

A Systematic Review on Digital HRM Tools and their Impact on Employee Mental Health of Emerging Practices

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Abstract: *The rapid digitalization of human resource management (HRM) has significantly transformed organizational strategies concerning employee well-being, with a particular emphasis on mental health. This study conducts a systematic literature review of digital HRM tools and their effects on employee mental health and well-being, concentrating on research published between 2021 and 2026. Utilizing the PRISMA framework, an exhaustive search was performed across major academic databases, culminating in the selection of Sixty five peerreviewed articles.*

The findings categorize digital HRM tools into five principal areas: Employee Assistance Programs (EAPs), AI-based mental health chatbots, digital wellness platforms, HR analytics systems, and remote work monitoring tools. The review further identifies core themes, including stress reduction, work-life balance, employee engagement, and psychological support.

The results indicate that digital HRM tools significantly enhance accessibility to mental health resources, improve employee engagement, and support proactive well-being management. However, challenges such as data privacy concerns, technological resistance, and algorithmic bias remain critical issues. The study underscores the necessity for integrated and ethically designed digital HRM systems that merge technological efficiency with human-centered approaches.

Future research should focus on longitudinal studies, cross-cultural contexts, and the development of personalized mental health interventions. This review contributes to the expanding body of knowledge by providing a comprehensive synthesis of emerging digital HRM practices and their implications for employee mental health..

Keywords: *human resource management*

I. INTRODUCTION

Employee mental health has emerged as a critical concern for organizations because of the escalating levels of workplace stress, burnout, and psychological disorders. Research indicates that poor mental health substantially impacts productivity, absenteeism, and employee retention. The advent of digital transformation has further exacerbated work demands, rendering mental well-being a strategic priority for organizations.

Role of Digital HRM

Digital Human Resource Management (HRM) drives employee and institutional productivity by automating routine tasks, enabling data-driven decision-making, and enhancing employee engagement through self-service platforms. It increases efficiency by reducing administrative burdens and improves talent management through AI-driven



recruitment and personalized learning. Ultimately, it fosters a flexible, collaborative work environment that improves employee performance and boosts organizational profitability.

Digital HRM encompasses the incorporation of digital technologies, including artificial intelligence (AI), analytics, and cloud platforms, into HR practices. These technologies enable organizations to monitor employee well-being, provide real-time support, and develop personalized interventions. Digital HRM tools enhance employee engagement, job satisfaction, and emotional support through data-driven decision-making and accessible platforms.

II. METHODOLOGY

Research Design

This study employs a Systematic Literature Review (SLR) methodology, utilizing the PRISMA framework. The databases consulted included Scopus, Web of Science, PubMed, and Google Scholar. The keywords employed in the search were “Digital HRM,” “Employee mental health,” “Workplace well-being,” “HR analytics,” “AI in HR,” and “Digital mental health interventions.” The PRISMA process yielded approximately 250 initial records, which were subsequently screened to approximately 120, resulting in the inclusion of approximately 65 high-quality peer-reviewed articles published between 2021 and 2026. PRISMA-based reviews are extensively utilized in digital mental health research to ensure transparency and reliability.

The inclusion criteria for this review were as follows: publications between 2021 and 2026, peer-reviewed journal articles, a focus on digital HRM or workplace digital mental health tools, and empirical or review studies. The exclusion criteria comprised non-English publications, studies conducted prior to 2021, and non-workplace contexts.

III. MAJOR CATEGORIES IDENTIFIED

The literature delineates five principal categories of digital Human Resource Management (HRM) tools:

Employee Assistance Programs (EAP Apps):

These applications offer confidential counseling and stress management services, accessible via mobile and web platforms, to enhance emotional resilience and mitigate burnout.

AI-Based Mental Health Chatbots:

It includes tools such as Wysa and Elomia Health, which provide 24/7 support utilizing cognitive behavioral therapy techniques. These chatbots aim to alleviate symptoms of anxiety and depression and offer scalable mental health solutions. While AI therapists demonstrate small to moderate positive effects on mental health outcomes, they necessitate careful validation.

