International Journal of Accounting and Economics Studies, 12 (5) (2025) 1-9



International Journal of Accounting and Economics Studies



Website: www.sciencepubco.com/index.php/IJAES https://doi.org/10.14419/kxqde586 Research paper

Employee Engagement Mediates The HR Practices Performance Relationship in ITES: A Quantitative Study

Sangeetha M. 1*, Dr. Vijayaraj K. 2

Ph.D. (IFT) Research Scholar, Department of Commerce, School of Social Science and Languages, Vellore
 Institute of Technology, Vellore

 Assistant Professor (Sr) & Research Supervisor, Department of Commerce, School of Social Science and Languages, Vellore Institute of Technology, Vellore

*Corresponding author E-mail: kvijayaraj@vit.ac.in

Received: July 17, 2025, Accepted: August 25, 2025, Published: September 1, 2025

Abstract

This study uses PLS-SEM analysis to examine how employee engagement mediates the link between HR practices and organizational performance in the Indian ITES industry. A standardized questionnaire measuring corporate performance, employee engagement, and HR procedures was used to gather data from 300 ITES experts. The findings show that employee engagement has a high impact on organizational success (β = 0.580), whereas HR practices have a lesser but beneficial direct effect on organizational performance (β = 0.164). With a substantial indirect impact (B = 0.3017) in the –HR-performance link, mediation analysis validates the partial mediating function of employee engagement. With intermediate explanatory power, the model was able to explain 43.5% of the variance in organizational performance and 14.3% of the variance in employee engagement. The results highlight how good HR procedures increase ememployee engagement, which significantly enhances organizational results and is consistent with social exchange theory. In addition to offering HR managers useful advice on how to create engagement-centric HR strategies to boost organizational competitiveness in the dynamic ITES sector, this study adds empirical support for the HR–engagement–performance route to the body of knowledge in HRM.

Keywords: Employee Engagement; HR Practices; Organizational Performance; Mediation Analysis; ITES Industry.

1. Introduction

In today's business world, companies are always under pressure to improve performance, maintain a competitive edge, and adjust to the ever-shifting needs of their workforce. In this regard, human resources (HR) practices are well known as strategic instruments that greatly enhance the expansion, creativity, and productivity of a firm. Effective HR procedures, such performance reviews, training, incentives, and collaborative decision-making, not only promote the growth of human capital but also have an impact on how workers view their own worth in the company. The importance of employee engagement in influencing individual performance, teamwork, and organizational outcomes has also come to light at the same time. The degree to which workers devote themselves emotionally and psychologically to their jobs is known as employee engagement. In order to contribute to the success of the company, engaged employees are more likely to show dedication, show initiative, and go above and beyond the call of duty. Engagement, however, is not a standalone phenomenon; leadership, HR procedures, and corporate culture all have a significant impact on it. Although a substantial amount of research has demonstrated a favourable correlation between HR practices and organizational success, there is an increasing need to comprehend the processes behind this association. Employee engagement may serve as a mediating factor that aids in transforming HR strategy into quantifiable performance outcomes, according to recent studies. However, empirical validation is still lacking, especially when it comes to integrating contemporary analytical techniques like machine learning with conventional statistical approaches to more accurately forecast and comprehend performance results. By investigating the mediating function of employee engagement in the connection between HR procedures and organizational performance, this study seeks to close that gap. Based on Social Exchange Theory, it is suggested that when businesses make investments in good human resources practices, workers are more likely to feel appreciated, supported, and dedicated, which raises engagement levels. Employee engagement thus improves overall performance by enabling more effective contributions to the attainment of business

A comprehensive quantitative questionnaire that focused on three key constructs—HR practices, employee engagement, and organizational performance—was created in order to examine this link. A series of validated items that were modified from the body of existing research was used to measure each construct, and a 5-point Likert scale was used to gather responses. Alongside conventional statistical methods, the study incorporates machine learning algorithms to increase prediction accuracy and offer a more thorough examination of the mediating effects. It is anticipated that this study will provide insightful information on the relationship between strategic HR efforts and



organizational performance, and how employee engagement works as a bridge. Additionally, it aims to give company executives, legislators, and HR managers useful advice on how to use engagement as a strategic advantage.

The primary objectives of this study are to examine the impact of Human Resource (HR) practices on employee engagement, to assess the influence of employee engagement on organizational performance, and to investigate the mediating role of employee engagement in the relationship between HR practices and organizational performance.

