIMIT TO (DOCTYPE, “ar”)) OR (LIMIT TO (DOCTYPE, “psychological safety”)) AND (LIMIT TO (LANGUAGE, “English”)). Query under this has yielded 62 research articles, which were then analysed using Biblioshiny software. Biblioshiny software is employed in the present study particularly effective to process bibliographic data and generate representations in graphical format to illustrate conceptual relationships (Eck & Waltman, 2009).

3.1 Sources of Data and Different Research Methods:

Bibliometric Data Sources:

The real-world analysis of this study was limited to the repossession and enquiry of bibliometric data to AI adoption and psychological safety-related literature contained in the SCOPUS database covering from 2011 to 2025.Only open-access articles were considered to ensure accessibility.

Data Collection Process:

The initial stage in bibliometric research is to select an authentic and credible data source from which the literature is extracted (Moraant et al., 2017; Anayat and Rasool, 2024). The selection of keywords stands as the most essential step after which the researcher applies filters to eliminate irrelevant research articles along with too narrow literature that might overlook vital scientific publications in their field (Chang et al., 2016). The query keywords were mentioned in the Table 1

Table 1- Keywords Selection

TITLE-ABS-KEY ((“artificial intelligence” OR “AI”) AND (“employee well-being” OR “employee health” OR “workplace stress” OR “employee satisfaction” OR “psychological safety”) AND (LIMIT TO (DOCTYPE, “ar”)) OR (LIMIT TO (DOCTYPE, “psychological safety”)) AND (LIMIT TO (LANGUAGE, “English”)).)

Analysis Methods:

The Biblioshiny software tool was utilized for visualization and analysis. The study created bibliometric networks to examine country collaborations, organizational affiliations, author contributions, source citations, document citations, and keyword co-occurrences. Metrics such as publication count and citation count were used to evaluate

the impact of the research. The period from 2011 to 2025, focused on AI-adoption and psychological safety related articles, was extracted, cleaned, and standardized with the help of PRISMA framework (Please refer Table 2) to align with the study's objectives.

Table 2: PRISMA protocol details

Criteria	Description
Source	Scopus
Years	2011-2025
Inclusion Criteria	Language – English, Source Type – Journals, Document Types - Articles, Subject Area –Social Sciences, Psychology and Business Management and Accounting
Exclusion Criteria	Subject Area – Physics and Astronomy, Material Science, Biochemistry, Genetics and Molecular Biology, Chemistry, Chemical Engineering, Medicine, Earth and Planetary Sciences, Agricultural and Biological Sciences, Neuroscience, Pharmacology, Toxicology and Pharmaceutics, Nursing, Immunology and Microbiology, Veterinary, Non-English Articles,
Sample Size	106
AI-adoption and psychological safety among employees	62

Research Software:

Bibliometric analysis has become a crucial method for evaluating academic research. This study utilizes Bibliometrix and Biblioshiny Software—two widely used bibliometric tools—to analyse scholarly output and trends. Bibliometrix, an open-source R package designed for users without coding expertise, provides a wide range of analytical options, including source analysis, author contributions, document trends, conceptual and social structures, and more. This involves delivering wide-ranging outputs by the use of tables along with visual graphs, to facilitate an painstaking inspection of research outlines.

The Biblioshiny software, created through Massimo Aria along with Corrado Cuccurullo in 2004 for the Web of Science and Scopus database, is an expert program for visualizing citation networks. It is Java-written and carries out the processes of co-citing and concurrence analyses, portraying relations between prominent information units such as authors and institutes and nations. The program is capable of supporting co-citation and co-occurrence analyses to enable researchers to map relations between prominent knowledge units, including authors, institutions, and nations.

Research Plan

Bibliometric analysis is a crucial method to summarize the ancient research consequences of across the field of academic to detect the scopes for future investigate. The current study examines the literature in connection to AI-integration and safety from psychological overview among employees through the use of the Bibliometrix R package. Through bibliometric visualization, it explores the research landscape, emerging directions, and the evolution of key themes within the above research objectives.

