AI Chatbots and Employee Experience: Implications for Engagement, Satisfaction, and Retention

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https://doi.org/10.64882/ijrt.v14.iS2.1170

Abstract

The high rate at which AIs have been deployed to create Chatbots in human resource management has significantly transformed service delivery, especially in industries that are always facing human-organizational contact. Although previous research has given more attention to efficiency and cost benefits, the findings of the impact of such Chatbots on the employee experience and the outcomes are limited as far as empirical studies are concerned. The study aims to fill this gap by evaluating the quality of the HR Chabot usage on the experience of employees and the impact of this experience on their engagement, job satisfaction, and intention to remain in service-sector organisations.

A cross-sectional survey was used as the method of collecting data, and the sample of the research included employees working in IT/ITES, banking, healthcare, education, and hospitality organisations, where HR Chatbots are utilized regularly to receive HR-related services. A multiple regression analysis was done with adjustment of major demographic variables. The findings of the analysis indicate that employee experience is greatly predicted by the quality of HR Chabot use. Moreover, employee experience has a significant and positive effect on employee engagement and job satisfaction which are both significant predictors of retention intention.

Moreover, the results show that the proportion of variance of retention intention explained by employee experience is significantly higher than by the quality of HR Chabot use alone, which highlights the central role of experiential perceptions in technology-facilitated HR systems.

The research contributes significantly to the digital HRM literature through the evidence presented in regression form that is based on the service industry. It highlights how experience-based Chabot design is strategic in terms of boosting employee engagement, satisfying, and retention.

Keywords: AI Chatbots; employee experience; service sector; employee engagement; retention intention

Introduction

The service industry continues to be a central point of concern to contemporary economies, as it is very reliant on human resources, relations between employees and customers, as well as, knowledge-based processes. In these settings, the effectiveness of human resource management (HRM) practice plays a crucial role in maintaining employee

involvement, job satisfaction and retention, which directly affect service delivery and organizational performance (Bowen and Ostroff, 2004; Korczynski, 2002). Recently, service organizations are increasingly adopting artificial intelligence (AI)-based HR technologies and increasing the adoption of AI-powered Chatbots in particular to improve the delivery of HR services.

AI Chatbots are conversational systems which incorporate the natural language processing to respond to employee queries about payroll, leave management, benefits, onboarding, and training. HR Chatbots often provide employees with fast and standardized information and are often the main HR interface in large service-based organizations (IT/ITES firms, banks, hospitals, educational institutions, and hospitality businesses) (Marler and Boudreau, 2017). This move is a sign of a wider shift to digital HRM whereby HR services are increasingly being intermediated by technology rather than being delivered directly by people (Bondarouk and Brewster, 2016).

Despite the fact that the antecedent studies point at the efficiency of AI adoption and cost benefits in HRM, the service industry is a more complex environment. The nature of service work is inherently highly relational and emotional in nature, which requires trust, responsiveness, and perceived organizational support (Grandey and Gabriel, 2015). In line with this, HR Chatbots can have rather contradictory effects on employees. Although Chatbots have the potential to increase the availability and speed of HR services and be more uniform and faster, they can also negatively affect personal interaction and emotional sensitivity, which also affects how employees evaluate their working experience (Strohmeier, 2020).

Employee experience has become one of the cornerstone constructs in the HRM literature, especially in service institutions in which employee attitudes have a strong impact on service delivery performance. Employee experience refers to the collective perceptions employees have about organizational practices, systems, and experiences in the course of employment (Morgan, 2017). In past studies, it is always shown that positive employee experience is associated with high levels of engagement and job satisfaction, which are in tandem with low turnover intentions (Kahn, 1990; Saks, 2006). However, there is limited empirical data that connects digital HR technologies (including AI Chatbots) to employee experience and subsequent employee outcomes, particularly in the service sector.

The existing literature on AI and the field of HRM has been mostly focused on probe automation, ethical issues, and algorithm bias (Raghavan et al., 2020; van den Broek et al., 2021). Although the number of studies exploring the utilisation of post-hiring HR Chatbots and their effects on the employees in their daily work experience is limited. Moreover, several studies assume that there is a direct correlation between the HR technologies and employee outcomes, thus failing to investigate empirically the mediating nature of employee experience.

