

Exploring the Impact of HR 4.0 on Organizational Performance

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Abstract - This study investigates the relationship between the adoption of HR 4.0 technologies and quality hires, focusing on the mediating and moderating effects of skill matching. The hypotheses propose that the adoption of HR 4.0 technologies significantly influences quality hires directly, as well as indirectly through skill matching as a mediating factor and moderating factor. This study explores the significant impact that HR 4.0 technologies have on hiring excellent employees for businesses. This study explains the complex effects of cutting-edge technology tools like automation, machine learning, artificial intelligence (AI), and data analytics on the hiring and selection process through a thorough examination of the literature and empirical evidence. These findings highlight the importance of both the adoption of HR 4.0 technologies and the implementation of effective skill matching strategies in enhancing the quality of hires within organizations. Implications for theory and practice are discussed, along with suggestions for future research.

Keywords: HR 4.0, Organizational Performance

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INTRODUCTION

The advent of the Fourth Industrial Revolution, often referred to as Industry 4.0, has brought about transformative changes across various sectors, including human resources (HR). HR 4.0 represents the integration of advanced technologies such as artificial intelligence (AI), machine learning, big data analytics, and the Internet of Things (IoT) into HR practices. This integration aims to enhance efficiency, improve decision-making, and foster a more dynamic and agile workforce. As organizations navigate this new landscape, understanding the impact of HR 4.0 on organizational performance becomes crucial. According to Anwar, (2017), with regard to Kurdistan region of Iraq, the growth of the SME segment is also of significant position and requires some feasibility, in specific as the nation experiences tasks in the systems of restricted work prospects for people in the private region and a wealth which lasts to trust generally on the hydrocarbon division. In Kurdistan region of Iraq, 40 percent of the employees is engaged in SME sector and this GDP range is between 15 to 20 percent (Anwar & Abdullah, 2021) The accelerating pace of technological innovation, the connectivity of data, and the advent of intelligent automation present a unique confluence of factors, which have necessitated a Revaluation of traditional HR practices. (Hirshberg et al., 2020)

The integration of IoT in HR practices further exemplifies the shift towards a more connected and responsive workplace. Wearable devices and smart office technologies can monitor employee well-being, track attendance, and provide real-time feedback on workplace conditions. These innovations contribute to a healthier and more productive work environment, ultimately boosting organizational performance (Vazquez, 2011). Technological and economic developments have worsened the belief that the level of knowledge assets gives an indication of the achievement of efficiency and effectiveness of human resources necessarily requires the potential for future profitability using the technologies of the Fourth Industrial Revolution 4.0. (Youssef & Al-Tamimi, 2024)

Employee job effectiveness is a very critical variable for both employees and organizations. Effective employees show high levels of productivity and performance, which in turn play a significant part in lifting organizational performance. Scholars found that employee job effectiveness is affected by numerous factors including human resource management (HRM) practices. The introduction of industry 4.0 concept results in various changes in how organizations should work. However, the transition to HR 4.0 is not without challenges. Organizations must address issues related to data

privacy, cybersecurity, and the ethical implications of using AI in HR processes. Ensuring that employees are adequately trained to work with new technologies and fostering a culture of continuous learning are also critical for the successful implementation of HR 4.0. (Shamaileh et al., 2023)

(Kosti et al., 2018) However, just like in other disciplines, ergonomics science has undergone some advances, changes and renewals relating to the innovations and needs brought by this age and technology. When recent studies in the field of ergonomics are examined, the most important contributions within the scope of human-machine interactions come from studies with brain imaging techniques, especially those using neuroscience tools [7]. The main reason for this is that new developments are happening in Industry 4.0 today: labour-intensive work is decreasing over time in light of these developments, and technology-intensive jobs that require a greater mental workload are increasing. As an example of these studies, Ricketson established the neurorobotics laboratory infrastructure with its own resources at the beginning of 2017 in Turkey (Kosti et al., 2018) Current studies suggest that human resource management is situated in a central place for the achievement of environmental performance. Organizations implement environmental management by carrying out green practices (e.g., personnel selection, and performance evaluation) that are consistent with environmental goals (Tang et al., 2018)

LITERATURE REVIEW

Adoption of HR.4.0 Technologies

Traditional human resource management practices include several practices such as employee recruitment and selection, employee training and development, employee performance appraisal, employee job planning. Organizations cannot depend only on these traditional practices in today's world that are inspired by new technologies (Verma et al., 2020) such as industry 4.0 technologies. Hence, organizations should readjust their policies of human resources i.e., to adopt smart human resource 4.0 in order to gain numerous benefits such as performing human resource operations quickly and efficiently, attracting, developing and retaining new-age talents, and leaner human resource departments (Vereycken et al., 2021).