Bibliometric Result Analysis:

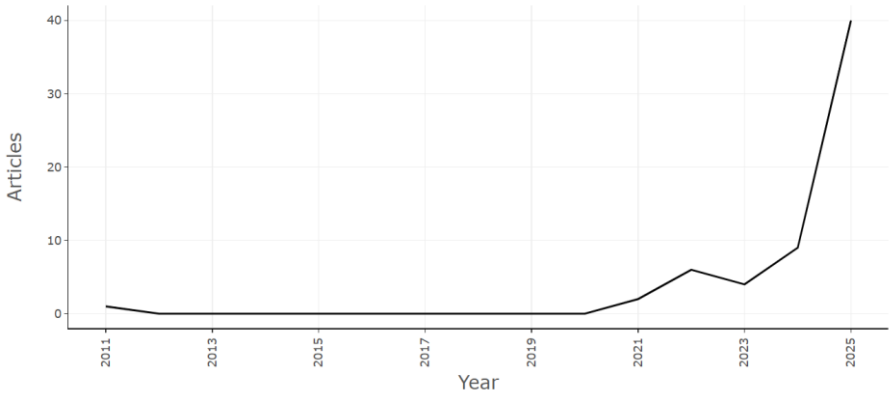
Figure 1 illustrates the characteristics in the descriptive category that relate to literature to the AI-adoption and psychological safety among Finance and HR employees. We identified 62 research articles, that has applied 281 author-suggested keywords along with the search period has been from 2011 to 2025. So, this has included 189 authors who have written around the 62 documents for the study assessment.

Figure 1: Description characteristics of literature related to AI-literacy research.

Annual Scientific Publications:

Figure 2, illustrates the annual scientific publications from 2021 and 2024, highlight a strong upward trend across research movement. Between 2011 and 2019, the number of publications remained minimal, suggesting that the topic had not yet emerged as a significant area of academic focus. However, from 2020 onwards, there was a notable increase in research output, driven by the rising consciousness for implementing of AI on psychological safety across workplace environment. The period between 2019 and 2023 reflects growing academic and industry interest in understanding how AI impacts on the EWB and PS, overlapping with the raising incorporation of AI systems within human resource applications. According to the author (Stamate et al., 2021) highlights the increasing adoption if artificial intelligence led to a significant transformation in employment structures and work practices, this phase is also known as the Fourth Industrial Revolution. New technologies like automated decision-making and performance monitoring started raising questions regarding their effects on employee autonomy, trust, and mental health. From 2023 to 2025, the discipline went into a period of speedy acceleration with a huge increase in the number of available research. This expansion is attributed to several major factors, such as technological innovation that brought more advanced AI applications, which led to further investigation of their psychological impact. In addition, greater investment and awareness of employee well-being, as well as rising regulatory and societal pressures regarding the ethical application of AI, have driven research. Enhanced data collection and reporting methods have also contributed to capturing a broader spectrum of studies, reflecting the increasing urgency to examining the connection of AI along with psychological safety across modern work environments.

Figure 2: Annual Scientific Publication



Most Contributing Journals:

Table 2 highlights the top 10 international authoritative journals publishing research on AI adoption and psychological safety among Finance and HR employees. The visual representation of the diagrams reflects the interdisciplinary nature of this emerging field. Journals such as "BMC Psychology" and "Corporate Communications" emphasize the growing recognition of psychological factors and organizational communication in understanding the effectiveness of using AI across workplaces along with society. Due to the publication of technology-focused journals like the "International Journal of Information Management" and "Technological Forecasting and Social Change"

indicates a strong interest in examining the role of information systems, technological advancements, and future trends. This diverse range of publications underscores the increasing academic and practical significance of AI literacy, particularly in addressing its psychological, communicative, and technological dimensions.

Figure 3: Most Contributing Journals

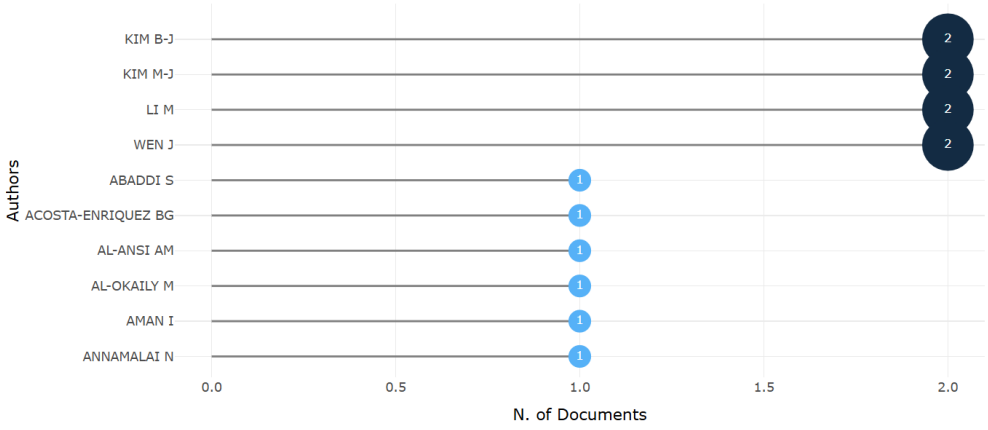
Sources	Articles
JOURNAL OF RETAILING AND CONSUMER SERVICES	3
BMC PSYCHOLOGY	2
CORPORATE COMMUNICATIONS	2
INTERNATIONAL JOURNAL OF ACCOUNTING INFORMATION SYSTEMS	2
INTERNATIONAL JOURNAL OF HOSPITALITY MANAGEMENT	2
INTERNATIONAL JOURNAL OF INFORMATION MANAGEMENT	2
JOURNAL OF HOSPITALITY MARKETING AND MANAGEMENT	2
TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE	2
ACCOUNTING AND FINANCE	1
ASIA PACIFIC JOURNAL OF MARKETING AND LOGISTICS	1

