

Integration of Artificial Intelligence in Human Resource Process for Achieving Sustainable Development Goal 8

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ABSTRACT:

The research investigated how Artificial Intelligence (AI) is used in the three core Human Resource Management (HRM) functions: Recruitment, Training, and Performance Evaluation; how this affects several Sustainable Development Goal 8 (SDG 8) indicators (HR Efficiency, Fairness in Employment Outcomes, Employee Productivity, and Work Quality), and what this means for the Indian context. Research agreed to use a quantitative cross-sectional method where the data were collected in the form of structured Likert-scale questionnaires from 218 HR professionals in medium- to large-sized organizations currently using AI-HRM systems, and analyzed using SPSS with regression, correlation, factor analysis, and reliability tests. Results revealed extremely weak and statistically insignificant correlations between AI-enabled HRM practices and SDG 8 indicators. Regression models accounted for less than 2% of the variance in SDG 8 indicators (for example, $R^2=0.011$ for Work Quality), and the p-values from each regression model were all greater than 0.05. Additionally, the Cronbach's alpha value for the constructs was only 0.108. Principal component analysis (PCA) identified two different factors: Recruitment versus Training/Performance. These findings indicate the continued fragmentation of AI adoption, limited effectiveness in reducing bias in employment, and negligible increases in productivity compared to literature expectations.

Keywords: Artificial Intelligence, HRM, SDG 8, Recruitment, Employee Productivity, Fairness in Hiring, Digital HRM, Sustainable Development, Indian Firms.

I. INTRODUCTION

Global Development Goals (SDGs) are a set of targets established by the United Nations (UN) to help advance sustainable development around the world. Each SDG represents a specific area of focus for the UN (Eberle et al. 2022). One of

these is Sustainable Development Goal No. 8 (SDG8) to promote sustainable economic growth. The only way SDG8 can be successfully accomplished will be if countries develop inclusive, sustained, and sustainable economic growth which includes the sustainable economic growth of men and women on the same basis

through equal pay for equal work, full productive employment, job security, and a workplace that provides for human rights. In this way and by creating laws that prohibit all forms of discrimination based on gender and poverty, the UN believes that economic growth will happen. As highlighted by Chigbu and Nekhwevha (2023), a sustainable economic growth strategy must address these existing gaps, such as paying people fairly and providing job security and job opportunities for people who have been discriminated against by their gender or income status. A successful way to accomplish this goal in India, will require India to make changes to the current labor policies that exist and find new ways to create opportunities for all employees.

India is rapidly changing how it looks at HRM through the use of digital technologies. These technologies enable businesses to access a wide range of capabilities to enhance the efficiency and quality of employee recruitment, training and management. The development of Artificial Intelligence (AI) in HRM has enabled managers to make more informed decisions through greater efficiency and effectiveness. Digital HRM (DHRM) has been adopted as a way of automating and improving how businesses manage their HR operations (Virmani et al. 2025). A number of industries in India, including the IT and Manufacturing industries, now use AI-based platforms to assist in employee recruitment, provide personalized training and conduct performance appraisals. Several studies have been conducted in India that show that the use of AI in HRM improves many of the key metrics associated with HRM, such as increasing accuracy and computational ability, and these improvements result in substantial time and cost savings for organizations that use them (Pillai & Sivathanu 2022). In addition, a recent survey of Indian IT managers found that the use of AI in HRM significantly reduced the administrative workload on HR professionals and created shorter hiring cycles (Nawaz et al. 2024). Ultimately, AI will assist HRM professionals to improve and streamline many of the routine HRM processes that managers currently manage, allowing them to shift their focus to developing

a pool of talented employees for strategic HRM goals, instead of continuing to spend excessive amounts of time on administrative processes associated with recruiting and managing employees.

AI-powered HRM can provide fairness and inclusivity in a way that is consistent with the principles of Sustainable Development Goal (SDG) 8. AI-enabled technologies reduce the potential for bias in recruiting and promotion decisions. For instance, AI-based recruitment technology can review thousands of resumes, regardless of gender or age, while Adaptive Learning Platforms create customised upskilling programs based on individual employee requirements. The ability of these systems to assist in achieving improved employee access to jobs is important in India, where the lack of diversity and inclusion in the workplace continues to be an obstacle to growth. In this regard, Mollah et al. (2024) write that "AI-Augmented HRM uses AI to boost and assist HR activities to remove implicit bias" (Jangbahadur et al. 2025). Further, Murugesan et al. (2023) say that based on a study in India, AI applications in HR have improved adaptability, employee skills and even workplace safety as key components of a sustainable workforce. One study also points out that the introduction of AI in HRM "provides the foundation for Adaptive Design" and strengthens the capacity of human resources to develop and sustain Organisations' sustainable practices.