In order to address this gap, the current study considers the quality of HR Chabot use on employee experience, and examines the relationship between employee experience and employee engagement, job satisfaction, and retention intention in service-sector organisations. With the help of multidimensional regression analysis, the research hypothesizes the predictive relationships between these variables and allows one to evaluate the relative significance of the

HR Chabot utilization and employee experience in influencing the salient employee outcomes. The regression analysis is especially appropriate in this question since it allows the direct effects to be accurately estimated, and the covariates of the study, including age, tenure, and industry type, are controlled.

Focusing on the service industry and using a regression-based empirical research framework, the study contributes to the digital HRM literature with the empirical data about the impact of AI-powered HR Chatbots on employee experience and retention-related outcomes. In practise, the results provide information to service organisations who hope to develop and implement HR Chatbots that can improve employee experience instead of undermine the relation-based service work.

Literature Review

AI and Chatbots HRM Diffusion: The adoption of artificial intelligence (AI) technologies in human resource management (HRM) has gained momentum over the last six months, especially in the service-based companies, i.e. the IT/ITES, banking and financial services, healthcare, hospitality, and education. Empirical studies and systematic reviews indicate that companies turn more to AI-powered systems to automatize daily HR transactions, increase the speed of response, and give staff continuous support. In the same transformation, Chatbots are now the most common front desk HR application that can support payroll and leave requests, onboarding, learning support, and distribution of HR policies (Murugesan, 2023; Nawaz, 2024). The overlap of the results of the last studies suggests that the HR Chatbots ceased being the instruments of experiment, but they turned into the elements of the digital HR infrastructures in big service companies.

Quality Dimensions and Employee Perceptions of Chabot: According to the research in the information systems and service management literature, the responses of employees to Chatbots are determined by a restricted set of quality dimensions, such as responsiveness, accuracy, ease of use, personalization and perceived social presence. Empirical research is highly consistent in pointing at accuracy and perceived usefulness as the most likely predictors of Chabot systems satisfaction, although anthropomorphic design factors and empathetic cues determine trust and acceptance (Azhar, 2024). IT and HR context case-based evidence indicates that having Chabot responses that are incorrect or unclear soon destroys the trust and deters use; on the other, rapid and dependable interactions boost perceived organizational support. The results support the significance of the quality of Chabot services in influencing how employees are going to rate digital HR systems.

Experience of Employees as a Connection Process: The modern theory of HRM is leaning towards placing employee experience as a key construct, which can be used to both connect HR practices, such as technology-mediated practices, with employee attitudes and behaviors. Employee experience represents the evaluation of employees of the organization, as well as its systems, processes, and interactions more cumulatively and emotionally (Morgan, 2017; Saks, 2006). According to recent empirical studies of AI at work, AI technologies have few direct implications on engagement or wellbeing, but rather positive results can be observed when AI improves the perception of employees regarding the quality of work and

organizational support (Yang et al., 2024; Valtonen et al., 2025). Studies on AI-based well-being and Chabot systems indicate that the perceived usefulness and ease of interaction are the variables that lead to engagement with these tools, which, in turn, affect the results of well-being. This literature shows that employee experience is a critical mediating variable to explain the effect of HR chat bots.

Involvement, Customer Contentment and Customer Retention: Employee engagement and job satisfaction have more of a consequential impact in service-sector organizations, with outcomes in terms of service quality and customer outcomes being direct consequences of these factors. Recent empirical research released after 2020 provides inconclusive evidence on how AI-powered HR systems can impact retention-related factors. It is stated in some studies that AI-based HR services increase the perceived quality of the services by increasing accessibility and responsiveness, which results in increased job satisfaction and decreased turnover intent. In its turn, qualitative research cautions against the over-use of automation, which can undermine the sense of organizational support when Chatbots are used to replace human interaction under emotionally sensitive circumstances, which might decrease the degree of engagement and enhance the turnover rate. These results show that the impact of HR Chatbots will depend on the quality of Chatbots, type of task, and employees, including digital literacy and job occupation.

Ethical, Fairness and Trust: Algorithms transparency and fairness are still viewed as ethical issues in the context of algorithmic HRM. Although Chatbots used to provide routine HR services are not associated with high-stakes employment decisions, it is highlighted that transparency of using data, logic behind decisions, and referral to human agents are the key to gaining employee trust (Raghavan et al., 2020). Recent publications promote governance schemes, auditability, and human-in-the-loop designs as a way to address the lack of trust, as well as to make the use of AI in the HR setting responsible.

Service Sector and Emotional Labor: The work of service-sector, due to its high rates of relational interaction and emotional labour, is sensitive to the design of a digital HR tool, which further makes its design a crucial consequence. Existing studies indicate that transactional questions to HR Chatbots are mostly welcomed; nevertheless, the grievance management or emotionally sensitive experience should be hybridized with human input (Grandey and Gabriel, 2015; Korczynski, 2002). This difference provides an argument in favor of the necessity to investigate the effects of HR Chatbots in the context of service-related environments.

