

EXPLORING THE IMPACT OF ARTIFICIAL INTELLIGENCE ON EMPLOYEE RETENTION AND TURNOVER AT THE UNIVERSITY OF BAGHDAD

Mohamed Ali Fadhel Mahdi Al-Gharabi¹; Dr. Assad Nasif Saad Attia²

^{1,2}Swiss international university - SIU university, Switzerland, Switzerland.

Email address of the corresponding authors: mohalifadel13@gmail.com¹

Abstract

This research investigates how artificial intelligence (AI) applications influence employee retention and turnover reduction at the University of Baghdad, against the backdrop of the persistent challenges Iraqi universities face in maintaining a stable workforce. Adopting a quantitative descriptive-analytical design, the study developed a structured questionnaire with fifty (50) items, grouped into three dimensions: organizational culture, artificial intelligence, and employee turnover. The survey was distributed to a randomly selected sample of 150 administrative and technical employees from the humanities and administrative faculties of the University of Baghdad, yielding 146 valid responses for statistical analysis. The results demonstrate that AI plays a significant role in strengthening retention strategies and lowering turnover rates. More precisely, AI technology reduced employees' intention to leave, decision-support technology contributed to decreasing job dissatisfaction, and intelligent automation helped achieve relative job stability. In general, the evidence confirmed a direct impact of AI—measured as an independent variable—on turnover dimensions, highlighting strategic importance in embracing such technology into human resource practices in higher education. The study concludes by recommending more investment in AI-based systems within universities, along with structuring efforts to build a constructive organizational culture and training sessions for raising employees' awareness regarding the benefits of AI, improving workforce stability, and enhancing institutional performance.

Keywords: Artificial Intelligence, Employee Retention, Employee Turnover, University of Baghdad, Human Resources.

Introduction

Universities are among the most vital institutions in developing societies, given their direct involvement in the creation of human capital. Nonetheless, these establishments have of late witnessed extremely high rates of employee turnover and retention problems. Rising levels of resignation and labor mobility are signs of insecure working conditions, which further undermine academic and administrative success and drive up the cost of recruiting, training, and inducting new employees. It has already been known from previous studies that retention is gradually becoming a strategic concern for universities since it has direct repercussions for teaching and learning quality and sustainability (Hancock et al., 2019).

It is where artificial intelligence (AI) has been the most transformative technology to date in handling human resources. It goes beyond automation or replacing operating activities; AI is increasingly used to examine employee information, predict patterned behavior, and track levels of commitment and satisfaction. Recent studies point out how AI offerings enable organizations to detect early warning indicators of employee attrition and implement timely and potent interventions for retaining the workforce (Vrontis et al., 2021; Gherhes et al., 2022).

These are particularly relevant skills in Iraqi higher education and most transparently at Baghdad University—presumably the country's largest and oldest. These are typical problems of the limitations of traditional incentive schemes, relatively high turnover, and competition from other sectors for highly qualified personnel. It is against this background that inclusion of AI in HRM

is a strategic move compared to a technological move towards enhanced retention of employees, reduction of turnaround, and finally stability and quality level of education delivery.

Research Problem and Questions

Schools, and especially those in developing environments, find themselves increasingly short-staffed and forced to cope with reduced resources in the face of burgeoning economic, technological, and social change. Skilled staff turnover at high levels and retention are unfavourable signs that detract as much as possible from institutional effectiveness while promoting maximum recruitment and continuous training expenses.

Consequently, AI is viewed as a contemporary strategic technology capable of optimising HR management by examining employee information, forecasting levels of commitment and satisfaction, and detecting early leaver intentions. New literature reveals that firms adopting AI applications perform better in decision-making, reducing turnover, and creating safer and more difficult working environments (Vrontis et al., 2021; Gherhes et al., 2022).

In Iraq, universities, and the University of Baghdad in particular, face unique challenges in this regard. Different faculties continue to suffer from the issue of high staff turnover and low capacity for retaining effective staff, with undesirable consequences for administrative and academic life. Despite growing international interest in using AI for HR management, its application is minimal in Iraqi universities, creating a research gap that needs to be studied and analyzed.

Accordingly, this study seeks to understand the impact of AI on employee retention and turnover at the University of Baghdad, aiming to provide a scientific and practical framework to support Iraqi universities in formulating more effective talent retention policies.

Main Research Question:

- What is the impact of AI applications on employee retention and turnover reduction at the University of Baghdad?

Sub-questions:

1. What is the impact of AI technologies on reducing intention to quit and enhancing employee retention at the University of Baghdad?
2. How does AI-based decision support affect job dissatisfaction and employee retention?
3. What is the impact of intelligent automation on reducing turnover rates and improving job stability at the University of Baghdad?

Research Hypotheses

Main Hypothesis:

H1: There is a statistically significant impact of AI applications on employee retention and turnover reduction at the University of Baghdad.