Improved productivity and fairness of Human Resource Management (HRM) through Artificial Intelligence (AI) contribute directly to achieving the sustainability development goal (SDG) 8. AI makes hiring process more efficient and accurate which will lead to shorter periods of unemployment; also improved work preparation via personalised career development tools (e.g. AI 'tutoring'/learning on demand) can help alleviate the skills gap in India. Alherimi et al. (2025), in a recent systematic review, highlighted the relationship between AI in HRM and SDG8 (decent work and economic growth): Their findings indicate that companies adopting "Green-HRM" are adopting sustainable business models and improve economic growth for society at large

(Zhao & Huang 2022). In short, Companies using Artificial Intelligence to improve efficiencies and support environmentally responsible and ethical policies achieve economic growth while simultaneously working to meet the goals of SDG8. In addition to this, existing evidence shows that AI-HRM implementation success is correlated with overall sustainable organisational performance in Developing Nations (DN). Furthermore, successful Implementation of AI-HRM within the context of a developed nation's organisational strategy can lead to resilience and long-term Operational efficiency over a sustained period of time.

The factors in the Indian context may be very favourable. The overall increase in the quality of employment will be significant as organisations' use of technology to digitise HR functions enables the automation of many repetitive HR processes, allowing HR professionals to concentrate on the development of talent and creating an inclusive culture. The United Nations Sustainable Development Goal (UN SDG) 8 seeks to ensure "decent work and economic growth for everyone." As referenced by Virmani et al. (2025), "Digital human resource management [DHRM] allows for the automation and streamlining of HR-related tasks such as performance management, recruitment, training and appraisal of employees". This does not only enhance the efficiency of HR, but it also enables organisations to maintain a sustainable competitive advantage. For example, companies in India that have begun using AI and other digital technologies for HR have reported shorter timeframes for hiring and creating a more effective talent pipeline. In addition, analytics powered by AI will assist HR professionals in determining where upskilling is needed and providing opportunities for targeted upskilling, thereby increasing productivity and establishing a key pillar of the UN SDG 8. In addition, through providing an accurate job match process and creating equitable HR policies, AI will improve the overall quality of employment opportunities available to employees.

In conclusion, utilizing artificial intelligence (AI) in human resources (HR) brings a

complementary way to support sustainable development goal (SDG) 8 in India. Many of today's problems can be solved by using AI technology to transform the way HR is managed; for example, scaling talent searches, being able to customize how individuals in the workforce develop and reduce bias in the workplace will lead to more ethical and inclusive workplaces overall. These new opportunities will promote and enhance productivity as well as workforce participation at a time when India is trying to grow the number of meaningful jobs within its formal sector and put millions of young individuals into positions of employment. The literature demonstrates that AI-enabled HRM aligns well with the ideals of decent work and economic growth by automating routine HR functions and making HR processes more efficient, allowing for greater adaptability of the workforce and facilitating workers' physical and mental health while embedding equity into the practice of HR (Petrika-Lindroos 2022). By providing these benefits to an organization, they also allow organizations to create more environmentally sustainable ways to conduct business and achieve the goals of SDG8. Therefore, in India, there is potential for AI-driven HRM to provide increased quality of employment, more productivity and a more inclusive workforce, which are key elements of SDG8 success

2. LITERATURE REVIEW

Raman et al. (2025) revealed that economic and employment growth drive SDG 8. Inclusion and equity in growth and employment require a comprehensive SDG analysis across all relevant subtargets. SDG 8 (Decent Work and Economic Growth) study is examined in this report to emphasize its sustainability. PRISMA and BERTopic are used to analyze the intricate links between SDG 8 and other goals like eradicating disparities (SDG 10), clean energy (SDG 7), climate action (SDG 13), poverty alleviation (SDG 1), and innovation and infrastructure (SDG 9). Findings and value added: Subtargets 8.1 (sustainable per capita growth) and 8.5 (universal employment and dignified work) are significant. Resources efficiency and sustainable consumption

rules (subtarget 8.4) and green innovation and the digital economy (subtarget 8.2) (technology upgrades to boost productivity) are also examined. Subtarget 8.3 implies that inclusive and equitable economic growth eliminates inequality. Economic growth and environmental sustainability require reasonable work conditions (subtarget 8.8) and green technologies. SDG 8 can use these insights to promote economic growth for all, natural resource protection, and long-term prosperity.

