

A Research Study of the Impact of AI-Driven Workplace Practices on Employee Well-Being

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Abstract:

The growing presence of artificial intelligence in organisational settings has altered how work is structured, managed, and experienced by employees, raising important questions about its implications for employee well-being. Against this background, the present study examined the impact of AI driven workplace practices on employee well-being. The study adopted a quantitative cross sectional design and used a structured questionnaire comprising 20 Likert scale statements distributed across two constructs, namely AI driven workplace practices and employee well-being. Data were obtained from 225 employees selected through convenience sampling and analysed through simple linear regression. The results showed a statistically significant positive influence of AI driven workplace practices on employee well-being ($R = .57$, $R^2 = .32$, $F(1, 223) = 106.74$, $p < .001$). The regression coefficient further indicated that more positive perceptions of AI driven workplace practices were associated with higher levels of employee well-being ($B = 0.48$, $t = 10.33$, $p < .001$). The findings suggest that workplace AI practices may serve as a meaningful organisational factor in shaping employees' work related well-being. The study offers practical relevance by indicating that the value of AI in organisations should be assessed not only in operational terms but also in relation to employee experience and well-being.

Keywords: Artificial intelligence, AI-driven workplace practices, Employee well-being, Workplace technology adoption.

1.1 INTRODUCTION

Artificial intelligence has become an increasingly visible feature of contemporary organisational life, influencing how tasks are assigned, monitored, coordinated, and completed. As workplaces adopt AI based systems to improve efficiency, accuracy, flexibility, and productivity, attention has begun to shift from operational outcomes alone to the broader employee consequences of such changes. This shift is important because workplace technologies do not operate in isolation from human experience. Their value is also reflected in how employees perceive their day to day work, their sense of support, and their overall well-being within the organisation.

In practical terms, AI driven workplace practices can shape several dimensions of working life. They may reduce manual workload, support decision making, improve task coordination, and make responsibilities easier to manage. At the same time, employee well-being remains a multidimensional concern that includes mental comfort, work life balance, motivation, satisfaction, emotional support, fulfilment, and a positive state of mind at work. For this reason, it is academically important to examine whether favourable perceptions of AI related workplace practices are associated with more positive well-being outcomes among employees across contemporary organisational environments.

The need for such enquiry becomes more relevant when the effects of workplace AI are not assumed to be uniformly positive. Even where AI practices are perceived favourably overall, employee responses may remain mixed across specific aspects of work experience. Similarly, employees may report positive well-being in some areas while expressing uncertainty or weaker responses in others. These variations indicate

that the relationship between AI driven workplace practices and employee well-being warrants focused empirical investigation rather than broad technological assumptions. A clear examination of this relationship is therefore necessary for both academic understanding and organisational decision making. Within this context, the present study analyses the impact of AI driven workplace practices on employee well-being. The study treats AI driven workplace practices as the independent variable and employee well-being as the dependent variable. Using a quantitative approach and regression based analysis, it seeks to determine whether workplace AI practices constitute a significant factor in shaping employee well-being in organisational settings today

1.2 REVIEW OF LITERATURE

(Arboh et al., 2025) examined whether employees' awareness of artificial intelligence could shape workplace well being in the healthcare sector through the lens of the job demands resources model. Using evidence from health workers, the study linked AI awareness with informal learning behaviour and, in turn, with workplace well being. Its contribution is especially relevant because it treats AI not simply as a technological system but as an experienced workplace condition that may influence how employees feel and function at work, which is closely aligned with the present study's concern with employee well being under AI driven workplace practices.

(Chuang et al., 2025) investigated AI's dual influence on employees' work and life related well being by applying the job demands resources framework to a three wave survey of 600 employees working with AI across industries. Their Bayesian SEM results showed that AI efficacy and generative AI supported productivity and job satisfaction, whereas AI related technostress increased exhaustion and work family conflict and reduced job satisfaction. The study is important for the present research because it demonstrates that AI may generate both resource based and strain based outcomes, thereby reinforcing the need to examine how AI driven workplace practices relate to employee well being in practical organisational settings.