Sub-hypotheses:

- H1.1: AI technologies have a statistically significant effect on reducing intention to quit and enhancing employee retention.
- H1.2: AI-based decision support has a statistically significant effect on reducing job dissatisfaction and increasing employee retention.
- H1.3: Intelligent automation has a statistically significant effect on reducing turnover rates and improving job stability.

Research Objectives

The study aims to explore the impact of AI applications on employee retention and turnover at the University of Baghdad by analysing AI dimensions (technologies, decision support, intelligent automation) and their relationship with job stability.

Sub-objectives:

1. To identify the effect of AI technologies on reducing intention to quit and enhancing employee loyalty.
2. To measure the role of AI-based decision support in reducing dissatisfaction and improving retention.
3. To analyse the impact of intelligent automation on reducing turnover and achieving greater workplace stability.
4. To provide practical recommendations to the University of Baghdad on how to leverage AI in retention strategies and turnover reduction.

Research Significance

Theoretical Significance

- Adds to the continued enhancement of scholarly literature on AI use in human resource management within higher education institutions across the Arab world.
- Offers a conceptual framework that coordinates the key dimensions of AI (technologies, decision-support systems, and automation) with key indicators of job stability such as employee turnover and retention.
- Expands previous studies by adding the University of Baghdad as a case study, offering new data from a developing environment that finds it difficult to keep its staff.

Practical significance:

- Help decision-makers at the University of Baghdad adopt AI-driven strategies to support employee stability.
- Provides practical solutions to reduce costs associated with turnover, including recruitment, training, and requalification expenses.
- Enhances the university's ability to build a motivating work environment capable of retaining talent, which positively reflects on the quality of education and services.
- Offers applicable recommendations to other Iraqi educational institutions facing similar

Key Concepts and Definitions

1. Artificial Intelligence (AI)

- Conceptual definition: AI generally describes the ability of computer systems to perform higher-order intellectual functions such as learning from experience, reasoning, perception of the environment, and decision-making. AI is defined by the OECD (2019) as "an automated system that can correctly interpret external data, learn from it, and use that learning to achieve specific goals through dynamic adaptation."
- Operational definition: AI in this research is examined from the perspective of the employees' comprehension of its implementation in the organization, as it is measured from the vantage point of the three dimensions of AI technologies, decision-support systems, and intelligent automation.

2. Employee Retention

- Conceptual definition: Employee retention refers to the capability of an organization to retain employees in the long term through delivering an employee-motivating working

environment and elements that strengthen job satisfaction and loyalty. SHRM (2020) defined it conceptually as "a set of policies and practices designed to retain employees and decrease voluntary turnover."

- Operational definition: Retention in this study is operationally defined as job stability, commitment, and satisfaction perceptions on the employees' part, and lack of low turnover intentions, as reflected in their answers to the applicable questionnaire items.

3. Employee Turnover

- Conceptual definition: Employee turnover is the ratio of employees who leave an organisation over a specific period, either out of compulsion (by dismissal) or willingness (by resignation). Hancock et al. (2019) provide a definition of turnover as "an indicator reflecting workforce movement within an organization, significantly affecting organisational performance and human capital sustainability."
- Operational definition: The Operational definition of turnover in this research is given by three indicators: intention to leave, job dissatisfaction, and low organisational commitment based on self-reports by participants of the instructed items on the survey.

Research Boundaries

1. Boundaries: The research is intended to investigate the effect of AI (technologies, decision support, and intelligent automation) on staff turnover and retention within the academic environment of the University of Baghdad.
2. Spatial boundaries: The research was conducted at the University of Baghdad, within the administrative and humanities faculties, which offer diverse academic and administrative environments in which retention problems are particularly evident.
3. Temporal boundaries: Data collection and analysis took place between the 2024/2025 academic year to ensure findings reflect the current situation of the university.
4. Human boundaries: The sample population was limited to administrative and technical personnel in the humanities and administrative faculties with a minimum of one year of work experience in the academic environment so as to ensure that they were capable of delivering informed opinions regarding the influence of AI on retention and job security.

Relationship Between Variables

Available literature recognises organisational culture as the cornerstone of workforce stability. Organisational values such as fairness, empowerment, and teamwork have been associated with increased commitment as well as lower turnover intentions (Alvesson & Sveningsson, 2016; Falaq & Yousif, 2019). Negative organisational culture, nevertheless, is mostly associated with increased turnover, primarily due to a lack of motivation as well as lower job satisfaction (Hancock et al., 2019).

With the rise of AI as a strategic resource in HR administration, the dynamics between AI and HR have changed. Programs powered by AI enable organisations to examine employee information and predict behaviour patterns, and in advance, management can solve dissatisfaction and loss of talent (Osman et al., 2020; Jawaria et al., 2022). Decision assistance systems and smart automation also ensure greater transparency and equity in administrative decisions, enhancing trust and commitment from the employees' side.

Second, AI could not only be an independent predictor of turnover rate but also a mediating variable of positive effect of supportive organizational culture and defend its negative effect. This blend of cultural (value-based) and technological (AI-based) strategies holds the promise of more sophisticated explanation of turnover dynamics in Iraqi universities.