Main Research Author Analysis:

Figure 4, provides the top 10 authors who has contributed in the research regarding AI adoption along with psychological safety among Finance and HR employees. The visual representation of the graph highlights their publication output. KIM B-J along with KIM M-J, LIM, and WEN J emerged as the most prolific, they have the highest research publication compared to other authors. This suggests a significant concentration of research efforts among these four scholars, making them key contributors to the field.

In contrast, the majority of the remaining authors, including ABADDI S, ACOSTA-ENRIQUEZ BG, AL-ANSI AM, AL-OKAILY M, AMAN I, and ANNAMALAI N, have each published only one document. This indicates a broader range of contributors with a more dispersed research output, reflecting a diverse yet less concentrated authorship landscape in AI literacy studies. The prominence of these leading authors emphasizes their influence on shaping discussions around AI literacy.

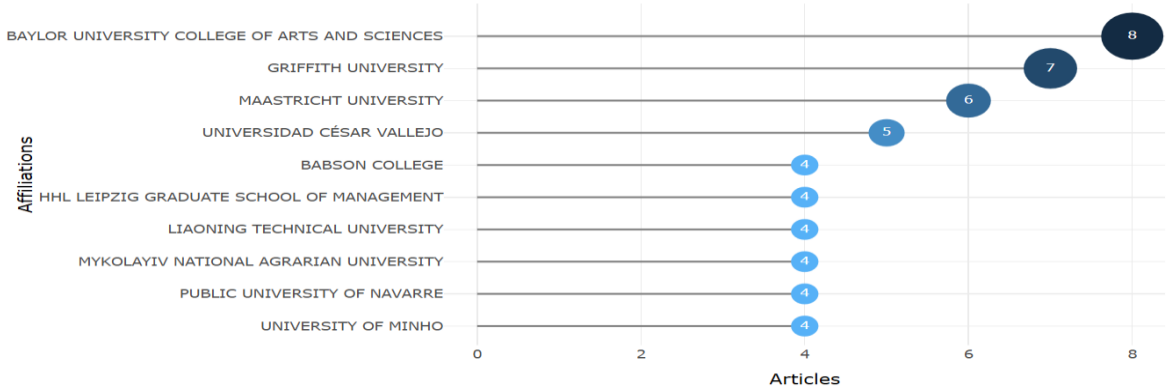
Figure 4: Most Contributing Authors



Most Contributing Institutions:

Figure 5 explains the numbers of research articles published by various academic institutions. The visual representation of the charts highlights that Baylor University College of Arts and Sciences leads with 8 articles, followed by Griffith University with 7 articles and Maastricht University with 6 articles. Other institutions, including Universidad César Vallejo and Babson College, contribute between 4 to 5 articles. This indicates a diverse range of academic contributions, with Baylor University being the most prolific. The valuable insight from the charts highlights that institutions are key players in research output, with significant contributions from both established and emerging universities across different regions.

Figure 5: Most Contributing Institutions



Most Contributing Countries

Figure 6 presents the geographical distribution of research contributions across the arena of adopting AI and raising psychological safety among Finance and HR employees. The visual representation of the charts highlights the leading countries and their relative frequencies of research publications. Major countries like The United States along with China has emerged in the leader's category, with the USA being the most prolific contributor, accounting for 31 publications, followed closely by China with 28 publications. This significant output suggests that these two countries are the front-runners across research along with development due to the adoption of AI, reflects their strong academic and industrial focus on the subject.

Australia ranks as a distant third, with 17 publications, indicating a substantial but notably lower contribution compared to the USA and China. Apart from these three foremost countries, the pattern of research production is tiered, with a steep fall in the frequency from Australia onwards.

Within the mid-range, both Peru and South Korea have 9 publications, indicating a moderate level of use of AI literacy studies. Germany and Spain closely trail with 8 publications each, ranking them at the lower-mid range.

