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## **MEDIATING ROLE OF ORGANIZATIONAL INNOVATION IN THE RELATIONSHIP BETWEEN HUMAN RESOURCES MANAGEMENT STRATEGIES AND ORGANIZATIONAL PERFORMANCE: EMPIRICAL EVIDENCE FROM IRAQ\***

*İnsan Kaynakları Yönetim Stratejileri ve İnavasyon  
Yönetiminin Çalışan ve Organizasyon Performansı  
Gelişmesinde Rolü: Kuzey Irak'ta Yatırım Kurulu Örneği*

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### **Abstract**

This research aims to build a model that explores the mediating role of organizational innovation in the relationship between human resources management strategies (HRMS) and organizational performance based on empirical data obtained from managers and employees working for the branches of investment boards in northern Iraq. The quantitative research method was used, and the research methodology was aimed to develop the relationship and influence between the model structures. The research hypotheses were examined using partial least squares path modeling based on structural equation modeling (SEM). The findings showed direct and indirect

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relationships between research constructs. Results showed that human resources management strategies positively and significantly related to organizational innovation and organizational performance. Organizational innovation becomes a necessity, particularly when organizations want to improve their performance and maintain competitiveness. Organizations can focus on all their human elements through innovation in human resources and thus improve organizational performance. In addition, the results presented that organizational innovation is positively and significantly related to enhancing organizational performance. The current research will contribute to enhancing the literature by representing that organizational innovation mediates the relationship between HRMS and organizational performance. Furthermore, results showed that organizational innovation partially mediated the relationship between HRMS and organizational performance.

**Keywords:** Human resources management strategies, organizational innovation, and organizational performance

**JEL Codes:** O15; D23; L21

## Öz

Bu çalışmanın amacı, insan kaynakları yönetimi stratejileri (İKYS) ile örgütsel araştırma yöntemiyle, performans arasındaki ilişkide örgütsel yeniliğin rolünü, kuzey Irak'taki yatırım kurullarının şubelerinde çalışan yönetici ve çalışanlardan elde edilen deneysel verilere dayanarak araştıran bir model oluşturmaktır. Bu minvalde, nicel araştırma yöntemi kullanılmış ve bu araştırma yöntemiyle, model yapıları arasındaki ilişkiyi ve söz konusu yapıların birbirine olan etkilerinin incelenmesi amaçlanmaktadır. Araştırma hipotezleri, yapısal eşitlik modellemesine dayalı kısmi en küçük kareler yöntemi modeli kullanılarak incelenmiştir. Bulgular, araştırma yapıları arasında doğrudan ve dolaylı ilişki olduğunu göstermektedir. Sonuçlar, insan kaynakları yönetimi stratejilerinin örgütsel yenilik ve örgütsel performans ile aralarında pozitif ve anlamlı bir ilişki olduğunu da göstermektedir. Ayrıca, bulgular örgütsel yeniliğin örgütsel performansın artmasıyla olumlu ve anlamlı bir şekilde ilişkili olduğunu ortaya koymaktadır. Mevcut araştırma, örgütsel yeniliğin İKYS ile örgütsel performans arasındaki ilişkiye aracılık ettiğini göstererek literatürün geliştirilmesine katkıda bulunacaktır. Örgütsel yenilik, özellikle organizasyonlar için performanslarını iyileştirmeyi ve rekabet gücünü korumayı hedef haline getirmelerini zorunluluk haline getirmektedir. Diğer bir sonuca göre, organizasyonlar, insan kaynaklarındaki inovasyonlar sayesinde, tamamıyla insan faktörlerine ağırlık

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verebilirler ve böylelikle örgütsel performanslarını iyileştirebilirler. Buna ilaveten, bulgular, örgütsel yeniliğin İKYS ile örgütsel performans arasındaki ilişkiye kısmen etki ettiğini göstermektedir.