Digital Wellness Platforms:

These platforms encompass meditation apps, fitness tracking, and stress monitoring tools, supporting holistic well-being by integrating physical and mental health. They contribute to improved work-life balance.

HR Analytics Tools:

These tools analyze employee behavior, stress levels, and engagement, enabling predictive interventions and enhancing decision-making through data insights. Digital HR systems significantly augment HR efficiency and the employee experience.

Remote Work Monitoring Tools:

These tools track productivity and engagement in hybrid/remote settings and provide feedback mechanisms. While they may enhance efficiency, they also raise concerns regarding stress.

THEMATIC ANALYSIS

I. Stress Reduction:

The implementation of digital Human Resource Management (HRM) tools has been shown to alleviate job-related stress through mechanisms such as real-time support systems, counseling applications, and flexible work arrangements.



Empirical evidence indicates that the adoption of digital HRM contributes to reduced occupational stress and enhanced employee well-being.

II. Work-Life Balance: Technologies facilitating remote work offer increased flexibility, while wellness applications encourage healthier lifestyle routines. However, it is important to note that excessive monitoring may obscure the boundaries between work and personal life.

III. Employee Engagement: Digital platforms enhance communication and feedback mechanisms, thereby increasing employee participation and satisfaction. These platforms also promote a collaborative work culture.

IV. Psychological Support: Artificial intelligence chatbots and virtual therapy tools provide immediate assistance, whereas early intervention systems are capable of detecting stress patterns. Digital interventions have improved access to mental healthcare; however, there are ongoing concerns regarding potential biases and inclusivity within AI systems...

IV. REVIEW OF LITERATURE

Digital HRM and Mental Health

Strohmeier. S. (2022), This study offers a foundational understanding of digital Human Resource Management (HRM) by delineating its scope and components. This underscores the integration of advanced technologies, such as artificial intelligence and analytics, within HR functions. The findings indicate that digital HRM enhances both efficiency and decision-making processes. In addition, it highlights the potential role of digital HRM in supporting employee well-being through data-driven strategies.

Bondarouk. T., and Brewster, C. (2021) examine the dynamic interplay between Human Resource Management (HRM) and digital technologies. The study delineates key research trajectories, notably focusing on employee well-being and digital transformation. It underscores the importance of incorporating human-centric methodologies in the adoption of technology. Furthermore, the paper highlights existing gaps in understanding the psychological ramifications of HR technologies.

Marler. J. H. and Boudreau, J. W. (2021) underscore the increasing significance of HR analytics in organizational decision-making processes. Their review elucidated the application of analytics in monitoring employee engagement and stress levels. These findings suggest that data-driven insights can enhance HR interventions. Nonetheless, this study also cautions against ethical concerns associated with the utilization of employee data.

Venkatesh. V. (2022) This study investigates the determinants influencing the adoption and effective utilization of artificial intelligence (AI) in human resource management. It elucidates how AI-driven tools enhance HR functions, including recruitment, performance management, and employee support systems. The findings indicate that AI adoption enhances decision-making efficiency and facilitates personalized employee experiences. Furthermore, the study underscores the potential of AI in identifying employee stress patterns and supporting mental well-being, while also acknowledging concerns related to trust, transparency and the ethical use of data.

Employee Mental Health and Well-being

Quick. J. C. and Henderson. D. F. (2021) examines the phenomenon of occupational stress and its implications for employee health and performance. The study underscores the importance of preventive strategies aimed at mitigating workplace stress and enhancing overall well-being. The findings underscore the significance of organizational support systems in fostering mental health. Furthermore, the study lays the groundwork for the integration of digital Human Resource Management (HRM) tools to effectively manage stress.

De Vries. H., et al. (2022) This review investigates the primary factors affecting employee mental health within an organizational context. It identifies workplace stressors, job demands, and insufficient support as significant contributors to mental health challenges. The study underscores the importance of organizational interventions and policies. Additionally, it suggests that digital tools can substantially enhance access to mental health resources.