The lowest level of representation is shown by India, the Netherlands, and South Africa, each contributing 6 publications. Although they contribute less in terms of output, these countries prove to show a growing interest in AI literacy research.

The involvement of nations such as Canada, Saudi Arabia, Malaysia, as well as Morocco and Hungary also indicates an international interest in promoting AI literacy. Yet the contributions of territories such as Taiwan, Belgium, Turkey, and Japan are scarce or insignificant, indicating a potential for more engagement and research work in these regions. This uneven but multifaceted allocation highlights the necessity for further international cooperation and more research efforts to facilitate a solid grasp of AI literacy in various contexts around the world.

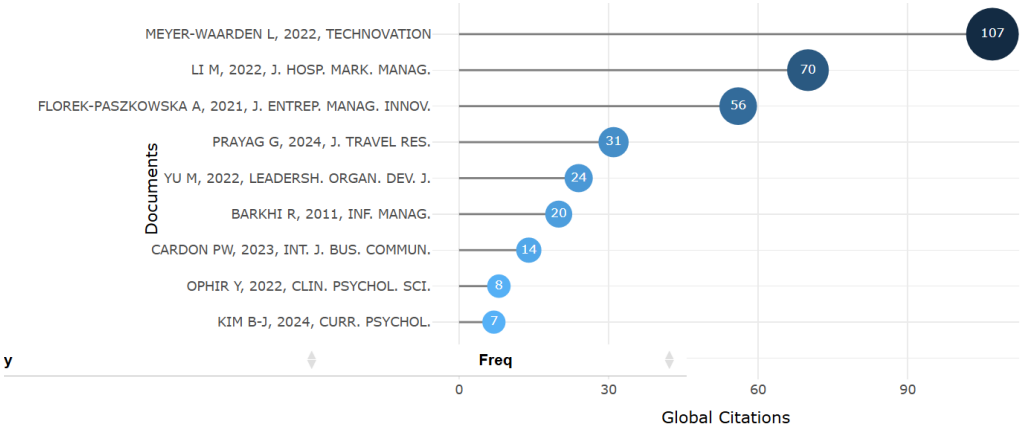
Figure 6: Most Contributing Countries

Country	Freq
USA	31
CHINA	28
AUSTRALIA	17
PERU	9
SOUTH KOREA	9
GERMANY	8
SPAIN	8
INDIA	6
NETHERLANDS	6
SOUTH AFRICA	6

Extremely Referred Analysis of Literature:

The Table 7 above indicates the highly cited literature analysis across the arena of AI acceptance along with PS among Finance and HR employees. Edmondson, 1999 play a foundational role in psychological safety related research. The visual representation of the citation analysis reveals significant contributions from several influential authors across various fields. An author's work published in J. Hosp. Mark. Manag. has accumulated 70 citations, reflecting a substantial impact on the domain of hospitality marketing and management. Similarly, Florek-Paszkowska A's 2021 publication in J. Entrep. Manag. Innov. has garnered 56 citations, highlighting a notable contribution to the areas of entrepreneurship, management, and innovation. Notably, Prayag G's 2024 work in J. Travel Res. has already received 31 citations despite its recent publication, indicates a high level of interest and relevance in AI-literacy and psychological safety related research. This citation distribution emphasizes the diverse scholarly engagement and emerging influence of recent research across these disciplines.

Figure 7: Highly cited literature



Content Analysis

Word Cloud and Tree-Map Analysis

This study has conducted the analysis of word frequency by the use of Biblioshiny software was utilized. In this regard, 62 full text articles have been selected by importing to the software. This included manual coding of the abstracts along with keywords have been labelled under a node “Abstracts and Keywords”. In addition, A query of Word Frequency has been applied along with the “word cloud” choice was undertaken to produce a graphic display of the 100 high-frequency words within the study. Figure 6 visually presents these results, where larger, bold words indicate higher frequency. Notably, the term “artificial intelligence” stands out as the most prominent word, emphasizing its central role in the digital transformation of organizations. According to Ye et al. (2024), employee motivation, staying open to transformation and engagement are vital components to influence the accomplishment of digital transitions within companies.