Previous Studies

Al-Musabi (2022). This study examined the impact of AI adoption on improved decision-making in human resource management in the General Command of Abu Dhabi Police. It administered a survey questionnaire to a sample of 180 HR employees selected through an exhaustive survey technique. Data were analysed through SPSS and AMOS to test hypotheses and identify causal relationships among variables. The results showed that AI directly improved decision quality by predicting outcomes and reducing human errors, while also exerting an indirect effect on administrative performance through the mediating role of decision-making. The study confirmed that AI adoption enhances the administration's ability to forecast HR needs and achieve greater efficiency in planning and distribution.

Al-Yahmadi (2021). This research investigated how AI applications influence the development of human capital among administrative leaders within Oman's Ministry of Education. The study examined both the degree of AI implementation and its contribution to strengthening professional competencies in educational institutions. Adopting a predictive-descriptive design, a questionnaire consisting of 29 items was administered to 290 leaders across various educational directorates. The instrument assessed four areas: AI applications, training and development, availability of experts, and user behaviour. Evidence indicated adoption of AI was highest in the areas of "system capability" and "training and development," while implementation was moderate for "availability of experts" and "user behavior." The evidence also showed positive, but relatively weak, direct effects of AI utilisation on human capital development, i.e., in professional development and regular training.

Kaplan & Haenlein (2019). In this paper, the adoption of cultural AI in organizations was investigated with specific attention to workers' attitudes toward the kind of technology and its influence on organizational culture and turnover. Based on an extensive theoretical review augmented by perceptive case studies, the authors asserted that AI success is dependent to a large extent on existing organisational culture. Work cultures that were open, discursive, and developmental in character were discovered to facilitate cooperative AI adoption, reduce employee stress, and boost loyalty. Bureaucratic or autocratic organizations, however, were likely to experience increased job loss anxieties, thus exaggerating turnover intentions.

Chukwudi (2018). In the Nigerian context, this study assessed the impact of AI on accounting activities and its correlate with turnover measures. Through a quantitative method involving survey instruments and statistical analyses, the study reached a conclusion that routine accounting work automation alleviated workplace stress and reduced routine workloads. This improvement in working conditions positively impacted job satisfaction and contributed to decreasing turnover rates. Yet, the study also pointed out the risks of implementing AI without an underpinning cultural context. Lacking clear cultural strategies, employees were prone to resist change, and this would intensify their motivation to leave the organization.

Rqiq (2020). Targeting Algerian organizations, this study explored the impact of using AI on the employee-organization relationship. Taking a descriptive-analytical approach with field study in industrial and service sectors, the study found issues were less technical and more culturally matched. Conflicts between traditional decision-making cultures and the AI propensity to minimize human touch often occurred. The study concluded that successful implementation of AI is a broad cultural shift on the basis of empowerment, trust, and effective internal

communication. Without this adaptation, workers became disenfranchised or marginalized and experienced low job satisfaction and high turnover.

Commentary on Previous Studies

In short, the literature under discussion demonstrates AI to be a powerful strategic tool for human resource management, whether enhancing recruitment operations, supporting decision-making, or predicting turnover. Certain research (e.g., Al-Musabi, 2022; Al-Yahmadi, 2021) centered around direct applications within governmental and educational settings, while others (e.g., Kaplan & Haenlein, 2019; Rqiq, 2020) centered around the cultural and transformational dimensions that accompany AI implementation. Findings suggest that the positive impact of AI on workforce stability is conditional upon the readiness of digital infrastructure and the presence of supportive organizational cultures. Against this backdrop, the present study gains importance by addressing a clear research gap—focusing on the Iraqi university context to test the direct and mediating roles of AI in reducing employee turnover and enhancing retention at the University of Baghdad.

Research Methodology

The “Methodology” chapter represents the foundation of scientific research, as it details the procedural steps undertaken in data collection and analysis to derive accurate scientific results. Its importance lies in strengthening research credibility by clarifying the adopted scientific approach, describing the population and sample characteristics, and outlining the measurement tools and statistical techniques used. As such, it serves as the bridge between the theoretical and practical frameworks, translating objectives, questions, and hypotheses into operational steps that ensure objective and reliable conclusions.

Research Design

The study adopted a quantitative descriptive-analytical approach as the most suitable for examining relationships among variables and testing hypotheses in a real-world environment. This methodology is based on collecting quantitative data from the target population and analyzing them through appropriate statistical methods to uncover the nature of relationships among variables. Since the aim of the study is to explore the impact of AI (independent variable) on employee retention and turnover (dependent variable) at the University of Baghdad, this approach is optimal for testing causal relationships and verifying hypotheses.

Population of the Study

The research population consisted of all administrative and technical employees working in the humanities and administrative faculties at the University of Baghdad during the 2024/2025 academic year. This population was chosen because it represents a diverse and dynamic organizational environment where the impact of AI adoption on workforce stability can be observed. Moreover, universities—particularly the University of Baghdad—face increasing challenges in retaining staff and reducing turnover, making it a suitable setting for hypothesis testing.