(Valtonen et al., 2025) explored AI and employee wellbeing in workplace settings through survey data from Finnish and international companies headquartered in Finland, using structural equation modelling on responses from 207 organisations. Their analysis indicated that AI adoption did not improve employee wellbeing directly, but operated through work related mechanisms such as task optimisation and safety. This study is highly relevant because it shifts attention from technology adoption alone to the workplace conditions through which AI may affect employee wellbeing, a logic that closely supports the present study's focus on AI driven workplace practices rather than AI presence in the abstract.

(Giuntella et al., 2025) analysed longitudinal survey data from Germany between 2000 and 2020 using an event study design and difference in differences approach to estimate how occupational exposure to AI related to workers' well being and health. The authors reported no sizeable negative effect on well being or mental health and identified some evidence of improved health status and health satisfaction, possibly linked to reduced physical job intensity. This article is directly relevant because it shows that the consequences of AI exposure are not uniformly harmful, while also suggesting that the effect of AI may depend on how exposure is operationalised, thereby leaving room for perception based studies such as the present one.

(Soulami et al., 2024) carried out a bibliometric and systematic review of research on AI adoption and employee well being, drawing on articles indexed in Scopus and Web of Science. Their synthesis identified four recurring clusters, namely ethics, work autonomy, employee stress, and mental health, and also highlighted a shortage of empirical evidence across non Western contexts and diverse workforce groups. This review is especially useful for the present study because it confirms that the field is expanding, yet still lacks sufficient direct empirical testing of AI related workplace practices and employee well being in broad organisational contexts.

(García Madurga et al., 2024) systematically reviewed 31 studies on AI and workplace well being published between 2018 and 2023. Their synthesis showed that AI applications were increasingly

associated with mental health monitoring, emotional support, personalised well being programmes, psychosocial risk detection, and training related interventions. At the same time, the review underlined the need for more empirical work capable of clarifying how AI influences employee outcomes in real work environments. This is directly relevant to the present study because it positions employee well being as an outcome of AI related organisational practice rather than solely as a policy or clinical concern.

(Xu et al., 2023) investigated the relationship between artificial intelligence opportunity perception and employee workplace well being through a moderated mediation model published in the International Journal of Environmental Research and Public Health. The study proposed that when employees interpret AI as an opportunity to develop relevant skills and career prospects, workplace well being improves through more positive cognitive and behavioural pathways. This work is relevant because it draws attention to employee perception as a central mechanism, which resonates strongly with the present study's concern with how employees evaluate AI driven workplace practices in relation to their well being.

(Tang et al., 2023) examined the work and after work consequences of interacting with artificial intelligence in a Journal of Applied Psychology article. Their analysis showed that greater interaction with AI could reduce interpersonal contact and contribute to feelings of loneliness, extending the effects of AI beyond immediate task performance into broader psychological experience. This study matters for the present research because it demonstrates that AI related work arrangements may shape employee well being through subtle relational and emotional pathways, not only through productivity related mechanisms.

(Loureiro et al., 2023) explored the relationship between AI and employee happiness by combining semi structured interviews with a survey of 200 employees working alongside AI algorithms and agents. Framed by stress and coping theory, the study showed that AI related stress was not necessarily harmful in all cases and could contribute to employee happiness through engagement under certain conditions. The article is relevant because it shows that employee well being in AI enabled environments is nuanced and contingent, which supports the need for direct empirical examination of the overall influence of AI driven workplace practices on employee well being.

(Kinowska & Sienkiewicz, 2023) analysed algorithmic management practices in European organisations and showed that such practices had a direct effect on workplace well being while also influencing it indirectly through reduced job autonomy and total rewards practices. Their work is relevant because algorithmic management is one concrete manifestation of AI driven workplace practice. It demonstrates that AI related management systems can influence how employees experience work, yet it remains centred on algorithmic control mechanisms rather than the broader set of AI driven workplace practices examined in the present study.

(Bhargava et al., 2021) used a qualitative cross sectional design based on 21 semi structured interviews to explore how employees perceived robotics, artificial intelligence, and automation in relation to job satisfaction, job security, and employability. The study revealed mixed employee reactions, with technology seen as both an enabler of efficiency and a source of uncertainty. Its relevance lies in showing that employee responses to AI infused work environments are complex and often shaped by anticipated implications for work quality and satisfaction, thereby offering an early basis for later well being oriented inquiry.

