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EXAMINING THE IMPACT OF ARTIFICIAL INTELLIGENCE ON FOUR KEY HUMAN RESOURCE PRACTICES IN THE BANKING SECTOR OF PAKISTAN

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Abstract
The purpose of this study was to examine the impact of AI on HR Practices in the banking sector of Pakistan. The specific objectives of the study were to determine how AI influences five key HR practices i.e., Recruitment and Selection, Training and Development, Performance Assessment and Talent Management. The study population consisted of all the banking sector employees working in public and private sector banks operating in the Khyber Pakhtoonkhwa province of Pakistan, so non-probability sampling technique and furthermore Convenience sampling was used to collect data from respondents. The sample size of 384 was selected as the most appropriate for our research and ultimately 374 responses were used for analysis and interpretation. Different statistical tests were performed to test the reliability, validity and normality of data. Correlation analysis was performed to test the relationship between variables while simple linear regression to check the direct impact of AI on HR practices. These study findings indicated that when AI systems are fully integrated into the HR practices it will result in the improvement of those practices and will overcome the issues related to these practices. Finally, the study recommends integration of technology acceptance factors as well as exploring social, environmental and risk factors that may have an impact on the relationship between AI and HR practices.
Keywords: Artificial Intelligence, Human Resource Practices, Recruitment and Selection, Training and Development, Performance Assessment and Talent Management.

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Introduction

Artificial Intelligence (AI) refers to the use of technologies based on algorithmic programs to perform different tasks that otherwise require human's intellectual as well as cognitive abilities to do so (Chedrawi & Haddad, 2022; Dhamija & Bag, 2020) while Agrawal et al. (2018) described AI as the capacity of machines to solve complex problems or make predictions, a system possessing the capability to handle untold issues or problems. Organizations are readily adopting this technology because of different benefits like improved efficiency, accuracy, transparency, time saving and help in better decision making (Vishwakarma & Singh, 2023; Vrontis et al., 2021). These AI applications instead of a set of instructions provide different highly developed and advanced interface-based tools or gadgets; designed by AI developers to get the maximum of these technologies and use them in an appropriate way (Ertel, 2011).

Human Resource Management (HRM) provides a base in enhancing organizational capabilities, learning new means and securing new emerging capabilities. Precisely, Human Resource (HR) is apprehensive with accomplishing organizational goals (Ulrich and Lake, 1990). AI significantly enhances the capability of HR processes like candidates screening and selection, training and development, performance evaluation and talent acquisition through different functions like talented requisition, personalized training, systematic and targeted performance evaluation, reduced biases, expert decision making, task automation, machine learning algorithms, accuracy as well as innovative solutions provided by these systems leading to employee's satisfaction, quality of care and organizational growth (Shahzad et al., 2023).

Despite AI having huge potential for change or improvement (Nankervis et al., 2021) we find lack of academic research on its use at individual or organizational level (Nguyen et al., 2022); and one such area remaining to be explored is its use in Human Resource Management (HRM) (Vrontis et al., 2021). The demand, application and use of AI enabled HRM outcomes for automotive decision making; finding solutions to a problem as well as providing insight into different issues is on the rise (Malik et al., 2022; Saukkonen et al., 2019). Inspite of AI having several operational, functional and revolutionary benefits the existing literature related to its application and use in HRM is at best patchy and incomplete (Prikshat et al., 2023).

So, here comes the responsibility or the need to discover more about the adoption of AI related to HR practices, the way it can transform these practices or the factors playing a central role in its adoption. Taking the strategic core of the organizational strength (HRM) (Ortega-Cotto et al., 2022) and enabling it with the use of latest and innovative technology (AI) (Prikshat et al., 2023); this two point integration of organization (under the study of dependent variables) and technology (under the study of independent variable) will open new venue of research. Moreover, this research will try to address

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several post-adaptation challenges, provide opportunities and insight into AI enabled HRM (known as HRM $^{(AI)}$) outcomes, thereby contributing to the existing body of knowledge and providing a roadmap or policy guidelines for the success of an organization.