Study Sample

The sample was selected using a simple random sampling technique to ensure fair representation of the population and minimize selection bias. A total of 150 questionnaires were distributed to administrative and technical employees in the humanities and administrative faculties at the University of Baghdad during the 2024/2025 academic year. Of these, 146 valid responses were retrieved, representing a response rate of 97.3%.

Table 3.1: Demographic Distribution of the Study Sample (N = 146)

Demographic Variable	Categories	Frequency	Percentage (%)
Gender	Male	66	45.2%
	Female	80	54.8%
Years of Experience	Less than 5 years	41	28.1%
	5–10 years	55	37.7%
	More than 10 years	50	34.2%
Academic Qualification	Bachelor's	54	37.0%
	Master's	73	50.0%
	PhD	17	11.6%
	Other	2	1.4%
Age Group	Under 30 years	57	39.0%
	30–40 years	61	41.8%
	40–50 years	18	12.3%
	Above 50 years	10	6.8%

Research Instruments

Based on the objectives, questions, and hypotheses of the study, a questionnaire was developed as the primary tool for data collection. The questionnaire was selected because it is the most common and appropriate instrument in quantitative descriptive-analytical research, especially studies targeting large samples within academic institutions. It was designed in light of the theoretical literature and previous studies related to AI and employee retention/turnover, thereby ensuring both face and content validity of the scale and supporting subsequent statistical analyses to test the study hypotheses.

The questionnaire was constructed using a five-point Likert scale, where respondents expressed their level of agreement with each statement according to the following options: (Strongly Agree = 5), (Agree = 4), (Neutral = 3), (Disagree = 2), (Strongly Disagree = 1).

Psychometric Properties of the Research Instrument

Psychometric properties (validity and reliability) are the minimum requirements that determine the quality of quantitative research measurement tools because they show the accuracy and objectivity of the instrument in measuring the required phenomenon. The researcher confirmed these properties by performing validity (content and expert validity) tests and reliability based on Cronbach's Alpha coefficient, aiming to define the quality of statistical results.

1. Validity of the Instrument

Validity is the degree to which an instrument actually measures that which it is supposed to, and to what degree it represents its dimensions accurately. In validating the scales used in this study (AI and employee turnover), two major procedures were followed:

- **Content Validity:** The questionnaire items were developed after an intensive examination of conceptual models and current literature in the fields of AI, employee turnover, and human resource management (Davenport & Ronanki, 2018; Kim et al., 2020; Roy & Gandhimathi, 2025). Maximum care was exercised while creating the items in order to encompass the whole range of the under-study constructs.

- **Face Validity:** Pilot testing was done with the sample questionnaire using a panel of experts in educational administration, educational statistics, and HR management. Their suggestions for item clarity, specificity, and relevance were taken into consideration. Based on their feedback, some of the statements were reworded and some duplicative items eliminated, and the final instrument was arrived at.

2.Reliability of the Instrument

To verify the reliability of the instrument, Cronbach’s Alpha coefficient was used to measure the internal consistency of the scales. The instrument was administered to a pilot sample of 50 employees outside the main study sample. A value of 0.60 is generally considered the minimum acceptable threshold for reliability. Results showed that reliability coefficients for all dimensions ranged from 0.671 to 0.862, which are acceptable to high.

Table 3.5: Cronbach’s Alpha Reliability Coefficients for the Study Scales and Dimensions

Study Scale	Sub-Dimension	No. of Items	Cronbach’s Alpha
Artificial Intelligence	AI Technologies	5	0.687
	Decision Support	5	0.674
	Intelligent Automation	5	0.671
	AI (Overall)	15	0.845
Employee Turnover	Intention to Quit	5	0.725
	Job Dissatisfaction	5	0.709
	Weak Organizational Commitment	5	0.773
	Turnover (Overall)	15	0.862
Entire Instrument	All Items (30)	30	0.918

These results indicate that all the dimensions of the tool have good to high internal consistency. The overall instrument reliability ($\alpha = 0.918$) is extremely high, confirming the reliability of the questionnaire and its suitability for measuring the relationship between AI (independent variable) and employee turnover/retention (dependent variable) among Iraqi universities.

Descriptive Analysis of the AI Dimension

This section shows the descriptive statistical findings of the AI dimension, which is the independent variable in this study. There are three main components of the AI dimension: AI technologies, decision support, and intelligent automation. The analysis was designed to measure the extent to which the university applies these technologies and their impacts on institutional efficiency and labor force stability.