*Anahtar Kelimeler:* İnsan kaynakları yönetimi stratejileri, örgütsel yenilik, örgütsel performans

*JEL Kodları:* O15; D23; L21

## 1. Introduction

Human resources (HR) consider as essential capital that must be developed and invested with a modern view. The studies on human resource management strategies (HRMS) and organizational innovation (OI) have expanded importance in the literature and, most significantly, their influence on organizational performance (OP). HRMS is to processes under the business's approach as a handling development that enables business strategies to be realized more effectively (Koser et al., 2018). It is also clear that development and growth depend mainly on innovation since the path of progress is achieved by human capital and innovation (Boxall and Purcell, 2011; Mustafa, 2016). For human resources managers to perform their strategic role in organizations, they must contribute their shares to their organizations' development and growth. Based on that organizations should be able to add value to the success and efficiency of the organization. In this context, innovation is also a significant factor for businesses to produce value and sustainable competitiveness in today's complex and changing environment. Therefore, organizations with more innovation will be more successful, allowing them to achieve the best OP, respond to changing environments, and create new capabilities (Farhang et al., 2018: 75). Thus, organizations need to be innovative to subtract products and market operations by predicting customer needs to gain a competitive advantage. Companies, including the most recent investment councils in project innovation, will be more successful if they can respond to changing environmental conditions and develop new capabilities that allow for better staff and institutions. Effective innovation can benefit from avoiding crises and then, the innovative attitude can help stay (Koser, 2019).

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The importance of understanding the concepts of HRMS and innovation is beginning to be realized as the flawed logic that innovation projects are coincidentally linked to information, knowledge, and enhancing OP (Rasool et al., 2019). OP is considered the way to achieve work goals. Accordingly, organizations are still looking for effective HRMS by re-establishing designing their structures, involving employees in developing policies more, creating a system of quality circles, and creating new incentives for concrete individual, group efforts, and other achieving methods improving performance (Abdullah et al., 2020; Caliskan, 2010). Modern organizations pursue to raise OP levels, support and enhance their human resources, such as training and development, evaluating their performance, and motivating them by developing their management practices and using them to improve the outcomes (Jabouri, 2009). Therefore, this research explores the mediating role of OI in the relationship between HRMS and OP based on empirical data obtained from investment boards in north Iraq. To remainder the current research is prepared in six sections, section one is the introduction. Section two is included the literature review on HRMS, OI, and OP. In section three we addressed the research conceptual model and hypothesis development. In section four, we dealt with the methodology of the research, through addressing the study population and sampling, measurement of the main constructs, research subjects, and data analysis methods. Section five covered analysis results, in section six, we discussed the research findings. In the last section, we addressed the main conclusions, recommendations, contributions, limitations, and suggestions for future research.

## **2. Literature Review**

### **2.1. Human Resources Management Strategies**

HRMS represent advanced intellectual practices that direct the management processes and activities in an organized manner to pursue the goals for which the organizations and companies were established. The HRMS requires an integrated system that includes a precise mechanism for setting goals, desired results, and following up

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on their achievement, modification, and development in light of internal and external variables (Zizlavsky, 2020). HRM strategies are the organization's overall direction to achieve its strategic objectives through its human resources that contribute to organizing its strategic plan, despite the emergence of HRM in different forms and levels within the organizational structures of establishments. The process of objective linkage between the general organization strategy, business strategy, and strategy of functional levels requires considering a set of considerations when determining the location of human resources management in the structure of the service or product organization (Caliskan, 2010). The strategic interest in human resources is mainly focused on subjects and issues related to employing human resources decisions to service the visions and ambitions of general strategies adopted by the organization when facing technological, economic, and social changes (Shahzad et al., 2008).

According to Chen and Huang (2009), the recruitment strategy is the range of activities and procedures used by the organization to identify employment sources and attract them according to the specific disciplines required in the human resources plan. The training strategy is adapting training programs to develop the organization by forming the human element according to studying its reality, actual needs, and employees' subsidiary needs (Shahnaei and Long, 2015). According to Arnold (2010), the development strategy is to increase the workforce's knowledge, skills, and capabilities to work in all areas to raise their productive efficiency to the maximum possible extent. In this regard, developing strategies for HRM is based on the directives of the general plan of HR (Caliskan, 2010). Performance evaluation is a procedure that comprises measuring and assessing the results of employee performance and the work they do. Performance evaluation is linked to promotion and career opportunities. It's an incentive for more learning and development to keep up with the broader and more complex requirements of senior officials in administrative peace, retain institutional staff and avoid wasting minds (Werner, 2012: 28). According to Shahnaei and Long (2015), compensation and rewards are drivers for employees to take risks and think innovatively to generate a new and successful product and process, as well as perform

organizational innovation. Companies can influence employee motivation in some ways. The use of compensation is primarily based on performance to provide rewards to employees for achieving company goals and objectives set. A wide range of companies has suggested that incentive affects company performance (Sani, 2012: 10).