World Health Organization. (2022). This report offers a comprehensive analysis of the significance of mental health in the workplace on a global scale. It underscores the economic and social repercussions of inadequate mental health on both organizations and their employees. The report advocates for strategies such as the establishment of supportive work environments and the provision of access to mental health services. Additionally, it highlights the pivotal role of digital solutions in enhancing mental health support and awareness.

AI and Digital Mental Health Tools

Inkster, B., et al. (2021), This study assesses the efficacy of digital mental health interventions, encompassing applications and online platforms. The findings demonstrate that these tools substantially enhance access to mental healthcare. The results suggest moderate effectiveness in alleviating anxiety and depression. However, challenges persist regarding the long-term impact and user adherence.

Fitzpatrick, K. K., et al. (2021) conducted a study to investigate the application of AI chatbots in the delivery of cognitive behavioral therapy (CBT). The results indicated that interventions facilitated by chatbots effectively alleviated symptoms of depression and stress. This tool offers an accessible and cost-effective means of providing mental health support. However, it is limited by the lack of emotional depth inherent in human interaction.

Laranjo, L., et al. (2022) examine the application of conversational AI tools within healthcare and workplace well-being contexts. The study concluded that chatbots significantly enhance user engagement and offer immediate psychological support. However, it also identified limitations, such as a lack of personalization. The findings underscore the potential of these tools as supplementary resources for mental health support.

Digital HRM Tools and Employee Outcomes

Parry, E., and Strohmeier, S. (2021) examine the impact of digital transformation on Human Resource Management (HRM) practices. The study underscores the transition towards employee-centric digital solutions. It highlights the significance of digital tools in enhancing employee experience and posits that these tools contribute to improved mental health outcomes.

Minbaeva, D. (2022) investigates the impact of digital disruption on human resource roles and processes. The study elucidates both the opportunities and challenges associated with digital human resource management (HRM) implementation. These findings indicate that digital tools have the potential to enhance employee well-being when effectively managed. Conversely, excessive reliance on technology can result in stress and burnout.

Bondarouk, T. (2021), This paper offers a comprehensive examination of the evolution of electronic Human Resource Management (e-HRM). It explores the transformative impact of digital technologies on HR practices over time. The study underscores the growing significance of digital tools in enhancing employee experience and engagement. Additionally, it identifies future opportunities for leveraging e-HRM to support employee well-being and mental health.

HR Analytics and Well-being

Margherita, A. (2022), This study investigates the potential of human resources analytics to enhance employee well-being initiatives. This underscores the significance of predictive analytics in detecting stress and burnout. The results indicate that data-driven human resource practices enhance organizational decision making. Nonetheless, ethical considerations persist as significant challenges.

Angrave, D., et al. (2022), This study conducts a critical examination of the limited adoption of HR analytics within organizations, despite its potential advantages. It identifies deficiencies in analytical skills, organizational culture, and data utilization within HR functions. The findings indicate that without appropriate capability development, HR analytics cannot effectively support decision-making processes. The study underscores the necessity of integrating analytics to enhance employee well-being and organizational outcomes.



Workplace Digitalization & Remote Work

Wang, B., et al. (2021) investigate the effects of remote work technologies on employee well-being. The study concludes that while flexibility enhances work-life balance, it also contributes to increased feelings of isolation. Digital tools are essential for sustaining communication and productivity. This research underscores the necessity for supportive human resource practices in remote work settings.

Kniffin, K. M., et al. (2021). This paper explores the significant workplace changes triggered by the COVID-19 pandemic. It emphasizes the rapid shift to remote work and increased reliance on digital technologies. The findings indicate positive outcomes, such as flexibility, and negative impacts, such as isolation and stress. This study underscores the importance of digital HRM tools in supporting employee mental health during crises.

