تحليل دور أنظمة التوظيف القائمة على التكنولوجيا في تعزيز فعالية اكتساب المواهب: الدور المعدل لممارسات الموارد البشرية الرقمية في المستشفيات الخاصة في أربيل

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كيفية اقتباس البحث

عمر ، بدرخان عبد الله ، تحليل دور أنظمة التوظيف القائمة على التكنولوجيا في تعزيز فعالية اكتساب المواهب: الدور المعدل لممارسات الموارد البشرية الرقمية في المستشفيات الخاصة في أربيل، مجلة مركز بابل للدراسات الانسانية، آيار ٢٠٢٦،المجلد:١٦ ،العدد:٥.

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Analyzing the Role of Technology-Driven Recruitment Systems in Enhancing Talent Acquisition Effectiveness: The Moderating Role of Digital HR Practices in Private Hospitals in Erbil.

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ABSTRACT

This study aims to investigate the impact of technology on recruitment effectiveness with a special focus on the moderating role of digital HR systems in private hospitals of Erbil. It aims to explore valuable connections, enhance hiring processes, and offer guidance on optimizing human resource technology within the healthcare environment.

The methodology used in this research is a quantitative study with 204 questionnaires distributed to 21 private hospitals. Data analysis was conducted using correlation and moderation analysis via the PROCESS macro in SPSS. Using the interaction effect model, the study controlled for factors that could lead to inaccurate results, as it employed the model to explore the relationships among technology-driven recruitment systems, talent acquisition effectiveness, and digital human resource practices.

The study found that the insignificant correlation between talent acquisition, digital HR practices, and technology-driven recruiting tools. The interaction between digital HR practices and recruiting systems explained an additional 2.23% of variance in talent acquisition effectiveness (R2 change = 0.0223). this indicating that Digital HR practices moderate the relationship, highlighting their significance in enhancing the impact of recruitment technology in Erbil's private hospitals. The insignificant correlation of these variables may reflect the limited use of technology due to low technology adoption, inadequate digital infrastructure, and resistance to change.

ملخص

تهدف هذه الدراسة إلى دراسة أثر التكنولوجيا على فعالية التوظيف، مع التركيز بشكل خاص على الدور المعدِّل لأنظمة الموارد البشرية الرقمية في المستشفيات الخاصة بمدينة أربيل. وتهدف إلى استكشاف العلاقات القيّمة، وتحسين عمليات التوظيف، وتقديم إرشادات حول الاستخدام الأمثل لتكنولوجيا الموارد البشرية في بيئة الرعاية الصحية.

اعتمدت الدراسة على منهجية كمية، حيث وُزِّعت ٢٠٤ استبيانات على ٢١ مستشفى خاصً في مدينة اربيل. وتم تحليل البيانات باستخدام تحليل الارتباط والتعديل عبر PROCESS macro في برنامج SPSS وباستخدام نموذج تأثير التفاعل، تحكّمت الدراسة في العوامل التي قد تؤدي إلى نتائج غير دقيقة، وذلك من خلال توظيف النموذج لاستكشاف العلاقات بين أنظمة التوظيف القائمة على التكنولوجيا، وفعالية استقطاب المواهب، وممارسات الموارد البشرية الرقمية.

وخلصت الدراسة إلى عدم وجود ارتباط ذي دلالة إحصائية بين استقطاب المواهب، وممارسات الموارد البشرية الرقمية، وأدوات التوظيف القائمة على التكنولوجيا. وقد فسّر التفاعل بين ممارسات الموارد البشرية الرقمية وأنظمة التوظيف نسبة إضافية قدرها ٢.٢٣% من التباين في فعالية استقطاب المواهب $R^2 = 0.0223$. يشير هذا إلى أن ممارسات إدارة الموارد البشرية الرقمية تُعدّل العلاقة، مما يُبرز أهميتها في تعزيز أثر تكنولوجيا التوظيف في المستشفيات الخاصة في أربيل. وقد يعكس ضعف الارتباط بين هذه المتغيرات محدودية استخدام التكنولوجيا نتيجةً لانخفاض تبنيها، وعدم كفاية البنية التحتية الرقمية، ومقاومة التغيير.