Academics have investigated the elements influencing HR 4.0 technology adoption in businesses. The desire for greater efficiency, cost savings, talent competitiveness, regulatory compliance, and push to innovate are a few examples of these drives. Knowing these factors makes it easier for academics and professionals to evaluate the reasons behind business decisions to invest in HR technology. Effect on HR Functions: Researchers have looked at how HR 4.0 technologies are changing the way that conventional HR tasks are done. Their effects on hiring and acquiring people, performance management, learning and growth, employee engagement, pay and benefits,

and the provision of HR services are all included in this. Researchers and practitioners may predict changes in HR roles and responsibilities by having a better understanding of these consequences.

Quality of hires

The calibre of hiring determines the calibre of employee performance. While many executives would agree that this is a simple reality, the majority of businesses today do not identify and systematically manage the elements that affect the quality of recruitment. However, in the future, businesses who establish standardised procedures and measurements pertaining to hiring quality would gain a significant competitive advantage. Numerous research examining strategies to reduce expenses and boost workforce efficiency can be found across the business literature. However, there hasn't been much published on the importance of hiring quality and how it relates to profits and sales. (Lermusiaux & Snell, 2005) .

Several researchers have defined QOH per their convenience, and HR leaders view QOH more as a "fit" construct to be determined through psychometric assessments and past job-skill experience. Among the several suggested approaches to measuring the quality of hire, new hire performance, and turnover rates, employee engagement and culture fit with the new hire are considered the most effective (Dutta & Vedak, 2023). Studies focused on using practice tests to manage the candidate quantity-quality dilemma. Still, they limited the definition of quality to the ability to separate qualified and unqualified candidates and reduce selection costs. Several organizations also consider the tenure of employees and use it as a measure of QOH. In a LinkedIn study, 97% of the respondents agreed that tenure is crucial for the organization.

Further, 39% of the hiring managers argued that QOH is the most valuable metric for tracking recruitment performance (Dutta & Vedak, 2023). During the previous three years, the majority of the companies that responded to the poll (55%) have employed new workers for occupations that need a two- or four-year degree from New Jersey colleges and universities. Numerous companies voice their worries over the degree of preparation obtained by graduates holding bachelor's and associate's degrees. Refer to Table 3. Employers in New Jersey, four out of five of them, do not believe there is a difference in the quality of education between graduates from New Jersey colleges and those from other states. Additionally, during the previous five years, employers did not see any appreciable improvements in the calibre of college graduates. One employer gave this explanation for her worries about the calibre of graduates: "The demands in the workplace haven't gotten worse; they've just gotten bigger." (Van Horn, 1995)

Employee engagement satisfaction levels

Outcomes of job satisfaction as reported in the literature include its effect on employee productivity (Bhatti & Qureshi, 2007), which means that employee productivity and performance can be enhanced based on employee job satisfaction (Sabuhari et al., 2020). Explaining the casual relationship between job satisfaction and job effectiveness could refer to the drivers of job satisfaction that supports employee competencies. Based on prior works on employee job satisfaction, it was noted that employees who are satisfied with various factors such as supervisor cooperation, communication style, working conditions, pay (Sabuhari et al., 2020) identified various facilitators of job satisfaction such as adequate job resources, career development, organizational systems, employee training, employee motivation, and positive organizational value.