## **2.2. Organizational Innovation**

OI is a significant topic in the literature related to management. The reason for this interest is likely to be the realization that innovation is crucial for improving products and services (Hartle, 005). OI is important on time since it is a trend from the start of innovation and development with the stages of human life. Innovation provides for continuing to adapt to the new conditions and harmonize with them for survival and growth. OI can be noted as the concept, technique, or operations that can be reached in companies that allow management to improve something get high-quality products, or create new services. These changes make it possible to achieve business process objectives for the organization, i.e., they allow companies to increase sales and increase the level of profitability of the activity. According to Albury (2005), OI is the implementation of a new method in the operating principles adopted by the company, in structuring workplaces or in interacting with the environment. Since innovation is a special tool in the hands of managers who gain the opportunity to participate in other activities or provide new services. OI is the ultimate change in the actual process of what managers do and the way they do it (Birkinshaw and Hamel, 2008: 825). OI is the capability to create an idea, work, design, style, or anything else better, easier, more usable, and more feasible (Trott, 2005: 5).

In addition, OI is one of the organizational capacities and human mental situations seeking different ideas and means to solve problems. Innovation is a real addition to total human making and realizes a real benefit on the ground, especially if it is associated with practical subjects or an organizational position (Johnston et al., 2012). OI can make a difference in the form, excellence, or further state work of the organization's managerial activities, where the change is a new or unprecedented departure from the past (Hargrave, and Ven, 2006).

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Organizational innovation is often used as the ideas management system. Managing ideas also is the practice of dealing with ideas in an orderly manner. The goal is to choose the best ideas with the greatest potential for further development and implementation. OI is a driver of service and product change, and it can also have a significant impact on the efficiency of business processes, improve the quality and efficiency of work, enhance information sharing, or increase the company's ability to learn and use different knowledge and techniques (Razavi and Attarnezhad, 2013).

### **2.3. Organizational Performance**

Vast authors stated that OP is the main inverter of the organization's ability to achieve its goals, thus, OP is the result of the organization's ability to make optimal use of the resources available to it and direct them towards achieving the planned goals. Koser et al. (2018) argued that OP represents the desired output to be achieved by the organization, based solely on the positive aspects of performance results, assuming the organization's ability to achieve a high level of performance, and since OP is seen as the result of various activities and actions carried out by the organization, its measurement is determined by the factors affecting it and the extent to which the organization can achieve its objectives through it. Kotler (2000: 40) explained that OP is a broad concept, and its variables specific that any organization's components are designed and developed. So the difference in the performance of the difference in standards and measures adopted to measure performance by managers and organizations. OP has therefore become one of the main concepts for managers at all organizational levels. The results of this performance may have negative effects on the organization's profits, or perhaps the basis for growth, enhancing competitiveness (Ahmed et al., 2008).

The OP emphasizes that it is essential to define the current situation and its distance from its desired ends. The extent of applying them together examining the organization's operations and determining its performance is essential to understanding how organizations work to correct deviations in the organization and raise performance. Besides, designing the organizational structure effectively and efficiently

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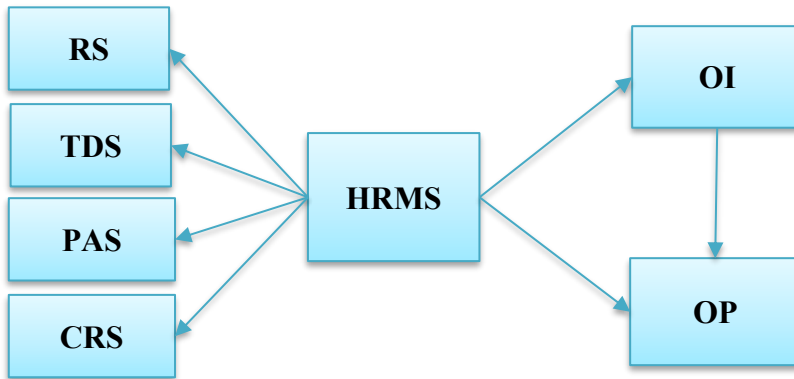
identifies the need for change and makes it into the organization (Gitongu et al., 2016). Since measures of OP depends on the questions and why they need to be measured, some professionals need to measure and report it in order to justify the correct use of investor funds and guide management decision-making by signaling to problem areas, comparing the performance of different jobs, projects and exercise control. Thus, the definition of organizational performance changes according to use. It is believed that the OP is clear from the fact that it reflects the highest level of performance. This is the organization's main objective by using various resources with the highest efficiency. This exceeds the ability of its competitors to perform the same under similar sufficient conditions (Rasool et al., 2019).