1- INTRODUCTION

The world today is witnessing rapid technological changes, and technology has become a critical factor in changing and developing the sectors, including the field of human resource management. Among the

areas that have seen significantly improved outcomes is recruitment and talent acquisition, where technology-driven recruitment systems encourage efficiency in hiring processes. These systems not only help simplify administrative processes but also ensure better decisions in selecting the right employees, and thereby bring glory and honor to one and all in the given situation. This study aims to investigate the impact of technology-based recruitment systems on talent acquisition effectiveness, including the moderating role of digital human resource practices of private hospitals in Erbil.

Talent acquisition is widely viewed as one of the key pillars upon which institutions depend to attain success and continuity in the fiercely competitive job market. As the required competencies are lacking globally, particularly in private hospitals, traditional recruitment operators are experiencing the need to use modern and effective ways to recruit the required personnel more and more. This is where the advent of technology-based recruitment systems comes into play, which are capable of using artificial intelligence, data analysis, and machine learning techniques to find the right talents. In addition, these systems make it easier to identify the right candidate, as it helps to objectively handle skills and experiences.

Moreover, the effectiveness of technological recruitment systems is impacted moderately by digital human resource practices. Utilization of advanced digital tools is expected to enable HR departments of private hospitals in Erbil to make communications with candidates more efficient, track employee performance, and identify the training and development needs. It will help not only in improving the employee experience but also in enhancing the data-driven and modern technology-driven organizational culture to build the overall competency framework in the institution to attract and retain the right talent.

This study also explores the impact of technology-based recruitment systems on improving talent acquisition processes in Erbil's private hospitals by examining the role of digital human resource practices in mediating this relationship. Based on the level of data gathered and the number of HR experts questioned from these institutions, the research aims to shed light on the advantages and disadvantages of these systems and how private hospitals in Erbil can take advantage of these systems to achieve their strategic objectives.

This research aims to improve professional and academic knowledge of how the processes related to human resources are becoming influenced by technology, particularly in the healthcare sector, which is one of the sectors most starved for qualified personnel. Moreover, it aims to present practical recommendations that could be adopted by private hospitals in Erbil to strengthen the processes in their human resources and talent acquisition procedures, which ultimately will improve the quality of care provided to patients and the community as a whole.

1.1.Problem Statement:

The influx of foreign investments and the entry of the private hospitals sector into the local market have created a competitive environment for attracting and retaining qualified talent. This paper investigates the impact of recruitment technology systems in terms of the main objective of recruitment and the role of digital practices as a factor improving the effectiveness of recruitment processes.

1.2.Research Aim and Objectives

The purpose of the study is to investigate the impact of technology-based recruitment systems on talent acquisition performance in private hospitals in Erbil, with the moderating effect of digital human resource practices. The study, relative to these systems, aims to improve recruitment processes, increase the accuracy of competency selection, and minimize

the time and effort expended in these processes. Moreover, it examines how digital practices have an impact on enhancing employee experience as well as on establishing an attractive working environment for competencies.

1.3. Research Questions

Research questions are overarching questions of the study, which the study attempts to answer through analysis and investigation. Within this research, the research questions can be directly established as:

1.What is the significance of using technology-based recruitment systems in enhancing the efficiency of talent acquisition in private hospitals in Erbil?

2.What are the main benefits that private hospitals in Erbil achieve from using technological recruitment systems?

3.What is the barriers that the private hospitals in Erbil face when establishing recruitment systems based on technology?

4.What are the barriers for the successful adoption of information technology-based recruitment systems in the health care domain?

1.3.Significance Of the Study

The importance of this study lies in several key aspects, including:

1.Improving the Healthcare Sector: This study serves to enhance the recruiting process in private hospitals in Erbil, which will, in turn, have a positive impact on the healthcare services offered to the community.

2.Attracting and Retaining Talent: The study highlights how technology and digital practices are used to attract and retain qualified talent, which is important in a competitive industry like healthcare.

3.Offering Practical Recommendations, the research intends to deliver practical suggestions for the private hospitals in Erbil, so they can enhance their recruiting procedures and talent management broadly.

Therefore, this research has implications for private hospitals' performance improvements through better talent acquisition systems and

practical utilization of this to inform better human resource management within the healthcare sector.