Defined EE as the "application of individuals' physical, cognitive, and emotional expression during role performances in engagement, organisation members' selves". But much as with other behavioural science concepts, there is disagreement about what exactly constitutes EE. Define EE, for example, as having two facets: absorption and attentiveness. While absorption refers to "being engrossed in the role and refers to the intensity of one's focus on a role," attention is defined as "cognitive availability and amount of time one spends thinking about and role." (Kahn, 1990). The research states that 37% of Indian workers are engaged. The degree of engagement in India varies according to the kind of organisation, size, gender, and functions of the workplace. When it came to employee engagement, younger workers showed less than married and older workers. Employee engagement was highest in the chemical and healthcare industries and lowest in the banking and financial services sector. Indian managers highlighted three factors—more career development and training opportunities (28%)—more chances to do what one does best (21%) and more demanding work (15%)—as the main contributors to job satisfaction among the drivers of engagement (Abraham, S., 2012). Social exchange theory, which serves as its theoretical basis, offers a theoretical framework for explaining why workers decide to participate in their profession to varying degrees. The theory serves as a theoretical foundation for comprehending the notion of employee engagement and the likelihood of higher levels of engagement among employees who get sufficient chances for professional growth. Additionally, according to Kim-Soon and Manikayasagam (2015), the conditions of engagement model implies that employment may be seen as an exchange of resources on both an economic and socio-emotional level. (Kim-Soon & Manikayasagam, 2015)

Skill Matching

"The process by which individuals are dynamically aligned with organisations and the situations (roles, jobs, tasks, etc.) within them" is the definition of matching. Building on this, the dynamic matching lifecycle model Human capital theory: Talk about how a person's aptitudes and competencies affect their performance and output in the job. Examine how an individual's talents and work needs match to determine how job matching theory affects performance and job happiness. (Weller et al., 2019) provides a more holistic view incorporating two core mechanisms: initial matching and dynamic matching. Initial matching refers to the selection stage where matches are created through recruitment and hiring; dynamic matching refers to subsequent adaptations through development and reconfiguration utilizing vertical or horizontal mobility, as well as the termination stage (Weller et al., 2019). Conventional methods: Examine techniques used to evaluate people's talents, such as standardised examinations, interviews, and resumes. New approaches: Talk about how technology, such as artificial intelligence and machine learning, is used to evaluate and match capabilities. Examine the techniques used to determine skill matching, including: Quantitative techniques (such as surveys and statistical analysis). qualitative techniques (such as case studies and interviews). mixed-methodologies strategies. after the information has been located, personnel must possess the abilities to assess the source's and its contents' value for the job at hand. Additionally, employees must possess the abilities to store and arrange digital data for simple retrieval. Because they often utilise several digital devices, today's workers need to be able to share and manage information across these devices. (Song & Ling, 2011)

METHODOLOGY

Research Design

The research adopted a quantitative approach to examine the impact of HR 4.0 on organizational performance. A cross-sectional design was implemented to collect data at a single point in time from participants representing different demographic backgrounds.

Sampling

The study utilized a convenience sampling technique to select customers. A sample size of 350 respondents was chosen based on Skill Matching and Employee engagement and satisfaction levels.

Random Sampling

Random sampling, a strategy for selecting samples from a group of individuals, guarantees that every potential participant has an equal chance of being picked. A representative sample of the complete population may often be obtained by randomly selecting a sample from a group. Random sampling

is among the most straightforward techniques for obtaining data from a large population.

When the population is only picked once, the random sampling formula is as follows.

Data Collection

Gathering data is a critical component of every research endeavors. Primary data collection and secondary data collection are the two methods of information gathering that are most often employed. Using a questionnaire, the main data will be obtained. Aside from these places, books, essays, research papers, yearly reports, and periodicals and journals may also include secondary data.

Tools for Data collection

Surveys/questionnaires: To gather information from respondents, structured questions are used in surveys, which are tools for collecting data. Their usage in research is common, since they provide valuable perspectives on attitudes, beliefs, and experiences. Researchers may quantify data, look for trends, and understand the different perspectives of teacher, student and parents on a given topic by using surveys, which are an adaptable instrument.

Inclusion and Exclusion Criteria

- **Inclusion Criteria:** the students, teachers, educated parents who are willing to participate in the study.
- **Exclusion Criteria:** Those who were under the age of 10 at the time of data collection and who were unwilling to participate in the study were declined.