### **3. Research Conceptual Model and Hypothesis Development**

HRMS, OI, and OP have been examined by many models. Wong et al. (2013) constructed a model and found that HRMS affects OP through the mediating role of innovation. Sabiu et al. (2019), in their research model, examined HRM practices, ethical climates, and organizational performance. Figure 1 is based on independent, mediation, and dependent variable. The independent variable is HRMS, and the mediation variable is OI, which is subject to examination. In this research, the dependent variable is OP; based on this research conceptual model, and the following empirical findings the research hypotheses developed. For the ethics committee approval of the research, it was obtained from Bingöl University Scientific Research and Publication Ethics Committee with the decision dated 14.01.2022 and numbered E.43595.



Figure 1: Research Conceptual Model



### 3.1. HRMS and Organization Innovation

In recent years, the relationship between HRMS and OI has been explored from various angles. HRMS has become one of the most critical strategies for achieving high performance, competitive positions, and innovation (Dharmasiri, 2009). Lin (2011) examined HRMS and innovation: the roles of information technology and virtual organizational structure. The results showed that HRMS positively affects OI. In this context, research conducted by Shipton et al. (2006) demonstrated that employee training, performance appraisal, and induction influence innovation. Shahnaei and Long (2015) examined the improvement of innovation performance through HR in OP. The results demonstrated that from technical and administrative aspects the framework of innovation impacts the strategy of organizational innovation. Seeck and Diehl (2017) analyzed the impact of HRM on innovation. The finding showed the impact of HRMS practices, which can be firmly linked to innovation. Zizlavsky (2020) investigated HRMS and the process of innovation. The results showed the importance of strategic HR within the framework of OI. Based on the positive correlation between HRMS and OI, the following hypothesis is predicted:

**Hypothesis 1 (H1):** Human resources management strategies (HRMS) is positively and significantly impact organizational innovation (OI).

### **3.2. Organizational Innovation and Organizational Performance**

The literature related to innovation and performance continually claims that companies' innovation impacts financial and OP (Das et al., 2018). Farhang et al. (2018) explored the impact of OI on manufacturing companies' performance in Iran, mainly studying the Rasht industrials park (RIP) through innovation capabilities in process and product. The results showed that OI is related to OP through process innovation capabilities. Karakaş et al. (2017), in their research, investigated the impact of innovation on OP to determine how occupational executives perceive innovation activities and assess their effects on performance. The study results can support Turkish tourism companies in adopting innovative technologies, developing better strategies, and making them innovative tourism services providers. Therefore, based on the above literature and positive relationships between OI and OP, the following hypothesis is predicted:

**Hypothesis 2 (H2):** Organizational innovation (OI) is significantly linked to enhancing organizational performance (OP).

### **3.3. HRMS and Organizational Performance**

Katou and Budhwar (2010) conducted research in the Greek industrial sector to find a causal relationship between HRMS and OP. As a result, the study found a positive relationship between HRMS: training, hiring, promotion, employee engagement, incentives, and OP. Sani (2012) examined the HRMS effect on Nigeria's insurance companies' OP. The results confirmed that HR practices value-added to insurance companies; however, the research found that line managers' training is inadequate even though line managers have an essential role in implementing HRMS. The study also validated that the organizational climate significantly impacts the workforce's retention and OP. In their research, Rebecca et al. (2013) investigated the impact of HRMS on OP: the mediating role of high-performance HR practices. The results showed a significant impact of HRMS on performance and better implementation strategies. Finally, Akhtar et al. (2014) examine the role of HRMS in OP. The outcomes showed that HRMS has a significant association with OP. Thus, the positive

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association between HRMS and OP is predicted in the following hypothesis:

**Hypothesis 3 (H3):** Human resources management strategies (HRMS) is significantly impact organizational performance (OP).

