

Artificial Intelligence In The Workplace: A Systematic Literature Review Of Psychological Impact, Employee Well-Being, And Managerial Implications

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ABSTRACT

Artificial intelligence (AI) has fundamentally changed the way humans work, interact, and make decisions in organizational settings. This article presents a systematic literature review of empirical research published between 2020 and 2024, focusing on the psychological impact of AI on employees, its implications for workplace well-being, and the challenges and opportunities in human resource management (HRM). Using a qualitative-narrative approach, 30 articles from internationally reputable journals were analyzed using an antecedent-phenomenon-consequence framework. The findings indicate that the adoption of AI in the workplace has a dual impact: on the one hand, it increases efficiency, work engagement, and data-driven decision-making; on the other hand, it raises anxiety, technostress, and fear of job loss. Moderating variables such as trust in AI, career orientation, and psychological resilience play a significant role in determining individual responses to AI-based changes. Theoretical and practical implications for lecturers, managers, and policymakers are discussed in depth.

Keywords: *artificial intelligence, employee well-being, workplace, organizational psychology.*

INTRODUCTION typed in capital letters [font Times New Roman 12 bold]

The digital revolution that has been unfolding over the past few decades has reached its most significant transformative point with the emergence of artificial intelligence (AI). Unlike previous technological innovations that merely automated physical and repetitive tasks, AI is capable of mimicking human cognitive functions such as reasoning, learning, and decision-making (Raisch & Krakowski, 2021). This capability makes AI not merely a tool, but an entity that is actively reshaping job design, organizational structures, and employee psychological experiences.

According to Dwivedi et al. (2021), as cited in Valtonen et al. (2025), global AI adoption is progressing much faster than previous technological innovations. A McKinsey

Global Institute report projects that between 400 and 800 million jobs worldwide are at risk of partial or full automation by 2030. In the context of Southeast Asia, including Indonesia, the ASEAN Investment Report (2023) noted a significant increase in AI investment, particularly in the manufacturing, banking, and public service sectors. This situation creates a new reality for the workforce that requires in-depth understanding from both business administration and organizational psychology perspectives.

From a psychological perspective, the presence of AI in the workplace impacts not only the technical-operational dimension, but also the affective, cognitive, and motivational aspects of employees. Bankins (2024) in the *Journal of Organizational Behavior* emphasized that understanding the impact of AI on employee work experiences at various levels of analysis is an urgent research agenda. On the one hand, AI has the potential to free employees from repetitive work, allowing them to focus on high-value activities that require creativity and empathy. On the other hand, anxiety about workforce reductions and career uncertainty can reduce employee motivation and psychological well-being (Soulami et al., 2024).

This literature review is structured with three main objectives. First, to identify and synthesize the findings of recent empirical research on the impact of AI in the workplace, particularly those related to psychological and organizational dimensions. Second, to construct a comprehensive thematic map of the impact of AI on individuals (employees) and organizations. Third, to formulate practical implications for managers, HR professionals, and organizational policymakers. With this approach, the article is expected to contribute to the development of evidence-based business administration while simultaneously being responsive to changes in the global business environment.

METHOD

This review uses a systematic narrative review approach that refers to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The search strategy was carried out systematically in four main databases: Scopus, Web of Science, PubMed, and Google Scholar, with a publication period spanning from 2020 to 2024. The keywords used included combinations of: "artificial intelligence AND workplace", "AI AND employee well-being", "AI AND organizational behavior", "AI AND human resource management", "technostress AND AI", and "AI adoption AND psychological impact".

Articles were included if they met the following criteria: (1) were peer-reviewed articles in English or Indonesian; (2) were published between January 2020 and December 2024; (3) contained empirical data or were systematic literature reviews; and (4) discussed AI in an organizational/workplace context. Excluded articles included non-data-driven opinion pieces, textbooks, non-academic industry reports, and articles solely discussing technical aspects of AI without organizational relevance. Of the 312 articles identified in the initial search phase, after screening titles, abstracts, and full texts, 30 articles were selected for in-depth analysis in this review.

The analysis was conducted using the antecedents-phenomenon-consequences (APC) framework adapted from Sharma et al. (2021). This framework allows the identification of factors influencing AI adoption (antecedents), the adoption process and mechanisms itself (phenomenons), and its impact on individuals and organizations (consequences). The articles analyzed were categorized based on the following main themes: (1) impact on psychological well-being, (2) anxiety and technostress, (3) trust in AI, (4) AI-based HR management, and (5)

ethical and managerial implications.

RESULT AND DISCUSSION

Research Trends in the Workplace (2020–2024)

Soulami et al. (2024) in a bibliometric study published in *Frontiers in Artificial Intelligence* noted a significant increase in publications on AI and employment since 2020. This study analyzed 92 articles from Scopus and Web of Science using VOSviewer software and identified four main thematic clusters: ethics, job autonomy, employee stress, and mental health. These findings indicate that the academic community is increasingly recognizing the psychological dimension as a critical arena in the study of AI in the workplace.