2. LITERATURE REVIEW

The use of technology in human resource management (HRM) is on the rise, having revolutionized recruitment in almost every sector, including healthcare. Talent acquisition effectiveness relies heavily on the data managed by technology-driven recruitment systems, such as applicant tracking systems (ATS), artificial intelligence (AI), and digital human resources (HR) platforms, during the recruitment process. That literature review focuses on the effects of these systems on recruitment results concerning private hospitals, in particular, the case of Erbil hospitals. It also investigates the moderating impact of digital HR practices on recruitment effectiveness.

2.1. Technology-Driven Recruitment Systems: An Overview

The systems being referred to are technology-driven recruitment systems, which are so efficient that they can automate and digitize the process of hiring completely. Such tools are ATS, AI-based candidate screening, video interviewing technology, and predictive analytics (Bondarouk & Brewster, 2016; Chapman & Gödöllei, 2021). ATS helps recruiters deal with wide pools of applications more efficiently, while reducing the administrative burden of manual recruitment (Holm, 2012; Breaugh, 2017). AI makes it easier to select candidates through resume analysis, job fit prediction, and reducing bias in recruitment decisions (Upadhyay & Khandelwal, 2018; Tambe et al., 2019).

2.2. Adoption of Technology-Driven Recruitment in Healthcare

Organizations in the healthcare field experience distinct recruitment challenges because of the high demand for qualified professionals and general shortages of the healthcare workforce (Haddad & Toney-Butler, 2020; Marler & Boudreau, 2017). According to preliminary studies, working technology-led strategies into the recruitment process leads to

improved hiring efficiency, enhanced candidate experience, and reduced time-to-hire (Okolie, U. C.,2023). But these types of systems have so far not been adopted by private hospitals, particularly in developing regions such as Erbil.

2.3. Talent Acquisition Effectiveness

Talent acquisition refers to the process of attracting and selecting the best candidates for open positions within an organization. Three dimensions of recruitment effectiveness get affected due to technology-driven recruitment–

2.3.1. Quality of Hire

Quality of hire is the value new hires add to an organization. Research shows that recruitment using AI improves quality through matching candidates with jobs (Mihalcea, 2017; Strohmeier & Piazza, 2015). Dineen and Soltis (2011) conducted a meta-analysis that showed organizations with technology-driven screening tools experienced a 20% increase in employee performance metrics over traditional hiring methods.

2.3.2. Time-to-Hire

In a competitive job market, shortening the hiring process is essential. Already, ATS and AI-powered tools have reduced hiring times by screening resumes from the raw text and shortlisting candidates (Koch et al., 2018; Langer et al., 2021). In healthcare with urgent recruitment needs, tech-enabled systems speed up the hiring of medical staff to relevant vacancies, making up for workforce shortages (Neubert & Montañez, 2020; Kavanagh & Johnson, 2017).

2.3.3. Cost Reduction

Recruitment technology minimizes hiring costs by reducing reliance on external recruiters and optimizing advertising expenses. A study by Stone et al. (2015) found that HR departments that leverage digital solutions have seen up to 30% decrease in recruitment costs. Cost-efficient hiring is

a necessity at private hospitals, where budgetary and financial sustainability are under constant scrutiny (Marler & Fisher, 2013).

2.4. Role of Digital HR Practices as Moderator

Showing how mature and integrated are the digital HR practices applied in the organization can also determine, to a great extent, the effectiveness of technology-driven recruitment. Digital HR technologies such as cloud-based HR systems, self-service portals, and data-driven decision making for better workforce management (Marler & Fisher, 2013; Bissola & Imperatori, 2019).

2.4.1. Integration with HR Processes

In order to succeed, recruitment technologies need to be integrated into the existing HR functions such as onboarding, training, and performance management (Parry & Tyson, 2011; Strohmeier, 2020). Research indicates that hospitals with advanced digital HR practices experience more benefits from using recruitment technologies than hospitals characterized by fragmented HR systems (Bondarouk & Ruël, 2013; Chapman et al., 2020).

2.4.2. HR Analytics and Data-Based Decision Making

HR analytics improves recruitment effectiveness, as it collects valuable manpower information regarding trends in hiring, candidate behavior, and workforce planning (King, 2016; Levenson, 2018). According to a study by van den Heuvel and Bondarouk (2017), 40% more efficient hiring was reported by organizations with better, data-informed recruitment decision-making with the support of HR analytics. In private hospitals, HR analytics can be used to optimize workforce allocation and predict future talent (Jeske & Shultz, 2016).