Objectives of the Study

This research attempts to determine the current utilization status of AI services in HRM practices as well as the perception of employees about the revolution it can bring to these practices. The main objective of the study is to examine the impact of AI on HR practices while its sub-objectives are as follow:

1. To examine the impact of AI on HR recruitment and selection practices.
2. To examine the impact of AI on HR training and development practices.
3. To examine the impact of AI on HR performance assessment practice.
4. To examine the impact of AI on HR talent management practice.

Literature Review

Artificial Intelligence (AI)

AI can be defined as the ability of machines to perform different tasks that are generally linked to human intellectual abilities to do so (Brennen et al., 218; Simmons & Chappell, 1988). Simply it is the ability of a machine that can act and think like humans and can do so in a rational way (Dhamija & Bag, 2020). Generally, it can be described as the ability of machines to forecast the future, make decisions related to that forecast or find solution to a problem using large amount of data in an efficient way (Agrawal et al., 2018).

Unlike previous application of automated systems in production or quality assurance AI based automated systems covers a much broader range, helping humans in different sectors or projected to be used in different areas which sets the course of mankind thus opening new venues of research and improvements. In the field of management different organizations as well as HR professionals are readily adopting this technology because of issues in using traditional methods of HR practices and the urgency to get improved results based on efficiency, accuracy, timely computation and help in better decision making (Lindebaum et al., 2020; Vishwakarma & Singh, 2023; Vrontis et al., 2021).

Human Resource Management (HRM)

HRM can be defined as "the management of the organizational human resources or its workforce through different policies, practices and systems having control on the behavior, attitude and performance of others" (Kramar & De Cieri, 2008) while according to Vincent & Joseph (2013) it is concerned with the organization, its employees and the interplaying linkage between them. It provides a mechanism for the employment and development of workforce where the basic aim of the philosophy is the effective management

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of people and that philosophy is based on different behavioral theories. Here the organization uses all its means and resources in an ethical manner in order to increase its productivity and effectiveness (Armstrong & Taylor, 2014).

HRM consists of all those policies, practices and systems that have an impact on employee's actions, deeds and approaches (Noe et al., 2007, p.5) and can play role in effective utilization of HR force. These policies and practices include recruitment and selection, training and development, compensation, career planning, performance appraisal, employee performance, labor relations and orientation etc. (Dessler, 2007, p. 4). Patterson et al. (1997) while linking the role/importance of different HR practices towards the success of an organization highlighted the importance of recruitment and selection as well as training and development because a well-qualified staff selected because of following HR selection practice and well trained because of following HR training practice will certainly contribute towards the success of an organization.

Human Resource (HR) Practices

HR Practices can be defined as all those activities performed by an organization for the effective utilization of its workforce and attainment of its goals. As HRM operates through its practices so is strong HRM system necessitates effective HR practices. HR practices can be grouped into different categories such as best practices, formal, sophisticated or professional (Tiwari & Saxena, 2012). Theories on these practices suggests that these practices are responsible for improved organizational performance and source of competitive advantage, leading to the observation that highly paid, well rewarded, committed and motivated workforce improves organizational efficiency and productivity (Boxall, 1996). Similarly, HR practices enhance performance of the organization in terms of financial performance i.e. productivity (Hyde et al., 2008) as well as employee's productivity (Soomro et al., 2011), leads to effective management of its workforce (Tripathy and Tripathy, 2008).

AI enabled HR Practices

The digitalization of HRM has brought a grand revolution (Garg et al., 2022; Votto et al., 2021). AI possesses the capability to handle large chunks of data efficiently (Di Vaio et al., 2020). The demand, application and use of AI enabled HRM outcomes for automotive decision making; finding solutions to a problem as well as providing insight into different issues is on the rise (Malik et al., 2022; Saukkonen et al., 2019). The integration of AI in decision making processes is bringing digital transformation and leading organizations towards success (Varsha, 2023); in a way compelling organizations to upgrade their system in order to cope with the rapidly changing environment and to effectively utilize its human resources (Waheed et al., 2019).