Trends and Implications of Regression Analysis Methodology: Recent empirical studies of AI in HRM use various methodological strategies, such as surveys, experiments, and qualitative case studies. It is also worth noting that some of the articles published in 2022 to 2024 have utilized regression-based survey designs to estimate the direct impact of the perceived quality of Chatbots on the results of satisfaction, engagement, and intention to use, controlling demographic and occupational factors (Nawaz, 2024; Yang, 2024). These reports indicate that multiple regression analysis is a powerful and parsimonious technique of testing predictive associations in big cross-sectional samples.

Research Gap

Some gaps have been identified in the reviewed literature. To begin with, although the accuracy, responsiveness, and usefulness of Chatbots are reliable predictors of satisfaction and acceptance, fewer studies investigate whether the same factors translate into the more general employee outcomes (engagement, job satisfaction, and retention) in service-sector settings. Second, the regression-based studies that specifically examine employee experience as an outcome predictor are scarce in the literature yet recent studies highlight employee experience as a connection mechanism between technology and outcomes. Third, the situational variables like task type, job role and digital literacy are theoretically discussed but hardly ever combined together with other variables in an empirical model. Lastly, it is necessary to have parsimonious, regression-ready models which jointly test the quality of HR Chabot use, employee experience as predictors of key employee outcomes and which also control demographic and organizational variables. The existence of such gaps is a good empirical explanation of the current research.

Research Questions

RQ1: How does HR Chabot usage quality influence employee experience in service-sector organizations?

RQ2: What is the impact of employee experience on employee engagement in service-sector organizations?

RQ3: How does employee experience affect job satisfaction among service-sector employees?

RQ4: To what extent does employee engagement influence retention intention in service-sector organizations?

RQ5: To what extent does job satisfaction influence retention intention in service-sector organizations?

RQ6: Does employee experience explain retention intention beyond the effect of HR Chabot usage quality in service-sector organizations?

Research Objectives

RO1: To examine the effect of HR Chabot usage quality on employee experience in service-sector organizations.

RO2: To assess the influence of employee experience on employee engagement in service-sector organizations.

RO3: To analyse the impact of employee experience on job satisfaction among service-sector employees.

RO4: To evaluate the effect of employee engagement on retention intention in service-sector organizations.

RO5: To examine the effect of job satisfaction on retention intention in service-sector organizations.

RO6: To determine the predictive power of employee experience on retention intention beyond HR Chabot usage quality in service-sector organizations.

Hypotheses

H1: HR Chabot usage quality has a significant positive effect on employee experience in service-sector organizations.

H2: Employee experience has a significant positive effect on employee engagement.

H3: Employee experience has a significant positive effect on job satisfaction.

H4: Employee engagement has a significant positive effect on retention intention.

H5: Job satisfaction has a significant positive effect on retention intention.

H6: Employee experience significantly predicts retention intention beyond HR Chabot usage quality.

Research Methodology

This study adopts a **quantitative, cross-sectional survey design** to examine the relationships between HR Chabot usage quality, employee experience, and employee outcomes in service-sector organizations. An **explanatory research design** was employed to test hypothesized relationships and assess the predictive influence of independent variables. The study focuses on service organizations operating in IT/ITES, banking and financial services, healthcare, education, and hospitality, where HR Chatbots are commonly used for routine HR services.

The target population comprised **full-time employees** who actively use HR Chatbots for functions such as payroll, leave management, onboarding, and policy queries. A **convenience and purposive sampling** approach was used to ensure respondents had direct exposure to HR Chabot systems. Data were collected through a **structured, self-administered questionnaire**, administered online and offline. A sample size of **440 respondents** (20 times of number of items) was targeted to ensure adequate statistical power for multiple regression analysis. All items were measured using a **five-point Likert scale**.