Wellness Platforms and EAP

Attridge, M. (2021), This study assesses the efficacy of Employee Assistance Programs (EAPs). The results indicate that EAPs substantially alleviate stress and enhance mental health outcomes. Digital EAP platforms improve accessibility and confidentiality. This research underscores their significance in organizational well-being strategies.

Carolan, S., et al. (2022), This study investigates the efficacy of digital mental health interventions implemented within workplace environments. It underscores tools such as mobile applications, online counseling platforms, and web-based therapy programs that enhance accessibility to mental health support. The findings suggest that these interventions can substantially mitigate stress, anxiety, and burnout among employees. Nonetheless, the study also identifies challenges related to user engagement, digital literacy, and long-term effectiveness, highlighting the necessity for well-designed and user-friendly solutions.

Ethics, Privacy and Challenges

Raghavan, M., et al. (2021), This study addresses the issue of algorithmic bias in AI systems and its implications for decision-making. It highlights how biased data can lead to unfair outcomes in HR processes, such as recruitment and performance evaluation. The findings stress the importance of transparency and fairness in AI implementation. This study is particularly relevant for ensuring the ethical use of AI in employee well-being initiatives.

Kellogg, K. C., et al. (2022) investigated the transformative impact of algorithmic management systems on workplace dynamics. The study underscores the increasing prevalence of digital monitoring and decision-making tools within organizations. The findings indicate that, although algorithms enhance efficiency, they may also elevate employee stress levels and diminish autonomy. The research underscores the necessity for a balanced application of technology to safeguard employee well-being.

Recent Trends

Sharma, R., and Sharma, P. (2023). This study investigates contemporary trends in digital Human Resource Management (HRM) and their effects on employee well-being. These findings indicate that digital tools enhance employee engagement and job satisfaction. This study underscores the significance of integrating technology with human support systems and highlights the necessity for ongoing innovation in HR practices.

Gupta, A. (2024), This study examines the role of artificial intelligence in human resource management for enhancing mental health outcomes. This research demonstrates that AI tools facilitate personalized interventions and early detection of stress. These findings suggest improvements in employee satisfaction and productivity. Nonetheless, concerns regarding data privacy and bias have been acknowledged.

Singh, S. (2023) examines the relationship between human resources (HR) analytics and employee engagement, demonstrating that data-driven insights enhance communication and performance management. The study identifies a positive correlation between engagement and mental well-being and underscores the strategic importance of analytics in human resource management (HRM).



Kumar, V. (2025) examines the extensive impact of digital transformation on human resource management (HRM) practices. The study concludes that digital tools significantly enhance both efficiency and employee experience. Furthermore, the research underscores advancements in mental health support systems and advocates a balanced approach to technology adoption.

V. RESEARCH GAP

While numerous studies have investigated digital Human Resource Management (HRM) and its impact on employee outcomes, the research landscape remains fragmented. The existing body of literature predominantly emphasizes HR efficiency rather than the mental health outcomes of employees. Furthermore, it tends to focus on isolated technologies, such as artificial intelligence and analytics, rather than integrated systems. Additionally, there is a notable absence of longitudinal evidence, with most studies concentrating on short-term effects. A systematic synthesis specifically examining the influence of digital HRM tools on employee mental health and well-being from 2021 to 2026 is lacking.

RESEARCH GAP IDENTIFICATION

Overall Research Gap Despite the increasing adoption of digital Human Resource Management (HRM) tools, there exists a paucity of comprehensive and integrated research that examines their direct and indirect effects on employee mental health and well-being.

Specific Research Gaps identified:

Fragmented Evidence: The majority of studies concentrate on individual tools (e.g., AI chatbots, HR analytics) rather than offering a holistic perspective on digital HRM systems and their cumulative impact on mental health.

Limited Focus on Mental Health Outcomes: Existing research predominantly emphasizes productivity, performance, and efficiency, while giving insufficient attention to psychological well-being, stress reduction, and emotional health.

Lack of Longitudinal Studies: Most studies are cross-sectional and short-term, resulting in limited evidence regarding the long-term effectiveness of digital HRM tools on mental health.