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Based on different functions of AI like high-speed computation, task automation, data driven decision making, algorithmic based technology, deep and continuous learning benefiting organizations through reduced cost, time saving, personalized and real time experiences finally lead us to the conclusion that AI enhances the efficiency and accuracy of HR practices. So based on the conclusion the following hypothesis is developed:

H1: AI has positive impact on HR Practices.

1. *Recruitment and Selection (R&S)*

According to Hamza et al. (2021) "recruitment is the process of discovering as well as selecting from a pool of competent candidates from both inside and outside of the organization". The process of recruitment is a challenging task and is one of the basic functions of management as organizations usually spend about 50-70% of their time on this practice every year (De-Cenzo et al., 2016; Orrick, 2008). According to Werther and Davis (1993) R&S consists of a sequence of stages like advertisement, initial application assessment, tests, interviews, physical tests, psychological tests and final hiring. All these stages can be broadly grouped into four categories like advertisement, receiving applications, initial applicant assessment and final selection. The ultimate decision made on the basis of these tests or assessments is known as R&S. Selection process starts after recruitment and it consists of selecting most suitable candidate from a pool of candidates identified in the recruitment phase.

- *AI enabled Recruitment and Selection Practice*

AI has the potential to transform the whole R&S process into a smarter one thus an increasing number of organizations are turning to it. AI not only helps in time consumption and sped up the whole R&S process, provides immediate feedback but also offers additional information about applicant's background (Meshram, 2023). AI based solutions processes the capability to handle large number of applicants, even hundreds, at a time (Mathew et al., 2021a). Cresswell (2018) argues that because of high-speed processors and transparency of output provided by these systems they can gather and analyze data much more easily and objectively. Upadhyay and Khandelwal (2018) argue that AI adds to both accuracy and reliability of the output regarding candidate's recruitment. Scholars like Mathew et al. (2021b), Vishwanath and Vaddepalli (2023) found that AI based applications can handle R&S related cases much effectively, within shorter span of time, help in better candidate selection and ultimately leading to the improvement in whole R&S process.

H1a: AI has positive impact on HR recruitment and selection practices.

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2. *Training and Development (T&D)*

After successfully completing the recruitment process the second major step faced by an organization is Training and Development (T&D) i.e. to equip its employees with the required skills and qualities related to the vision of the organization. T&D can be defined as a systematic process through which different knowledge and skills are imparted to employees in order to make them able to compete with the latest challenges that develop with the passage of time (Armstrong and Taylor, 2014). Apart from all these benefits provided by training programs it consumes a lot of time and other resources, so there is also mounting concern on the cost and effectiveness of these T&D programs (Elangovan & Karakowsky, 1999). Moreover, in case of T&D programs using traditional methods organizational leaders complain of absence of person specific programs (Sucharita & Seethalakshmi, 2022). T&D programs can also be costly and put pressure on financial constraints especially when an organization has to hire new trainers or buy different training materials. Similarly, the amount of time employees spend on these T&D programs will disturb their normal routine tasks leading to badly affecting the productivity or working of the organization (Hiremath et al., 2021).

AI enabled Training and Development Practice

AI provides open or self-paced T&D programs where one can have them at his own preferred place or time (Maity, 2019; Premnath & Chully, 2020) leading to the increase in work engagement and able to balance between official and personal matters in a better way (Rozman et al., 2023). Scholars like Bennani et al. (2022), Chen (2023), Upadhyay & Khandelwal (2019) found that AI assists in identifying areas where training is required and provide better interactive approaches through virtual reality (providing seemingly real experiences), as well as adaptive and personalized T&D programs which ultimately results in increased production, participation, encouragement, interest, learning based environment and better understanding further leading to reduction in cost as well as deployment of resources. Maity (2019) asserts that along with trainees AI also assists trainers regarding progression as well as the effectiveness of those T&D programs and better guidance for future programs as its programs are more employees oriented. Similarly, AI based T&D programs promotes a culture of learning within the organization (Schuhbert et al., 2023) whereby its employees are better equipped and dedicated towards the attainment of the organization goals and objectives (Kambur & Yildirim, 2023). Above all discussion regarding AI-powered T&D programs leads us to our research hypothesis that:

H1b: AI has positive impact on HR training and development practices.