Table 4.6: Descriptive Analysis of AI Dimension Components (N = 146)

Dimension	Mean	Std. Deviation	Level
AI Technologies	4.02	0.514	High
Decision Support	4.04	0.525	High
Intelligent Automation	3.90	0.535	High
AI (Overall)	3.99	0.446	High

The findings show that AI is being effectively implemented at the University of Baghdad. The overall mean value of 3.99 indicates a generally positive attitude of employees towards AI applications. Decision support scored the highest mean (4.04) among the three dimensions for the high regard of the employees for AI in augmenting the quality of decisions by processing information in real time. This confirms Al-Musabi (2022), who had indicated that AI helps to enhance the accuracy of decisions and minimize human error.

The technologies dimension of AI was followed by a mean of 4.02, indicating the reliance of the university on predicting tools as well as data analysis in measuring performance. This is in agreement with the research by Al-Yahmadi (2021), which demonstrated a positive relationship between AI technologies and the development of human capital in schools.

On the other hand, intelligent automation received the lowest mean rating (3.90), though in the high category. This could be an indication of challenges in implementing automation to all mundane activities, possibly due to infrastructural limitations or employee resistance. Such findings were made by Chukwudi (2018), who stated that automation always encounters such challenges despite its ability to make workloads less complex and improve the workplace environment.

In sum, the results reinforce earlier scholarship: AI has become a vital factor in boosting institutional efficiency at the University of Baghdad. However, to maximize its effect on workforce stability and turnover reduction, additional investment in intelligent automation remains necessary.

Descriptive Analysis of the Dependent Variables

1. Employee Retention

Employee retention is directly linked to indicators of job satisfaction and organizational commitment, which together form the foundation of human resource stability in the university.

Dimension: Low Job Satisfaction

Table 4.11: Descriptive Analysis of the Dimension “Low Job Satisfaction” (N = 146)

Item	Mean	Std. Deviation	Level
I feel dissatisfied with my current work environment.	3.87	0.816	High
I lack support and motivation from senior management.	3.83	0.905	High
Rewards do not correspond to the effort exerted.	4.12	0.891	High
My achievements are undervalued and unrecognized.	3.94	0.807	High
The level of challenge in my work is low and does not meet my ambitions.	3.86	0.937	High
Overall Mean	3.92	0.593	High

The “low job satisfaction” dimension recorded the highest overall mean (3.92), indicating that weak incentives and insufficient managerial recognition represent major threats to employee retention. This finding supports Mobley (1982), who argued that low satisfaction is a strong predictor of increased turnover, and aligns with Roy & Gandhimathi (2025), who emphasized that fairness in rewards is a prerequisite for workforce stability.

Dimension: Weak Organizational Commitment

Table 4.12: Descriptive Analysis of the Dimension “Weak Organizational Commitment” (N = 146)

Item	Mean	Std. Deviation	Level
I do not feel a genuine sense of belonging to the institution.	3.83	0.905	High
I would not mind leaving my job if a better opportunity arises.	3.82	0.907	High
I refrain from participating in developmental activities at the university.	3.81	0.889	High
I feel little responsibility toward the university’s success.	3.74	0.887	High
I do not consider the university’s success as part of my personal	4.04	0.778	High

success.

Overall Mean	3.85	0.633	High
---------------------	-------------	--------------	-------------

The results show low organizational commitment being relatively high (3.85), which shows low identification with the organization on the part of employees. This is aligned with Alvesson & Sveningsson (2016), which stressed that poor participatory culture diminishes loyalty, and Kaplan & Haenlein (2019), which determined that cultural misalignment increases employees' intention to quit.

It is observed that the core problems associated with employee retention are poor incentives, injustice, and weaker organizational commitment, all of which necessitate retention policies that support a fair and empowering work environment.

2. Employee Turnover

This variable focuses on turnover intention, as it represents the most direct indicator of actual turnover rates within the university.

Dimension: Intention to Quit

Table 4.10: Descriptive Analysis of the Dimension “Intention to Quit” (N = 146)

Item	Mean	Std. Deviation	Level
I feel inclined to seek an alternative job outside the university.	3.78	0.986	High
I plan to leave my job within the next two years.	4.01	0.883	High
I feel instability in my current job.	3.93	0.860	High
I believe that job opportunities in other institutions are more attractive.	3.90	0.881	High
I would prefer to move to a workplace that values my efforts more.	3.84	0.900	High
Overall Mean	3.89	0.623	High

The results show that the intention to turnover among employees is relatively high, with an overall mean score of 3.89. The statement "I plan to leave my company within two years" recorded the highest mean (4.01) and can be considered an imperative warning sign for possible short-term staff losses. This finding is consistent with Hancock et al. (2019), who identified intent to leave as the most robust predictor of turnover, and supported by Osman et al. (2020), who validated organisational dissatisfaction as being strongly related to employees' intention to leave.

Together, the foregoing results refer to the critical issue for the University of Baghdad: the high growth in employees' intention to leave. This calls for the implementation of effective retention initiatives founded on equitable incentive systems, organizational justice, and enhancement of the general working conditions.

Hypotheses Testing

Main Hypothesis (H1): “There is a statistically significant effect of AI applications on employee retention and turnover reduction at the University of Baghdad.”