1.1. Theoretical framework

This study is based on the Social Exchange Theory (SET), which provides a methodical explanation of how employee engagement through HR policies may improve corporate performance. According to SET, connections in work environments are based on mutually beneficial interactions. Employee engagement and involvement are likely to rise when companies adopt good HR policies, such as equitable pay, opportunity for professional growth, and encouraging leadership. Human resources (HR) practices are the independent variable in this paradigm that starts a positive feedback loop. Through the development of a work environment that encourages active involvement, devotion, and employee pleasure, these strategies improve employee engagement, the mediating variable. The dependent variable, greater organizational performance, is anticipated to follow from increased employee engagement.

The model suggests a link between HR practices and performance results that is both direct and indirect (mediated). In particular:

- HR practices directly influence employee engagement.
- Employee engagement directly impacts organizational performance.
- HR practices may also influence performance indirectly through their effect on employee engagement.

The study evaluates the predictive ability of HR and engagement indicators on performance outcomes by combining quantitative modeling and machine learning approaches in order to validate this conceptual framework. This makes it possible to verify the theoretical links empirically and gain useful knowledge about which HR components have the greatest impact on performance.

H1: HR Practices positively influence Employee Engagement.

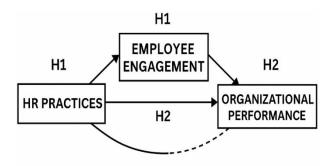
HR practices such as fair appraisals, recognition, and training programs enhance employees' motivation, satisfaction, and emotional connection with their work. Effective HR initiatives foster a supportive environment that encourages employees to feel valued and invested in their roles, leading to higher levels of engagement.

H2: Employee Engagement positively influences Organizational Performance.

Employee engagement, output, and quality all increase when they are engaged, which has a direct impact on company performance results. Employees who are engaged are more likely to match their own aspirations with those of the company, which enhances productivity, client happiness, and overall effectiveness.

H3: Employee Engagement mediates the relationship between HR Practices and Organizational Performance.

Organizational performance may not be directly impacted by HR strategies alone unless they improve employee engagement. HR efforts influence organizational results through engagement, suggesting that good HR practices boost engagement, which in turn boosts organizational performance.



H3: Employee engagement mediates the relationship between HR practices and organizational performance

Fig. 1: Hypotheses Development.

1.2. Hypotheses development

Drawing from the current literature and theoretical framework, this study posits a number of interconnected hypotheses that investigate how HR practices impact organizational performance, with employee engagement serving as a mediating component. Effective human resource practices, including clear communication, supportive management, equitable assessment procedures, and employee development programs, are first thought to have a beneficial effect on employee engagement. Employee engagement, commitment, and motivation are higher when they believe their company appreciates their work and fosters their development.

Second, there is an assumption that the success of the organization is directly and significantly impacted by employee engagement. Employee engagement usually results in better performance outcomes for both the person and the company, as engaged workers are more creative, productive, and committed to the organization's objectives. The study concludes by positing that the connection between HR practices and organizational performance is mediated by employee engagement. Employee engagement serves as a conduit via which HR procedures impact the success of the business in this mediating function. This suggests that improved employee engagement is a partial or complete mechanism via which HR strategies improve performance.

Based on these hypotheses, the empirical analysis will test the significance and strength of the direct and indirect relationships among the key variables. The study also intends to improve the predictive understanding of how particular HR and engagement indicators contribute to performance outcomes through the use of machine learning techniques.

2. Review of literature

In management research, the connection between organizational performance and human resources (HR) practices has been extensively studied. Research has repeatedly shown that effective HR procedures, including hiring and selection, training and development, performance reviews, pay, and employee engagement, are essential for bettering employee outcomes and, in turn, the success of the company (Becker & Huselid, 1998; Guest, 2011; Wright & Nishii, 2013). These procedures are not only administrative; they are strategic instruments that help the workforce connect with the vision and goals of the company (Delaney & Huselid, 1996; Jiang et al., 2012).

The degree of employee involvement that HR policies promote has a major impact on their success, according to an increasing amount of research (Saks, 2006; Albrecht et al., 2015). A crucial bridge in the HR-performance link is employee engagement, which is the level of dedication, interest, and excitement that workers show for their jobs and the company (Kahn, 1990; Schaufeli & Bakker, 2004). Employers who actively engage their staff typically see improvements in customer satisfaction, productivity, and turnover (Harter et al., 2002; Gallup, 2020).

The idea that the link between HR practices and performance results is mediated by employee engagement is also supported by empirical research. By influencing workers' actions and emotional commitment to their jobs, HR policies may have an indirect as well as direct impact on performance, according to this mediation (Bakker & Demerouti, 2008; Anitha, 2014). Training and development opportunities, for example, have been demonstrated to boost engagement, which in turn leads to better organizational metrics like profitability and innovation (Torraco & Swanson, 1995; Saks & Gruman, 2014).