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3. *Performance Assessment*

Performance assessment being an integral part of the career development process can be defined as the process of evaluating the job-related performance of employees (Greenberg & Baron, 2000). According to Werther and Davis (1985) organizations evaluate employee's performance through performance assessment. So from the organizational perspective performance assessment provides a formal system to HR managers/supervisors/leaders to measure and evaluate the job related attributes of employees against pre-set standards/rules in order to improve productivity and overall performance of the organization by providing balancing point between managing people and meeting organizational goals because for the growth and development of an organization it is necessary that employee's goals and objectives should be linked with the prospects of the organization (Boice, 1997).

AI based Performance Assessment

AI based advanced systems has the capacity of integration (connecting different processes and systems) and big data handling, so such AI based systems as proposed by Shanmugam and Garg (2015) provides well organized processes, improved transparency as well as well managed documentation and employee's ratings; where managers as well as lower employees can easily check their score card thus providing a clear picture of the situation. Premnath and Chully (2020) while examining the role played by AI regarding performance assessment suggested that AI provides a clear understanding of employee's performance by providing real time monitoring and feedback, giving rewards or bonuses to high achievers as well as suggesting corrective measures for those who failed to achieve their targets and compels them to score better and improve their performance. Similarly, AI-driven tools help in better performance assessment and skill gaps identification (Giuggioli & Pellegrini, 2023). The above cited research findings lead us to the formulation of following hypothesis:

H1c: AI has positive impact on HR performance assessment practice.

4. *Talent Management*

Talent Management can be defined as the systematic process of recruiting, developing and retaining the most beneficial or talented people within the organization (Davies & Davies, 2010; Rothwell & Kazanas, 2004). Talent management is very much critical to the success of the organization as it ensures identification or recruitment of most capable people and developing their skills (Iles et al., 2010). Apart from the benefits or advantages provided by talent management, organizations are also facing a number of issues while performing these practices using traditional methods. For example, in this digital era rapid advancements are happening at greater pace, so there is constant demand for acquiring new talent or skills (Khang, 2024). Moreover, talented or capable are always in demand and organizations have to adopt

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different tactics like giving rewards or bonuses in order to retain those employees (Dawson & Agbozo, 2024).