Tools and Techniques of this Study

Tools

In this research, the SPSS (Statistical Package for Social Sciences) application is used.

Techniques

Regression Analysis

Regression analysis is a statistical approach for determining the connection between one dependent variable and one or more independent variables. It seeks to understand how changes in the independent factors affect changes in the dependent variable. The basic concept is to adapt a mathematical model to the data that best captures the connection. The most frequent method is linear regression, which uses a straight line to estimate the connection. Regression analysis is adaptable and extensively used in a variety of areas, including economics, biology, and social science. It helps researchers make predictions, analyses patterns, and determine the degree and type of linkages within datasets. The analysis generates a

regression equation that may be used to estimate the dependent variable's value using the values of the independent variables.

The coefficients in the regression equation indicate the intensity and direction of the associations. A positive coefficient suggests a positive link, while a negative coefficient denotes a negative relationship. Regression analysis is also used by researchers to analyses the statistical significance of correlations, which helps in determining if the observed patterns are dependable and not due to chance. Overall, regression analysis is an effective approach for modelling and analyzing complicated connections in datasets.

Correlation Tests

The correlation statistical approach is used to determine and clarify the direction and intensity of a link between two variables. The strength of the relationship between changes to one variable and changes in another is ascertained by the correlation test. Most often used, the Pearson correlation coefficient (r) ranges from -1 to $+1$. If the result is positive, it suggests that the variables are positively correlated, meaning that as one increases, the other also increases. When one variable increases, the other drops, indicating a negative correlation. This is shown by a negative result.

Correlation does not suggest causation; it only reveals the presence and strength of a correlation. Correlation analysis is used by researchers in many domains, including psychology, economics, and biology, to investigate the relationships between variables. It's an effective method for detecting patterns and creating predictions based on observable correlations. Correlation tests assist researchers comprehend the interdependence of variables, which aids hypothesis testing and informs future study. They give useful insights into the nature of relationships within data sets, which aids decision-making and contributes to evidence-based research in a variety of fields.

Hypothesis Testing (T- Test)

Hypothesis testing, which is often done using T-tests, is an important statistical method for assessing the feasibility of research proposals. It ascertains if the observed facts significantly deviate from the probability distribution. T-tests are necessary for contrasting the mean values of two groups to ascertain if observed differences are statistically significant. Because they facilitate the making of data-driven decisions and logical deductions from empirical data, t-tests are often used in scientific research. The t-test may be performed in a number of methods, some of which are mentioned below:

- **One Sample T-test:** With the use of the one-sample t-test, the mean of only one

group is contrasted to the provided and extrapolated means from a population.

- **Paired Sample T-test:** When comparing and contrasting the mean of two measurements taken from the same subjects, items, or equivalent units, a paired sample t-test is used. If a sample is drawn from the same group as the people being researched, the paired sample t-test statistical method may be used.
- **Independent two-sample t-test:** The means of two different groups are compared and examined using an independent two-sample t-test. similar to having two distinct study groups.

OBJECTIVES OF THE STUDY

- To Automate the screening process, reducing time-to-hire and improving the quality of hires.
- To Forecast talent needs and identify potential skill gaps before they become critical.
- To Reduces biases in performance appraisals by relying on quantifiable data.
- To Ensures the right talent is in place to meet organizational objectives

HYPOTHESES

H1:

Adoption of HR 4.0 technologies is significantly influences on Quality Hires.

The globe has seen significant change and invention, and many of these developments are credited to the Industrial Revolutions. From England, other European nations saw an economic revolution starting in 1760. Agrarian and animal husbandry, along with trades and craftspeople working on projects like weaving, blacksmithing, and handcrafted benches, comprised the economy prior to the Industrial Revolution. The steamer's invention brought about the creation of an economic structure based on mechanization, economics, and serial production using land, labour, and agriculture. Along with the mechanization came an increase in sales and manufacturing volume. As a result of the capital's increased use of machines in production, large corporations have started to emerge. After finding new jobs, the populace began to concentrate in the cities.