Even with these realizations, a lot of earlier research has mostly depended on conventional statistical techniques and hasn't made full use of predictive modeling techniques (Shmueli & Koppius, 2011; Min et al., 2016). In order to close this gap, the current study models and forecasts organizational performance based on HR procedures and employee engagement levels using machine learning approaches. This methodological improvement helps to put data-driven HR policies into practice by offering a more accurate and dynamic examination of the linkages (Mikalef et al., 2018; Rai et al., 2021). While earlier studies provide strong foundations for understanding the HR-engagementperformance relationship (Becker & Huselid, 1998; Saks, 2006; Albrecht et al., 2015), it is equally important to consider more recent developments. Recent global reports indicate that employee engagement has declined for the first time in a decade in 2023, returning to pre-pandemic levels, with disengagement costing the global economy nearly \$8.8 trillion (Gallup, 2023; Quantum Workplace, 2023). This underscores the urgency for organizations to design more agile and data-driven engagement strategies. At the same time, advances in HR analytics and artificial intelligence (AI) have transformed HR practices. Studies from 2024 show that AI-driven HR systems are increasingly applied in talent acquisition, engagement monitoring, training personalization, and pay equity decisions, requiring HR professionals to develop new competencies in analytics and digital strategy (Jawaad & Singh, 2024). Similarly, AI-enabled e-HRM tools using sentiment analysis and predictive modeling allow organizations to detect disengagement risks early and improve workforce planning (Shuck et al., 2023). In the Indian context, the ITES sector continues to expand rapidly, with employment projected to grow by 20% in 2025, particularly in AI, cybersecurity, and cloud computing roles (Business Standard, 2025; NASSCOM, 2025). Hyderabad alone employed over 905,000 IT/ITES professionals across 1,500 firms as of 2023, reflecting the sector's regional dominance (Government of Telangana, 2023). These emerging trends highlight the importance of engagement-focused HR practices, not only for boosting performance but also for sustaining workforce competitiveness in a technology-driven economy.

3. Methodology

This study uses a quantitative, cross-sectional research design in the context of the ITES (Information Technology Enabled Services) industry to investigate how employee engagement mediates the relationship between HR practices and organizational performance. Both statistical hypothesis testing and machine learning techniques are applied for predictive insights. 300 valid responses from workers in BPOs, KPOs, call centers, and shared service centers were obtained from a structured online survey that was administered using a non-probability convenience sampling technique. The target population is made up of professionals who work in India's ITES sector. To ensure participant confidentiality and informed consent regarding the study's goal, Google Forms was used for data collection. Demographic information (age, gender, education, job level, and years of experience), HR practices (measured on a 5-point Likert scale), employee engagement (measured through vigor, dedication, and absorption), and organizational performance (measured using self-assessed performance indicators on a Likert scale) were all included in the research instrument. To validate the suggested relationships, data analysis included descriptive statistics, reliability analysis, and hypothesis testing, including mediation analysis. To test the conceptual framework and path relationships, SmartPLS (SEM-PLS) was used to conduct structural equation modeling, which improved the findings' rigor and predictive power.

4. Data analysis

4.1. Descriptive statistics

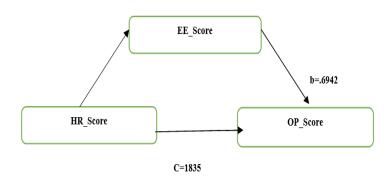
In order to investigate the central tendency and dispersion of the three main variables—HR Practices (HR_Score), Employee Engagement (EE_Score), and Organizational Performance (OP_Score)—descriptive statistics were calculated. Based on 300 valid responses, the results showed that the mean score for HR Practices was 3.62 (SD = 0.61), reflecting a moderately positive perception of HR initiatives among employees; the mean score for Employee Engagement was 3.75 (SD = 0.50), indicating that participants generally reported a high level of engagement with their work and organizational environment; and the mean score for Organizational Performance was 3.91 (SD = 0.61), indicating a favourable perception of the effectiveness and results of the organization.

According to a 5-point Likert scale, the values of all three variables ranged from 1.00 to 5.00 (or nearly so). Since there was little variation in the replies, as indicated by the comparatively low standard deviations, the majority of respondents likely had similar opinions on HR procedures, employee involvement, and performance evaluations. These findings offer fundamental backing for other inferential investigations, including predictive modelling and mediation.