Ethical and Privacy Concerns: Underexplored issues such as data privacy, algorithmic bias, and employee surveillance are discussed conceptually but lack empirical validation and practical frameworks.

Limited Contextual Studies in Developing Economies : The majority of research is concentrated in developed countries and large organizations, leaving a gap in studies focusing on micro, small, and medium enterprises (MSMEs) and the context of India and other emerging economies.

Lack of Integrated Theoretical Frameworks: Few studies integrate digital HRM, mental health theories, and organizational behavior models, resulting in a gap in theoretical integration and model development.

Employee-Centric Perspective is Limited: Most studies prioritize organizational benefits, with less focus on employee perceptions, user experience, and digital fatigue.

VI. CONCEPTUAL FRAMEWORK OF THE STUDY

Conceptual Framework of Digital HRM Tools and Employee Mental Health

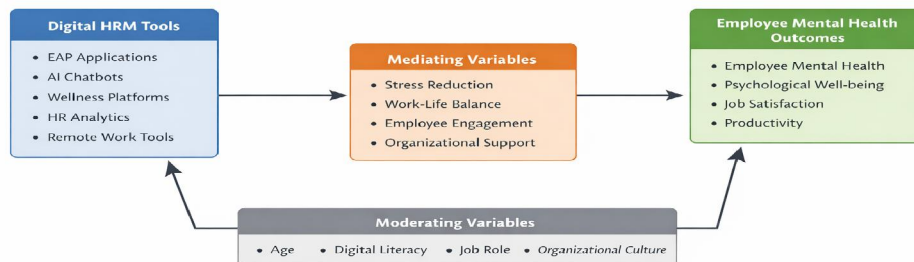


Fig.1 Framework structure



This study introduces a conceptual framework designed to investigate the relationship between digital Human Resource Management (HRM) tools and employee mental health and well-being. Digital HRM tools are posited as independent variables that affect employee outcomes through mediating factors, such as stress reduction, work-life balance, employee engagement, and organizational support. These mediators elucidate the mechanisms by which digital interventions enhance psychological well-being and job satisfaction. Furthermore, moderating variables, such as age, digital literacy, job role, and organizational culture, may impact the strength and direction of these relationships. The framework offers a comprehensive model to elucidate both the direct and indirect effects of digital HRM tools on employee mental health.

DISCUSSION

The overall findings indicate that digital Human Resource Management (HRM) tools have a positive impact on employee well-being. These tools enhance accessibility to mental health resources and improve employee engagement and satisfaction. Furthermore, digital tools serve as preventive, supportive, and analytical mechanisms for managing workplace mental health.

VII. CHALLENGES IN IMPLEMENTATION

Challenges in the adoption of technology include resistance to its implementation, concerns regarding data privacy and confidentiality, and a lack of digital literacy among employees. Additionally, algorithmic bias in AI tools poses a significant challenge. The success of implementation depends on the organization's readiness and the adequacy of training provided.

VIII. CONCLUSION AND FUTURE SCOPE

Conclusion

This systematic review (2021–2026) underscores the significant role of digital Human Resource Management (HRM) tools in enhancing employee mental health and well-being. Technologies, such as artificial intelligence chatbots, HR analytics, and wellness platforms, offer scalable, accessible, and data-driven solutions. However, their effectiveness depends on ethical implementation, organizational support, and employee acceptance.

Future Scope

Future research should prioritize the following areas: longitudinal and cross-cultural studies; the integration of artificial intelligence with human-centered human resource (HR) practices; the development of ethical frameworks for digital HR management; and the personalization of mental health interventions. There is an increasing demand for comprehensive digital HR ecosystems that effectively merge technological advancements with human empathy to promote sustainable employee well-being. Digital HR management tools have the potential to significantly transform workplace well-being; however, their successful implementation necessitates a balanced approach that integrates technological innovation with ethical considerations and employee-focused strategies. Future research should aim to develop holistic and sustainable digital HR management ecosystems that emphasize both organizational performance and employee mental health.

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