Kholaif (2025) emphasized that AI is crucial to decent work (SDG 8). The paper examines how AI adoption increases the relationship between GSCM, CSR, and five ISO-26000 labor practice aspects aligned with SDG 8. PLS-SEM analysis of survey data from 428 SMEs' managers and employees shows that GSCM drives CSR adoption, which significantly improves four labor dimensions: employment relationships/income security (SDG 8.5), occupational health/safety (SDG 8.8), social dialog (SDG 8.5/8.8), and human development (SDG 8.6). CSR has little influence on social protection (SDG 8.b), indicating serious vulnerability gaps. Importantly, AI adoption improves operational transparency and accountability in technologically advanced organizations, strengthening the GSCM–CSR link. This study uses Stakeholder and Dynamic Capabilities Theories to explain AI's role in scaling decent work in emerging economies and emphasizes social protection policy.

Nain et al. (2024) examined the 2015 UN proposal that created the Sustainable Development Goals to address global issues like poverty, inequality, education, and climate change by 2030. This research examines how human resources may promote the SDGs in organizations. The most important goals are gender equality, SDG 5, decent work and economic growth, SDG 8, and lifelong learning, SDG 4. Modern HR professionals are vital to corporate change on SDG concerns through policy implementation and advocacy. The findings demonstrate how human resources can alter sustainable development and provide practical guidance on how to implement SDG-aligned HR strategies.

Akter et al. (2024) investigated how AI-driven task optimization could boost Malaysian employee well-being and productivity, promoting SDG 8-aligned long-term economic growth. The study emphasizes the role of artificial intelligence in changing workplace dynamics as Malaysian enterprises prioritize employment and economic success. AI may boost resource allocation, operating costs, and employee satisfaction. Researchers conduct semistructured interviews with managers from six AI-enabled companies using qualitative methods. The impact of AI on employee experiences and organizational success is examined in detail. The study stresses the importance of strengths development techniques for workplace support and personal and professional goals. Effective AI implementation incorporates employee participation, which boosts human skills. Successful AI adoption enhances employee health, job satisfaction, and work-life balance, boosting productivity and morale, according to theme analysis. Due to its focus on a few companies, the paper acknowledges its limits and calls for more research across sectors. This study finds that Malaysia's economic growth and sustainability depend on a balanced approach that prioritizes technology innovation and employee well-being amid rapid technological advancement and expanding employee needs.

Beltazar-Clemente (2023) emphasized that decent labor and economic growth are essential for a society's sustainable development, with SDG8 being one of the UN's 2030 Agenda's main goals. Faster and more reliable 5G connectivity can help achieve SDG8 by enabling innovation, operational efficiency, and job development. This study examined how 5G technologies affect decent work and economic growth (SDG8). PRISMA was used to analyze 265 articles from Scopus, IEEEExplore, and ScienceDirect, yielding 74 relevant papers after applying the inclusion and exclusion criteria. Thus, manufacturing, health, and transportation sectors used the 5G network more, boosting economic growth and job creation. The biggest technological advancements were “Internet of Things” and “Artificial intelligence”. Finally, this review's findings can inform 5G network technology research to boost economic growth

and fair and sustainable decent work in a variety of sectors and rural locations.

Chigbu & Nekhwevha (2023) analyzed adequate employment and sustainable economic growth under SDG 8, which covers gender inequality, market economies, the informal sector, and environmental sustainability. SDG 8 appraisal-based research rarely ranks decent work. SDG 8 doesn't address decent work for sustained economic growth, hence little is known. A descriptive and critical study of 108 journal papers and reports examines decent labor under SDG 8 to solve these issues. SDG 8's decent work challenges are researched. Despite labor market gender difference improving, gender bias, salary discrepancies, and underrepresentation of women in top positions continue to hinder inclusive and sustainable economic growth, full and productive employment, and decent work for all (SDG 8). SDG 8's inclusive and sustainable development ignores market economy inequality, precarity, and exploitation. Unsupported informal workers lack legal and social security. SDG 8 is unsustainable because market-based labor markets promote economic growth and hurt the environment. This unique policy-focused study on SDG 8's decent employment principles is crucial. Results reveal that economic growth and worker rights require fair, safe, and secure labor. Final SDG 8 goals depend on decent work and sustainable growth, affecting others.

Ezeafulukwe et al. (2022) suggested a sustainable HRM paradigm that incorporates ethical decision-making, CSR, and data-driven HR analytics. Sustainable HR strategies may help organisations build long-term workforce growth, resilience, and adaptation in the digital age. Ethical practices create transparent, fair, and inclusive workplaces, while CSR programs boost employee engagement and create a purpose-driven culture. HR analytics can improve workforce planning, employee retention, and productivity. The study addresses synergies to integrate HRM practices with sustainability goals. It ends with practical suggestions for using this integrated strategy to build resilient and sustainable companies.

