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RESEARCH ARTICLE

The Role of Human Resource Management Practices in Enhancing Job Performance Quality in Jordanian Public Universities: Exploring the Mediating Influence of Business Intelligence and Employee Engagement

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ARTICLE INFO	ABSTRACT
	This study investigates the mediating role of business intelligence and employee engagement in the relationship between human resource management (HRM) practices and the enhancement of job performance quality in Jordanian public universities. It employs a quantitative approach, utilizing both descriptive and analytical methods. Data is collected through a questionnaire and was subjected to analysis by using PLS-SEM). 429 employees participated in this study at the managerial level. The results highlight positive and statistically significant indirect effects of predictor variables (including Planning, Recruitment and Selection, Reward and Incentive, and Training and Development) on Job Performance through Business Intelligence and Employee Engagement.
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INTRODUCTION

In contemporary organizations and universities, the human aspect is increasingly recognized as a crucial factor in determining institutional performance quality. The need for effective management of individuals, enhanced human resources management practices, and the strategic integration of modern technology to support human capital is now a primary focus (Barak and Masrad, 2022). This marks a significant shift from earlier decades, where the emphasis was more on machinery, technology, and materials, often at the expense of considering the human element's abilities, emotions, development, and potential (Qais and Muhaibis, 2022).

Today, human resources are central to organizational development and growth, transitioning from being viewed as mere tools of production to being seen as invaluable assets. They carry knowledge, expertise, and experience that are crucial to an organization's success (Khaled, Faten, 2022). The recognition of these individuals as "the most important resources" rather than "costs" necessitates a reevaluation of their role in achieving organizational objectives. Despite their significance, Jordanian universities face challenges in managing human resources, partly due to the rapid expansion of

higher education over the past thirty years. This growth, primarily focused on quantity rather than quality, has perpetuated traditionalist approaches, limiting improvements in the educational system. Such conservatism restricts these institutions' ability to adapt to modern requirements and meet the growing demand for higher education (Jaradat, 2019).

This research investigates the role of human resources management practices in enhancing job performance quality in Jordanian public universities, with a particular focus on the mediating effects of business intelligence and employee engagement. It aims to explore how these factors contribute to the universities' success in achieving their specific goals.

LITERATURE REVIEW

The essence of human resources management

Human Resource Management (HRM) practices are a broad array of practices, policies, and systems designed to positively influence the behavior, attitudes, and performance of organizational members (Al-Wahshi and Afaf, 2020). These practices involve strategic activities for acquiring, retaining, and motivating employees, ensuring they contribute effectively and energetically. This approach nurtures a cooperative and supportive team environment conducive to peak productivity.

HRM is a multidimensional domain, encompassing a suite of functions, activities, and programs that include defined tasks, duties, and responsibilities all aimed at clear objectives. Specialized HR departments, under the stewardship of dedicated managers, undertake these activities, focusing on strategic planning, execution, monitoring, and coordination (Wang et al., 2022). According to Lenart-Gansiniec et al. (2023), HRM practices serve as a vehicle for executing human resource strategies, with the ultimate goal of bolstering organizational and functional performance, as well as enhancing the capabilities, skills, and knowledge of employees to meet strategic goals. Central to these practices are human resources planning, recruitment and selection, training and development, and rewards and incentives.

Human resources planning, detailed by Sobaih & Gabry (2019) and Manuti et al. (2020), involves strategic forecasting of an organization's future requirements in terms of human resources, aligning with both internal and external environmental factors and expected changes. Following this strategic forecasting, the recruitment and selection processes identify and select the most qualified candidates in a timely manner to fill organizational roles (Paillard & Noe, 2015).

Training, as outlined by Blom et al. (2020), is crucial for bridging the gap between current employee skills and job requirements, enhancing employee performance and contributing to organizational success. Moreover, Husnain et al. (2023) underscore the significance of rewards and incentives in fostering job satisfaction, encouraging superior effort, and attracting and retaining top talent, highlighting their critical role in organizational performance.

Job performance

Job performance, as explored by Ahmed and Lubna (2021), Ding and Liu (2023), and Tian and Guo (2023), encompasses accuracy, decision-making timeliness, innovation in problem-solving, and the overall effort an employee contributes towards achieving organizational objectives. The relationship between behavior and performance is complex, with varying influences on organizational outcomes (Melhem and Alsukkar, 2023). Nye and Wee (2022) argue that effective training and a supportive environment are pivotal for enhancing employee satisfaction and performance, while Osama (2022) highlights the strategic importance of continuous improvement and knowledge management in maintaining competitive advantage.

Business intelligence in HRM

Business Intelligence (BI) integrates methodologies, processes, models, techniques, and tools for converting data into actionable intelligence, thereby facilitating informed decision-making across strategic, tactical, and operational levels (Hurbean & Danaiata, 2023). In the realm of HRM, BI is leveraged for data management, analysis, and predictive modeling to support both strategic and operational decision-making processes, merging essential resources like information and people to bolster organizational performance (Dias & Sousa, 2015; Rocha et al., 2015). Effective BI integration within HR processes is crucial for real-time talent management and adaptability (Nocker & Sena, 2019).