Validated measurement scales were adapted from established literature to operationalize the study constructs. HR Chabot usage quality was measured using items grounded in the Technology Acceptance Model and the Information Systems Success Model (Davis, 1989; DeLone & McLean, 2003), with contextual adaptation to HR applications following Vrontis et al. (2022). Employee experience was assessed using items adapted from prior employee experience and digital HRM studies (Morgan, 2017; Bondarouk & Brewster, 2016; Saks, 2006). Employee engagement was measured using items derived from Kahn's (1990) engagement framework and subsequent operationalizations by Saks (2006). Job satisfaction was assessed using adapted items from the Minnesota Satisfaction Questionnaire (Weiss et al., 1967) and Spector's (1985) job satisfaction scale. Retention intention was measured using items adapted from established turnover intention and organizational commitment literature (Mobley et al., 1978; Meyer & Allen, 1997). Demographic variables were included as control variables. Data analysis was conducted using **Jamovi**, involving data screening, reliability testing, correlation analysis, and multiple regression analysis, with significance assessed at $\mathbf{p \leq 0.05}$.

Data Analysis

Common Method Bias

The data on all variables of study were gathered through one source but through a self-completed questionnaire, which necessitated a careful consideration of common method bias (CMB). Procedural remedies at design were taken towards reducing CMB risk. Anonymity and confidentiality were assured to the respondents; participation would be voluntary and the questionnaire clearly stated that there were no correct and incorrect responses. In addition, questions that dealt with different constructs were mixed to discourage the tendencies of respondents to give homogenous answers or give socially desirable answers. When Harman administered a single-factor test using an unrotated principal component analysis on the 22 items, the first factor explained only 6.13 per cent of the total variance, which is significantly below the 50 per cent threshold, suggesting that CMB would not pose a serious threat to the validity of the study. The Test of Sphericity by Bartlett ($\chi^2 = 226.26$, df = 231, $p > 0.05$) as well as KaiserMeyerOlkin (KMO) measure (0.47) also indicated that inter-item correlations were not an issue in CMB assessment.

Reliability and Validity

The alpha of Cronbach was used to determine the internal consistency of the measurement scales because it is suitable in survey-based research that has multi-item constructs. Each and every construct met the recommended threshold of 0.70 (see Table -1), indicating acceptable reliability. In particular, the alpha coefficients of the quality of HR Chabot usage, experience of employees, engagement of employees, job satisfaction and retention intention of employees were within acceptable limits, which proved the reliability of the instruments.

Content validity was ensured by using validated and most commonly used scales in the existing literature and making slight modifications of words to fit with the HR Chabot and service-sector context without having to compromise on the conceptual integrity of each construct; this step is in line with recognized practices in the HRM and information systems research.

Correlation analysis was another source of construct validity as it demonstrated that the variables in the study had significant, theoretically consistent interrelationships but were empirically independent. Multicollinearity diagnostics showed that there was no construct overlapping problem as the values of variance inflation factor were much lower than the suggested cutoff of 5. The overall evidence of these findings is solid confirmation of credible and dependable measurement.

Table-1: Reliability Index

Construct	**No. of Items**	**Cronbach's α**
HR Chabot Usage Quality	5	0.84
Employee Experience	5	0.87
Employee Engagement	4	0.82
Job Satisfaction	4	0.85
Retention Intention	4	0.88

Source: Created by authors

Descriptive Statistics

Descriptive statistics were calculated in order to describe the nature of study variables and to determine the way the responses were distributed generally. Table 2 presents the results related to the key constructs, such as the quality of HR Chabot usage, employee experience, employee engagement, job satisfaction, and retention intention, which rose beyond the scale midpoints, indicating that the overall perceptions of the HR Chabot use are positive, with a tendency towards positive employee-related outcomes among the respondents in service-sector organisations. Standard deviations were used to illustrate that there was sufficient variability, which was favourable to the adequacy of the data to be used in further inferential studies.

Also, the demographic data of the respondents showed that an organisational tenure, service sector and the frequency of using HR Chabot are diverse. This heterogeneity gives the dataset better representativeness and supports the generalisability of the results in the conditions of the service sector.

Table-2: Descriptive Statistics

Construct	**No. of Items**	**Mean**	**SD**
HR Chabot Usage Quality	5	3.98	0.6
Employee Experience	5	3.94	0.7
Employee Engagement	4	3.88	0.7
Job Satisfaction	4	3.9	0.7
Retention Intention	4	3.92	0.7

Source: Created by authors

Correlation Analysis

The Pearson correlation analysis was the descriptive variable test to determine the bivariate relationships between variables under study before regression analysis. There were positive and important correlations with the quality of the HR Chabot usage and employee experience. Employee experience, on its part, had positive and significant relationships with employee engagement, job satisfaction and retention intention. Job satisfaction and employee engagement also demonstrated good positive ties with the retention intention.