D'Amore et al. (2022) examined AI's position in the WEF nexus using institutional, stakeholder, and innovation theories. This study examines how firms use AI to advance SDGs. This structured literature study covers 94 ISI Web of Science, Scopus, and Google Scholar papers from 1990 to 2021. The primary publications arguing about these problems are reviewed in depth in this study. The findings show that AI is becoming more important in the water, energy, and food industries, but its use as a connector to achieve SDGs is still being studied. Research on AI for WEF nexus management has primarily focused on technology, ignoring management tools and commercial models. Although most publications did not use a theoretical lens, experts acknowledged the necessity for a multi-stakeholder approach and the importance of AI and other digital technologies in addressing the WEF nexus dilemma. This paper provides an AI-based nexus management strategy for sustainable and responsible business models. Combining scientific data and policy needs with inclusive, technically viable methods for sustainable resource use could bridge the research-policy gap.

3. Objective of Study

To assess the measurable impact of AI integration in core HR processes on organizational HR efficiency in Indian firms.

To examine the statistical relationship between AI-enabled HR practices and fairness in employment outcomes aligned with SDG 8.

To evaluate the effect of AI-driven HR systems on employee productivity and overall quality of work as indicators of SDG 8 progress.

3. MATERIALS AND METHODS

3.1 Research Design

The research design used in this study is a quantitative, cross-sectional study to test the effects of AI integration on HR operations on organizational efficiency, employment practice fairness, and productivity outcomes in accordance with SDG 8. The quantitative design is suitable because it enables measuring the relationships between variables and statistical generalization on organizations that implement AI-enabled HR systems in India..

3.2 Sampling Technique

A purposive sampling method is used to choose the respondents that have had direct experience with AI-based HR practices. The sample will be made up of the HR managers, recruiters, learning and development practitioners, and team leaders of medium and large organizations in India. The targeted sample size of 218 respondents will be used to ensure sufficient quantitative analysis by providing sufficient statistical power and representativeness..

3.3 Data Collection

The structured questionnaire, which is based on a five-point Likert scale between strongly disagree and strongly agree, is used to gather the data. The tool is constructed based on the findings of validated items based on the previous empirical research on AI-based HRM, workplace inclusiveness, and sustainable employee practices, and therefore, is reliable and valid in terms of content validity. The questionnaire includes three main constructs that could be considered in relation to the study: the use of AI in HR procedures, equitability and non-discrimination in the field of hiring, and work efficiency and quality in accordance with SDG 8. In order to provide wide coverage in various organizational contexts, as well as provide the opportunity to gather the required number of answers quickly, the survey is conducted online among HR professionals and managerial employees of organizations located in India and using AI-based HR practices or turning to them.

3.4 Data Analysis Tool & Technique

Data collected for this study are analysed using the Statistical Package for the Social Sciences (SPSS) which provides a powerful means of (WHO).

performing multifaceted and complex quantitative analysis. The first step in the analysis of the data is to use descriptive statistics to provide an overview of the demographic information collected, as well as to provide an overview of the primary variables of interest in relation to key demographic characteristics. The next step is to assess the reliability of these measurement scales using Cronbach's alpha. Once the reliability of the measurement scales has been established, exploratory factor analysis (EFA) will be conducted to explore the validity of the constructs represented by these measurement scales. Once the EFA has been carried out, the strength and direction of the preliminary relationships between all variables will be determined using correlation analysis, and the role of AI-enabled HR processes in predicting SDG 8 will be evaluated through multiple regressions. SPSS is the tool of choice for analysing and interpreting the large volumes of data being used in this research and it is a powerful tool for completing the complex analyses needed for quantitative social science research.

3.5 Ethical Consideration

The study adheres to the ethical principles outlined in this document. The respondents are voluntarily participating, and informed consent has been obtained prior to their participation. Confidentiality and anonymity of the respondents are preserved, and there will be no identifying information collected during the study. All data will be stored in a secure manner and used only for academic purposes. The study meets the ethical standards of the institution and follows the international guidelines for ethical research practices as set forth by the World Health Organization

4. RESULT & ANALYSIS

Objective 1 : To assess the measurable impact of AI integration in core HR processes on organizational HR efficiency in Indian firms.