Employee engagement

Employee engagement is pivotal for involving staff in psychological and social activities, decision-making processes, and fostering a motivated and productive workforce (Jiang & Shen, 2023). This engagement is instrumental for retaining talent, ensuring customer loyalty, and enhancing organizational performance (Budriene and Diskiene, 2020). HRM plays a vital role in understanding and nurturing employee engagement, with a significant correlation between engagement levels and organizational success (Guest, 2014; Bakker and Demerouti, 2014).

The literature highlights the nuanced relationship between HRM practices, business intelligence, and employee engagement, emphasizing their collective impact on job performance. While the studies offer insights into the effectiveness of HRM strategies, they also signal the need for context-sensitive research, especially considering the unique challenges across different industries and geographic regions. This body of work underscores the complexity of these relationships and the pivotal role of HRM in fostering an environment conducive to engagement, performance, and organizational success.

HYPOTHESES DEVELOPMENT

HRM and job performance

The relationship between HRM practices and job performance has been extensively explored, with a focus on planning, recruitment and selection, training and development, and rewards and incentives. These practices are critical in shaping an organization's human resources strategy and have been linked to improved job performance (Sobaih & Gabry, 2019; Manuti et al., 2020; Paillard & Noe, 2015).). Lenart-Gansiniec et al. (2023) highlight the strategic nature of these practices in enhancing organizational performance, suggesting that well-designed HRM practices could significantly impact job performance, mediated by factors like business intelligence and employee engagement. This suggests the hypothesis that HRM practices have a statistically significant impact on job performance, potentially mediated by business intelligence and employee engagement.

Business intelligence in HRM

Business Intelligence (BI) plays a crucial role in transforming data into actionable insights, thereby enhancing decision-making processes within HRM (Hurbean & Danaiata, 2023). The integration of BI in HRM is seen as essential for modern organizations, aiding in strategic planning and operational decisions (Dias & Sousa, 2015; Rocha et al., 2015). This underscores the hypothesis that BI mediates the relationship between HRM practices and job performance, enabling organizations to leverage data for strategic advantage.

Employee engagement and performance

Employee engagement is integral to organizational success, influencing job satisfaction, productivity, and ultimately, job performance (Jiang & Shen, 2023; Budriene and Diskiene, 2020). Engaged employees are more likely to exhibit higher levels of job performance, suggesting that employee engagement can mediate the impact of HRM practices on job performance. This is supported by

research indicating a positive correlation between HRM strategies, employee engagement, and performance outcomes (Guest, 2014; Budriene and Diskiene, 2020).

Based on the literature reviewed, it is hypothesized that HRM practices have a significant impact on job performance, and this relationship is mediated by both business intelligence and employee engagement. Specific aspects of HRM practices, such as training and development, planning, recruitment and selection, and rewards and incentives, are expected to influence job performance through these mediators. This integration of hypotheses within the literature review emphasizes the multifaceted impact of HRM on job performance and the crucial roles of BI and employee engagement in this relationship.

H1: HRM practices have a statistically significant impact on Job Performance through the mediation of Business Intelligence and Employee Engagement at the statistical significance level of (a≤ 0.05).

H1.1: There exists a positive influence of training and development on job performance through the mediation of business intelligence at (α≤0.05).
H1.2: There exists a positive influence of planning on job performance through the mediation of business intelligence at (α≤0.05).
H1.3: There exists a positive influence of recruitment and selection on job performance through the mediation of business intelligence at (α≤0.05).
H1.4: There exists a positive influence of reward and incentive on job performance through the mediation of business intelligence at (α≤0.05).
H1.5: There exists a positive influence of planning on job performance through the mediation of employee engagement at (α≤0.05).
H1.6: There exists a positive influence of reward and incentive on job performance through the mediation of employee engagement at (α≤0.05).
H1.7: There exists a positive influence of training and development on job performance through the mediation of employee engagement at (α≤0.05).
H1.8: There exists a positive influence of the recruitment and selection on job performance through the mediation of employee engagement at (α≤0.05).

Fig (1) illustrates the conceptual model that maps the hypothesized pathways and relationships among various constructs related to Job performance.
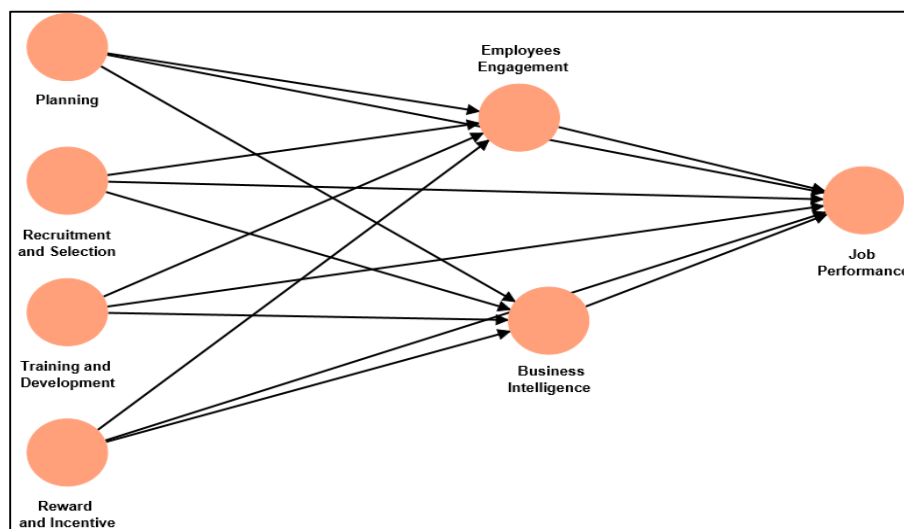