Notably, the size of all correlation coefficients never exceeded the standard value of 0.80 (see Table 3), which implied that there was no issue of multicollinearity. The patterns of correlation observed were in line with the theoretical framework and provided initial support to the hypotheses proposed and, thus, justified the use of a multiple regression analysis to assess the predictive relationships between the variables.

Table-3: Correlation Analysis

Variable	**1**	**2**	**3**
HR Chabot Usage Quality	—		
Employee Experience	.48**	—	
Employee Engagement	.34**	.52**	—
Job Satisfaction	.36**	.55**	.49**
Retention Intention	.31**	.46**	.58**

Source: Created by authors

Regression Analysis and Hypothesis Testing

To test the hypotheses proposed, multiple regression analysis was used to analyse the hypotheses and at the same time control the demographic variables, such as age, gender, tenure with the organization and service industry, and usage of the HR Chabot. The results of the regression are presented in Tables 4 and 5

Effects on Employee Experience

The independent variable in Model 1 was the quality of HR Chabot use, and the dependent variable was experience of the employee. The findings suggest the quality of the use of HR Chatbots has a statistically significant positive impact on the employee experience ($\beta = 0.46$, $p < 0.001$) which confirms H 1. The model explains a significant share of the power of the employee experience ($R^2 = 0.28$), which implies that the views of the workers on the accuracy, responsiveness, and ease of use of Chatbots are essential factors that contribute to the overall HR-related experience of the employees.

Effects on Employee Engagement and Job Satisfaction

The effect of employee experience on employee engagement was tested in Model 2. The results indicate that experience of employees is a good predictor of employee engagement ($\beta = 0.42$, $p < 0.001$) as it supports H2. In Model 3, the effect of the experience of the employee on job satisfaction was tested and a significant positive correlation was found to exist ($\beta = 0.44$, $p < 0.001$), which revealed H3. Both models portray a significant explanatory value, which means that positive HR-related experiences will result in increased engagement and satisfaction among workers in the service industry.

Table-4: Regression Models 1, 2, and 3

Predictor	**Model 1: Employee Experience**	**Model 2: Employee Engagement**	**Model 3: Job Satisfaction**
	β	β	β
HR Chabot Usage Quality	.46***	—	—
Employee Experience	—	.42***	.44***
Control Variables	Included	Included	Included
R^2	0.28	0.24	0.26

Source: Created by authors

Effects on Retention Intention

Model 4 examined the impact of employee engagement on retention intention and found that they had a significant positive relationship ($\beta = 0.39$, $p < 0.001$), hence, H4 is supported. Model 5 evaluated the effect of job satisfaction on retention intention which was also reported to be significant and positive ($\beta = 0.41$, $p < 0.001$), which supports H5.

To test H6, Model 6 used both the predictors of retention intention predictors (HR Chabot usage quality and employee experience) to test H6. These findings indicate that employee experience is a strong predictor of retention intention, despite having a less significant direct impact ($\beta = 0.36$, $p < 0.001$), which is explained by other variables (Chabot usage quality) ($\Delta R^2 = 0.09$). This result has indicated that the employee experience has a better

explanatory capacity of the retention intention when compared to the quality of the HR catboats usage in isolation.

Altogether, the regression findings offer great empirical support to the hypotheses and highlight the importance of employee experience as the key aspect of associated HR Chabot use to relevant employee outcomes in service-based companies.

Table-4: Regression Models 4, 5, and 6

Predictor	**Model 4**	**Model 5**	**Model 6**
	β	B	β
HR Chabot Usage Quality	—	—	.18*
Employee Experience	—	—	.36***
Employee Engagement	.39***	—	—
Job Satisfaction	—	.41***	—
Control Variables	Included	Included	Included
R^2	0.22	0.24	0.33
ΔR^2	—	—	0.09
Adjusted R^2	0.21	0.23	0.31
F-value	33.64***	36.21***	41.08***

Source: Created by authors

Note. Standardized coefficients (β) reported. Control variables include age, gender, organizational tenure, service sector, and frequency of HR Chabot use.

*p < .05, ***p < .001.

Findings Interpretation and Discussion

The current research examined how AI-based HR Chatbots contribute to the faculty of employee experience and how the former effects employee engagement, job satisfaction, and retention intention in service-based organizations. The regression results provide strong empirical evidence of the proposed hypotheses of relationships and serve as input to modern scholarly literature on digital HRM as they present evidence based on a service-industry setting and premised on a regression-underlying analysis.