Table 1 : Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.105 ^a	.011	-.003	1.423
a. Predictors: (Constant), AI in Performance Evaluation, AI in Recruitment, AI in Training				

This table presents findings from a regression analysis assessing the relationship between the various aspects of AI Use (in Performance Evaluation, Recruitment and Training) and the outcome variable. An r value of 0.105 represents a weak positive correlation between predictor variables and the dependent variable. An r -square (r^2) value of 0.011 indicates that 1.1% of the variance in the dependent variable can be explained by the AI Practices tested within this model, which is indicative of a weak explanatory

effect of the model upon the dependent variable. An adjusted r -square (adjusted r^2) of -0.003 also confirms that the model is not a good fit for the data being tested due to being slightly negative, indicating that the use of these predictors would slightly weaken the overall model's predictive ability. The standard error estimates (SEE) for this model is 1.423, which reflects an average error of a moderate amount in predicting the dependent variable

Table 2 : ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.857	3	1.619	.800	.495 ^b
	Residual	433.111	214	2.024		
	Total	437.968	217			
a. Dependent Variable: Work Quality (SDG 8)						
b. Predictors: (Constant), AI in Performance Evaluation, AI in Recruitment, AI in Training						

The ANOVA table examines the overall significance of the regression model's construct. At the $p = 0.495$ level with an $F = 0.800$, it suggests that this model does not achieve statistical significance at the commonly used alpha level of 0.05, indicating that collective AI-driven/human resource practices (AI to Evaluate Performance; AI for Recruiting Employees; AI to Train Employees) do not significantly account for variance in work quality (SDG 8). The Regression Sum of Squares (4.857) identifies how much variation was explained by the regression model

and how much wasn't (Residual Sum of Squares 433.111). The opposite of this is true for the Mean Square of the Regression (1.619) and the Residuals (2.024). Hence, the unexplained variance is considerably larger than that which has been explained through regression. Taken as a whole, these findings suggest that while AI-driven recruitment/human resource practices may have some level of impact on work quality, they do not provide enough explanatory power or suitability to produce an accurate representation of work quality based on these data

Table 3 : Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.620	.342		7.666	.000
	AI in Recruitment	.065	.068	.065	.946	.345
	AI in Training	.003	.068	.003	.049	.961
	AI in Performance Evaluation	.085	.068	.086	1.256	.210
a. Dependent Variable: Work Quality (SDG 8)						

In Table 3, the coefficients that result from applying a regression model to assess how AI-driven HR practices relate to how good the quality

of work people produce (i.e., SDG 8) are shown. The constant (2.620) is how Quality Work is predicted when no variables are in effect. The

results demonstrated that AI in Recruitment has an unstandardized coefficient of .065, but its associated p-value (.345) indicated that it is not statistically significant and therefore does not statistically affect Quality Work. The same is true for AI in Training (i.e., unstandardized coefficient = .003, associated p-value = .961), as AI in Performance Evaluation, which showed a coefficient of .085 and a p-value of .210, does not

have a statistically significant influence on Quality Work. Thus, no AI-driven HR practice from this model can significantly predict Quality Work (i.e., SDG 8), as all predictors have comparatively high p-values and were not statistically significant.

Objective 2 : To examine the statistical relationship between AI-enabled HR practices and fairness in employment outcomes aligned with SDG 8

Table 8 . Reliability Statistics

Cronbach's Alpha	N of Items
.108	4

The reliability statistics for the AI-enabled HR practices and outcomes scales are shown here in Table 8. A Cronbach's Alpha of 0.108 for four items indicates that there is very poor internal consistency across the four variables in the scale. The low Cronbach's Alpha suggests that the items do not measure a single construct reliably and likely measure four different dimensions of AI-enabled HR practices, rather than forming one composite scale. In the field of social sciences,

reliability is generally considered to be acceptable at 0.70 or higher; therefore, the low alpha indicates that as currently constructed, the scale is not reliable. The low alpha could be a result of few items, low correlation between items, or the items measuring different dimensions of AI-driven HR practices. Caution should be used when interpreting these findings and additional research should examine ways to refine the scale or analyze individual variables

Table 9. Correlations

		AI in Recruitment	AI in Training	AI Performance in Evaluation	Fairness in Hiring
AI in Recruitment	Pearson Correlation	1	.080	-.057	-.059
	Sig. (2-tailed)		.237	.398	.383
	N	218	218	218	218
AI in Training	Pearson Correlation	.080	1	.120	.016
	Sig. (2-tailed)	.237		.077	.820
	N	218	218	218	218
AI in Performance Evaluation	Pearson Correlation	-.057	.120	1	.075
	Sig. (2-tailed)	.398	.077		.270
	N	218	218	218	218
Fairness in Hiring	Pearson Correlation	-.059	.016	.075	1
	Sig. (2-tailed)	.383	.820	.270	
	N	218	218	218	218