Figure 1: Conceptual Model

METHODOLOGY

The study's design encompassed a combination of descriptive and analytical research methods to investigate the influence of human resource management practices on job performance quality in Jordanian public universities, with a focus on the roles of business intelligence and employee engagement. Targeting managerial staff across Jordanian public universities, the study achieved a high response rate with 429 valid questionnaires out of 450, which were distributed by hand, indicating comprehensive coverage. Rigorous data screening was conducted for validity and reliability, and analysis was performed using Smart PLS 4 and PLS-SEM, suitable for complex relational analyses. The study underscored the importance of clear variable definition, robust questionnaire design, pilot testing for initial assessment, statistical validity of the methods, and transparent methodology to ensure accuracy, clarity, and reproducibility of the research. Data was obtained using a questionnaire adopted from various researchers (Aggrawal& Potadar 2022; Alfes & Gatenby 2013; Iqbal et a.,l 2023; Kharitonova 2019; Manzoor et al., 2019; Middleton 2017; Mira et al., 2019; Muchhal, 2014; Nadarajah et al. 2012; Naim & Lenka 2016; Pancić & Serdarušić 2023; Rotea et al., 2023 ; Taib & Hanafi 2018; Yuniarsih et al., 2022). The questionnaire was grounded in previous scholarly work and refined through expert review from the Jordanian universities, to ensure relevance and accuracy

RESULTS

Demographic characteristics

Table 1 outlines the demographic characteristics of those who participated in this study from the Jordanian Public Universities at the managerial level. It includes information about gender, age, qualification, position, and experience. The data shows that the sample comprises a diverse group, with a majority of respondents being male (66.43%) and a significant female representation (33.57%). In terms of age, respondents are distributed across various age groups, with a notable portion falling within the 31-35 years and 36-40 years categories. The majority of the group, representing 46.62%, holds a Bachelor's degree. 23.31% of the group possesses Master's degree, which is significant. However, the proportion of PhD holders is notably high at 30.07%. This is particularly significant as it suggests that a considerable segment of the group has attained the highest level of academic qualification. In terms of experience, a considerable proportion have 5-10 years of experience (50.58%), indicating a mix of junior and mid-level professionals in the sample.

Table 1: Demographic Characteristics

Variables	Categories	Frequency	Percentage
Gender	Female	144	33.57%
	Male	285	66.43%
Age	30 years and blow	123	28.67%
	31-35 years	98	22.84%
	36-40 years	94	21.91%
	41-45 years	67	15.62%
	46-50 years	28	6.53%
	51 years and up	19	4.43%
Qualification	Bachelor	200	46.62%
	Master Degree	100	23.31%
	PHD	129	30.07%

Experience	less than 5 years	81	18.88%
	5- less than 10 years	217	50.58%
	10-less than 15 years	71	16.55%
	15 years and up	60	13.99%

THE MEASUREMENT MODEL

Items related to various constructs, such as Planning (Plan1-5), Reward and Incentive (RewInc1-5), and Training and Development (Train1-5), Business Intelligence (BInt1-5), Employee Engagement (EmpEng1-5), Recruitment and Selection (Recru1-5), Job Performance (JobPerf1-10), with a total of 40 items were entered and assessed.in the model. Table (2) displays standardized outer loadings representing the strength of the relationship between items and their corresponding constructs in a Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis using SmartPLS4. The loadings range from 0.60 to 0.88, with higher values indicating a stronger association between the item and the construct. To enhance the model fit, all items exhibiting outer loadings below 0.6 were removed. This step not only refined the model but also streamlined the data presented in table (2) and fig (2), ensuring that only the most relevant and impactful factors were included for analysis. As depicted in Figure 2, the model underwent a systematic refinement process. This involved the removal of one item each from the Recruitment and Selection, Training and Development, Business Intelligence, and Employee Engagement constructs. Additionally, two items were eliminated from the Job Performance construct. This resulted in a total of six items being excluded, streamlining the model to a more focused set of 34 items, thereby enhancing its fitness.