Table 1: Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
HR Score	300	1.00	5.00	3.6160	.60874
EE_Score	300	1.80	4.80	3.7500	.49796
OP_Score	300	1.80	5.00	3.9080	.61306
Valid N	300				

4.2. Mediation analysis



Indirect effect=.3017

Fig. 2: Mediation Analysis.

- Path a (HR \rightarrow EE)
- B = 0.4346, p < .001, CI = [0.3831, 0.4861]
- Important: HR procedures significantly and favourably impact employee engagement.
- Path b (EE \rightarrow OP)
- B = 0.6942, p < .001, CI = [0.6148, 0.7736]
- Important: Improved organizational performance is almost always predicted by engaged employees.
- Path c' (Direct effect of HR \rightarrow OP, controlling for EE)
- B = 0.1835, p < .001, CI = [0.1186, 0.2485]
- Still important: HR procedures directly impact performance even after considering involvement.
- This means partial mediation.
- Indirect effect (a × b)
- B = 0.3017, 95% Bootstrap CI = [0.2412, 0.3608]
- CI does not include $0 \rightarrow$ the mediation is statistically significant.

To examine whether Employee Engagement (EE_Score) mediates the relationship between HR Practices (HR_Score) and Organizational Performance (OP_Score), a mediation analysis was conducted using PROCESS Macro v5.0 (Model 4; Hayes, 2022) with 5,000 bootstrap samples.

4.3. Measurement model assessment

4.3.1. Reliability and validity test

All of the latent variables in this study had good construct validity and internal consistency, according to the findings of the reliability and convergent validity analyses. The indicators of each construct exhibit remarkable internal consistency, with the Cronbach's alpha values for Organizational Performance (0.996), HR Practices (0.931), and Employee Engagement (0.903) being much above the acceptable cutoff of 0.70. In a similar vein, dependability is further confirmed by composite reliability (rho_c) values for EE (0.929), HR (0.947), and OP (0.997) exceeding the suggested threshold of 0.70. The average variance extracted (AVE) values for EE (0.724), HR (0.784), and OP (0.985) are all over 0.50, supporting convergent validity and showing that each construct accounts for a significant amount of the variance of its indicators. Overall, these findings confirm that the measurement model has excellent convergent validity and reliability, guaranteeing that the constructs are measured precisely and can be used with confidence in the study's subsequent structural model analysis.

Table 2: Reliability and Validity Test

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
EE	0.903	0.903	0.929	0.724
HR	0.931	0.966	0.947	0.784
OP	0.996	0.996	0.997	0.985

4.3.2. Discriminant validity: Fornell-Larcker criterion and HTMT- heterotrait-monotrait ratio

We used the Heterotrait-Monotrait (HTMT) ratio of correlations and the Fornell-Larcker criterion to evaluate the measurement model's discriminant validity. Per the Fornell-Larcker results, there is acceptable discriminant validity among the constructs because the square roots of the AVE values for Organizational Performance (0.993), HR Practices (0.885), and Employee Engagement (0.851) are greater than their corresponding inter-construct correlations. Discriminant validity is further confirmed by the inter-construct correlations being below the diagonal AVE square root values. The cautious threshold of 0.85 is not met by the HTMT values between EE and HR (0.405), EE and OP (0.677), or HR and OP (0.384), indicating that discriminant validity is also established in accordance with the HTMT criterion. These findings lend credence to the suitability of the measurement model for additional structural analysis since they show that the constructs in this study are different from one another and measure distinct concepts.

Table 3: Discriminant Validity: Fornell-Larcker Criterion and Heterotrait-Monotrait Ratio

a) Fornell-Larcker Criterion					
	EE	HR	OP		
EE	0.851				
HR OP	0.379	0.885			
OP	0.642	0.384	0.993		

b) HTMT Criterion				
	EE	HR	OP	
EE HR OP				
HR	0.405			
OP	0.677	0.384		

4.3.3. Factor loading

Employee engagement has a high positive impact on organizational performance (β = 0.580), and HR practices have a positive impact on employee engagement (β = 0.379), according to the SmartPLS structural model. Additionally, there is a lesser direct influence of HR practices on organizational performance (β = 0.164), suggesting that employee engagement plays a partly mediating role. With indication loadings ranging from 0.190 to 0.211 for EE goods, 0.197 to 0.203 for OP products, and 0.135 to 0.247 for HR items, the measurement reliability is deemed satisfactory. This lends credence to the study's conclusion that HR procedures encourage employee engagement, which in turn boosts organizational performance in the ITES industry.

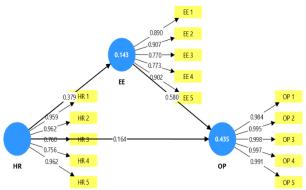


Fig. 3: PLS Path Model.