According to Table 9 of the study, there was a Pearson correlation analysis of the relationship

between AI-enabled HR Practices and Fairness in Hiring. These practices are aligned with the Sustainable Development Goal (SDGs) 8. The correlation results indicate that there were weak and statistically insignificant correlations between AI in Recruitment & Fairness in Hiring ($r = -0.059$, $p = 0.383$), AI in Training & Fairness in Hiring ($r = 0.016$, $p = 0.820$), and AI in Performance Evaluation & Fairness in Hiring ($r = 0.075$, $p = 0.270$). Therefore, there is no evidence of a meaningful linear relationship between the AI enabled HR Practices examined in this study and the perceptions of fairness in hiring among the

sampled organizations. Moreover, the intercorrelations among the AI practice variables (e.g. AI in Recruitment, AI in Training & AI in Performance Evaluation) were also found to be low, which suggests that there is little association between AI enabled HR functions. Overall, the findings from the study indicated that the use of AI in HR processes does not significantly affect perceptions of fairness regarding employment outcomes and, therefore, warrants further investigation into what contextual or organizational factors may moderate this relationship

Table 10. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.094 ^a	.009	-.005	1.416
a. Predictors: (Constant), AI in Performance Evaluation, AI in Recruitment, AI in Training				

Table 10 included the Model Summary for the regression analysis that assessed whether AI-enabled HR practices would be related to Fairness in Hiring. The R value listed (0.094) demonstrates a very weak positive relationship between the independent variables (AI in Recruitment, AI in Training, and AI in Performance Evaluation) and the dependent variable Fairness in Hiring. Therefore, there is a small amount of variance explained by AI-enabled HR practices included within the model since the R-square value is 0.009 which is equal to 0.9% of the total variance of

Fairness in Hiring. The Adjusted R Square value was -0.005 indicating that the Model doesn't fit well; therefore, adding the AI-enabling variables did not improve the prediction of Fairness in Hiring. A Standard Error of the Estimate value of 1.416 indicates a moderate level of prediction error. As such, while AI-enabled HR practices may provide some benefit to organizations with respect to Fairness in Hiring, this benefit is minimal based on the data collected from organizations participating in this study.

Table 11. ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.807	3	1.269	.633	.594 ^b
	Residual	428.822	214	2.004		
	Total	432.628	217			
a. Dependent Variable: Fairness in Hiring						
b. Predictors: (Constant), AI in Performance Evaluation, AI in Recruitment, AI in Training						

The ANOVA analysis presented in Table 11 reports the regression model which assessed the impact of AI enabled HR practices on Fairness in Hiring. With an F-value of 0.633 and a p-value of 0.594, the findings suggest that at a significance level of 0.05 the overall regression model does not

reach statistical significance. This implies that collectively, AI in Recruitment, AI in Training, and AI in Performance Evaluation have no significant influence on the degree of Fairness in Hiring outcomes. The Regression Sum of Squares at 3.807 is much lower than that of the Residual

Sum of Squares at 428.822, indicating that there is still a large portion of the variation in fairness perceptions that remains unexplained by the regression model. Accordingly, the ANOVA results indicate that the regression model does not

represent a good predictor of Fairness in Hiring. Therefore, AI driven HR practices measured in this study do not have a statistically significant effect on perceived fairness regarding SDG8

Table 12. Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.975	.340		8.748	.000
	AI in Recruitment	-.056	.068	-.056	-.822	.412
	AI in Training	.011	.068	.012	.168	.866
	AI in Performance Evaluation	.069	.068	.070	1.025	.307
a. Dependent Variable: Fairness in Hiring						

The effect of AI-enabled HR practices on Fairness in Hiring is shown in the regression coefficients of Table 12. The constant at 2.975 shows that Fairness in Hiring would be expected to be 2.975 if all of the predictors relating to AI were zero. AI use in the recruitment process is shown by a negative $B = -0.056$ and a p-value of 0.412 meaning that AI use in Recruitment is not significantly related to Fairness in Hiring. AI use for Training has a very small positive $B = 0.011$ with a p-value of 0.866 meaning Training is not meaningful related to Fairness. AI Additionally,

AI use for Performance Evaluation is reported to have a positive $B = 0.069$ with a p-value of 0.307 indicating it is also not significant. Thus, based on this sample, No AI enabled HR practice is a statistically significant predictor of Fairness in Hiring meaning AI enabled HR does not provide measurable success in achieving SDG 8 - decent work, and Economic Growth.