Table 2: Standardized outer loadings of items on their construct

| Items	Construct	Regression weight	Items	Construct	Regression weight
BInt1 <- Business Intelligence		0.79	Plan2 <- Planning		0.79
BInt2 <- Business Intelligence		0.8	Plan3 <- Planning		0.79
BInt3 <- Business Intelligence		0.71	Plan4 <- Planning		0.66
BInt4 <- Business Intelligence		0.85	Plan5 <- Planning		0.65
EmpEng1 <- Employees Engagement		0.65	Recru1 <- Recruitment and Selection		0.88
EmpEng2 <- Employees Engagement		0.83	Recru2 <- Recruitment and Selection		0.72
EmpEng3 <- Employees Engagement		0.74	Recru3 <- Recruitment and Selection		0.85
EmpEng4 <- Employees Engagement		0.6	Recru4 <- Recruitment and Selection		0.81
JobPerf1 <- Job Performance		0.61	RewInc1 <- Reward and Incentive		0.63
JobPerf2 <- Job Performance		0.65	RewInc2 <- Reward and Incentive		0.76
JobPerf3 <- Job Performance		0.68	RewInc3 <- Reward and Incentive		0.77
JobPerf4 <- Job Performance		0.81	RewInc4 <- Reward and Incentive		0.75
JobPerf5 <- Job Performance		0.73	RewInc5 <- Reward and Incentive		0.67
JobPerf6 <- Job Performance		0.77	Train1 <- Training and Development		0.85
JobPerf7 <- Job Performance		0.7	Train2 <- Training and Development		0.82
JobPerf8 <- Job Performance		0.65	Train3 <- Training and Development		0.7
Plan1 <- Planning		0.67	Train4 <- Training and Development		0.63
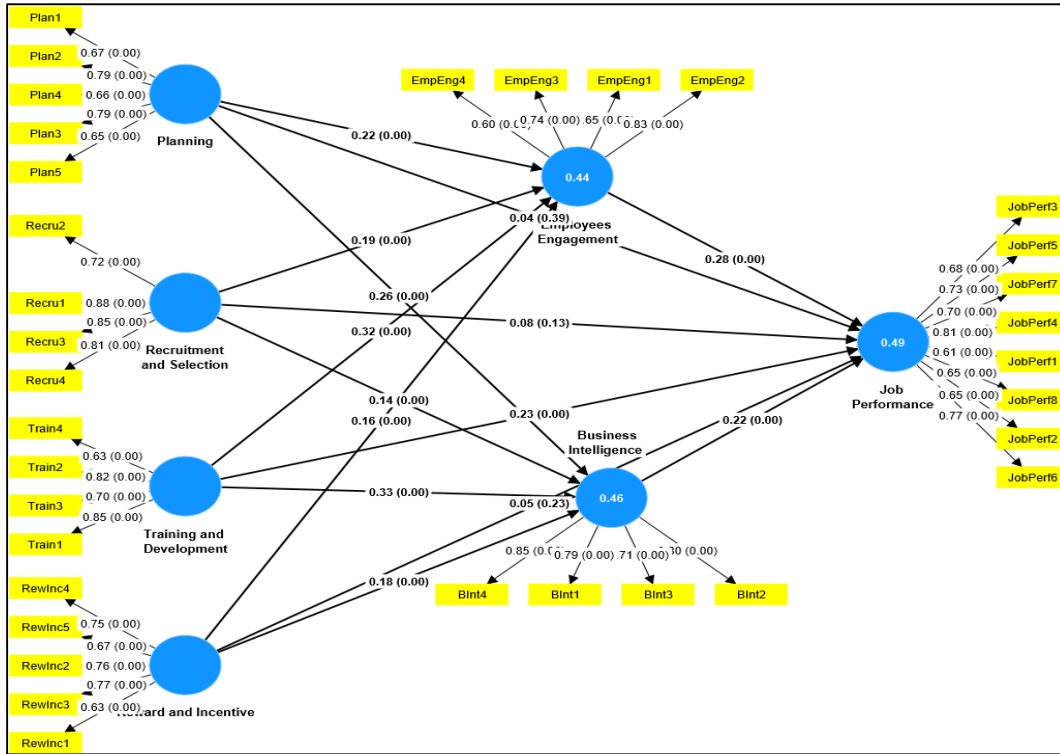
Figure 2: Standardized outer loadings of items on their construct with regression coefficients R^2

R-square

Table 3 presents the R-square and adjusted R-square values for Business Intelligence, Employee Engagement, and Job Performance. These values, crucial in regression analysis, measure how well independent variables explain the variance in a dependent variable. Business Intelligence has an R-square of 0.46, meaning 46% of its variance is explained by the model's independent variables, with an adjusted R-square also at 0.46. Employee Engagement's R-square is 0.44, with a slightly lower adjusted R-square of 0.43. Job Performance shows an R-square of 0.49, which remains unchanged at 0.49 in the adjusted measure.

Table 3: R-square and R-square adjusted

	R-square	R-square adjusted
Business Intelligence	0.46	0.46
Employees Engagement	0.44	0.43
Job Performance	0.49	0.49

Construct reliability and validity assessment

The analysis of construct reliability and validity revealed several key statistics, underscoring the internal consistency and convergent validity of the variables in question. Cronbach's alpha, a metric assessing internal consistency reliability, ranged across variables, reflecting values above 0.7, indicative of satisfactory reliability levels. Similarly, composite reliability scores, encompassing both rho a and rho c metrics, varied between 0.69 and 0.89. These figures align with the conventional benchmark of 0.7, suggesting acceptable consistency across the constructs within the model. The

average variance extracted (AVE) further supported these findings, with most constructs exhibiting values exceeding the 0.5 threshold, denoting a considerable measure of variance attributable to the construct relative to the measurement error, and hence indicating strong convergent validity. These metrics collectively affirm the constructs' reliability and validity, underscoring the model's integrity for subsequent analyses.