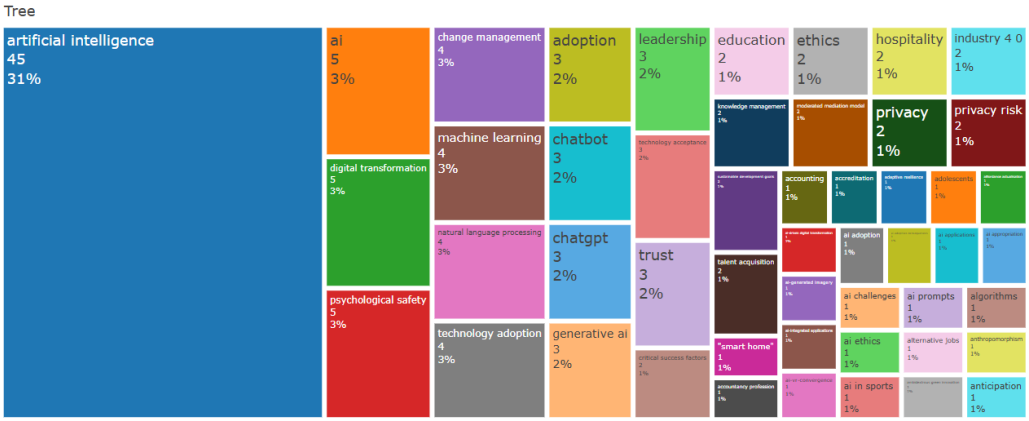
For the analysing tree-map, again this research has used Biblioshiny software to integrate complete writing based 62 research studies containing abstracts along with keywords. The visual representation of the charts shows highlights-Artificial Intelligence (AI) emerges as the most dominant theme in the analysed literature. This prominence connects with the current study that focus on AI’s ever-changing influence to make important decisions, improving operational efficiency, and reshaping employee interactions (Brynjolfsson & McAfee, 2017; Davenport & Ronanki, 2018). Within this overarching category, several subfields also hold substantial significance. Machine Learning (3%), a core component of AI, is critical for enabling data-driven insights and predictive analytics (Jordan & Mitchell, 2015). Natural Language Processing supports automated language comprehension and communication, it highlights the increasing research interest in conversational AI (Bender et al., 2021). Additionally, recent advancements in Generative AI, including chatbots and ChatGPT, highlight the growing influence of human-like content creation and interactive AI applications (Bommasani et al., 2021).

Beyond the technical dimensions, digital transformation emerges as a significant driver of AI adoption. Previous research suggests that AI is speeding up business innovation and operational flexibility (Vial, 2019). This emphasis

highlights how businesses are responding to the fast-changing nature of technology environments and embracing business models with AI (Hanelt et al., 2021). Additionally, the literature highlights human aspects critical to successful AI deployment. Issues such as psychological safety —which promotes the kind of climate that enables innovation—fit in with Edmondson's (1999) work on the need for nurturing workplaces. The addition of change management is an indication of proven models such as Kotter's (1996) model for organizational transformation. Likewise, adoption, leadership, and education point towards the need to deal with human aspects of AI integration, as per Westerman, Bonnet, and McAfee's (2014) digital transformation concepts. Additionally, the tree-map of work cloud analysis highlight ethical, and privacy concerns exhibit a significant impact on AI discourse. The heightened focus on ethics as well as AI ethics aligns with increasing scholarship and policy debates for ethically establish and deploy the AI-enhanced systems (Floridi et al., 2018). In addition, privacy (1%) and privacy risk (1%) concerns capture the wider social fears of protecting data and regulatory compliance (Zuboff, 2019). These results align with the existing literature that promotes transparency and equity in AI practices (Jobin, Ienca, & Viena, 2019). In general, although AI is still the overarching theme in recent studies, the emphasis on human-oriented factors and ethical concerns reflects the increasing awareness throughout the social as well as organizational implications while embracing AI.

Figure 8: Word Analysis

Figure 9: Tree Map Analysis



Keywords Cluster Analysis:

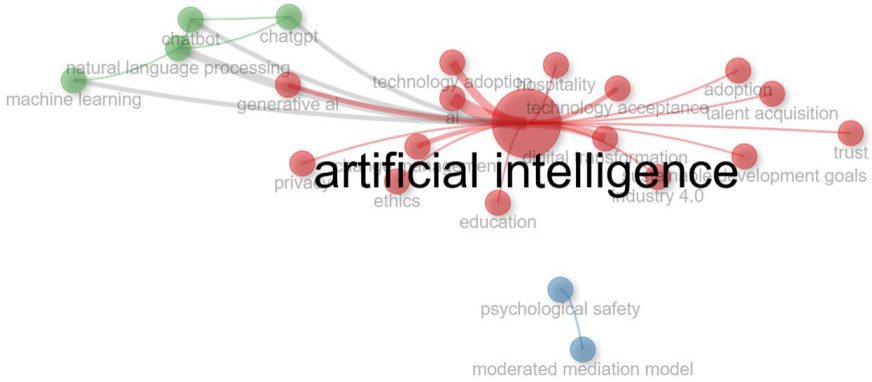
Figure 10 illustrates the keywords clusters. The visual representation of the figure highlights emerging themes and the examination of interconnections between various areas of study Our analysis reveals three primary clusters shows connection of artificial intelligence (AI), psychological safety (PS) along with employee well-being (EWB).