Objective 3 : To evaluate the effect of AI-driven HR systems on employee productivity and overall quality of work as indicators of SDG 8 progress

Table 13. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.132 ^a	.017	.004	1.434
a. Predictors: (Constant), AI in Performance Evaluation, AI in Recruitment, AI in Training				

The Model Summary table (Table 13) of the regression analysis used to determine the effect that HR Practices using AI technology has on employee productivity regarding the SDG 8 as measured by UNU's Project ProSPER.Net Global Survey. The results of this analysis show that the relationship between employee productivity (dependent variable) and the variables included in this study (AI for Recruitment, AI for Training, and AI for Performance Evaluation), is positive but weak, as

reflected in an R value of .132. The results are suggesting that only 1.7% of the variance in employee productivity can be explained through this model ($R^2 = .017$). All three predictors are included in this estimate; Adjusted $R^2 = .004$ suggests that there has been some marginal improvement to the predictive ability of the model, but it continues to have a limited capacity for explaining, through prediction, the relationship between HR practices and employee productivity. The standard error of the model was

found to be 1.434 which indicates a moderate level of predictive error. Overall, it appears that the use of AI technology in HR practices has very

limited ability to explain employee productivity within the participating organizations

Table 14. ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.839	3	2.613	1.271	.285 ^b
	Residual	440.142	214	2.057		
	Total	447.982	217			
a. Dependent Variable: Productivity Improvement						
b. Predictors: (Constant), AI in Performance Evaluation, AI in Recruitment, AI in Training						

The analysis of variance for the regression modeling looking at the effect of AI technologies used by Human Resources departments on employee productivity improvement (Table 14) shows that the combined effect of AI technologies used for recruitment, for training, and for evaluating performance (AI) is not a statistically determining factor in predicting improvement in employee productivity. Therefore, based on the $F=1.271$ and $p=0.285$ from Table 14, the total regression is not

significant at the 0.05 level. The regression SS (7.839) was small relative to residual SS (440.142), which means there is still a large amount of unexplained variance in model predictions, which is still affecting the results of the study regarding the SDG 8 outcome Implementation of AI as a part of HR strategy does not predict improvements in employee productivity, but there may be other drivers of employee productivity improvement affecting the SDG 8 Outcome that are not measured in this study

Table 15. Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.627	.345		10.525	.000
	AI in Recruitment	-.080	.069	-.079	-1.156	.249
	AI in Training	-.089	.069	-.089	-1.293	.197
	AI in Performance Evaluation	-.042	.068	-.042	-.621	.535
a. Dependent Variable: Productivity Improvement						

The coefficients as presented in Table 15 illustrate the relationships for the model assessing how AI-Enabled HR Practices predict productivity improvements. A constant of 3.627 indicates that, if all of the AI-related predictors were at their respective "0" levels, we would expect productivity improvements to be equal to 3.627.

When it comes to AI Recruiting, there is a negative unstandardized coefficient for AI Recruiting ($B = -0.080$) and a p-value equal to 0.249 which suggests that AI Recruiting does not significantly affect productivity improvements statistically speaking. Likewise for AI Training, there is a negative coefficient ($B = -0.089$) and a

p-value of 0.197 indicating that AI Training does not have any significant effect on productivity outcomes. With regard to AI Performance Evaluation, once again we have a negative coefficient ($B = -0.042$) and a p-value of 0.535 indicating that AI Performance Evaluations have no statistically significant effect. Taken together,

the findings indicate that AI-Enabled HR Practices do not provide statistically significant predictions of productivity improvements in this model, therefore indicating that AI-Enabled HR Practices do not have a measurable positive effect on employee productivity as measured by SDG 8 progress

Table 16. Correlations

		AI in Recruitment	AI in Training	AI in Performance Evaluation	Productivity Improvement	Work Quality (SDG 8)
AI in Recruitment	Pearson Correlation	1	.080	-.057	-.083	.060
	Sig. (2-tailed)		.237	.398	.220	.378
	N	218	218	218	218	218
AI in Training	Pearson Correlation	.080	1	.120	-.100	.019
	Sig. (2-tailed)	.237		.077	.141	.781
	N	218	218	218	218	218
AI in Performance Evaluation	Pearson Correlation	-.057	.120	1	-.049	.083
	Sig. (2-tailed)	.398	.077		.475	.223
	N	218	218	218	218	218
Productivity Improvement	Pearson Correlation	-.083	-.100	-.049	1	-.120
	Sig. (2-tailed)	.220	.141	.475		.077
	N	218	218	218	218	218
Work Quality (SDG 8)	Pearson Correlation	.060	.019	.083	-.120	1
	Sig. (2-tailed)	.378	.781	.223	.077	
	N	218	218	218	218	218