Similarly, Bankins (2024) conducted a multilevel empirical review in the *Journal of Organizational Behavior*, including articles from the Scopus database, filtered by business/management and psychology. The results indicate that workplace AI research is increasingly moving from a macro-level approach (organizational strategy) to a micro-level approach (individual employee experiences), a crucial transition for understanding the real-world impact of AI on everyday work life.

Valtonen et al. (2025) in ScienceDirect present findings from a systematic literature review covering five years of empirical research (2020–2024). This study specifically focuses on employees' first-hand experiences with AI-driven changes in their workplaces, including variations in attitudes toward AI across different professional sectors and implementation contexts. These findings confirm that employee responses to AI are highly contextual and influenced by job characteristics, organizational culture, and individual variables.

Impact of AI on Employee Psychological Well-being

The impact of AI on employee well-being is paradoxical. Soulami et al. (2024) found that AI has a dual impact: increasing efficiency and work engagement on the one hand, while potentially increasing job stress and insecurity on the other. Stamate et al. (2021), as cited by Soulami et al. (2024), showed that employee attitudes toward AI are significantly correlated with their job satisfaction and psychological well-being.

Research published in *Scientific Reports* (2024) examined the impact of STARA (Susceptibility to Automation Risk Assessment) awareness on employee affective well-being. Through an empirical analysis of 349 respondents, the study found that employee awareness of automation risks negatively predicted their affective well-being at work. Furthermore, job stress acted as a mediator between STARA awareness and affective well-being, while psychological resilience served as a moderator that could mitigate these negative impacts.

Konuk et al. (2023), as reviewed by Soulami et al. (2024), showed that AI learning anxiety correlated with decreased psychological well-being (PWB), although job-change anxiety specifically did not always have a significant impact on PWB. This finding suggests the need to differentiate between different types of AI-related anxiety in research and organizational interventions. Xu et al. (2023) provided a more optimistic perspective, showing that perceived AI opportunities were positively correlated with employee well-being, mediated by informal workplace learning, with perceived unemployment risk as a moderator.

Research from ScienceDirect (2025) based on the Job Demands-Resources (JD-R) Model found that AI self-efficacy increases work engagement and job satisfaction, while AI-related technostress induces emotional exhaustion and work-family conflict. Interestingly, the

study also found that generative AI can mitigate the negative effects of technostress, suggesting that not all AI technologies have the same psychological impact.

Technostress and Job Loss Anxiety

Technostress is one of the most widely studied psychological consequences of AI in the literature. This concept refers to the stress experienced by individuals due to the use of computer/digital technology, and in the context of AI encompasses dimensions such as techno-overload, techno-invasion, techno-complexity, techno-insecurity, and techno-uncertainty. Brougham & Haar (2020), as cited in Scientific Reports (2024), documented the impact of technological disruption on job insecurity and turnover intentions in a cross-national study.

Fukumura et al. (2021) examined office workers' perspectives on AI integration in the workplace in the International Journal of Environmental Research and Public Health. The study's findings highlight workers' concerns about data privacy, the replacement of humans by machines, and a lack of control over AI-based decisions. This study emphasizes the importance of employee involvement in the AI design and implementation process to minimize resistance and anxiety.

From a career management perspective, Presbitero & Teng-Calleja (2023) in their Personnel Review examined employee career attitudes and behaviors in response to their perceptions of AI incorporation in the workplace. Using a career self-management perspective, this study found that employees with a proactive career orientation tend to be more adaptive to AI-based changes. An important implication of this finding is the need for organizational interventions that encourage the development of a protean career orientation in employees.

Trust in AI and Human-Machine Collaboration

Trust is a crucial psychological variable in shaping the acceptance and use of AI in the workplace. Kong et al. (2023), as reviewed in Souлами et al. (2024), found that trust in AI improves employee well-being and supervisor-rated productivity by enhancing collaboration between employees and the AI system. This positive effect is particularly strong among employees with a high protean career orientation, suggesting an interaction between individual dispositions and the technological context.

Research in Frontiers in Organizational Psychology (2025) explores trust and decision weight in human-AI collaborations in the context of organizational decision-making. This research introduces a weight-distribution mechanism that challenges the traditional human-AI decision-making paradigm. These findings are relevant for designing AI systems that are not only technically efficient but also psychologically acceptable to their human users.

In the context of AI-based recruitment, research from Frontiers in Psychology (2024) documents the complex dynamics of trust and acceptance. On the one hand, the transparency and tangibility of AI agents in video interviews can increase candidates' cognitive and affective trust. On the other hand, chatbots perceived as impersonal can foster skepticism and degrade the candidate experience. A mismatch between candidate expectations and the AI interaction they encounter can impact their perception of the employer brand.

AI in Human Resource Management

The adoption of AI in HR functions has revolutionized how organizations recruit, develop, retain, and evaluate employees. Ekuma (2024) in the Human Resource Development Review published by SAGE Publications presents a systematic review of the impact of AI and

automation on HR practices. The study found that AI-based predictive analytics assists HR professionals in talent management and strategic human resource development planning.