Discriminant validity evaluation

In evaluating discriminant validity, the focus was on ensuring the uniqueness and distinctiveness of each construct within the research model. Discriminant validity was assessed by comparing the square roots of AVE values for each construct against the correlations between constructs. The analysis showed that for most constructs, the square root of the AVE surpassed its correlations with other constructs, affirming their discriminant validity. This outcome indicates that the constructs are sufficiently distinct and do not unduly overlap, reinforcing the model's conceptual clarity.

Multicollinearity analysis (VIF)

The investigation into multicollinearity, through the Variance Inflation Factor (VIF), highlighted minimal concerns regarding the overlap of independent variables within the model. The VIF values, predominantly fewer than 2.92, fall well below the cautionary thresholds of 5 or 10, suggesting that multicollinearity does not significantly compromise the model's analytical robustness.

Model fit assessment

The assessment of model fit, leveraging model fit indices from structural equation modeling (SEM), compared a saturated model and an estimated model. The Standardized Root Mean Square Residual (SRMR) values for both models were recorded at 0.07, indicating a commendable fit based on residual discrepancies. Despite this, the chi-square values suggested noticeable differences between the estimated and saturated models, a phenomenon not uncommon in complex models. The Normed Fit Index (NFI) values hovered around 0.7, suggesting a reasonable fit but also signaling room for refinement. This nuanced view of model fit highlights the balance between achieving an adequate fit and acknowledging potential areas for model enhancement.

Bootstrapping

Bath coefficients

Table 4 presents the bootstrapped path coefficients along with their corresponding p-values for the relationships between different variables in the model. The path coefficients represent the strength and direction of the relationships between the variables, while p-values indicate the statistical significance of these relationships. All path coefficients are in the range of 0.04 to 0.33. The p-values for all coefficients are less than 0.05, indicating that these relationships are statistically significant, except for the path from Planning to Job Performance (p = 0.39), the path from Recruitment and Selection to Job Performance (p = 0.13), and the path from Reward and Incentive to Job Performance (0.23), which are not statistically significant at the 0.05 level.

Table 4: Bath coefficients

	Original sample (O)	T statistics (O/STDEV)	P values
Business Intelligence -> Job Performance	0.22	4.3	0.00
Employees Engagement -> Job Performance	0.28	5.06	0.00
Planning -> Business Intelligence	0.26	4.95	0.00

	Original sample (O)	T statistics (|O/STDEV|)	P values
Planning -> Employees Engagement	0.22	4.15	0.00
Planning -> Job Performance	0.04	0.85	0.39
Recruitment and Selection -> Business Intelligence	0.14	3.3	0.00
Recruitment and Selection -> Employees Engagement	0.19	4.09	0.00
Recruitment and Selection -> Job Performance	0.08	1.5	0.13
Reward and Incentive -> Business Intelligence	0.18	3.76	0.00
Reward and Incentive -> Employees Engagement	0.16	3.79	0.00
Reward and Incentive -> Job Performance	0.05	1.21	0.23
Training and Development -> Business Intelligence	0.33	7.36	0.00
Training and Development -> Employees Engagement	0.32	6.9	0.00
Training and Development -> Job Performance	0.23	5.47	0.00

Total effect

Table 5 presents the total effect of various predictor variables on Job Performance in the model. These total effects represent the combined direct and indirect influence of each predictor variable on the outcome variable, Job Performance. The "Original sample (O)" column shows the strength of these total effects, with values ranging from 0.14 to 0.39, indicating the degree to which each predictor affects Job Performance. The T statistics and p-values indicate the statistical significance of these total effects, with all p-values being less than 0.05. These results suggest that Business Intelligence, Employee Engagement, Planning, Recruitment and Selection, Reward and Incentive, and Training and Development all have statistically significant total effects on Job Performance. This implies that these factors, either directly or indirectly, play a role in influencing an individual's job performance, highlighting their importance in the the model.

Table 5: Total effect

	Original sample (O)	T statistics (|O/STDEV|)	P values
Business Intelligence -> Job Performance	0.22	4.3	0.00
Employees Engagement -> Job Performance	0.28	5.06	0.00
Planning -> Business Intelligence	0.26	4.95	0.00
Planning -> Employees Engagement	0.22	4.15	0.00
Planning -> Job Performance	0.16	3.32	0.00
Recruitment and Selection -> Business Intelligence	0.14	3.3	0.00
Recruitment and Selection -> Employees Engagement	0.19	4.09	0.00
Recruitment and Selection -> Job Performance	0.16	3.08	0.00

Reward and Incentive -> Business Intelligence	0.18	3.76	0.00
Reward and Incentive -> Employees Engagement	0.16	3.79	0.00
Reward and Incentive -> Job Performance	0.14	3.06	0.00
Training and Development -> Business Intelligence	0.33	7.36	0.00
Training and Development -> Employees Engagement	0.32	6.9	0.00
Training and Development -> Job Performance	0.39	8.81	0.00

Indirect effect

Table 6 shows that the impact of s "Training and Development on Job Performance through Business Intelligence is statistically significant as P value is below 0.05 which implies a negligible probability that the observed positive effect is due to chance, confirming the reliability of the finding. Similarly, for "Recruitment and Selection -> Business Intelligence -> Job Performance" and "Reward and Incentive -> Business Intelligence -> Job Performance," P values of 0.01 also denote statistical significance, though slightly lower compared to instances with a P value of 0.00.