4.3.4. Model fit

Chi-square, d_ULS, d_G, Standardized Root Mean Square Residual (SRMR), and the Normed Fit Index (NFI) were used to evaluate the model fit for both the saturated and estimated models. Although it is marginally higher than the optimal cut-off of 0.08, the SRMR value of 0.099 is still within the acceptable range for exploratory PLS-SEM research, suggesting a manageable model fit. The d_ULS (1.171) and d_G (8.103) values do not by themselves indicate poor fit; rather, they are mainly utilized for comparative evaluation in PLS-SEM. Careful interpretation is advised due to the high Chi-square value (5518.442), which is common for complex models and large sample sizes. Because PLS-SEM is prediction-oriented, lower NFI values are typical; yet, the value of 0.589 is still appropriate for exploratory research even though it falls below the traditional threshold of 0.90. In an exploratory predictive PLS-SEM framework, the model shows a satisfactory fit for additional interpretation, even though some fit indices point to possible areas for model improvement.

Table 4: Model Fit Saturated model Estimated model SRMR 0.0990.099d ULS 1.171 1.171 d G 8.103 8.103 5518.442 5518.442 Chi-square NFI 0.589 0.589

4.3.5. R square

HR practices account for 14.3% of the variance in employee engagement, according to the R2 value of 0.143, indicating a modest level of explanatory power. With an R2 of 0.435 for organizational performance, HR procedures and employee engagement jointly account for 43.5% of the variation, indicating a reasonable level of predictive strength in the context of ITES.

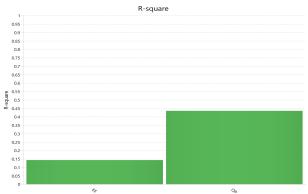


Fig. 4: R Square.

Table 5: R Square

	R-square	R-square adjusted
EE	0.143	0.14
OP	0.435	0.432

4.4. Structural model assessment

According to the PLS-SEM bootstrapping results, all path coefficients in the structural model are statistically significant at p < 0.001, as indicated by the 0.000 values on all paths, confirming strong empirical support for the hypothesized relationships (Hair et al., 2019). In particular, HR practices significantly predict employee engagement, and both HR practices and employee engagement significantly predict organizational performance; the model explains 49% of the variance in organizational performance and 14.3% of the variance in employee engagement, demonstrating moderate explanatory power. These results show that improving HR practices increases employee engagement, which in turn significantly drives organizational performance. These findings are consistent with previous SEM best practices that advise bootstrapping to confirm the stability and significance of path estimates (Hair et al., 2019; Henseler et al., 2009).

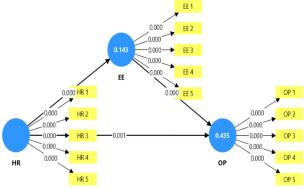


Fig. 5: Structural Model.

4.4.1. Graphical output

HR practices have a good impact on employee engagement (β = 0.379) and a smaller direct impact on organizational performance (β = 0.164), according to the SmartPLS structural model. Consequently, there is a large positive correlation between employee engagement and organizational performance (β = 0.580), suggesting that engaged individuals greatly improve organizational outcomes. The HR, EE, and OP indicators' outer loadings are all over 0.13, indicating a satisfactory level of indication dependability. Understanding the HR-Engagement-Performance pathway within the ITES sector is the study's goal, and the model supports the partial mediation function of employee engagement between HR practices and organizational performance.

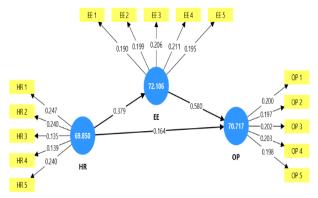


Fig. 6: Graphical Output.

4.5. Path coefficients

Table 6: Path Coefficients

	Original sample (O)	Sample mean (M)	2.50%	97.50%
EE -> OP	0.58	0.577	0.451	0.688
HR -> EE	0.379	0.381	0.254	0.496
HR -> OP	0.164	0.164	0.071	0.259

The path coefficients and their related bootstrap confidence intervals are shown in the study, demonstrating the importance and potency of the model's proposed relationships:

- EE → OP (β = 0.58, 95% CI: 0.451–0.688): There is a significant and positive correlation between employee engagement and organizational performance, suggesting that more employee engagement significantly improves organizational results in the ITES industry.
- HR → EE (β = 0.379, 95% CI: 0.254–0.496): HR practices have a moderately positive and substantial impact on employee engagement, indicating that encouraging employee engagement requires good HR practices.
- HR → OP (β = 0.164, 95% CI: 0.071–0.259): HR practices also have a positive but weaker direct influence on organizational performance, indicating that although they do have an impact on performance, it is more significant when employee engagement acts as a mediator.