1.3 RESEARCH OBJECTIVE

To analyse the impact of AI-driven workplace practices on employee well-being.

1.4 RESEARCH METHODOLOGY

1.4.1 Research Design

The study adopted a quantitative cross sectional research design to examine the impact of AI driven workplace practices on employee well-being.

1.4.2 Research Approach

The study followed a quantitative research approach. This approach was appropriate because both the independent and dependent variables were examined through measurable questionnaire responses and analysed using statistical techniques.

1.4.3 Population and Sample

The target population comprised employees working in organisational settings where AI driven workplace practices were present or experienced. The study used a sample of 225 respondents. This sample size was considered adequate for descriptive assessment of the constructs and for testing the proposed relationship through regression based analysis.

1.4.4 Sampling Technique

Convenience sampling was used for the study. This method was appropriate for the present investigation because it allowed the researcher to obtain responses from employees who were available within the relevant organisational context.

1.4.5 Research Variables

The study included one independent variable and one dependent variable. The independent variable was AI driven workplace practices, which referred to the extent to which artificial intelligence based systems and processes were perceived to shape routine work activities, decision support, flexibility, coordination, and productivity in the workplace. The dependent variable was employee well-being, which referred to employees' perceived mental comfort, work life balance, satisfaction, motivation, emotional support, stress handling, sense of value, fulfilment, and overall positive work experience.

The constructs were derived directly from the research objective and hypothesis. AI driven workplace practices were treated as the predictor construct because the study aimed to assess their influence within the workplace setting. Employee well-being was treated as the outcome construct because the study focused on the extent to which such practices were associated with employees' overall work related well-being.

1.4.6 Instrument Development and Measurement

Data were collected through a structured questionnaire consisting of two constructs. The first construct, AI driven workplace practices, contained 10 Likert statements, and the second construct, employee well-being, also contained 10 Likert statements, producing a total of 20 items. Responses were measured on a five point Likert scale ranging from 1 for strongly disagree to 5 for strongly agree.

Item level mean scores were calculated for each statement to understand response tendencies. Construct level mean scores were obtained by averaging the item responses within each construct. Higher mean values indicated more positive perceptions of AI driven workplace practices and higher levels of employee well-being.

1.4.7 Data Collection Procedure

Data were collected from employees through a questionnaire based survey. The responses were gathered in a structured manner so that the variables could be measured consistently and analysed statistically. The study relied on respondent based primary data collected within the chosen sample framework.

1.4.8 Reliability of the Instrument

The reliability of the instrument was assessed using Cronbach's alpha to examine the internal consistency of the items within each construct. The alpha value for AI driven workplace practices was 0.815, while the alpha value for employee well-being was 0.782. These values indicated acceptable internal consistency and suggested that the items within both constructs were sufficiently reliable for further statistical analysis.

1.4.9 Statistical Tools and Techniques

For hypothesis testing, simple linear regression was applied. This technique was appropriate because the study examined the impact of one independent variable, AI driven workplace practices, on one dependent variable, employee well-being.

1.5 LIKERT STATEMENT

Table Error! No text of specified style in document..1: Distribution of Opinion for AI-Driven Workplace Practices

SNO	Likert Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	AI tools help streamline routine work processes in my organisation.	18	64	90	45	8
2.	AI-driven systems improve the efficiency of task completion at work.	16	64	91	45	9
3.	AI technologies support better decision-making in my workplace.	13	51	84	63	14
4.	My organisation uses AI in a way that enhances work flexibility.	13	47	82	65	18
5.	AI-driven practices reduce unnecessary manual workload in my job.	10	41	87	70	17
6.	AI systems contribute to greater accuracy in work-related activities.	12	44	81	62	26
7.	The integration of AI in the workplace improves coordination of tasks.	9	38	78	67	33
8.	AI-driven workplace practices make job responsibilities easier to manage.	4	35	70	82	34
9.	AI applications in my organisation support productive work performance.	5	17	81	81	41
10.	Overall, AI-driven workplace practices positively shape my work experience.	1	22	68	82	52

The responses relating to AI driven workplace practices suggest a generally favourable orientation, although the pattern is not uniformly strong across all items. Higher agreement was visible for statements concerning easier job management, productive work performance, and the overall positive shaping of work experience. At the same time, several items showed notable neutral responses, especially those relating to streamlining routine work, task efficiency, and decision support, which suggests that employees recognised the role of AI but did not express consistently strong endorsement across all practical dimensions.