2.4.3. Employee Experience and Engagement

Digital HR framework enhances candidate experience and engagement seamlessly throughout the recruitment process (Stone et al., 2015; Vathanophas & Thai-ngam, 2017), when implemented in the right way.

Positive candidate experiences also build employer branding, which can then help attract top talent in competitive job markets. Candidates seek transparent, technology-enhanced hiring processes that integrate well with the work organization, as per research by Van Esch and Black (2019).

2.5. Adoption Challenges and Barriers

In addition to this advantage, however, the implementation of technology-based recruitment in private hospitals has many impediments:

2.5.1. Financial Constraints

Many private hospitals have been unable to adopt advanced HR technologies due to budget limitations (Dessler, 2020; Kavanagh & Thite, 2012). Small healthcare providers may not be able to afford ATS, AI technologies, and HR analytics software because of implementation costs.

2.5.2. Resistance to Change

Employees and HR professionals often don't want to switch from traditional ways of hiring to digital ones (Kavanagh & Johnson, 2017). Studies have shown that improving management techniques, such as training employees and getting stakeholders involved, are needed for technology to be adopted successfully (Tambe et al., 2019).

2.5.3. Data Security and Compliance

Digital recruitment systems increase ethical issues related to data privacy and compliance with regulations, particularly in healthcare (Acikgoz, 2019; Strohmeier & Piazza, 2015). Hospitals must be sure these recruitment technologies comply with data protection laws and regulations (Jeske & Shultz, 2016).

This use of technology-based recruitment systems can improve the performance of talent acquisition practices in private hospitals in Erbil. But the effective implementation of these systems depends on the combination of digital HR practices, cost-effectiveness, and the

organizational readiness level. Long-term implications of recruitment technologies for healthcare workforce sustainability and patient care outcomes need to be examined in future research.

3. THEORETICAL FRAMEWORK

3.1. Conceptual Model

The conceptual framework demonstrates the relationship between technology-driven recruitment systems and talent acquisition effectiveness, with digital HR practices as a moderating variable. This model assists researchers in understanding the impact of recruitment technologies on hiring in private sector hospitals in Erbil.

3.2. Key Components of the Model

1.**Independent Variable (IV): Technology-Driven Recruitment Systems**

- Includes applicant tracking systems (ATS), AI-powered recruitment tools, automated resume screening, and predictive analytics.
- These systems help simplify the hiring process, optimize efficiencies, and elevate candidate selection.

2.**Dependent Variable (DV): Talent Acquisition Effectiveness**

- Measured by **quality of hire, time-to-hire, and cost of hire**.
- Successful hiring results in a greater fit for the job, a lower turnover rate, and improved performance of the organization.

3.**Moderating Variable (MV): Digital HR Practices**

- The extent to which HR functions leverage digital tools and data-driven decision-making.
- HR digitalization strengthens the influence of technology-enabled hiring on hiring effectiveness.