### **3.4. Mediating Role of Organizational Innovation**

Many empirical studies have analyzed the mediating role of OI in the relationship between HRMS and OP. Heritage (2006) investigated innovation through human resources and argued that HRMS enables OI by actively attracting, developing, and managing talents. In research, Volberda et al. (2013) studied management innovation: management as a rich ground for innovation and suggests that management innovation plays a mediating role in the relationship between HRM, and OP. Wong et al. (2013) examined the importance of HRM in innovation, environmental management, and organizational performance. Through a literature review of relevant empirical research, including resource-based views, and organizational performance. The results found casual relationships between HRM, innovation, and OP. Krasnicka et al. (2017), in their research, showed that corporate innovation plays a mediating role between HRM practices and performance. In their research, Rasool et al. (2019) examined the possibilities of how HRM interprets OP and uses innovation as the mediating role. The results showed that the HRMS directly and positively impact OP. Furthermore, while all dimensions of HRM were positively related to innovation, it was positively associated with OP. In this regard, OI was, therefore, revealed to play a mediating role between HRM and OP. Based on the literature above, the following hypothesis is proposed:

**Hypothesis 4 (H4):** Organizational innovation (OI) mediates the human resources management strategies (HRMS) impact on organizational performance (OP).

## **4. Research Methodology**

In this research, we used a quantitative research method. this method is established suitable for the research purpose to explore the mediating role of OI in the relationship between HRMS and OP based

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on empirical data obtained from investment boards in north Iraq. The quantitative method is commonly applied in studies when analyzing numerical data. Thus, this method comprises empirical data and statistical procedures describing, discovering, and demonstrating the relationships between variables (Abdullah et al., 2020). The research design is aimed to develop the relationship and influence between model structures. This design is appropriate because it permitted survey participators to contribute their basic information about the subject. To analyze the data, the structural equation modeling partial least squares (SEM-PLS), or path modeling was used.

#### **4.1. The Study Population and Sampling**

The research population is managers and employees working for the branches of investment boards in north Iraq, namely the general directorate, Erbil investment board, Sulamaniya, Duhok, Halabja, and Kirkuk investment board. These investment boards are selected as the research population since investment boards are expected to respond well to HRMS, OI, and OP. However, the investment boards are the correctly targeted population size. The sampling process was convenience-based; reviewing the managers' and employees' perceptions by organizing various approaches to narrow down the population to sort an appropriate sample. Therefore, the data gathering was started by personal visits and mailing out an invitation letter to branches of investment boards. Based on that most questionnaire forms were managed by electronic means, particularly over a professional internet survey to managers and employees. Though, at the final step of the data collection, 455 completed surveys were submitted. 27 forms of the 455 surveys were removed as they had missing data, thus, generating a final of 428 samples, which is considered a good sample.

#### **4.2. Measurement of the Main Constructs**

In the development of survey scale, and measurement of the main constructs to assess model constructs, we have followed resource-based view theory. In the first step, we have observed the literature to related scales on HRMS, OI, and OP, besides, all constructs adapted

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from the operational field. The first part of the scale included the survey demographic variables to measure research subjects or respondents' profiles. The second covered the main constructs were HRMS measured through four main strategies, the first is recruitment strategy, which has five indicators, training, and development strategy has five indicators to measure the development of HR, performance evaluation strategy has six indicators, and compensation and rewards strategy has four indicators were all adapted from Alqadi (2012). OI measured by twelve indicators were adapted from Zhang et al. (2019), and Goyal and Pitt (2007), which aims to measure the innovation policy applicable to managers and employees, innovative ideas to develop work effortlessly, implement new ideas, procedures, and pursue solutions to problems. In addition, the OP aims to measure the desired outcome is an essential part of the organization. Completion of the job/task with minimal expenditure of time and effort, quality, creation, promotion, and production of goods and services. HRMS encourages joint teamwork and participation in providing opinions to improve OP and profitability were adapted from Koohang et al. (2017). However, the survey used a 7-point measuring scale, as 7=completely agree, 6=mostly agree, 5=somewhat agree, 4=neither agree nor disagree, 3= somewhat disagree, 2= mostly disagree, and 1=completely disagree.

### **4.3. Research Subjects**

The research subjects are managers and employees who are working for the branches of investment boards in north Iraq, these branches are the general directorate, Erbil investment board, Sulamaniya, Duhok, Halabja, and Kirkuk investment board, see Table 1 below, which show the results of subjects' profile. The research participants were willingly contributed in the survey and the male participants were 60.7% (n=260) while female 39.3% (n= 168). The subjects' age group, 35.5% (n= 152) were aged fall in 41-50 years, which is the peak volume. Meanwhile, 31.1% (n= 133) belonged to 31-40 years, 20.8% (n= 89) aged between 51-60. however, 11% (n= 47) aged fall in the group less than 30 years. Finally, 1.6% (n=7) of respondents aged belonged to the last group 61 years and above. The highest degree of survey sample from investment boards was bachelor's degree 65.2%

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(n= 279), followed by diploma degree holder's 15.9% (n=68), and master degrees 10% (= 43); however, Ph.D. degrees came at last place 8.9% (n=38), of the overall sample. We asked about the current working position of survey participators, 70.32%, (n= 301) revealed that they are an employee. While managers were 29.68% (n=127). Results from Table 1 showed that 29.4% (n= 126) had experienced between 11-15 years, 24.5% (n= 105) experienced was 16-20 years. In the same regard, 22.2% (n= 95) experienced 6-10 years. While 13.1% (n= 56) had an experience of 21 years and more, finally, 10.7% (n= 46) had experienced less than five years, see (Table 1).