(Saraç & Yağlıkara, 2018)

This study looks at how Industry 4.0 (I4.0) technologies affect operators' learning curves. Data was gathered throughout the onboarding process of new operators in a quality control workstation. There were two different scenarios taken into consideration: before and after I4.0 technologies were used. Each scenario involved the collection of data from ten operators, each of whom completed the quality inspection cycle thirty times in a

row. The learning process in the two groups was evaluated using a 2-parameter hyperbolic learning curve model. The outcomes showed that operators using I4.0 technologies learned at a far faster rate than those using I4.0 help for the same jobs. The groups' final performance levels did not differ much from one another. A theoretical gap in the relationship is filled by our investigation.(Tortorella et al., 2023)

H2:

Adoption of HR 4.0 technologies is significantly influences on Quality Hires by the mediating factor Skill Matching.

The industrial and service industries have seen significant changes in development due to technological advancements. An growing trend for forward-thinking businesses is the integration of Industry 4.0 technologies into corporate operations. This study suggests an Industry 4.0 innovation model based on the technology-organization-environment (TOE) paradigm, which is connected to company performance, process innovation, and product innovation. The test results showed that, surprisingly, compatibility, top management support, and competitive pressures can determine the adoption of Industry 4.0 technology—rather than cost or employee capability. Technology adoption can only indirectly affect company performance through the mediation effects of product and process innovation. The results also showed that the type of industry and international commerce may moderate the adoption of new technologies: employee capability appears to have a greater influence on technology than manufacturing industry does.

(Zhong & Moon, 2023)

One of the most important aspects influencing an organization's effectiveness is its workforce. A successful company recognizes that human resources are essential to

Factors have a direct impact on and contribute to performance 'Any organization's ability to succeed is mostly dependent on the actions and decisions made by its personnel, however a number of other elements also have a role, including the organization's size, operations, and surrounding environment. Human resource management techniques are frequently used to assess an employee's performance inside the company. In the current day and highly competitive business environment, there is a propensity to increase employee performance through the improvement of HRM practices. The way an employee performs is by using their knowledge, abilities, experiences, and skills to carry out.(Et.al, 2021)

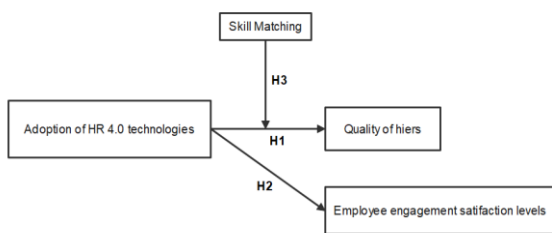
H3:

Determine the factors that influence a company's sustainable performance, and investigate how the adoption of Industry 4.0 may moderate a company's

financial, environmental, and social sustainability. The core theories of the triple bottom line, resource-based view, and stakeholder theory were applied, and data was gathered from 269 Malaysian manufacturing businesses across three sectors. The findings demonstrated that corporate sustainability performance is significantly impacted by stakeholder pressure, organizational skills, green marketing, and green entrepreneurial attitude. In the meantime, there was support for the direct effects of organizational sustainability on social, environmental, and financial issues. Adoption of Industry 4.0 demonstrated notable moderating impacts on sustainable performance's financial and environmental aspects. The report offers manufacturers important new insights into how to effectively address sustainable development. Managers and policymakers can use the data to help create strategic strategies that will help the industry achieve sustainable performance. Adoption 4.0(Ijaz Baig & Yadegaridehkordi, 2023)

Artificial Intelligence (AI) is causing a major shift in the human resources (HR) environment in Jordan's IT and telecommunications sector in corporation. This study, "Transforming HR: The Impact of AI Integration on Recruitment Practices in Zain Jordan," explores this development with a particular emphasis on how AI is being used in hiring at Zain Jordan. It will therefore investigate how AI changes the recruiting process, focusing on effectiveness, candidate happiness, and the relationship between organizational culture and technology readiness. Even though AI is becoming more and more popular, there aren't many empirical studies that are relevant to the Jordanian setting, which makes this a rare chance to look at its potential applications. By evaluating the both overt and covert effects of AI in HR recruitment, this study aims to offer practical insights. (Ijaz Baig & Yadegaridehkordi, 2023)

Conceptual Framework



Hypothesis:

H₁: There will be significant impact of Adoption_HR_4.0_technology and Quality of hire.