Table Error! No text of specified style in document..2: Distribution of Opinion for Employee Well-being

SNO	Likert Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I feel mentally comfortable while carrying out my work responsibilities.	12	67	88	45	13
2.	I am able to maintain a healthy balance between my work and personal life.	12	60	93	55	5
3.	I generally feel satisfied with my overall work experience.	10	49	85	68	13

SNO	Likert Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
4.	I feel motivated to perform my duties in my organisation.	8	52	73	71	21
5.	My work environment supports my emotional well-being.	2	32	101	75	15
6.	I am able to cope effectively with work-related stress.	4	26	87	85	23
7.	I feel valued and respected in my workplace.	5	34	82	76	28
8.	My job provides a sense of personal fulfilment.	2	15	87	86	35
9.	I usually experience a positive state of mind at work.	0	13	79	86	47
10.	Overall, my work contributes positively to my well-being.	2	16	59	103	45

The responses on employee well-being also reflected a moderately positive pattern, with stronger agreement appearing for overall contribution of work to well-being, positive state of mind, personal fulfilment, and coping with work related stress. However, substantial neutral and disagreeing responses were visible for work life balance, mental comfort, and general satisfaction, indicating that employee well-being was present in a qualified rather than uniformly strong form. This pattern suggests that well-being perceptions were positive overall but still mixed in specific areas of everyday work experience.

1.6 HYPOTHESIS:

H01: There is no significant impact of AI-driven workplace practices on employee well-being.

To test H01, a simple linear regression analysis was conducted to examine the influence of AI driven workplace practices on employee well-being.

Table Error! No text of specified style in document..3:Model Summary

R	R ²	Adjusted R ²	Standard error of the estimate
0.57	0.32	0.32	0.52

The model showed a moderate positive relationship between the predictor and the outcome, with R = .57, R² = .32, and adjusted R² = .32. This indicates that AI driven workplace practices accounted for 32% of the variance in employee well-being

Table Error! No text of specified style in document..4: ANOVA

Model	df	F	p
Regression	1	106.74	<.001

The overall regression model was statistically significant, F(1, 223) = 106.74, p < .001, which suggests that the model provided a meaningful fit to the data.

Table Error! No text of specified style in document..5:Coefficient

Model	Unstandard. Coef. B	Standard. Coef. Beta	Std. Error	t	p
Constant	1.77		0.16	11.41	<.001
AI_Score	0.48	0.57	0.05	10.33	<.001

The unstandardised regression coefficient for AI driven workplace practices was positive and statistically significant, $B = 0.48$, $SE = 0.05$, $t = 10.33$, $p < .001$, while the constant was 1.77, $SE = 0.16$, $t = 11.41$, $p < .001$.

The regression equation may therefore be expressed as:

Employee well-being = $1.77 + 0.48$ (AI-driven workplace practices).

H_{01} was tested using simple linear regression. Since the p-value for AI-driven workplace practices was less than .001, the relationship was found to be statistically significant. The null hypothesis is rejected.

Finding & Conclusion

The findings indicate that stronger AI driven workplace practices were associated with higher employee well-being among the respondents. This suggests that when employees perceived AI related practices more positively in their workplace, their overall sense of well-being also tended to improve.

Since the null hypothesis is rejected, the researcher concludes that there is a significant influence of AI driven workplace practices on employee well-being

1.7 SUGGESTIONS BASED ON FINDINGS

1. Organisations should adopt AI applications that simplify work processes and support better job performance.
2. Adequate training should be provided so that employees can understand and use AI tools effectively.
3. The purpose and practical benefits of AI systems should be communicated clearly to employees.
4. AI adoption should be managed in a way that reduces manual workload rather than creating additional pressure.
5. Employee feedback should be considered regularly to identify useful AI practices and areas requiring improvement.
6. Greater organisational attention should be given to improving employees' work life balance.
7. AI systems should be supported by human centred workplace practices to protect employee well-being.
8. Organisations should periodically review the effect of AI driven practices on employee well-being.

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