**Table 1:** Respondents' Profiles

<b>Respondent's Gender</b>		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>
	Male	260	60.7	60.7
Valid	Female	168	39.3	39.3
	Total	428	100.0	100.0
<b>Respondent's Age</b>				
	Less than 30 years	47	11.0	11.0
	31-40	133	31.1	31.1
Valid	41-50	152	35.5	35.5
	51-60	89	20.8	20.8
	61 and above	7	1.6	1.6
	Total	428	100.0	100.0
<b>Respondent's Education</b>	<b>Level of</b>			
	Ph.D.	38	8.9	8.9
	Master	43	10.0	10.0
Valid	Bachelor Degree	279	65.2	65.2
	Diploma Degree	68	15.9	15.9
	Total	428	100.0	100.0
<b>Respondent's Experience</b>	<b>Overall</b>			
	Less than 5 years	46	10.7	10.7
	6-10 years	95	22.2	22.2
Valid	11-15 years	126	29.4	29.4
	16-20 years	105	24.5	24.5
	21 years and more	56	13.1	13.1
	Total	428	100.0	100.0

### 4.3. Data Analysis

In this research, the data analysis conducted to examine the respondents' perceptions and test hypotheses, based on that PLS is used. PLS is a typical examination method to determine the path

models, mostly with the underlying variables and their relationships (Hair et al., 2014). According to Sarstedt et al. (2017), PLS has three significant assessments before hypothesis testing. These are convergent reliability and validity and analytical check of the structural model. Therefore, it is significant to test the validity of research constructs, accordingly, to apply structural equation modeling, using confirmatory factor analysis, and testing hypotheses we have to establish the validity of the research. In this context, the values of average variance extracted (AVE) must always be greater than 0.5. The values loaded on the root of the AVE must be correlated with all research constructs while at the same time checking the validity of discrimination based on the specified criteria (Beins and McCarthy, 2018). Additionally, the load values of composite reliability (CR) should be greater than 0.80. Cronbach's  $\alpha$  is used to calculate the reliability of the constructs, this test also estimates the reliability of the questionnaire's responses assessed by subjects referring to tool stability. Cronbach's  $\alpha$  ranges from 0.7 and higher values indicating good reliability of constructs (Hair et al., 2014).

## **5. Results**

### **5.1. Establishing Reliability and Validity**

As shown in Table 2 the values loaded on AVE of model constructs; as human resource management strategies, organizational innovation, and organizational performance are (0.597, 0.593, and 0.545), respectively, all values more than 0.05. The loaded values of CR related to model constructs are (0.813, 0.843, and 0.837), respectively, indicating that all values of CR are greater than  $>0.80$ . Cronbach's  $\alpha$  index is used to estimate stability through internal consistency when a reliable score is significant (ie, consistent), meaning that results yield similar results when repeating the questionnaire, under the same conditions, where the values of Cronbach's  $\alpha$  are (0.791, 0.786, and 0.748), respectively, all higher than 0.70. The results verified the research model's reliability and validity.

**Table 2:** Constructs' Reliability and Validity

Contracts (Variables)	Average Variance Extracted (AVE)	Composite Reliability (CR)	Cronbach's $\alpha$
HRMS	0.597	0.813	0.791
OI	0.593	0.843	0.786
OP	0.545	0.837	0.748

**Note:** HRMS= human resource management strategies, OI= organizational innovation, and OP= organizational performance.

As revealed in Table 3 the factor loaded values for the first construct HRMS in terms of recruitment strategy, training and development strategy, performance evaluation strategy, compensation, and rewards strategy ranged between (0.701 to 0.917), which all values higher or equal to 0.70. Thus, the factor loadings for HRMS are accepted. Results showed that the values of factor loading for organizational innovation reached from (0.765 to 0.876) were all values higher or equal to 0.70. Hence, the factor loadings for organizational innovation are all accepted. Finally, Table 3 presented that the factor loading values of organizational performance are all high were ranged between (0.779 to 0.912). This result indicated the validity of the research scales, which means a high correlation between all constructs and their indicators.