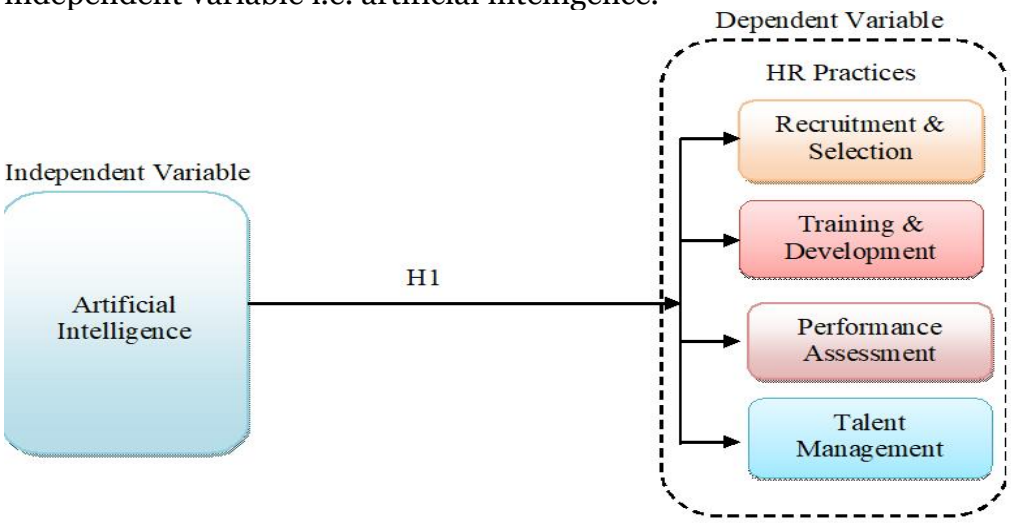
AI enabled Talent Management

The three main areas of talent management are talent acquisition, talent development and talent retention. AI can assist in all these areas by making processes more effective, efficient and timely (Kim-Schmid & Raveendhran, 2022). Top global organizations are adopting different technologies for talent acquisition and AI can greatly assist them in securing a large talent pool (Johnson et al., 2020). Scholars like Faqihi and Miah (2023) and Miller (2018) are of the view that AI uniqueness of providing automated, forecasting and predictive analysis-based systems have the potential to equip talent management with designing better strategies for talent development and retention. Moreover, Jia et al., (2018) and Vishwanath and Vaddepalli (2023) explored the big data handling capability of AI and found that AI assists organizations in talent management in improved identification and assessment resultantly, saving time and other resources. So, on the basis of above research findings the following hypothesis is drawn:

H1d: AI has positive impact on HR talent management practice.

Conceptual Framework

The conceptual framework of this study comprises total of five variables; four dependent variables; such as (1) recruitment and selection (2) training and development (3) performance assessment and (4) talent management and one independent variable i.e. artificial intelligence.



Conceptual Framework

Hypothesis

On the basis of research model as well as literature review the conceptual framework is built keeping in view the findings of Kambur et al., (2022). In

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this study four HR Practices are taken as an dependent variables as the study of Kambur et al. (2022) in Turkiye, found significant positive impact of all of these four variables.

H1: AI has positive impact on HR Practices.
H1a: AI has positive impact on HR recruitment and selection practices.
H1b: AI has positive impact on HR training and development practices.
H1c: AI has positive impact on HR performance assessment practice.
H1d: AI has positive impact on HR talent management practice.

Research Methodology

Research Design

Research design provides a crucial framework or blueprint of how the study proceeds while ensuring research questions are answered, research objectives met, and research problems addressed in an efficient manner (Marczyk et al., 2010). The preferred methods selected in our research design are such as achieving our objective in an unbiased manner, using pre-established theories for formulation and development of hypothesis as well as using different statistical tests for analysis and interpretation of data. So, Positivism was considered as the preferred choice. Pre-established theories were used for the development of hypothesis as well as quantitative methods of data collection. So, a top-down or deductive approach was adopted. Our research strategy was based on a survey method. Hence, close ended questionnaires were used for data collection. Moreover, mono method (quantitative) was used for data collection as well as due to time constraint cross-sectional study design was used for data collection.

Population of the study

The population for the study consisted of all the male/female employees of public sector commercial, specialized, local private and Islamic banks in whole Khyber Pakhtunkhwa (KP) province of Pakistan which includes managers, supervisors and the employees working under them.

Sample Size, Sampling Technique and Sources of Data

Valid research findings necessitate the importance of good sampling strategy (Kumar et al., 2013). Yamane (1967) proposed and further endorsed by Sekaran and Bougie (2009) that for population up to one million or where population is unknown a sample of 384 is sufficient.

In countries like Pakistan, India, Nepal and Bangladesh where researchers usually face lack of research funding selecting an appropriate sample size is a matter of convenience only (Bulmer & Warwick, 1993). Therefore, in view of the above research findings as well as facts and figures the sample size of 384 was selected as most appropriate for our research. To overcome the issue of low response oversampling was performed (Fink, 1995;

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Salkind, 1997) using formula given by Kotrlik (2001) so we got our final sample size equal to 480.

In this study as the population size was unknown as well as due to time limitations so non-probability sampling technique was selected. Furthermore, convenience sampling was used to collect data from respondents. Questionnaire was used as research instrument. Data was collected from male/female employees of all the banks (i.e. public sector commercial, specialized, local private and Islamic banks) operating in KP province.

Reliability Analysis

The following table shows the reliability statistics of all the variables used in our study. A threshold value of 0.7 indicated that all our scales were reliable.