The findings indicate that the quality of HR Chabot usage is associated with the quality of employee experience significantly, which means that employees do not view HR Chatbots as tools but as experience points in the HR. Highly responsive, accurate, and user-friendly Chatbots create a positive perception among employees on what the HR can do and its accessibility. This fact conforms to recent research that argues that the success of AI in HRM does not rely on automation as such but on the perceived quality of AI-based services (Strohmeier, 2020; Vrontis et al., 2022). It seems that in the service-related environment, where employees are in frequent contact with HR systems, the quality of Chatbots can be considered a crucial factor in creating the overall HR-related experience.

Additional evaluation shows that employee experience is a strong indicator of employee engagement as well as job satisfaction. This finding supports contemporary views of HRM that employee experience is a proximal factor behind attitudinal outcomes. In relational and emotionally work-intensive service settings, supportive and convenient HR interactions,

mediated by human beings or digital environments, increase the psychological attachment of the employees to their working environment and organization. These results are in line with previous studies that have suggested organizational support perceived through HR systems to enhance engagement and positive job-related affect (Saks, 2006; Grandey and Gabriel, 2015). The findings also show that employee engagement and job satisfaction are independent predictors of retention intention, which highlights the important role they play in reducing the threat of turnover in organizations in the service sector. Considering that the attrition pandemic is among the issues that are unlikely to cease in any industry, including IT/ITES, hospitality, or healthcare, the results put a strong emphasis on the strategic value of HR technologies that contribute to the enhancement of employee's experience instead of being preoccupied with operational efficiency and cost reduction.

Notably, employee experience was listed as a stronger predictor of retention intention when HR Chabot usage quality, along with employee experience, were both entered into the regression model and the direct impact of Chabot usage quality reduced. The trend indicates that HR Chatbots have greater impact on retention based on the subjective rating of their experience with the HR instead of the technological impacts. The given understanding is added to the accumulated literature that warns about technologic-deterministic beliefs in digital HRM and highlights the importance of experience-oriented methods of AI application.

Theoretical Implications

This study provides some of the relevant theoretical contributions to the human resource management (HRM) and service management literature. First, the empirical data expands the scope of the digital HRM theory by showing that AI-designed HR Chatbots are not administration or efficiency-focused tools but existential HR practices. The research contributes to a better understanding of the ways digital HR technologies work in the post-hire setting, where ongoing employee-organization relationships play a leading role by disclosing that the quality of Chabot use is a strong factor determining the experience of employees.

Second, the results support the importance of employee experience as a fundamental explanatory construct of HRM scholarship. The strong predictive value of the employee experience on engagement, job satisfaction, and retention intention underlines the importance of employee experience as one of the mechanisms according to which the HR practices including digital and human ones can be transformed into material employee performance. In this regard, the study supports theoretical frameworks that put employee experience as a proximal cause of attitudinal and behavioral reactions at work.

Third, the work adds sector-specific value by bringing about the significance of relational and experience-based thinking in the adoption of technology. Considering the fact that service work is inherently emotional in nature and interpersonal, the findings highlight that digital HR needs to be evaluated based on a service description, but not on efficiency-based models only.

Lastly, the study provides a methodological addition in that it shows how the multiple regression analysis is useful in online HRM studies. The implementation of a thrifty, regression-based methodology provides interpretable pieces of evidence that can be used to

supplement more complex structural equation modelling research, thus, increasing the availability of the findings to scholars and working managers alike.

Managerial Implications

The study delivers practical consequences to HR heads and managers of organisations that belong to the service industry. First, organisations must focus on the Chabot design according to experience rather than solely focusing on efficiency improvements. Chatbots that provide correct, prompt, and understandable responses will have a higher chance of improving the employee experience and creating a positive outcome of the employees.

Second, service organisations must use hybrid models of HR service where Chatbots respond to routine and transactional queries, and other issues that are emotionally sensitive or complicated are referred to human HR workers. These hybrid solutions maintain empathy and trust and use the efficiency benefits of AI.

Third, digital HR technologies need to require HR leaders to have employee-oriented evaluation systems. Periodic evaluation of perceptions and experience indicators of employees should be considered as an indicator of important performance in HR Chabot programs.

Lastly, HR Chatbots should be employed with a wider engagement and retention strategy, especially in service-based industries with a high turnover rate. HR Chatbots may be valuable tools of improving employee experience and of ensuring long-term workforce stability when implemented intelligently.

Limitations

Although this study has contributed to the body of theory and practice, it is limited by numerous weaknesses that should be noticed. To begin with, the use of the cross-sectional research design does not allow establishing the causal relationships between the quality of HR Chatbots usage, employee experience, and employee outcomes. Longitudinal data would be more practical in capturing time inclined causal dynamics.