The Red Cluster (Core Applications and Adoption Focus) emphasizes the practical implementation of AI, emphasizing on key topics such as technology adoption, technology acceptance, digital transformation, talent acquisition, and sustainable development goals. This cluster reflects a growing interest in integrating AI into industries and understanding its transformative impact on business processes.

The Green Cluster (Emerging Technologies) connects AI with front-line technologies such as machine learning along with natural language processing. This also includes the features of chatbots along with generative AI, showcasing the rapid advancements in AI-driven applications.

Lastly, the Blue Cluster (Workplace Dynamics), though smaller and separate, focuses on psychological safety and moderated mediation models, highlighting the increasing interest in examining how AI influences human factors and workplace environments. Together, these clusters illustrate the multifaceted relationship between AI, technological progress, and organizational dynamics.

Figure 10: Keywords Cluster Analysis



Most Trend Topic Analysis

Figure 11 illustrates the trend topic analysis. The graphical charts highlight the strong emphasis on keywords such as artificial intelligence (AI) along with digital transformation for the year 2025, it reflects a widespread anticipation of the AI and machine learning impact on various industries. In contrast, psychological safety has been a consistent topic of discussion from 2022 through 2024, indicates its sustained relevance in the workplace. This dual focus suggests that while organizations are keen to adopt cutting-edge technologies, they are also recognizing the importance of fostering supportive work environments. In the finance sector, AI adoption is advancing rapidly, with a 68% adoption rate in the banks and finance-related services sectors in India, leading across every sectors. Financial institutions are leveraging AI for virtual assistants, risk assessment, compliance, and wealth management. For example, Goldman Sachs has reported that AI-driven solutions could increase coding productivity by 20-30%, enhancing operational efficiency. Despite these advancements, challenges remain in monetizing AI investments and integrating them seamlessly into existing workflows. Similarly, AI adoption in the HR sector is transforming critical functions like talent acquisition of talents, adapting learning along with development and managing performances. A report by McKinsey,20251 Around 25% of employers have integrated AI into their HR processes, with adoption rates being higher in large organizations and industries such as technology and finance. Companies like Hitachi and Texans Credit Union are utilizing AI to streamline employee onboarding, reducing both the time and human involvement required. However, as AI takes on more administrative tasks, maintaining the "human touch" is essential to preserve a sense of empathy and understanding within the workplace.

Psychological safety, on the other hand, remains an important factor for ensuring employee well-being and organizational success. A recent survey by Economic times,20232 indicated that 45% of employers view psychological safety as a key performance indicator, while 47% associate it with higher employee retention and engagement. The global mental health crisis has amplified the need for organizations to prioritize psychological safety, as investments in mental well-being are linked to better employee satisfaction and improved financial performance. The influence of leadership is vital in generating a psychologically protected environments, with some executives openly sharing their mental health experiences to normalize conversations and reduce stigma.

[1] https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/superagency-in-the-workplace-empowering-people-to-unlock-ais-full-potential-at-work

[2] https://economictimes.indiatimes.com/news/company/corporate-trends/psychological-safety-to-be-crucial-for-india-inc-in-2023-and-beyond-survey/articleshow/97937736.cms

The intersection of AI adoption along with PS reflects the need for balancing technological advancement including the EWB. While AI can improve productivity and operational effectiveness, many employees remain hesitant regarding the anxieties for job movement along with a low amount of appropriate training. Addressing these concerns requires organizations to provide comprehensive training and foster an environment where employees feel supported during the transition to AI-driven processes. Furthermore, it is crucial to raise the assurance of with AI irrespective of replacing the human interaction for emphasising the trust and psychological safety.

In essence, the trend topic analysis focus on AI adoption and psychological safety underscores a dual priority for organizations: embracing technological innovations to enhance efficiency while enhancing a workplace setting to support well-being of the employees. The continuation of AI reshapes the finance and HR sectors, businesses need to develop a cautious balance across in fostering technological advancements and managing the human-related aspects to raise promote a psychologically safe and supportive workplace.