Table 6: Business Intelligence and Employee Engagement

Hypoth eses	PATH	Original sample (O)	P values	Status
H1.1	Training and Development -> Business Intelligence -> Job Performance	0.07	0.00	Accepted
H1.2	Planning -> Business Intelligence -> Job Performance	0.06	0.00	Accepted
H1.3	Recruitment and Selection -> Business Intelligence -> Job Performance	0.03	0.01	Accepted
H1.4	Reward and Incentive -> Business Intelligence -> Job Performance	0.04	0.01	Accepted
H1.5	Planning -> Employees Engagement -> Job Performance	0.06	0.00	Accepted
H1.6	Reward and Incentive -> Employees Engagement -> Job Performance	0.04	0.00	Accepted
H1.7	Training and Development -> Employees Engagement -> Job Performance	0.09	0.00	Accepted
H1.8	Recruitment and Selection -> Employees Engagement -> Job Performance	0.05	0.00	Accepted

Testing hypotheses

Table 10 is pivotal in testing hypotheses about the indirect effects of Business Intelligence and Employee Engagement on Job Performance. It shows how "Training and Development," "Planning," "Recruitment and Selection," and "Reward and Incentive" influence Job Performance through these mediators. The table's findings highlight that the impacts of these factors through Business Intelligence and Employee Engagement are statistically significant, with P values below 0.05, ensuring confidence in the observed effects, signifying notable significance. Additionally, Table 10 includes hypotheses H1.1 to H1.8, detailing their paths, statistical measures, and outcomes. Hypotheses H1.1 to H1.4 confirm the substantial impact of various factors on Job Performance via

Business Intelligence, as indicated by their low P values. Similarly, H1.5 to H1.8 demonstrate significant effects through Employee Engagement, all with P values at 0.00, underscoring the positive influence of the examined factors on Job Performance via this pathway.

DISCUSSION

The analysis highlights the positive and significant indirect effects of various predictors like Planning, Recruitment and Selection, Reward and Incentive, and Training and Development on Job Performance. Additionally, it demonstrates the substantial total effects of Business Intelligence, Employee Engagement, and other HRM practices on Job Performance through both direct and indirect pathways. These results offer strong evidence of the model's validity and suggest effective strategies for enhancing Job Performance via Business Intelligence and Employee Engagement interventions. More importantly, the study underlines the importance of HRM practices in enhancing job performance, consistent with previous research. For instance, Al-Wahshi and Afaf (2020) highlighted that HRM practices positively influence the behavior, attitudes, and performance of individuals within an organization. This aligns with the study's emphasis on the strategic integration of HRM practices to improve job performance quality.

The study proposes business intelligence as a mediating factor in the relationship between HRM practices and job performance. This notion finds resonance in the work of Hurbean & Danaiata (2023), who described business intelligence as a combination of processes and tools used for data transformation into organizational intelligence. The study's suggestion that business intelligence mediates the impact of HRM practices on job performance is a novel application in the context of Jordanian universities, extending existing theories. Similar to business intelligence, the study posits employee engagement as a crucial mediator. This is in line with the findings of Jiang & Shen (2023), who emphasized the role of employee engagement in improving organizational performance. The study's focus on employee engagement as a pathway through which HRM practices influence job performance is supported by the broader literature, suggesting a consistent pattern across different organizational contexts. The study's contextual focus on Jordanian public universities provides a unique perspective, considering the rapid expansion of higher education in Jordan and the associated HRM challenges. This aspect may slightly contrast with general HRM theories that are often derived from Western corporate contexts, indicating the need for contextual adaptation of HRM practices.

CONCLUSION

The study's findings have important implications for academia and practical application within Jordanian public universities. These consequences include the emphasis of HRM strategies like as recruitment and selection, reward and incentive, and training and development as critical drivers of job performance. Furthermore, the study underscores the transformative potential of using Business Intelligence for informed decision-making and the vital role of Employee Engagement in encouraging Job Performance. Furthermore, it emphasizes the necessity of a holistic approach across all HRM functions and advocates for specialized interventions in specific HRM domains to solve identified deficiencies. Finally, the study provides direction for policymakers and university leaders in developing human resource policies and strategies that align with the ultimate goal of enhancing job performance in Jordan's higher education sector. These findings, in fact, give a thorough roadmap for Jordanian public universities to improve Job Performance quality through improved HRM practices, effective Business Intelligence utilization, and a constant commitment to cultivating Employee Engagement.

Subsequent research should focus on broadening its geographical and sectoral reach, potentially encompassing private entities. Additionally, integrating qualitative approaches, could provide more profound understanding of HRM practices, Business Intelligence, and Employee Engagement. Equally

crucial is the investigation of additional mediating or moderating factors, like organizational culture or leadership styles, to further clarify how HRM practices interact with job performance outcomes.

REFERENCES

Aggrawal, N., & Potadar, A. (2022). Role of business intelligence and HR planning in modern industrialization. In *Business Intelligence and Human Resource Management* (pp. 123-144). Productivity Press.