Table 1: Reliability Statistics of all the Variables

Variables	Number of items	Cronbach's Alpha	Cronbach's Alpha based on standardized items
Artificial Intelligence	9	0.928	0.935
Recruitment and Selection	8	0.911	0.918
Training and Development	6	0.943	0.944
Performance Assessment	6	0.910	0.915
Talent Management	5	0.932	0.933

Descriptive Statistics

Descriptive statistics is considered as a first step in research as it summarizes data in an organized manner (Kaur et al., 2018). The following table shows descriptive statistics of our research variables:

Table 2: Descriptive statistics of Research Variables

Name	N	Minimum	Maximum	Mean	S.D
Artificial Intelligence	374	1.56	4.78	3.453	0.631
Recruitment and Selection	374	1.88	5.00	3.813	0.651
Training and Development	374	1.00	5.00	3.651	0.869
Performance Assessment	374	1.50	5.00	3.389	0.781
Talent Management	374	1.40	5.00	3.579	0.784

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Factor Analysis

KMO measure as shown below is 0.947 which is much greater than the threshold value and it means that the factor analysis for the selected variables is found to be appropriate to the data. Test value of 16034.815 and the significance value of 0.000 show that the sampling adequacy is significant at 99 percent confidence level; values are shown in the following table:

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.947
Bartlett's Test of Sphericity	Approx. Chi-Square	16034.815
	Df	990
	Sig.	0.000

Factor Extraction

After fulfilling the basic criteria of factor analysis, we move on to the next step i.e. factors extraction. Based on the factor loadings five factors having Eigen values more than one were identified as shown below:

Table 4: Total Variance Explained

Component	**Initial Eigen Values**			**Extraction Sums of Squared Loadings**		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	18.521	41.158	41.158	18.521	41.158	41.158
2	5.180	11.510	52.668	5.180	11.510	52.668
3	3.807	8.460	61.129	3.807	8.460	61.129
4	1.652	3.671	64.799	1.652	3.671	64.799
5	1.380	3.067	67.866	1.380	3.067	67.866

Factor Rotation

The following table shows rotated component matrix using orthogonal rotation.

Table 5: Rotated Component Matrix

	Components				
Items	**1**	**2**	**3**	**4**	**5**
Artificial Intelligence					
N_AI1	.642				
N_AI2	.725				
N_AI3	.669				

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N_AI4	.880				
N_AI5	.779				
N_AI6	.738				
N_AI7	.821				
N_AI8	.874				
N_AI9	.860				
Recruitment and Selection					
N_R_S1		.641			
N_R_S2		.606			
N_R_S3		.740			
N_R_S4		.584			
N_R_S5		.674			
N_R_S6		.587			
N_R_S7		.698			
N_R_S8		.689			
Training and Development					
N_T_D1			.743		
N_T_D2			.756		
N_T_D3			.727		
N_T_D4			.684		
N_T_D5			.694		
N_T_D6			.700		
Performance assessment					
N_PA1				.527	
N_PA2				.781	
N_PA3				.421	
N_PA4				.762	
N_PA5				.746	
N_PA6				.776	
Talent Management					
N_TM1					.686
N_TM2					.681
N_TM3					.696
N_TM4					.699
N_TM5					.716

Correlation Analysis

Correlation is a statistical procedure used to describe the strength as well as direction of association/relationship between two or more variables (Asuero et

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al., 2006; Franzese & Iuliano, 2018; Gogtay & Thatte, 2017). The Correlation matrix of our research variables is shown below, showing significant positive correlation amongst all the variables:

Table 6: Correlation Matrix

S. No	Variable	1	2	3	4	5
1.	Artificial Intelligence	-				
2.	Recruitment and Selection	.504**	-			
3.	Training and Development	.360**	.681**	-		
4.	Performance Assessment	.375**	.677**	.720**	-	
5.	Talent Management	.339**	.648**	.751**	.721**	-

Regression Analysis

It is a statistical technique used to describe the estimate of change in dependent variable because of independent variable(s) as well as the statistical significance or accuracy of that estimate (Allen, 2004; Skiera et al., 2021). The following table shows regression analysis against all our four dependent variables which ultimately validates our hypothesis H1 that AI has positive impact on HR practices.