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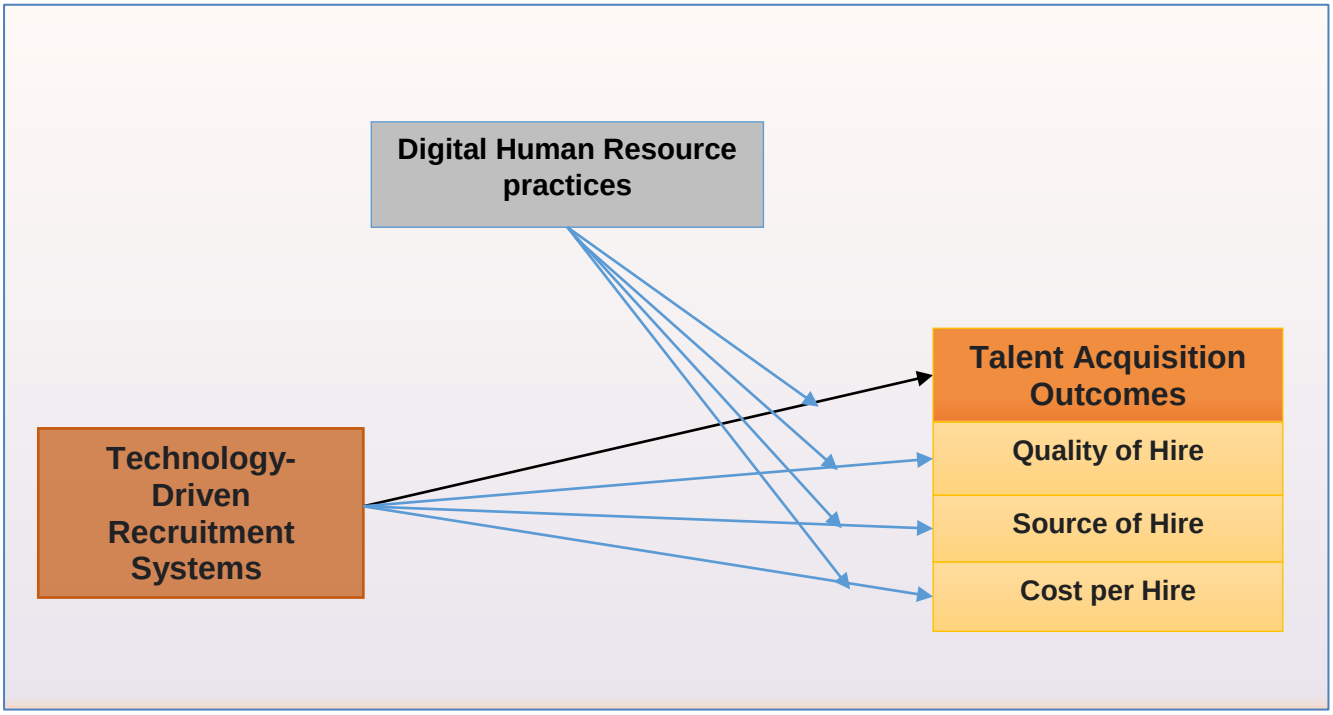
3.3. Expected Relationships

- Technology-driven recruitment positively influences talent acquisition effectiveness.
- The impact is stronger in hospitals with well-established digital HR practices.



This model highlights the need for hospitals to invest in recruitment technology while ensuring seamless integration with HR processes to maximize its effectiveness.

3.4. Hypotheses

It has been hypothesized in this study that technologized processes in recruitment systems are partly responsible for enhancing acquisition effectiveness of talent. It also investigates the moderating and mediating effects of digital HR practices in this context, highlighting how hospitals can utilize technology to address their staffing challenges.

3.4.1. Main Hypothesis

H1: The technology-driven recruitment systems positively and significantly affect talent acquisition efficiency for private hospital digital human resource practices in Erbil.

Sub-Hypotheses (based on talent acquisition effectiveness dimensions):

H1a: The quality of hire is significantly enhancing the quality of hire in private hospitals in Erbil.

H1b: The Cost of Hire in Private Hospitals in Erbil is Significantly Improved By utilizing Technology-Driven Recruitment Systems

H1c: The effectiveness of sourcing candidates from diverse channels (source of hire) in private hospitals in Erbil is significantly impacted by technology-driven recruitment systems (source of hire).

3.4.3. Mediating Hypotheses

H2: Digital human resource practices moderate the relationship between technology-driven recruitment systems and the talent acquisition effectiveness of private hospitals in Erbil.

4. RESEARCH METHODOLOGY

4.1. Research Design

This study employs a quantitative research approach, using statistical methodologies to examine the relationship between a technology-driven recruiting system and talent acquisition effectiveness, mediated by digital HR practices. The data were gathered from HR professionals in private hospitals in Erbil using a survey methodology. Quantitative method of data collection enables objective variable measurement, hypothesis testing, and result generalization. Surveys are basically structured and generate reliable data; statistical analysis (regression and moderation analysis) provides causal links. Consequently, this methodology can be utilized to assess the efficacy of a recruitment mechanism inside a healthcare setting.

4.2. Scope of the Research

This study investigates the impact of technology-driven recruitment systems on talent acquisition effectiveness in the healthcare sector, particularly in the private hospitals in Erbil. So, the study targets HR professionals, recruiters, and hospital administrators to investigate recruitment technology adoption, hiring efficiency, and HR digitalization. The study does not consider public hospitals or other industries to ensure the context remains relevant. The findings empower hospital management, the human resources policymakers, and the health care recruiters in Erbil with recommendations for improving integrated recruitment technology approaches and workforce acquisition systems for the private health care sector.