Ahmed, L. M. S., & Mahmoud Sanusi, L. (2021). Lean management and its impact on improving the quality of job performance in the Egyptian Olympic Committee. *Beni Suef Journal of Physical Education and Sports Sciences*, 4(08), 114-140.

Al-Azri, S. b. M. b. S. (2023). The impact of human resources management strategies on job performance: A case study (Al-Sharqiya University in the Sultanate of Oman). *Al-Andalus Journal of Humanities and Social Sciences*, 10(67).

Alfes, K., Truss, C., Soane, E. C., Rees, C., & Gatenby, M. (2013). The relationship between line manager behavior, perceived HRM practices, and individual performance: Examining the mediating role of engagement. *Human Resource Management*, 52(6), 839-859.

Al-Sawa'ir, M. M. M. (2017). *The mediating role of business intelligence competencies in the relationship between information technology competencies and organizational agility, a field study in Jordanian commercial banks* [PhD dissertation, Middle East University].

Al-Wahshi, M., & Hameed, A. (2020). The impact of human resources management practices on employee satisfaction in public universities: A case study of the United Arab Emirates University.

Awawdeh, H., Abulaila, H., Alshanty, A., & Alzoubi, A. (2022). Digital entrepreneurship and its impact on digital supply chains: The mediating role of business intelligence applications. *International Journal of Data and Network Science*, 6(1), 233-242.

Bakker, A. B., & Demerouti, E. (2014). Job demands-resources theory. In P. Y. Chen & C. L. Cooper (Eds.), *Wellbeing: A Complete Reference Guide, Volume III, Work and Wellbeing* (pp. 37-64). Wiley Blackwell.

Barak, H., & Masrad, B. (2022). The reality of using electronic human resources management applications in the organization: Case study of the University of August 2, 5733 - Skikda. Economic Researcher Review, 10(2), 275-289.

Bilal Jassim Al-Qaisi, & Hassan Falih Mahli. (2015). Achieving administrative control requirements in accordance with human resources management practices. *Journal of Economics and Administrative Sciences*, 21(86), 272-272.

Blom, R., Kruyen, P. M., Van der Heijden, B. I., & Van Thiel, S. (2020). One HRM fits all? A meta-analysis of the effects of HRM practices in the public, semipublic, and private sector. *Review of Public Personnel Administration*, 40(1), 3-35.

Budriene, D., & Diskienė, D. (2020). Employee engagement: Types, levels, and relationship with practice of HRM. *Malaysian e-commerce Journal*, 4(2), 42-47.

Dias, I., & Sousa, M. J. (2015). Business intelligence applied to human resources management. In *New Contributions in Information Systems and Technologies: Volume 2* (pp. 105-113). Springer International Publishing.

Ding, H., & Liu, J. (2023). Paying close attention to the strengths mindset: The relationship of employee strengths mindset with job performance. *Current Psychology*, 42(26), 22758–22769.

Guest, D. (2014). Employee engagement: A skeptical analysis. *Journal of Organizational Effectiveness: People and Performance*, 1(2), 141-156.

Humeera, N., & Mufeed, S. A. (2023). Role of HRM practices in enhancing employee engagement: A literature review. IUP Journal of Management Research, 22(3), 40–64.

Hurbean, L., Militaru, F., Muntean, M., & Danaiata, D. (2023). The impact of business intelligence and analytics adoption on decision making effectiveness and managerial work performance. Scientific Annals of Economics & Business, 70, 43–54.

Husnain, U. M. A., Saadat, U. R., Noreen, S., Shah, M. I., Ali, N., & Hussain, J. (2023). Impact of HRM practices on work engagement in teachers: Mediating effect of psychological capital. *Journal of Positive School Psychology*, 7(4), 1836–1842.

Iqbal, S., Litvaj, I., Drbúl, M., & Rasheed, M. (2023). Improving quality of human resources through HRM practices and knowledge sharing. Administrative Sciences, 13(10), 224. https://doi.org/10.3390/admsci13100224

Jaradat, M. K. M. (2019). The role of strategic planning in developing human resources at the Hashemite University and its future expectations. Studies: Educational Sciences, 46(1), 441-468.

Jiang, H., & Shen, H. (2023). Toward a relational theory of employee engagement: Understanding authenticity, transparency, and employee behaviors. International Journal of Business Communication, 60(3), 948–975.

Khaled Muhammad Talal, & Faten Abdel Rahman. (2022). The impact of electronic human resources management practices on strategic creativity in private Jordanian universities. Amman Arab University Journal, 7(2), 113–133.

Kharitonova, A. (2019). Examining the role of business intelligence and analytics in hospitality revenue management (Order No. 13900936). ProQuest Dissertations & Theses Global. (2312585750). Retrieved from https://www.proquest.com/dissertations-theses/examining-role-business-intelligence-analytics/docview/2312585750/se-2

Kinsinger, P.C. (2007). The business intelligence challenge in the context of regional risk. Thunderbird International Business Review, 49(4), 535-541.