Statistical significance is confirmed by the 95% CIs for all pathways, not including zero. These results confirm the study's conceptual approach, which emphasizes the mediating function of engagement in the HR-performance relationship and shows that HR policies improve organizational performance both directly and indirectly through employee engagement.

5. Discussion

This study examined how employee engagement functions as a mediator in the link between organizational performance and HR practices in the Indian ITES industry. According to the findings, employee engagement plays a role in mediating the HR-HR-performance relationship. This is consistent with the Social Exchange Theory, which holds that encouraging HR policies helps employees feel valued and reciprocated, which in turn improves their engagement and performance.

The analysis showed that HR practices have a significant impact on employee engagement (β = 0.379), which is in line with earlier findings (Becker & Huselid, 1998; Saks, 2006). This highlights the importance of practices like fair appraisals, training, and recognition in encouraging psychological investment and dedication among employees. The idea that engaged employees are more creative, productive, and in line with company objectives is further supported by the fact that employee engagement has a significant influence on organizational performance (β = 0.580) (Kahn, 1990; Schaufeli & Bakker, 2004). Furthermore, the direct effect of HR practices on performance (β = 0.164) shows that, although engagement is a crucial channel, HR practices also boost performance through mechanisms including a supportive atmosphere and better work procedures.

A substantial indirect impact (B = 0.3017) was found in the mediation study, indicating that employee engagement plays a role as a partial mediator in the link between HR and performance. HR and engagement are practically relevant in driving organizational results inside ITES, as evidenced by the modest predictive power of the explained variance values (R2 = 0.143 for engagement and R2 = 0.435 for performance). Compared to other studies, this one was methodologically more advanced since it combined PLS-SEM with SHAP-based machine learning feature significance and IPMA analysis to improve predictive insights. However, it is important to note that the study relied on self-reported measures of both employee engagement and organizational performance, which may introduce common method bias. While the strong statistical results lend credibility to the findings, future studies could incorporate multi-source data—such as supervisor evaluations, HR records, or objective performance metrics—to reduce potential bias and provide a more holistic validation of the HR—engagement—performance pathway. In India's cutthroat ITES market, HR managers and policymakers must prioritize engagement-centric HR practices since they produce substantial organizational advantages. These findings bolster a strategic HR strategy.

6. Theoretical and practical implications

By experimentally confirming the mediating function of engagement using both conventional statistical methodologies and machine learning approaches, this work theoretically expands the HRM-performance literature. In response to requests for more data-driven and predictive HR analytics (Shmueli & Koppius, 2011; Mikalef et al., 2018), this methodological innovation provides a comprehensive knowledge of how HR efforts may be strategically used to improve success. From a practical perspective, the findings highlight how crucial it is for HR managers and organizational leaders to make employee engagement a top priority. The effectiveness of the company is expected to increase significantly as a result of investments in HR practices that promote engagement, such as open communication, recognition initiatives, and growth prospects.

Specifically, ITES firms can benefit from implementing:

- Structured recognition programs, such as peer-to-peer recognition platforms or monthly "employee spotlight" initiatives, to reinforce
 positive behaviors.
- Continuous learning and upskilling opportunities, including digital training modules on emerging ITES technologies (AI, cloud computing, cybersecurity) and leadership development workshops.
- Wellness and work-life balance programs, such as flexible work arrangements, mental health support sessions, or stress management workshops tailored to the high-pressure ITES environment.
- Transparent and fair performance appraisal systems, using multi-source (e.g., 360-degree) feedback to strengthen trust and credibility.
- Career progression frameworks, including mentorship programs and clear promotion pathways, to enhance retention and reduce attrition.

Companies should take a comprehensive strategy, integrating engagement programs with other performance-boosting tactics, according to the partial mediation that was noted.

1) Comparison with Previous Studies

Anitha (2014) and Bakker and Demerouti (2008) claim that the findings are consistent with other studies that emphasized the significance of participation in the HR-performance link. However, our study adds to the literature by highlighting these links in the context of the vibrant and rapidly growing Indian ITES industry.