Table 1: Regression Weights

Path Co efficient			Unstandardized Estimate	S.E.	Standardized Estimates	C.R.	P
Quality HIRE_	<---	Adoption HR	.093	.044	.133	2.103	.036
AHR5	<---	Adoption HR	1.000		.722		
AHR4	<---	Adoption HR	1.087	.085	.763	12.851	***
AHR3	<---	Adoption HR	1.095	.087	.745	12.588	***
AHR2	<---	Adoption HR	1.073	.087	.733	12.402	***
AHR1	<---	Adoption HR	1.000	.083	.707	12.004	***
QH1	<---	Quality HIRE_	1.000		.506		
QH2	<---	Quality HIRE_	2.232	.237	.878	9.417	***
QH3	<---	Quality HIRE_	1.375	.168	.631	8.209	***
QH4	<---	Quality HIRE_	1.537	.170	.772	9.067	***
QH5	<---	Quality HIRE_	1.421	.165	.689	8.598	***

Table depicts a hypothetical structural equation model that show cases the interdependence between Two variables, namely the Adoption of HR 4.0 technologies and Quality of hires. In the present model, the independent variable is the Adoption of HR 4.0 technologies, where the dependent variable is Quality of hires. The findings of the investigation indicate a positive and statistically significant relationship between Adoption of HR 4.0 technologies and Quality of hires ($\beta=.093$, $P<.05$).

The standardized coefficient of .133, a positive association between Adoption of HR 4.0 technologies and Quality of hires, as shown in the route connecting these two variables. The correlation coefficient values (C.R. values) show large magnitudes, suggesting that the observed associations are statistically significant. The fit indices indicate that the model has

good fit, since the factors exhibit statistical significance with p-values over 0.05. The total model fit was evaluated by using seven distinct fit indices, which together demonstrated a statistically significant positive association between Adoption of HR 4.0 technologies and Quality of hires.

Table 2 Model fit

Variable	Value
Chi-square value(χ^2)	54.161
Degrees of freedom (df)	34
CMIN/DF	1.341
P value	0.40
GFI	0.918
RFI	0.955
NFI	0.966
IFI	0.991
CFI	0.991
RMR	0.37
RMSEA	0.031

The quality of fit was acceptable representation of the sample data ($\chi^2 = 54.161$), NFI (Normed Fit Index) = 0.966; IFI (Incremental fit index) = 0.991, GFI (Goodness of Fit) = 0.918, RFI (Relative Fit Index) = 0.955, and CFI (Comparative Fit Index) = 0.991, which is much larger than the 0.90. Similarly, RMR (Root Mean Square Residuals) = 0.37, and RMSEA (Root mean square error of approximation) = 0.031 values is lower the 0.000 critical value. Results indicated a good fit for the model presented including RMSEA of 0.031, RMR of 0.37, GFI of 0.918, and CFI of 0.991

H₂: There will be Mediation effect of Skill matching on mediate relation between Adoption HR 4.0 technology and Quality of hire.

Table 3: Regression Weights:

Path	Co efficient	Unstandardized Estimate	S.E.	Standardized Estimates	C.R.	P
Skill M	<--- Adoption of Hr	.586	.034	.680	17.314	***
Quality HIRE	<--- Adoption of Hr	.507	.030	.590	17.174	***
Quality HIRE	<--- Skill M	.367	.034	.368	10.710	***

The regression analysis presented in Table 2 explores the connection between Adoption of HR 4.0 technologies, Skill matching, and Quality of hires, with a specific emphasis on examining the mediating role of Skill matching. Based on the findings, it is evident that

the utilization of Adoption of HR 4.0 technologies and the level of Skill matching play a crucial role in influencing Quality of hires. The unstandardized estimate for the path from Adoption of HR 4.0 technologies to Skill matching is 0.586, with a critical ratio (C.R.) of 17.314, suggesting a robust positive correlation. In a similar vein, the relationship between using Adoption of HR 4.0 technologies and Quality of hires is supported by a substantial unstandardized estimate of 0.507 and a C.R. of 17.174. In addition, there is a noteworthy unstandardized estimate of 0.367 and a C.R. of 10.710 when considering the path from Skill matching to quality of hires.