Figure 11: Trend Topic Analysis

Term	Frequency	Year (Q1)	Year (Median)	Year (Q3)
psychological safety	5	2022	2024	2024
artificial intelligence	45	2025	2025	2025
ai	5	2025	2025	2025
digital transformation	5	2025	2025	2025

Thematic Analysis

A thematic map, in Biblioshiny, delivers a visual of the major themes in research in a given field through the process of thematic mapping analysis (please refer, Figure 12). The thematic map classified key research themes based on the relevance of topic (Centrality) and development degree (density). The thematic map offers fruitful perceptions within the intersection of AI-adoption along with emotional safety among finance and HR employees.

Motor Themes:

Motor themes refer as a highly developed and highly relevant quadrant. It comprises of the essential keywords like AI along with acquisition of talent. These keywords reflect the increasing focus on integrating AI in recruitment and employee management processes. The integration of AI in talent acquisition and employee management is transforming HR practices by automating tasks like resume screening, onboarding, and performance analysis (Kadirov et al., 2024). Companies like Chipotle and Workday use AI to streamline recruitment, reduce hiring time, and enhance member assignation to allow the HR professionals emphasise for strategic decision-making while improving efficiency and candidate experiences.

Basic Themes:

Basic themes comprise includes the keywords like Artificial intelligence (AI) along with Digital transformation. AI and digital transformation are core areas that underpin research, while psychological safety indicates an essential focus on ensuring employee well-being amid technological change. The moderated mediation model suggests advanced statistical methods are widely used to explain complex relationships in these domains. Basic themes, including "artificial intelligence" (AI) and "psychological safety," highlights the foundational role in shaping workplace dynamics. Research suggests AI enhances productivity along with making important decisions (Duan et al., 2019), while psychological safety encourage open communication and innovation (Edmondson, 1999). The intersection between the topic AI and psychological safety reflects the equilibrium across the high-tech advancement and well-being of the employees in modern organizational practices.

Niche/ Specialized Themes:

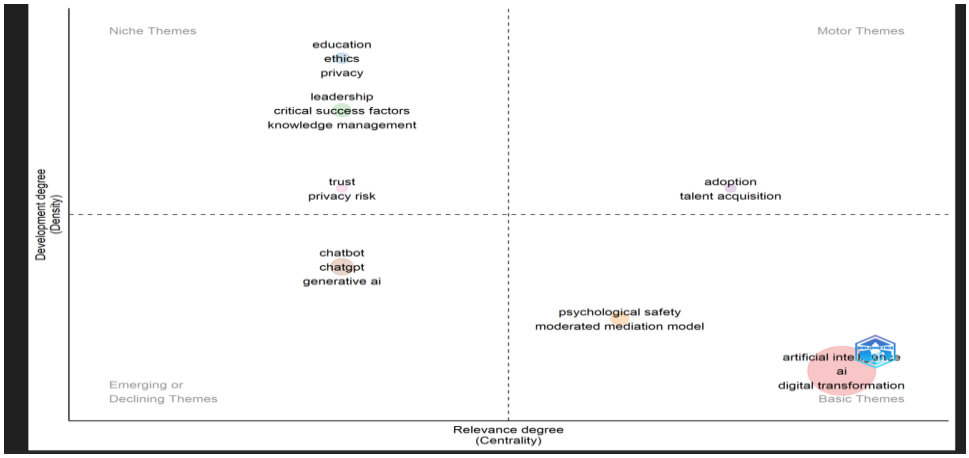
Niche themes consist of the keywords such as education, ethics, privacy, leadership and Knowledge management. Niche themes are primarily highly specialized themes with a limited relevance. It could be emerging areas for future exploration or serve as critical but context-specific concerns, particularly around AI ethics and knowledge management. AI based education enhanced workforce adaptability and innovation (Cascio & Montealegre, 2016), However, in the AI and advanced digital context, ethical practices and privacy concerns are important for maintaining trust (Martin, 2019). While, in the advanced technological era, effective leadership encourage psychological safety in

organizational resilience (Northouse, 2021), while knowledge management drives competitive advantage through efficient information sharing (Nonaka & Takeuchi, 1995).

Emerging Themes:

Emerging themes comprises of the keywords such as Chatbot, ChatGPT, Generative AI. These themes have low centrality and low development, suggesting they are either emerging or losing importance. However, their presence reflects the growing conversation around AI-driven conversational models and their evolving applications.

Figure 12: Thematic



Discussion:

The present article examines the effectiveness of artificial intelligence (AI)-influenced operations to manage the finance along with the HR managers and employee's psychological safety (PS) and balancing the aspects of work-life. While AI enhances work by automating repetitive and stressful tasks, improves flexibility, autonomy, confidence, and collaboration (Shaikh et al., 2023), it also raises concerns regarding loss of jobs and issues across the mental health like misery (Brougham and Haar, 2018). So, prominent AI integration seeks examining the key parameters to ensure smooth adoption. Ethical considerations play a crucial role, that includes adopting transparency along with fairness, data secrecy and accountability (Khogali & Mekid, 2023; Bankins, 2021). Furthermore, business organization should provide continuous AI-literacy, training and support system to ease employee concerns about job security and reduce stress (Bello et al., 2024). Implementing these strategies can help minimize the adverse impacts of AI while improving its management within the organization.