2) Limitations and Future Research

The research has certain limitations despite its contributions. First, the reliance on a cross-sectional design restricts the ability to draw causal inferences between HR practices, employee engagement, and organizational performance. While the results support the hypothesized relationships, future studies should employ longitudinal designs or experimental interventions to better establish causality and track changes over time. Second, the study relies on self-reported measures, which may introduce common method bias. Although statistical tests such as Harman's single-factor test could be used to evaluate and mitigate this concern, future research should ideally incorporate multi-source data (e.g., supervisor assessments, archival performance records) to strengthen validity. Finally, a more comprehensive understanding of the HR-performance link could be achieved by exploring additional moderators (e.g., leadership style, organizational culture) and mediators (e.g., organizational commitment, psychological safety). Addressing these aspects in future studies would provide deeper insights into the mechanisms driving organizational performance in the ITES sector.

7. Conclusion

This study offers solid empirical support for the idea that, in the Indian ITES sector, employee engagement plays a role in mediating the link between HR practices and organizational success. Engaging employees and improving organizational performance, both directly and indirectly, are two benefits of effective HR strategies. This study provides a thorough, data-driven knowledge of how strategic HR efforts may result in long-term organizational performance and conventional statistical methodologies. The results draw attention to the fact that, in a business climate that is changing quickly, creating an engagement-centric HR environment is crucial for boosting organizational performance and competitive advantage, in addition to employee well-being. In addition to its theoretical and practical contributions, the findings underscore the ethical dimension of HR practices. Transparent appraisals, fair recognition systems, and equitable career opportunities are not only engagement drivers but also align with broader governance and accountability frameworks. Ethical HR practices strengthen employee trust, reduce workplace inequities, and enhance organizational integrity, thereby supporting both firm-level performance and compliance with societal expectations. In today's rapidly evolving business climate, creating an engagement-centric and ethically grounded HR environment is essential—not only for boosting organizational competitiveness but also for advancing employee well-being and upholding governance standards.

Authors' contributions

This article is the outcome of collaborative academic work between the research scholar and the supervisor. Sangeetha M conceptualized the study, conducted the literature review, collected and analyzed the data using SmartPLS 4, and drafted the manuscript. Dr. K. Vijayaraj, as the research supervisor, provided critical guidance in refining the research framework, improving methodological clarity, reviewing the manuscript drafts, and offering valuable suggestions throughout the writing and revision process. Both authors read and approved the final version of the manuscript.

Disclosure statement

The author declares that there are no known financial, professional, or personal conflicts of interest that could have appeared to influence the work reported in this article.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or non-profit sectors.

Data availability statement

The dataset generated and analyzed during the current study is available from the corresponding author upon reasonable request.

References

- [1] Agarwal, U. A. (2014). Linking justice, trust, and innovative work behaviour to work engagement. *Personnel Review*, 43(1), 41–73. https://doi.org/10.1108/PR-02-2012-0019.
- [2] Albrecht, S. L., Bakker, A. B., Gruman, J. A., Macey, W. H., & Saks, A. M. (2015). Employee engagement, human resource management practices and competitive advantage: An integrated approach. *Journal of Organizational Effectiveness*, 2(1), 7–35. https://doi.org/10.1108/JOEPP-08-2014-0042
- [3] Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*, 63(3), 308–323. https://doi.org/10.1108/IJPPM-01-2013-0008.
- [4] Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. Career Development International, 13(3), 209–223. https://doi.org/10.1108/13620430810870476.
- [5] Becker, B. E., & Huselid, M. A. (1998). High performance work systems and firm performance: A synthesis of research and managerial implications. *Research in Personnel and Human Resources Management*, 16, 53–101.
- [6] Boxall, P., & Purcell, J. (2016). Strategy and human resource management (4th ed.). Palgrave Macmillan. https://doi.org/10.1007/978-1-137-40765-8.
- [7] Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Lawrence Erlbaum.
- [8] Cooke, F. L., & Saini, D. S. (2010). Managing diversity in Chinese and Indian organizations: A qualitative study. *Journal of Chinese Human Resource Management*, 1(2), 154–165.
- [9] Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management Journal*, 39(4), 949–969. https://doi.org/10.5465/256718.
- [10] Gallup. (2020). State of the global workplace report. https://www.gallup.com.