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**Table 3:** Result of the Measurement Model

Contracts (Variables)		Indicators	Loadings
Human Resource Management Strategies	Recruitment Strategy	RS1	0.789
		RS2	0.736
		RS3	0.705
		RS4	0.739
		RS5	0.745
	Training and Development Strategy	TDS1	0.917
		TDS2	0.766
		TDS3	0.774
		TDS4	0.701
		TDS5	0.704
	Performance Evaluation Strategy	PES1	0.778
		PES2	0.771
		PES3	0.747
		PES4	0.715
		PES5	0.706
	Compensation and Rewards Strategy	PES6	0.743
		CRS1	0.859
		CRS2	0.785
		CRS3	0.701
			CRS4
		OI1	0.797
		OI2	0.876
		OI3	0.769
		OI4	0.782
Organizational Innovation	Twelve Indicators of Organizational Innovation (OI)	OI5	0.771
		OI6	0.781
		OI7	0.870
		OI8	0.798
		OI9	0.856
		OI10	0.793
		OI11	0.859
		OI12	0.765
		OP1	0.814
		OP2	0.811
Organizational Performance	Eight Indicators of Organizational Performance	OP3	0.860
		OP4	0.868
		OP5	0.874
		OP6	0.852
		OP7	0.779
		OP8	0.912

We also tested the discriminant validity or established the relationship between the research constructs as a key step before hypotheses are verified. The discriminant validity was compared

through the square root AVE values. The values of the AVE square roots must be revealed in the relationship matrix. As Table 4, shown the AVE root square value of HRMS is (0.887), for OI is (0.901) and OP is reached (0.891) were all greater than relationships with any other model constructs. Therefore, we confirm that the research model is reliable.

**Table 4:** Discriminant Validity

Fornell-Larker Criterion			
Constructs	HRMS	OI	OP
HRMS	0.887		
OI	0.799	0.901	
OP	0.673	0.739	0.891

**Note:** HRMS= human resource management strategies, OI= organizational innovation, and OP= organizational performance.

## 5.2. Hypotheses Testing

Checking the estimated R<sup>2</sup> values or the determined coefficient of the outcome variables is a vital step before testing hypotheses or assessing the structural equation modeling (SEM). The R<sup>2</sup> values also determine the prediction of the research model (Hair et al., 2014). Table 5 showed the R<sup>2</sup> values for OI and OP are (0.384, and 0.526), respectively; this result indicates that the research model's R<sup>2</sup> values have established a significant explanation of the empirical research data.

**Table 5:** R<sup>2</sup> Values (Model Summary)

Dependent Variables	R Square	R Square Adjusted
OI	0.384	0.383
OP	0.526	0.504

Results in Table 6 displayed that HRMS positively and significantly affected OI with the coefficient of effect up to ( $\beta = 0.579$ ,  $p < 0.000$ ); thus, the first hypothesis (H1) is accepted, this result shows that the developments in HRMS, namely recruitment strategy, training, and development strategy, performance evaluation strategy, compensation, and rewards strategy by 1% will increase the OI by 0.579, as the innovation practices give the organization a comprehensive framework that enables it to make the required

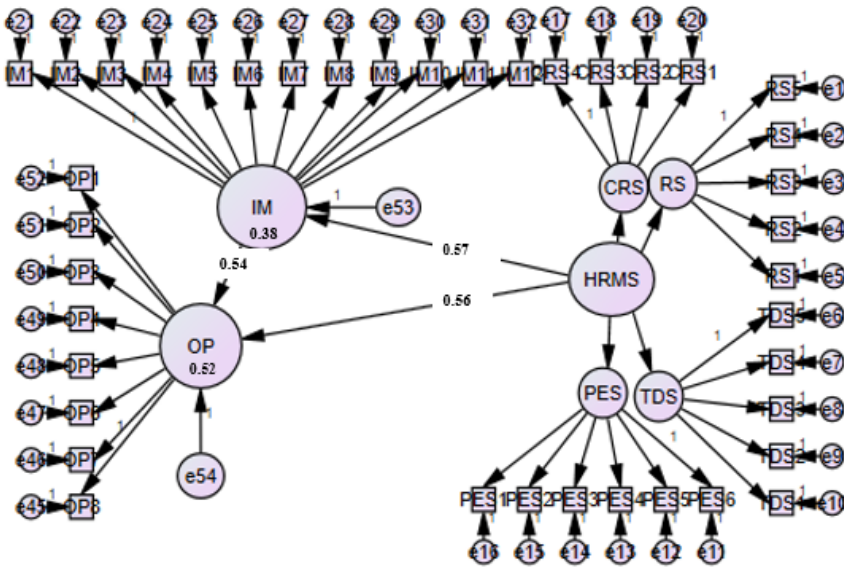
positive changes and works to improve the work results and effectiveness of OP.