Bibliometric and content analysis identifies serious loopholes across the existing literature. It aims to fulfil the needs to grow outside the developed countries like United States and Europe to emerging nations like African and Asian content. Moreover, the study should focus on underexplored sectors like education and call centres. Future studies should adopt diverse methodologies, including qualitative and longitudinal approaches, to understand AI's long-term effects on employee well-being. Additionally, there is extreme requirement examine the demographic components like age, sex, gender, along with culture shape perceptions of AI adoption.

To conclude, our study primarily focused on addressing the connection of AI and well-being of the employees. The literature review exposed the influence of AI going outside of comfort by engaging the need for employee assignation, growing productivity, and improving the performance along with the job satisfaction (Tang et al., 2023).

CONCLUSION AND FUTURE RESEARCH SCOPE:

The present articles examine how AI-integrated applications affect finance and HR managers and employees, focusing on their impact on psychological safety and work-life balance through a comprehensive bibliometric, word count and thematic analysis. The outcome of the study indicates the twofold effect of AI across the workplace as AI enhances efficiency and engagement, it also poses uncertainty regarding the job stress and threats of living a fruitful life (Morandini et al., 2023). In addition, this study has examined a noteworthy loophole across the literature mainly in the sectors examined along with appropriate application of the research methodologies. This has also used the

hypothetical frameworks to fulfil the needs of the present literature. Furthermore, AI application across the professional settings displays the difficulties across ethical and organizational perspectives which requires the businesses to carefully handle (Olatoye et al., 2024). Hence, AI implementation to balance the benefits with potential jeopardies for the well-being of the employees.

On the other hand, the outcome of the research connects with the opinion of Stamate et al. (2021), on employees' perceptions of AI to affect their job satisfaction significantly and raise their overall psychological well-being. In addition, the study of Calvo et al. (2020) and Nazareno and Schiff (2021) focused on employing AI to deliver new scopes. However, it brings the brings potential challenges by attractive the issues of job unpredictability and growing stress regarding technological transitions. So, examining these issues seeks a hands-on approach to manage the influence of AI impact on employees based on the ethical practices and caring procedures.

The pressing need to understand how AI interacts with employee well-being is crucial in fulfilling the need of the future research. As per the study of Ortega-Bolaños et al. (2024) the need for exploring further indicates the ethical concerns that surrounds AI in the workplace. In this regard, the research of Fisher et al. (2023) identifies the significance of exploring the impact of AI for the purpose of occupational health along with the safety equity. It requires ensuring employee mental health is the moral pressure but acts as a strategic requirement for administrations. It is because poor mental health for the employees can impact the performance of the organizations negatively that leads to low productivity, reduced focus, absenteeism at a large scale with higher turnover (Dimoff et al., 2014; Dimoff & Kelloway, 2018). For addressing these risks, it is important for the companies to engage AI solutions for accommodating employee well-being. It is mainly done through managing the AI applications to align with the needs of the employees by engaging age along with educational circumstances (Wei & Li, 2022).

The upcoming research needs to incorporate on the important theoretical perceptions mainly for the data privacy and transparency across the AI systems. As Gibbons (2021) focused on engaging fruitful education based upon AI technologies to assist the employee adaptation. So, it is crucial in minimising the harmful effects of AI in raising positive technological incorporation. Moreover, this method is crucial in growing the work environment in which AI is used to enhance the operational outcomes, instead of detracting from the well-being of employees.

In the practical point of view, this research study emphasizes on the efficacious AI adoption which seeks ethical implementation along with transparency and fairness. So, the organizations need to invest across the unremitting employee training and expansion to raise the skills and upsurge the mental happiness. In methodological point of view, the current study has implemented a vigorous agenda regarding the future research for the purpose of AI along with the employee well-being. This mainly recommends on the varied research methods which includes ethnographic along with the longitudinal studies for addressing the long-standing impact of AI comprehensively.

Hence, due to the acceleration of digital transformation, the efficacious implementation of AI focus on raising the collaboration across the different stakeholders. Moreover, this accommodating method is indispensable to establish approaches for balancing the employee well-being along with the outcome of the organizational performance (Dikshit et al., 2024).

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