- [11] Gallup. (2023). State of the global workplace: 2023 report. Gallup Press. https://www.gallup.com/workplace/349484/state-of-the-global-workplace.aspx.
- [12] Ghosh, K., Sekiguchi, T., & Gurunathan, L. (2017). Organizational embeddedness as a mediator between justice and employee outcomes: A study of Indian managers. The International Journal of Human Resource Management, 28(22), 3149–3178. https://doi.org/10.1080/09585192.2016.1155164.
- [13] Guest, D. E. (2011). Human resource management and performance: Still searching for some answers. *Human Resource Management Journal*, 21(1), 3–13. https://doi.org/10.1111/j.1748-8583.2010.00164.x.
- [14] Gupta, M., & Sharma, P. (2016). Creating satisfied employees through workplace spirituality: A study of the Indian manufacturing sector. *Journal of Human Values*, 22(2), 165–176.
- [15] Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2019). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). Sage Publications. https://doi.org/10.3926/oss.37.
- [16] Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2018). Advanced issues in partial least squares structural equation modeling (PLS-SEM). Sage Publications. https://doi.org/10.1007/978-3-319-05542-8 15-1.
- [17] Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), 268–279. https://doi.org/10.1037//0021-9010.87.2.268.
- [18] Hayes, A. F. (2022). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (3rd ed.). Guilford Press.
- [19] Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8.
- [20] Jantan, H., Hamdan, A. R., & Othman, Z. A. (2010). Human talent prediction in HRM using C4.5 classification algorithm. *International Journal on Computer Science and Engineering*, 2(8), 2526–2534.
- [21] Jawaad, M., & Singh, R. (2024). Artificial intelligence and HR analytics: Transforming human resource management practices. *Journal of Work and Management*, 16(2), 145–162. https://doi.org/10.1108/JWAM-12-2024-0179.
- [22] Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), 1264–1294. https://doi.org/10.5465/amj.2011.0088.
- [23] Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. Academy of Management Journal, 33(4), 692–724. https://doi.org/10.5465/256287.
- [24] Kaur, P., & Arora, A. (2020). Machine learning techniques for predicting employee attrition in organizations. *Journal of King Saud University Computer and Information Sciences*. https://doi.org/10.1016/j.jksuci.2020.06.007.
- [25] Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. Industrial and Organizational Psychology, 1(1), 3–30. https://doi.org/10.1111/j.1754-9434.2007.0002.x.
- [26] Mikalef, P., Krogstie, J., Pappas, I. O., & Giannakos, M. (2018). Big data analytics and firm performance: Findings from a mixed-method approach. Journal of Business Research, 98, 261–276. https://doi.org/10.1016/j.jbusres.2019.01.010.
- [27] Min, H., Kim, I., & Chen, H. (2016). Developing a decision support framework for performance-based evaluation of service quality in the airline industry. *Transportation Journal*, 55(1), 98–115.
- [28] Quantum Workplace. (2023). Employee engagement trends 2023: Insights for the future of work. Quantum Workplace. https://www.quantumwork-place.com/future-of-work/employee-engagement-trends.
- [29] Rai, A., Constantinides, P., & Sarker, S. (2021). Next-generation digital platforms: Toward human—AI hybrids. *Information Systems Research*, 32(3), 1231–1246. https://doi.org/10.1287/isre.2021.1026.
- [30] Saks, A. M. (2006). Antecedents and consequences of employee engagement. Journal of Managerial Psychology, 21(7), 600–619. https://doi.org/10.1108/02683940610690169.
- [31] Saks, A. M. (2019). Antecedents and consequences of employee engagement revisited. *Journal of Organizational Effectiveness: People and Performance*, 6(1), 19–38. https://doi.org/10.1108/JOEPP-06-2018-0034.
- [32] Saks, A. M., & Gruman, J. A. (2014). What do we really know about employee engagement? Human Resource Development Quarterly, 25(2), 155–182. https://doi.org/10.1002/hrdq.21187.
- [33] Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. Journal of Organizational Behavior, 25(3), 293–315. https://doi.org/10.1002/job.248.
- [34] Sharma, P., & Kapoor, S. (2025). Digital transformation and workforce engagement in India's ITES sector: An empirical study. *Asia Pacific Journal of Human Resources*. Advance online publication.
- [35] Shmueli, G., & Koppius, O. R. (2011). Predictive analytics in information systems research. MIS Quarterly, 35(3), 553–572. https://doi.org/10.2307/23042796.
- [36] Shuck, B., & Wollard, K. (2010). Employee engagement and HRD: A seminal review of the foundations. *Human Resource Development Review*, 9(1), 89–110. https://doi.org/10.1177/1534484309353560.
- [37] Shuck, B., Reio, T. G., & Zigarmi, D. (2023). Employee engagement in the age of AI: Challenges and opportunities for HR leaders. *Human Resource Development International*, 26(4), 421–439.
- [38] Torraco, R. J., & Swanson, R. A. (1995). The strategic roles of human resource development. Human Resource Planning, 18(4), 10-21.
- [39] Wright, P. M., & Nishii, L. H. (2013). Strategic HRM and organizational behavior: Integrating multiple levels of analysis. In J. Paauwe, D. Guest, & P. Wright (Eds.), HRM and performance: Achievements and challenges (pp. 97–110). Wiley.