H₃: There will be Moderation effect of Skill matching on moderate relation between Adoption HR 4.0 technology and Employee engagement satisfaction levels.

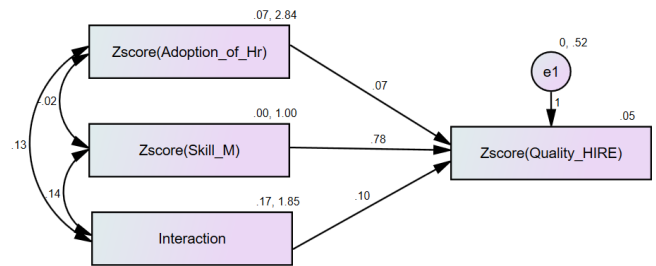
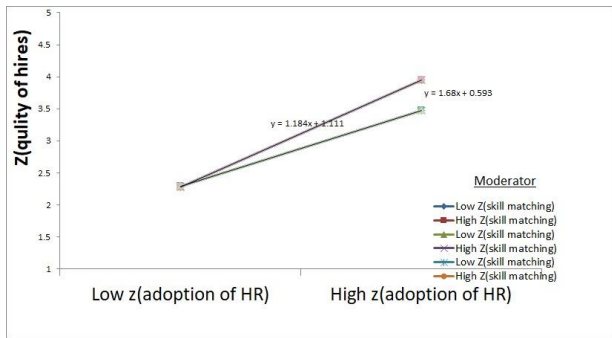


Table 4: Regression Weights

Path	Co efficient	Unstandardized Estimate	S.E.	Standardized Estimates	C.R.	P
ZSCORE Quality HIRE	<--- ZSCORE (Skill. M)	.775	.039	.716	20.023	***
ZSCORE Quality HIRE	<--- ZSCORE Adoption of Hr	.072	.023	.113	3.164	.002
ZSCORE Quality HIRE	<--- Interaction	.099	.029	.124	3.466	***

The regression analysis presented in Table 3 examines the relationship between Adoption of HR 4.0 technologies and ZSCORE Quality Hire, taking into account the role of ZSCORE Skill matching as a moderator. The findings indicate a notable influence of utilizing Adoption of HR 4.0 technologies and the level of ZSCORE Skill matching on the ZSCORE Quality Hire. The estimate for the regression weight of Adoption of HR 4.0 technologies on ZSCORE Quality Hire is 0.072, with a standardized estimate of 0.113, suggesting a positive association between the two variables. Similarly, the estimate for the regression weight of ZSCORE Skill matching on ZSCORE Quality Hire is 0.774, with a standardized estimate of 0.716, indicating a stronger positive association between ZSCORE Skill matching and ZSCORE Quality Hire. The estimate for the regression weight of Interaction variables on Employee engagement satisfaction levels is 0.099, with a standardized estimate of 0.124, suggesting a negative association between the two variables.



We tested the Z (skill matching) as a moderator. Result indicate that interaction term of Z(Transparency) and Z (Adoption HR 4.0) exerts Positive and a significant influence on Z(Quality of hires) ($\beta = 0.02$, $P < 0.05$). The result shows that there is statistical support for the moderating role of Z (Skill Matching) in our data which is hypothesized nature of relationship. Based on the results in the aforementioned table, that Transparency have a significant moderating effect between Extent of HR 4.0 implementation and Satisfaction levels.

HYPOTHESES

H1: Adoption of HR 4.0 technologies is significantly influences on Quality Hires.

H2: Adoption of HR 4.0 technologies is significantly influences on Quality Hires by the mediating factor Skill Matching.

H3: Adoption of HR 4.0 technologies is significantly influences on Quality Hires by the moderating factor Skill Matching.

CONCLUSION

The way businesses handle their human resources has undergone a dramatic change with the arrival of HR 4.0. HR may become a strategic partner in advancing organizational performance and accomplishing corporate goals by utilizing cutting-edge technologies. The secret to success is to handle the related problems, make sure these technologies are in line with larger company goals, and successfully integrate them into the HR department.

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