Sub-Hypothesis 1 (H1.1):

“There is a statistically significant effect of AI technologies on reducing turnover intention and enhancing employee retention.”

Table 4.25: ANOVA Results Measuring the Effect of AI Technologies on Turnover Intention (N = 146)

Relationship	F	Sig.	R	R ²	Eta	Eta ²
Turnover Intention × AI Technologies	6.7460	0.0000	0.5220	0.2720	0.6150	0.378

The results show that the significance level ($\text{Sig} = 0.000 < 0.05$) suggests a statistically significant impact of AI technologies on intention to turn over. The model is able to account for approximately 27.2% of the variance in the factor—a remarkable percentage in organizational and behavioral research. The significant effect size ($\text{Eta}^2 = 0.378$) reports the impact of AI technologies on employees' decision-making and willingness to remain in the institution.

These findings show that the use of AI technologies such as predictive models of worker behavior and HR data analytics allows firms to detect early warning signs of risk of turnover. In this manner, they reduce workers' turnover intentions. The technologies also give managers more information about workers' job satisfaction and commitment, allowing them to respond early in an effort to resolve issues and improve job stability.

These findings are in agreement with Osman et al. (2020), whose emphasis lay on how powerful predictive analytics are, in the ability to avert turnover by intervening in time. It also agrees with Kaplan and Haenlein (2019), who specifically mentioned that integrating AI technologies into organisational practice stimulates the stability of staff as well as organisational loyalty.

Sub-Hypothesis 2 (H1.2):

“There is a statistically significant effect of decision support on reducing job dissatisfaction and improving employee retention.”

Table 4.26: ANOVA Results Measuring the Effect of Decision Support on Job Dissatisfaction (N = 146)

Relationship	F	Sig.	R	R ²	Eta	Eta ²
Job Dissatisfaction × Decision Support	4.3640	0.0000	0.4700	0.2200	0.5140	0.264

Statistical testing established Decision-Support Systems significantly influenced ($\text{Sig} = 0.000 < 0.05$) and accounted for 22% of variance in the level of job satisfaction among the participants. The effect size ($\text{Eta}^2 = 0.264$) is moderate, and this suggests that the use of AI-based decision support has an important role to play in enhancing the working environment and providing more employee satisfaction levels.

These findings indicate that artificial intelligence-based decision support systems introduce transparency and fairness to vital administrative decisions such as performance appraisal, promotion, and assignment. Employees perceive such decisions as credible and fair, which reduces dissatisfaction and increases the likelihood of retention.

This finding is consistent with Al-Musabi (2022), who demonstrated that AI improves decision quality and raises employee satisfaction, and aligns with Alvesson (2016), who noted that organizational justice in decision-making is positively associated with job satisfaction and retention.

Sub-Hypothesis 3 (H1.3) “There is a statistically significant effect of intelligent automation on reducing turnover rates and improving job stability.”

Table 4.27: ANOVA Results Measuring the Effect of Intelligent Automation on Turnover Dimensions (N = 146)

Relationship	F	Sig.	R	R ²	Eta	Eta ²
Turnover Intention × Intelligent Automation	5.3200	0.0000	0.4460	0.1990	0.5860	0.344

Job Dissatisfaction × Intelligent Automation	8.5360.0000.4570.2090.6760.457
Weak Organizational Commitment × Intelligent Automation	4.5200.0000.3550.1260.5550.308

The results indicate that intelligent automation had a statistically significant effect on all dimensions of employee turnover, with all significance values below 0.05. Intelligent automation explained between 12.6% and 21% of the variance, highlighting its effectiveness in influencing employees' attitudes and behaviors. The strongest effect was observed on job dissatisfaction ($R^2 = 0.209$), followed by turnover intention ($R^2 = 0.199$), while the weakest effect was on organizational commitment ($R^2 = 0.126$).

These findings suggest that smart automation, by reducing loads of routine and repetitive work, assisted in making workers more job-satisfied and less stressed, which decreased turnover intentions. But it had comparatively minimal effects on organizational commitment, suggesting that commitment is also determined by cultural and managerial factors.

This conclusion is in agreement with Chukwudi (2018), who depicted that automation helps alleviate work-related stress and turnover, and Jawaria et al. (2022), who emphasized that intelligent automation maintains worker stability by improving work environments and alleviating the burden of workload, thereby positively contributing to the retention of workers in educational institutions.

Discussion of Results

The findings of the research confirmed that AI applications statistically significantly impact employee retention and turnover reduction in the University of Baghdad, in three primary fields: technologies, decision support, and intelligent automation.

AI Technologies: Predictive screening algorithms and predictive analytics were found to play a pivotal role in the minimization of turnover intentions and the maximization of organizational commitment. This is similar to Osman et al. (2020), who pointed out predictive HR tools facilitate interventions at an early stage to correct roots of attrition, and Kaplan and Haenlein (2019), who pointed out the role of AI in maximizing the employees' fit for jobs, thereby increasing job stability.