4.3. Data Collection Methods

Using a survey-based quantitative method, this study collects data from HR professionals, recruiters, and hospital administrators working in private hospitals in Erbil. The technology-oriented recruitment systems, talent acquisition effectiveness, and digital HR practices are measured using a structured questionnaire.

The study used Likert-scale questions to assess respondent's perceptions and experiences. A random sampling approach is used to allow representativeness across hospitals. To ensure accessibility, data is collected through online and face-to-face surveys. This method enables statistical analysis to be conducted that can objectively assess the association between the variables of interest while ensuring the findings will be reliable and generalizable to the recruitment setting within healthcare.

4.4. Sampling and Data Analysis Method

The study is utilized using a random sampling method that uses HR professionals, recruiters, and hospital administrators in the private hospitals of Erbil. Statistical sampling approaches are used to determine a target sample size to support representativity of the sample.

Descriptive statistics, correlation analysis, and moderation analysis in SPSS and the PROCESS macro are conducted to analyze the data. Regression models investigate the relationship between technologically-driven recruitment systems and the effectiveness of talent acquisition, moderation analysis tests how the impact of these practices is constructed and interpreted through the lens of digital HR. These approaches have enabled statistical validity and reliability, while also identifying key relationships and trends in healthcare recruitment technology advancement.

4.5. Limitations of the Study

This study focused only on private hospitals in Erbil, which limits the ability to generalize findings to public hospitals or other industries. It is based on self-reported survey data, which can be biased. Moreover, the cross-sectional nature of the study represents data at one point in time, meaning that it cannot yield insight into long-term trends in recruitment systems or their effectiveness.

5. RESULTS AND ANALYSIS

5.1. Model Overview

- Dependent Variable (DV): GC (talent acquisition effectiveness)
- Independent Variable (IV): GB (technology-driven recruitment systems)
- Moderator (MV): GD (digital HR practices)
- Covariate: GA
- Sample Size: 204

5.2. Correlation analysis

Correlation analysis correlates different variables with each other, in this case, GB, GC, and GD. To do so, they are looking at correlations between these variables, the statistical significance level of those correlations, and what that means either for academics as researchers or practitioners using this information.

Table 1: Correlations (GA, GB, GC, GD)

Correlations

		G A	G B	G C	GD
G A	Pearson Correlation	1	.052	.026	-.050
	Sig. (2-tailed)		.457	.713	.480
	N	204	204	204	204
G B	Pearson Correlation	.052	1	.007	.051
	Sig. (2-tailed)	.457		.916	.467
	N	204	204	204	204
G C	Pearson Correlation	.026	.007	1	.067
	Sig. (2-tailed)	.713	.916		.345
	N	204	204	204	204
GD	Pearson Correlation	-.050	.051	.067	1
	Sig. (2-tailed)	.480	.467	.345	
	N	204	204	204	204

There is no significant relationship found between the following variables: GB vs GC (r=0.007, p=0.916). The fact that they are near-zero means that there is almost no linear relationship, and so the p-value is very high indicates that there is almost no association. This means that any change in GB is not systematically associated with a change in GC, and any correlation between the two is likely due to random variation. These findings provide no support for the hypothesis of a significant linear relationship between GB and GC (Table 1).

GB and GD:

With a Pearson correlation of 0.051 and a p-value of 0.467, the result show very weak and non-significant relation between GB and GD,

GC and GD:

Pearson correlation = 0.067; p = 0.345. No significant relationship between GC and GD.

The GB, GC, and GD correlation analysis does not show a significant relationship. It may also reflect that these variables are not directly linked in a linear or independent format, or else their relations are dependent, moderated, or mediated by factors that are not controlled for in this analysis.

5.3. Regression Analysis Report

These findings show several regressions that were conducted to understand the relationship between GB (Independent Variable) and where we should predict outcomes such as GC (dependent Variable), COST (cost of hire), QUALITY (quality of hire), and SOURCE (source of hire). The outputs also provide statistical information like R-squared and ANOVA details (e.g. how well each G B predicts).