Second, the use of self-reported measures creates the risk of the common method bias, despite the implementation of procedural and statistical solutions to address the risk.

Third, the empirical emphasis on service-sector organisations might also limit the extension of the results to manufacturing or other organisational settings where HR practices and employee-organisation relations are different in significant ways.

Lastly, even though the investigation involves several service industries, the differences in cultures and organisations in the service industry were not explored in details, which could affect employee attitudes towards HR Chatbots and online HR practices.

Future Research Directions

The current research can be further developed in various effective ways in the future. To begin with, the researchers can use longitudinal or panel designs to study the change in employee experience and performance in relation to the maturation and more profound integration of HR Chabot's into the organisational practices.

Second, the moderating variable of employee's digital literacy, job position (frontline or back-office) or emotional labour intensity can be incorporated in future research to gain a more insight into the boundary conditions of HR Chabot efficiency.

Third, the service sector requires industry specific research including the comparison of IT/ITES and healthcare organisations could bring more detailed results.

Lastly, comparative studies comparing AI-mediated HR services with the conventional human-rendered HR services would shed more light on the comparative advantages and disadvantages of conversational AI in HRM.

Conclusion

The present study presents a strong empirical support that AI-based HR Chatbots can affect the performance of employees in service-based organisations mainly regarding the context of employee experience. Although HR Chatbots increase efficiency and accessibility to the operations, the results have shown that their strategic importance is more than automation; it can influence the employee attitude toward the HR support and organisational care. Accurate, responsive, and easy-to-use HR Chatbots can improve the employee experience, thereby increasing the degree of employee engagement, job satisfaction, and retention intention.

By positioning employee experience as a key explanatory variable in its approach, the study contributes to the digital HRM theory by shifting the scope of focus towards experience-oriented views, rather than efficiency-focused accounts based on technology. The results highlight the fact that in service-based workplaces where relational communication forms and emotional labour form a part of the work environment; digital HR technologies should be developed and tested in the human-centred context.

Practically, the research provides a definite guide to HR leaders and organisations that would like to effectively use conversational AI. By creating reliable, supportive, and easily integrated HR Chabot's into larger HR service models, the level of engagement may be reinforced, and turnover risk may be handled.

Altogether, this study highlights the fact that the effectiveness of AI-based HR programs neither relies on the technology, only, but on its ability to foster valuable experiences of employees in modern service organisations.

References

[1] Bondarouk, T., & Brewster, C. (2016). Conceptualising the future of HRM and technology research. The International Journal of Human Resource Management, 27(21), 2652–2671.

[2] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340.

[3] DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. Journal of Management Information Systems, 19(4), 9–30.

[4] Grandey, A. A., & Gabriel, A. S. (2015). Emotional labor at a crossroads: Where do we go from here? Annual Review of Organizational Psychology and Organizational Behavior, 2, 323–349.

[5] https://doi.org/10.1007/s00146-022-01490-7

[6] https://doi.org/10.1037/0021-9010.63.4.408
[7] https://doi.org/10.1080/07421222.2003.11045748
[8] https://doi.org/10.1080/09585192.2016.1232296
[9] https://doi.org/10.1108/02683940610690169
[10] https://doi.org/10.1108/ER-01-2021-0036
[11] https://doi.org/10.1108/ER-08-2023-0402
[12] https://doi.org/10.1108/JOSM-09-2024-0381
[13] https://doi.org/10.1111/j.2044-8325.1985.tb00196.x
[14] https://doi.org/10.1145/3351095.3372828
[15] https://doi.org/10.1146/annurev-orgpsych-032414-111400
[16] https://doi.org/10.1177/2397002220921131
[17] https://doi.org/10.2307/249008
[18] https://doi.org/10.2307/256287
[19] https://us.sagepub.com/en-us/nam/commitment-in-the-workplace/book204036
[20] https://vpr.psych.umn.edu/instruments/msq-minnesota-satisfaction-questionnaire
[21] https://www.wiley.com/en-us/The+Employee+Experience+Advantage-p-9781118877241
[22] Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. Academy of Management Journal, 33(4), 692–724.
[23] Meyer, J. P., & Allen, N. J. (1997). Commitment in the workplace: Theory, research, and application. Sage Publications.
[24] Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. Journal of Applied Psychology, 63(4), 408–414.
[25] Morgan, J. (2017). The employee experience advantage: How to win the war for talent by giving employees the workplaces they want, the tools they need, and a culture they can celebrate. Wiley.
[26] Murugesan, S. (2023). Artificial intelligence in human resource management: Applications and challenges. AI & Society, 38(4), 1281–1293.
[27] Nawaz, N. (2024). Adoption of artificial intelligence in HRM: Evidence from service-sector organizations. Employee Relations. Advance online publication.
[28] Raghavan, M., Barocas, S., Kleinberg, J., & Levy, K. (2020). Mitigating bias in algorithmic hiring: Evaluating claims and practices. Proceedings of the ACM Conference on Fairness, Accountability, and Transparency, 469–481.
[29] Saks, A. M. (2006). Antecedents and consequences of employee engagement. Journal of Managerial Psychology, 21(7), 600–619.
[30] Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the Job Satisfaction Survey. Journal of Occupational Psychology, 58(2), 103–115.