Decision Support Systems: AI-enabled decision support processes also minimized job dissatisfaction and employee turnover by maximizing fairness and transparency in administrative processes, namely promotion, evaluation, and job allocation. This can be testified to by Al-Musabi (2022), who testified that the integration of AI improves the quality of decisions made and maximizes the satisfaction of employees, and by Alvesson (2016), who said that fair decision-making processes maximize organizational loyalty.

Smart Automation: Smart automation was also revealed to reduce turnover and job stability mainly by relieving the employees from menial tasks and reducing workplace stress, hence enhancing job satisfaction. While as significant as its impact on organizational commitment was bantam unimportant, automation itself enhanced productivity and optimized processes. Such findings are in agreement with Chukwudi (2018), who argued that automation spares an individual from stress, and Jawaria et al. (2022), who proved that intelligent automation develops stability through the establishment of a self-enabling working environment.

Overall, the research shows that AI has been a strategic HR management partner in higher education. Its impact makes its way through satisfaction, commitment, and job security—domains essential to preventing flight of intellectual and administrative brains.

The research further suggests differences between the three dimensions:

It had the most significant impact on job satisfaction and was most affected by decision-support systems and automation.

The second strongest impact was on turnover intent, diminished by prediction technologies.

The lowest was the impact of organizational commitment, i.e., one cannot just rely on AI and one has to mix it up with proper organizational and culture practices to instill institutional loyalty.

Finally, these findings are consistent with the fact that investment in AI is not only an engineering decision but also a human capital management objective for the colleges and universities. Its success lies in placing it within a culture of equity, empowerment, and participation that guarantees increased acceptance of deployment of AI and maximizing its impact to best on employee retention and reduction of turnover.

Recommendations

1. Extend the use of smart technologies such as predictive analytics and screening algorithms to aid hiring and screening for the identification of highest-risk turnover employees and the initiation of proactive retention efforts.
2. Promote the use of AI-based systems within colleges and universities for greater transparency and fairness in administrative decisions in terms of promotions, job assignment, and rewards, which are direct job satisfaction and job security motivators.
3. Deploy intelligent automation tools (i.e., chatbots, leave systems, electronic workflow systems) to automate routine workloads, thereby creating a more supportive environment that reduces stress and enhances satisfaction.
4. Do not rely exclusively on technology fixes by establishing a supportive organizational culture based on empowerment, fairness, and participation, thereby promoting increased acceptability and improved utilization of AI solutions.
5. Provide continuous training sessions to staff in AI mechanisms and how they may be beneficial to them, to reduce resistance to change and promote positive interaction with smart systems.
6. View AI technologies as part of long-term institutional strategy rather than short-term operational tools, to ensure their contribution to the capacity to retain human resources and competitive advantage of Iraqi universities.
7. Request further studies to examine the effect of AI on other factors affecting employees' stability—such as transformational leadership, work environment satisfaction, and organizational justice—with possible comparative studies opportunities in Iraqi and Middle Eastern universities.

References

Arabic References (Transliterated)

- Al-Ja'afrah, M. (2023). *Dawr al-dhakā' al-istīnā'ī fī idārat al-mawārid al-bashariyya fī al-balādiyyāt al-'Urdunniyya: Dirāsāt ḥālat balādiyyat al-Karak al-kubrā* [The role of artificial intelligence in HRM in Jordanian municipalities: A case study of Greater Karak Municipality]. *Majallat al-Buḥūth al-Idāriyya*.
- Al-Zahrani, 'A., & Al-Qurashi, 'A. (2022). *Darajat istiqdām idārat maktab al-ta'līm bi-l-Ṭā'if lil-dhakā' al-istīnā'ī wa-'alāqatuhū bi-l-jawda al-shāmila min wijhat naẓar al-*

mushrifīn al-tarbawīyyīn [The degree of AI use by the Taif Education Office and its relation to total quality from the perspective of educational supervisors]. *Majallat Shabāb al-Bāḥithīn, Jāmiʿat Suhāj*, (109).