5.3.1. Model Analysis

A.Model for "GC":

The R-squared showing of the results of the regression is. 000 — suggesting that "G B" accounts for no variance in "GC." ANOVA test p-value: 0.916 suggesting that "GB" does not significantly affect "GC," further proving that "GB" has no explanatory power on "GC" ($p > 0.05$). The coefficient for "GB" is. 023, with a high p-value of 0.916 denoting insignificance (Table 2).

Table 2: ANOVA for (GB, GC)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.201	1	.201	.011	.916[b]
	Residual	3680.976	202	18.223		
	Total	3681.176	203			

a. Dependent Variable: G C

b. Predictors: (Constant), G B

B.Model for "COST OF HIRE":

This model also has an extremely low R-squared of .005, meaning "GB" has nearly no predictive power over "COST." ANOVA analysis yields a p-value of . 310, which again suggests that the relationship is not statistically significant (Table 3). > The "GB": coefficient is -0.099, and the p-value is. 310, for which there was no substantial association with the cost of hiring.

Table 3: ANOVA of (GB, cost of hire)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.826	1	3.826	1.035	.310[b]
	Residual	746.880	202	3.697		
	Total	750.706	203			

a. Dependent Variable: COST

b. Predictors: (Constant), G B

C.Model for "QUALITY OF HIRE":

The output of "QUALITY" gives an R-squared of .015, indicating limited predictive power from "G B." Meanwhile, the ANOVA returned a p-value of. 095, was very close to statistically significant, but it still does not achieve conventional levels (generally < . 05) (table 4). The coefficient (-

. 226) states a negative correlation, again, suggesting that more "G B" equals worse quality of hire, but not statistically significantly supported by this data.

Table 4: ANOVA for (GB, quality of hire)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.429	1	19.429	2.986	.085[b]
	Residual	1314.160	202	6.506		
	Total	1333.588	203			

a. Dependent Variable: QULITY

b. Predictors: (Constant), G B

D.Model for "SOURCE OF HIRE":

As with previous models, R-squared =. 005 and that the p-value for the ANOVA is. 329, demonstrating that the "G B" does not have a significant effect on the source of hire. Since the p-value is. 329, this association is not statistically significant (Table 5).

Table 5: ANOVA of (GB, source of hire)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.075	1	8.075	.957	.329[b]
	Residual	1703.847	202	8.435		
	Total	1711.922	203			

a. Dependent Variable: SOURCE

b. Predictors: (Constant), G B

This general analysis of this section concludes that there is no strong evidence showing that the impact of G B on G C, COST, QUALITY, and SOURCE is negative/positive (significant). The ANOVA tests all yielded high p-values, which indicates that these relationships are not statistically significant. These results indicate weak relationships for "G B" with the dependent variables listed, suggesting caution in interpreting "G B" as a correlate in the context of these data.

5.4. Moderation analysis

This study examines how digital HR practices moderate the relationship between technology-driven recruitment systems and talent acquisition effectiveness. With the use of the PROCESS macro in SPSS, the study analyzes interaction effects, demonstrating how digital HR practices

modify the strength and direction of this association and how organizations can optimize recruitment strategies.

In this analysis, the model tests whether the relationship between GB (IV) and GC (DV) is moderated by GD (MV), while holding GA constant.

5.4.1. Model Summary

With an R-squared value (R^2) of 0.0276, it suggests that the combined effect of GB, GD, and the interaction between them and GA only explains 2.76% of the variance in GC. Thus, this low contribution implies that the model cannot explain the observed variability in GC, and that the vast majority of variability in GC remains unexplained by these predictors.

The F-statistic was 1.4134, and the p-value was 0.2309, demonstrating that the overall model was not statistically significant. In other words, the predictors do not explain a significant proportion of the variance in GC, and any correlations observed could easily have occurred by random chance.

5.4.2. Regression Coefficients

The relationship between GB (IV) and GC (DV) depends on the level of GD (MV), because the interaction term (GB × GD) is significant (p = 0.0337). The main effects of GB, GD, and GA are nonsignificant.