Lenart-Gansiniec, R., Sypniewska, B. A., & Chen, J. (2023). Innovation-driven human resource management practices: A systematic review, integrative framework, and future research directions. Journal of Entrepreneurship, Management and Innovation, 19(2), 7-

Manuti, A., Giancaspro, M. L., Molino, M., Ingusci, E., Russo, V., Signore, F., ... & Cortese, C. G. (2020). "Everything will be fine": A study on the relationship between employees' perception of sustainable HRM practices and positive organizational behavior during COVID-19. Sustainability, 12(23), 10216.

Manzoor, F., Wei, L., Bányai, T., Nurunnabi, M., & Qazi, A. S. (2019). An examination of sustainable HRM practices on job performance: An application of training as a moderator. Sustainability, 11(8), 2263.

Melhem, Y. S. B., Ababneh, R. I., & Alsukkar, H. B. (2023). Servant leadership and job performance: Evidence from airline companies in Jordan. International Journal of Business & Society, 24(1), 523–542.

Middleton Robinson, L. T. (2017). The potential role of business intelligence in assisted living facilities (Order No. 10601684). ProQuest Dissertations & Theses Global.

Mira, M., Choong, Y., & Thim, C. (2019). The effect of HRM practices and employees' job satisfaction on employee performance. Management Science Letters, 9(6), 771-786.

Muchhal, D. S. (2014). HR practices and job performance. IOSR Journal of Humanities and Social Science (IOSR-JHSS), 19(4), 55-61.

Nabi, M. N., Syduzzaman, M., & Munir, M. S. (2016). The impact of human resource management practices on job performance: A case study of Dhaka Bank Pvt. Ltd., Bangladesh. Human Resource Management Research, 6(2), 45-54.

Nadarajah, S., Kadiresan, V., Kumar, R., Kamil, N. N. A., & Yusoff, Y. M. (2012). The relationship of HR practices and job performance of academicians towards career development in Malaysian private higher institutions. Procedia - Social and Behavioral Sciences, 57, 102-118.

Naim, M. F., & Lenka, U. (2016). Mentoring as an HR intervention to engage Gen Y employees. People: International Journal of Social Sciences, 2(1), 1697-1715.

Nocker, M., & Sena, V. (2019). Big data and human resources management: The rise of talent analytics. Social Sciences, 8(10), 273.

Nye, C. D., Ma, J., & Wee, S. (2022). Cognitive ability and job performance: Meta-analytic evidence for the validity of narrow cognitive abilities. Journal of Business & Psychology, 37(6), 1119–1139.

Paillard, T., & Noé, F. (2015). Techniques and methods for testing the postural function in healthy and pathological subjects. *BioMed Research International, 2015*.

Pancić, M., Ćućić, D., & Serdarušić, H. (2023). Business intelligence (BI) in firm performance: Role of big data analytics and blockchain technology. *Economies*, 11(3), 99.

Pratibha, S. (2022). HRM practices on employee performance with respect to small scale industries. *Journal of Positive School Psychology*, 6(2), 915–920.

Qais Jameel, & Mhaibes, H. (2022). The impact of human resource agility on knowledge sharing behaviors-analytical research at the university of Anbar. *World Bulletin of Management and Law*, 10, 125-134.

Rocha, A., Correia, A. M., Costanzo, S., & Reis, L. P. (Eds.). (2015). *New contributions in information systems and technologies*. Springer.

Rotea, C. C., Andra-Nicoleta Ploscaru, Bocean, C. G., Vărzaru, A. A., Mangra, M., & Mangra, G. I. (2023). The link between HRM practices and performance in healthcare: The mediating role of the organizational change process.

Sattar, T., Ahmad, K., & Hassan, S. M. (2015). Role of human resource practices in employee performance and job satisfaction with mediating effect of employee engagement. *Pakistan Economic and Social Review*, 81-96.

Sobaih, A. E. E., Ibrahim, Y., & Gabry, G. (2019). Unlocking the black box: Psychological contract fulfillment as a mediator between HRM practices and job performance. *Tourism Management Perspectives*, 30, 171-181.

Susita, D., Sofwan, M., Sudiarditha, I. K. R., Handaru, A. W., & Gustiawan, D. (2021). Investigating the influence of motivation and organizational support on employee performance with employee engagement as a mediator. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(4), 3116-3135.

Taib, N. M., Saludin, M. N., & Hanafi, W. N. W. (2018). The effects of human resources management (HRM) practices on employee performance with the mediating role of employee engagement. *Selangor Business Review*, 46-60.

Tian, X., & Guo, Y. (2023). The effect of deviant workplace behavior on job performance: The mediating role of organizational shame and moderating role of perceived organizational support. *Behavioral Sciences*, 13(7), 561.

Wang, J., Li, Q., & Chen, M. (2022). Mixed method research on technological teaching system based on human resource management practices (HRMP): Study pertaining to majors in nursing undergraduate programme. *Technology and Investment*, 13(2), 70-82.

Yu, M., Jiao, Q., Wang, G. G., & Liu, Y. (2022). The threshold effect of commitment-oriented HRM practices on employee job performance: The role of employee age. *Employee Relations*, 44(6), 1372–1392.

Yuniarsih, T., Gaffar, M. F., Suryadi, E., Affandi, A., & Rohmawati, T. (2022). Job satisfaction as a mediator in improving employee performance through talent and knowledge management. *Journal of Eastern European and Central Asian Research*, 9(5), 749-762.