- Dashti, J., & ʿAbd al-Qādir, ʿA. (2025). *Al-dawr al-wasīt li-taqniyāt al-dhakāʾ al-istīnāʾ fī al-ʿalāqa bayna al-taḥawwul al-raqāmī wa-l-rashāqa al-tanzīmīyya* [The mediating role of AI in the relationship between digital transformation and organizational agility]. *Majallat al-Dirāsāt al-Tijāriyya al-Muʿāshira*, 11(19), 1703–1705.
- Al-Ṣālīḥ, N. (2021). *Athar istiḡdām taqniyāt al-dhakāʾ al-istīnāʾ ʿalā mamārisāt al-mawārid al-bashariyya fī al-muʿassasāt al-ṣaghīra wa-l-mutawassīṭa* [The effect of AI technologies on HR practices in SMEs]. *Majallat al-Idāra wa-l-Iqtisād*.
- ʿAbd al-Munʿim, M. (2023). *Athar al-dhakāʾ al-istīnāʾ ʿalā al-rashāqa al-istrātījiyya: Al-dawr al-wasīt li-l-jadārāt al-waḡīfiyya al-raqāmīyya fī al-mawārid al-bashariyya – Dirāsa maydāniyya ʿalā al-jāmiʿāt al-khāṣṣa al-Miṣriyya* [The impact of AI on strategic agility: The mediating role of digital HR competencies – A field study on Egyptian private universities]. *Majallat al-Tijāra wa-l-Tamwīl*, 4(1).
- Muhammad, I., & ʿAbd Allāh, S. (2022). *Jawdat al-ʿamal al-muḥāsabī fī ḡill al-nuḡum al-khabīra* [Quality of accounting work under expert systems]. *Majallat al-ʿUlūm al-Iqtisādiyya wa-l-Idāriyya*, 28(133), 187–199.
- Al-Yahmadi, A. (2021). *Athar taḡbīqāt al-dhakāʾ al-istīnāʾ ʿalā tanmiyat raʾs al-māl al-basharī fī al-muʿassasāt al-talīmīyya* [The impact of AI applications on human capital development in educational institutions]. *Majallat al-ʿUlūm al-Tarbawīyya wa-l-Nafsiyya*.
- Al-Dāwūd, L. (2021). *Wāqiʿ istiḡdām al-dhakāʾ al-istīnāʾ fī ʿAmādat al-Mawārid al-Bashariyya bi-Jāmiʿat al-Imām Muhammad bin Saʿūd al-Islāmiyya* [The reality of AI adoption at the HR Deanship of Imam Muhammad ibn Saud Islamic University]. *Majallat al-Idāra al-Tarbawīyya*.

English References

- Ahmad, Z., AlWadi, B., Kumar, H., Ng, B.-K., & Nguyen, D. N. (2024). Digital transformation of family-owned small businesses: A nexus of internet entrepreneurial self-efficacy, artificial intelligence usage and strategic agility. *Kybernetes*. <https://doi.org/10.1108/K-12-2023-0632>
- Alvesson, M., & Sveningsson, S. (2016). Organizational culture and change: Interpreting identity through organizational discourse. *Human Relations*, 69(1), 33–58. <https://doi.org/10.1177/0018726715599564>
- Aly, H. (2020). Digital transformation, development and productivity in developing countries: Is artificial intelligence a curse or a blessing? *Review of Economics and Political Science*. <https://doi.org/10.1108/REPS-04-2020-0052>
- Bonnet, D., & Westerman, G. (2020). The new elements of digital transformation. *MIT Sloan Management Review*. Retrieved from <https://sloanreview.mit.edu>
- Brock, J., & von Wangenheim, F. (2019). Demystifying AI: What digital transformation leaders can teach you about realistic artificial intelligence. *California Management Review*, 61(4), 110–134.
- Chukwudi, A. (2018). Effect of Artificial Intelligence on the Performance of Accounting Operations among Accounting Firms in South East Nigeria. *International Journal of Accounting Research*.

- Guo, Y., Li, X., & Zhao, H. (2025). Artificial intelligence applications and organizational structures: Evidence from higher education. *Journal of Applied Management Research*.
- Hancock, J., Allen, D., Bosco, F., McDaniel, K., & Pierce, C. (2019). Meta-analytic review of employee turnover as a predictor of firm performance. *Journal of Management*, 45(2), 652–681. <https://doi.org/10.1177/0149206318792312>
- Jawaria, S., Khan, R., & Malik, M. (2022). Intelligent automation and employee well-being: A new frontier in HR analytics. *Human Resource Management Review*.
- Kaplan, A., & Haenlein, M. (2019). Siri, Siri, in my hand: Who's the fairest in the land? On the interpretations, illustrations, and implications of artificial intelligence. *Business Horizons*, 62(1), 15–25. <https://doi.org/10.1016/j.bushor.2018.08.004>
- Kshetri, N. (2021). Evolving uses of artificial intelligence in human resource management in emerging economies in the global South: Some preliminary evidence. *Management Research Review*. <https://doi.org/10.1108/MRR-06-2020-0370>
- Osman, M., Peters, H., & Hassan, R. (2020). Predictive analytics and employee turnover: The role of AI in HRM. *Journal of Human Capital Analytics*, 7(3), 210–225.
- Prentice, C., Dominique Lopes, S., & Wang, X. (2019). Emotional intelligence or artificial intelligence – An employee perspective. *Journal of Hospitality Marketing & Management*, 28(7), 775–796.
- Roy, A., & Gandhimathi, S. (2025). Artificial intelligence and employee retention: The mediating role of job satisfaction. *International Journal of Human Resource Studies*.
- Vrontis, D., El Namar, S., & Shams, S. M. (2021). Artificial intelligence and HRM: The impact on employee retention and turnover. *The International Journal of Human Resource Management*, 32(12), 2595–2623. <https://doi.org/10.1080/09585192.2021.1891116>