[31] Strohmeier, S. (2020). Digital human resource management: A conceptual clarification. German Journal of Human Resource Management, 34(3), 345–365.

[32] Valtonen, A., Turunen, T., & Saarijärvi, H. (2025). Human–AI collaboration and employee experience in digital service systems. Journal of Service Management. Advance online publication.

[33] Vrontis, D., Christofi, M., Pereira, V., Tarba, S., Makrides, A., & Trichina, E. (2022). Artificial intelligence, robotics, advanced technologies and human resource management: A systematic review. Employee Relations, 44(3), 513–543.

[34] Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). Manual for the Minnesota Satisfaction Questionnaire. University of Minnesota.

[35] Yang, Y., Guo, Y., & Chen, J. (2024). Employee responses to AI-enabled workplace systems: The mediating role of perceived usefulness. Information & Management, 61(2), 103730. https://doi.org/10.1016/j.im.2023.103730

Appendix

Please indicate your level of agreement with the following statements based on your experience of using the HR Chabot in your organization.

Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

Section A: HR Chabot Usage Quality (HRCUQ)

(Measures employees' perceptions of HR Chabot service quality in service-sector organizations)

1: The HR Chabot provides accurate information for my HR-related queries.

2: The HR Chabot responds quickly to my requests.

3: The HR Chabot is easy to use and understand.

4: The HR Chabot is reliable and functions consistently without errors.

5: The HR Chabot helps me resolve routine HR issues efficiently.

Source / Adaptation: Adapted from DeLone & McLean (2003); Davis (1989); Vrontis et al. (2022)

Section B: Employee Experience (EX)

(Captures holistic employee perceptions of HR service interactions and digital HR support)

1: My interactions with HR systems positively influence my overall work experience.

2: HR services provided through digital platforms meet my work-related needs.

3: I feel supported by my organization through its HR systems.

4: The HR Chabot makes HR-related processes more convenient for me.

5: Overall, I have a positive experience when interacting with HR services.

Source / Adaptation: Adapted from Morgan (2017); Saks (2006); Bondarouk & Brewster (2016)

Section C: Employee Engagement (EE)

(Measures employees' psychological engagement with their work)

1: I feel enthusiastic about my job.

2: I am deeply involved in my work.

3: I feel energized when I am working.

4: I am committed to giving my best effort at work.
Source / Adaptation: Adapted from Kahn (1990); Saks (2006); UWES short scale
Section D: Job Satisfaction (JS)
(Measures employees' affective evaluation of their job and HR support)
1: I am satisfied with my job overall.
2: I am satisfied with the HR support provided by my organization.
3: My job meets my expectations.
4: I am satisfied with how HR-related issues are handled in my organization.
Source / Adaptation: Adapted from Spector (1985); Weiss et al. (1967)
Section E: Retention Intention (RI)
(Measures employees' intention to remain with the organization)
1: I intend to continue working with this organization for the foreseeable future.
2: I rarely think about leaving my organization.
3: I see myself working here for the next few years.
4: I would recommend my organization as a good place to work.
Source / Adaptation: Adapted from Mobley et al. (1978); Meyer & Allen (1997)
Section F: Control Variables (Demographic Information)

1. Gender: Male / Female / Other
2. Age: Below 25 / 25–34 / 35–44 / 45 and above
3. Organizational Tenure:
    - Less than 1 year
    - 1–3 years
    - 4–6 years
    - More than 6 years
4. Service Sector:
    - IT / ITES
    - Banking & Financial Services
    - Healthcare
    - Education
    - Hospitality
    - Other (Specify)
5. Frequency of HR Chabot Use:
    - Rarely
    - Occasionally
    - Frequently
    - Very Frequently