Table 16 contains the findings of the Pearson correlation analysis on the relationships between AI enabled HR practices, productivity improvement, and work quality (SDG 8). It is shown in the findings that there was a weak relationship between AI in Recruitment, AI in Training, AI in Performance Evaluation, with productivity improvement or work quality, which

are not statistically significant. The AI in Recruitment also had a weak negative correlation with productivity improvement ($r = -0.083$, $p=0.220$) and a weak positive correlation with work quality ($r = 0.060$, $p=0.378$). Likewise, both AI in Training and AI in Performance Evaluation's had weak correlations with both outcome variables, none of them were statistically

significant at the 0.05 level. Additionally, productivity improvement had a weak negative correlation to work quality ($r = -0.120$, $p=0.077$), which also is not statistically significant. In conclusion, the findings indicate that AI enabled HR practices, as measured in this study, had no statistically significant linear relationship to employee productivity or work quality, and therefore do not directly contribute to achieving SDG 8 in the organizations sampled in this study.

5. DISCUSSION

According to the results of the research, the introduction of AI into the main processes in HR, i.e., recruitment, training, and performance assessment, has a minor/statistically insignificant effect on the achievement of the key SDG 8-related outcomes, i.e., fairness in the hiring process, productivity, and the quality of the work provided in the Indian organizations. Even though the exploratory factor analysis identified that the use of AI in HR practices creates underlying dimensions that are coherent, the following reliability analysis displayed very low internal consistency. This implies that AI in the HR is in its fragmented form and functions as individual practices instead of a coordinated strategic platform. The results of correlation and regression analysis also showed weak and insignificant correlations between AI-enabled HR practices and the fairness of hiring. In contrast to a significant part of the current literature, which emphasizes that AI can help decrease bias and make employment more inclusive, such results suggest that the implementation of AI does not necessarily lead to the perception of fairness. Organizational environment, governance structures, transparency of AI algorithms, and human control are also likely to be a key modulating factor influencing the fairness results.

In the same vein, AI-based HR practices had little influence on the improvement of productivity and the quality of work. Regression models accounted less than 2 percent of productivity and work quality variance meaning that AI-driven HR tools might be in the infancy or experimental

phase of application in the Indian companies. The productivity and the quality of work are complex outcomes that depend on leadership, organizational culture, employee motivation, and job design, which can significantly overcome the direct impact of AI-based HR systems. On the whole, the findings indicate that there is disconnect between the hypothetical potential of AI in HRM and the real one in SDG 8 contribution. Although AI can be efficient and advantageous in terms of automation, its role in promoting decent work and economic development seems to depend on the presence of supportive organizational policies and ethical AI frameworks and strategic alignment. The next-generation research would include qualitative knowledge, longitudinal studies, and modifying factors to reflect the subtle position of AI as a sustainable and inclusive HR development driver.

6. CONCLUSION

The paper of the present study explored how AI-based HR practices can contribute to the achievement of the following key results closely related to Sustainable Development Goal 8 (SDG 8), which are fairness in hiring, employee productivity, and quality of work. The results indicate that although AI is becoming more commonly applied to HR areas, including recruitment, training, and performance assessment, its quantifiable effect on the fairness and performance-related consequences is little in the sampled organizations. Regression and correlation analyses repeatedly presented weak and statistically significant correlations between AI-based HR practices and the chosen SDG 8 indicators. The results of the factor analysis imply that AI applications in HR can be found in different dimensions and, in particular, there are AI applications in recruitment and AI applications in training and performance. The poor scores in reliability however show that these practices are still not encompassed in a unified HR system. Such a fragmented implementation could be one of the reasons why the perceived benefits of AI (increased fairness, productivity, and work quality) are not greatly reflected in employee perception and company performance.

These results point to one significant implication: implementing AI in HR, on its own, cannot lead to significant change in the direction of decent work and economic growth. To help the HR systems based on AI contribute to SDG 8, they have to be presupposed by clear governance frameworks, codes of ethics, trust towards employees, and human supervision. Technology does not seem to be the decisive factor in determining fairness and performance outcomes as organizational culture, leadership practices and employee engagement do. To sum up, the paper provides important insights on the necessity of a

more strategic and responsible method of AI integration in HRM. Future studies are encouraged to include contextual and moderating variables, use longitudinal designs, and integrate quantitative and qualitative designs to improve the comprehension of how AI can be used to facilitate the achievement of sustainable, inclusive, and productive workplaces in accordance with the global development objectives.

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