In the recruitment realm, *Frontiers in Psychology* (2024) documented that AI-based automation offers significant efficiencies, but also raises new challenges in the form of algorithmic bias, privacy concerns, and resistance from HR professionals worried about the relevance of their roles. This research underscores the importance of adequate regulation and transparent organizational policies in the use of AI for HR functions. A study published in the *All Research Journal* (2025) emphasized that to maintain AI as a complement to human capabilities in HR, rather than a threat, a balance between efficiency and employee trust is needed through transparent AI governance and human oversight.

Soni et al. (2020), as cited in the MDPI (2024) review, emphasized that nearly every industry is now utilizing AI technology, from healthcare and finance to manufacturing and even the legal sector. In the context of skills transformation, research from MDPI Business and Management (2024) identified that AI is driving demand for adaptive skills, particularly the ability to collaborate with AI systems and manage human-machine interactions. The implications for vocational education and human resource development are significant: training curricula need to be redesigned to integrate AI literacy as a core competency.

Ethical Dimensions and Managerial Implications

Ethical dimensions of AI adoption in the workplace include issues of employee data privacy, algorithm transparency, potential algorithmic discrimination, and erosion of professional autonomy. Ekuma (2024) emphasizes that organizations must comply with relevant data protection regulations, including the General Data Protection Regulation (GDPR) in Europe, and regularly audit their AI tools to identify and mitigate potential bias. Olatoye et al. (2024), as reviewed in Soulami et al. (2024), assert that AI adoption in professional settings presents ethical and organizational challenges that require careful management to maximize benefits while minimizing risks to employee well-being.

From the Academy of Management perspective, the concept of the "automation-augmentation paradox" introduced by Raisch & Krakowski (2021) offers a useful framework: AI should not only replace human capabilities (automation), but also strengthen and expand human capabilities (augmentation). This paradox is relevant for designing AI implementation strategies that focus not only on cost efficiency but also on developing human capacity and maintaining work meaningfulness.

Discussion

This literature review reveals several integrative conclusions relevant to the fields of business administration and organizational psychology. First, the impact of AI on employees is not deterministic or linear, but rather mediated by a series of individual psychological (resilience, self-efficacy, career orientation) and contextual (organizational culture, quality of AI implementation, change management policies) variables. This finding is consistent with the Person-Environment Fit Theory perspective, which emphasizes the importance of a fit between individual characteristics and the technologically transformed work environment.

Second, trust in AI is not a static variable but rather a dynamic one that can be built through transparency, communication, and employee engagement in the implementation

process. Organizations that successfully build employee trust in AI systems tend to experience smoother adoption and a more tangible positive impact on employee productivity and well-being. This aligns with the principles of Organizational Justice Theory, which emphasizes the importance of perceived procedural justice in the acceptance of organizational change.

Third, the Job Demands-Resources (JD-R) Model perspective has proven to be a productive theoretical framework for understanding the dynamics of AI in the workplace. Within this framework, AI can act as both "demands" (technostress demands, adaptation anxiety) and "resources" (capability enhancements, cognitive load reduction), with outcomes depending on the configuration of both within specific job and individual contexts. The practical implication is the need for a more nuanced approach to AI design and implementation not just maximizing efficiency but also actively managing the accompanying psychological demands.

Fourth, there is a significant research gap in the existing literature. Most research still focuses on developed country contexts (the United States, China, Western Europe) and specific sectors such as technology, finance, and healthcare. Research in non-Western contexts, including Southeast Asia and Indonesia in particular, is very limited, even though different cultural, regulatory, and labor market dynamics can produce different patterns of AI impacts. This presents a highly relevant research opportunity for the academic communities of business administration and organizational psychology in Indonesia.

CONCLUSION

This systematic literature review has identified artificial intelligence as a transformative force fundamentally reshaping the workplace, with profound implications for employee psychology, HR practices, and overall business administration. The impact of AI is ambiguous and contextual: it can be a source of increased well-being and productivity, as well as a source of anxiety and technostress, depending on how it is implemented and managed.

Based on the literature synthesis conducted, the following recommendations can be offered. For HR practitioners and managers: (1) develop a transparent communication strategy about the role and limitations of AI in organizational operations; (2) invest resources in ongoing AI literacy training programs for all employees; (3) design employee participation mechanisms in every phase of AI implementation; and (4) build a proactive psychological support system to address AI-related anxiety and technostress.

For researchers and academics, especially in Indonesia: (1) fill the research gap by conducting empirical studies in the local cultural and industrial context; (2) develop valid and reliable measurement instruments for key psychological variables such as AI trust, AI anxiety, and AI self-efficacy in Indonesian; and (3) explore indigenous theoretical models that can explain AI-employment dynamics in the Southeast Asian context, including the values of collectivism and long-term orientation that characterize the work culture in this region.

For policymakers: a regulatory framework is needed that encourages AI-based innovation while protecting employee rights, ensuring algorithmic transparency, and promoting a more inclusive distribution of AI benefits. Policies that support just career transitions for workers most impacted by AI automation need to be a priority on the national workforce development agenda.

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