Table 6: coefficient of regression between all variables

Predictor	Coefficient	SE	t	p-value	LLCI	ULCI
Constant	23.4460	1.3754	17.0471	0.0000	20.7339	26.1582
GB (X)	0.0491	0.2155	0.2276	0.8202	-0.3759	0.4740
GD (W)	0.0630	0.0801	0.7869	0.4323	-0.0949	0.2210
Int_1 (GB×GD)	0.1207	0.0565	2.1381	0.0337	0.0094	0.2320
GA	0.0375	0.1246	0.3009	0.7638	-0.2082	0.2832

5.4.3. Test of Interaction Effect

In this study, interaction term we aim to determine the significance of the indicates that this additional ٠.٠٢٢٣Change of ²GB × GD). The R) change in the model explains 2.23% more of the dependent variable (GC). Although a modest percentage, this indicates that the interaction between the independent variable (GB) and the moderator (GD) uniquely contributes to the explanation of variance in GC in addition to the main effect of the predictors.

The F-statistic for the interaction is 4.5716, with a p-value of 0.0337, which is statistically significant at the conventional alpha level of 0.05. This result tells that the interaction effect between GB and GD

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significantly influences GC. In other words, the relationship between GB (technology-driven recruitment systems) and GC (talent acquisition effectiveness) is not uniform but depends on the level of GD (digital HR practices). This finding underscores the importance of considering the moderating role of GD in the model and suggests that GD influences how effectively GB impacts GC.

5.4.4. Conditional Effects

Tables of conditional effects. One useful analysis is to examine the conditional effects, which show how the effect of GB on GC varies at levels of GD:

Table 7: coefficient of regression among all the variables

GD (Moderator) Level	Effect	SE	t	p-value	LLCI	ULCI
-3.7388 (Low)	-0.4022	0.2877	-1.3983	0.1636	-0.9695	0.1650
0.0000 (Mean)	0.0491	0.2155	0.2276	0.8202	-0.3759	0.4740
3.7388 (High)	0.5004	0.3150	1.5884	0.1138	-0.1208	1.1216

The above table tells us that:

- At lower levels of GD, the influence of GB on GC is negative and insignificant.
- The impact is close to zero and non-significant at the mean level of GD.
- High levels of GD showed a positive but non-significant effect of GB on GC ($p = 0.1138$).

6. CONCLUSION AND RECOMMENDATIONS __

Key Findings

1.Since the interaction term (GB × GD) is significant, GD significantly moderates this relationship.

2.GB, GD, and GA main effects are not significant.

3.The relationship interaction plot would show how GD alters the connection between GB and GC.

These findings of the moderating test suggest that digital HR practices (GD) significantly moderate the relationship between technology-driven recruitment systems (GB) and talent acquisition effectiveness (GC). The association's strength and direction depend on the degree of digital HR practices. However, the interaction explains only a small additional variance (R^2 change = 2.23%), and individual conditional effects are not significant. Further research could focus on other variables or settings that improve the model's explanatory power.

Recommendations

The results of this study can help shed light on the role of technology-driven recruitment systems in achieving the effectiveness of talent acquisition in private hospitals in Erbil, and the following recommendations could be suggested:

1.Leverage Digital HR Practices as Moderators

Hospitals must integrate their ATS and performance management systems into a digital HR strategy to increase recruitment outcomes. This link could be improved by training HR workers on digital technologies and aligning hiring technology with corporate goals.

2.Expand Technology Adoption

Hospitals and systems could consider AI for candidate screening and predictive analytics for workforce planning. These techniques boost efficiency, reduce biases, and improve hiring.

3.Address Barriers to Adoption

This is where hospitals can opt for a more economical solution, like Cloud-based systems that come with a rigorous change management program to facilitate a smooth transition. This can also alleviate resistance and create a climate that does not dismiss innovation.

4.Continuous Evaluation and Feedback Mechanisms

Most significantly, the recruiting system must have a feedback loop. Maintain regular evaluation of recruitment systems to reduce time-to-hire, improve offer acceptance, and increase cost-efficiency. Finally, hospitals should seek applicant and recruiter input for improvement prospects.

Conclusion

The study examined the impact of technology-driven recruitment systems on talent acquisition effectiveness in Erbil Private hospitals, among other tests, adopting digital HR practices as a moderating variable. The results show no direct significant relationships between recruitment technology and hiring outcomes; however, they are significantly moderated across digital HR practices — demonstrating its importance in relation to those efficiencies gained from recruitment technology. The study highlights the crucial role of HR to digitalize procurements that would act together to enhance the profit of recruitment technology, despite its limitations. Further research interests could include the roles of additional factors, such as organisational culture and leadership in the complexities surrounding technology use in healthcare recruitment.

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