Table 7: Regression Analysis

Hypothesis	Regression Weights	Beta Coefficient	R^2	F-test	p-value	Hypothesis Supported
H1a	AI → R&S	0.504	0.254	126.745	0.000	Yes
H1b	AI → T&D	0.360	0.130	55.394	0.000	Yes
H1c	AI → PA	0.375	0.140	60.719	0.000	Yes
H1d	AI → TM	0.339	0.115	48.156	0.000	Yes

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Discussion

The overall purpose of the study was to study the impact of artificial intelligence on human resource practices in the context of banking sector of Pakistan. In order to answer the research question and achieve our objective of the study hypothesis were formulated. The regression results indicate that AI has positive impact on all four HR practices in the banking sector of Pakistan such as for R&S indicating 9.9 % variance in R&S is accounted by AI and for one unit increase in AI R&S will increase by 0.11 units, T&D indicating 9.9 % variance in T&D is accounted by AI and for one unit increase in AI T&D will increase by 0.11 units, PA indicating 9.9 % variance in PA is accounted by AI and for one unit increase in AI PA will increase by 0.11 units and finally for TM indicating 9.9 % variance in TM is accounted by AI and for one unit increase in AI TM will increase by 0.11 units. All the results were found to be statistically significant; fully validating all our hypotheses that AI has positive and direct impact on R&S, T&D, performance assessment and talent management. From these findings it can be deduced that when AI system is fully integrated in the banking sector of Pakistan it will result in the improvement of HR practices and will overcome those issues related to these practices. For example, automation feature of AI could assist R&S in providing better means for talent hunting, reduction in time spent; stress involved as well as resources consumed in finding appropriate candidates, providing more thorough and detailed examination, selection without any personal biases and resultantly better and more qualified R&S. In case of T&D AI features like automation could save our time and other resources spent on different training programs. AI-based PA could provide real-time feedback resulting in more dedicated and motivated staff. Algorithmic and calculation-based abilities could provide error free performance determination and advanced analytics could help in better prediction of employee's future performance. As in the case of other HR practices, TM equipped with AI technology could provide a number of added advantages like better guidance in career path selection as well as giving a helping hand to acquire all those necessary skills or qualification in order to achieve that ambitious career plan.

Implication of the Study

The current study paid huge contribution to both theory and practice; providing insight to different issues being faced by HR professionals in the field of HRM as well as other employees; the way to handle these issues; ultimately resulting in the achievement of their goals and the success of the banking sector of Pakistan. In this way the current study has significant theoretical implications regarding our understanding of how AI can reshape HR practices. The present study was conducted in an under researched area (Pakistan), examining the impact of moderating and mediating variables and that also in the banking sector. Organizations planning to adopt AI enabled

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tools must focus on capacity building and infrastructure development while data-driven decision making and high-speed computational ability of AI can be helpful in better decision making. These findings could be equally beneficial to HR professionals regarding implementation of AI; ultimately leading to more effective and efficient HR practices; aligned with the goals and objectives of the organization and resultantly benefiting both organization as well as its employees. Finally, focusing on the banking sector of Pakistan the study added contextual dimension to the study. AI implementation provided means for timely and effective achievement of recruitment and selection processes, conducting updated training and development programs, merit-based performance assessment and efficient talent management system. So, this study offered contextually relevant insights that can be directly applied by banks in Pakistan.

Limitations and Future Research Directions

Although this study tried to cover several dimensions, it still has some limitations. In the current research considering the huge population and the importance of this study there is always chances of errors. In this research non-probability sampling furthermore, convenient sampling was used. Although non-probability is good for educational research where the aim is just to learn research process, its sampled population can't be compared with that of using probability sampling. As probability sampling provides much more factual position. In current study only banking sector employees were taken as respondents, while other potential respondents like employees working in IT, construction or education sector should also be included in future research. For authenticity, reliability and validity of the tools as well as research findings it is necessary that this research be carried out outside Pakistan, so that a general conclusion can be drawn about the impact of AI on HR practices. Scholars like Moseson et al. (2020) and Shtrikov and Shtrikova (2022) described the financial impact of HR practices using traditional methods, so a comparative study is suggested regarding HR practices using traditional methods versus AI enabled systems. Other HR practices like compensation, career planning, employee engagement, employee participation and communication, rewards, and succession planning play significant role towards the success of the organization.

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