**Table 6:** Path Analysis Coefficient, t-value, and p-value for the SEM

Hypotheses	Interaction	Standardized Path Coefficient	t-value	p-value	Decision
H1	HRMS -> OI	$\beta = 0.579$	14.503	0.000	Supported
H2	OI -> OP	$\beta = 0.542$	13.459	0.000	Supported
H3	HRMS -> OP	$\beta = 0.565$	13.928	0.000	Supported

**Note:** HRMS= human resource management strategies, OI= organizational innovation, and OP= organizational performance

**Figure 2:** The results of path analysis



SRMR= 0.076, Chi-square=1.891, VIF= Ranged from 1.870 to 2.024, NFI=1.000

In addition, the results presented that OI positively and significantly affected OP with the coefficient of effect ( $\beta=0.542$ ,  $p=0.000$ ); therefore, the second hypothesis (H2) is accepted. OI has become a necessity, particularly when organizations want to obtain improved OP and maintain a competitive environment. That the organization's role is to provide an atmosphere that works on developing the capabilities of its members, supports inventiveness and creative

thinking (Das et al., 2018). Through its belief that OI is the most important area in enhancing the interaction between the organization and achieving its goals (Karakaş et al., 2017). Furthermore, the result showed that HRMS positively and significantly affected OP with the coefficient of effect up to ( $\beta=0.565$ ,  $p=0.000$ ). Accordingly, the third hypothesis (H3) is accepted. Through the implementation of effective HRMS, organizations can focus on all their human resources and thus improve OP.

### *Mediation Analysis*

As demonstrated in Table 7, the predicted variable is HRMS, the mediating variable is OI, and the outcome variable is OP. The results already showed that the direct correlation was established between HRMS and OI; in addition, OI related to OP, and the relational effects were also positive and significant between the research constructs. However, Table 7 showed the indirect effect in the mediator's existence and the coefficient of effect is up to ( $\beta=0.313$ ) with the p-values (0.000). Therefore, the fourth hypothesis (H4) is accepted.

**Table 7:** Inferences for Mediation.

Hypotheses	Interaction		Direct Beta w/o Med	Indirect Beta	Mediation Type Observed
H4	HRMS OI->OP	->	$\beta=0.565$ , $p=0.000$	$\beta=0.313$ , $p=0.000$	Partial mediation

Note: HRMS= human resource management strategies, OI= organizational innovation, and OP= organizational performance

## **6. Discussions**

Today, one of the biggest challenges facing organizations is the extent of their ability to adapt to changes and innovations resulting from several environmental factors: technological, economic, and market forces. The human element is considered one of the most important pillars of adaptation and ensuring the survival and development of the organizations. To benefit from this human resource, the necessity of activating the role of human resource management as an effective strategic tool and a contribution to creating a competitive advantage appears. Thus, the main purpose of

this research was to explore the mediating role of organizational innovation in the relationship between human resources management strategies (HRMS) and organizational performance of the investment boards in northern Iraq.

As HRMS is a comprehensive plan for managing human resources. However, the recent trends in human resources, are very concerned with long-term plans and focus on aspects. That does not focus on traditional human resource management, modern human resource strategies must be built on the future (Akhtar et al., 2014). It is also proactive and linked with the company's strategic goals, linked to technology and continuous development in the world. In addition, the modern human resources strategies are a change in the function and functions of the human resources department within the organization, as it is more concerned with attracting and retaining talent to reach organizational innovation and enhances organizational performance (Boxall and Purcell, 2011).

After establishing the research model's reliability and validity, we have tested four research hypotheses, by using partial least squares (PLS) path modeling, based on structural equation modeling (SEM). The hypotheses H1-H3 included direct relationships between the model's main constructs namely HRMS, organizational innovation, and organizational performance. H4 involved the mediation role of organizational innovation in the relationship between HRMS and organizational performance, which all four hypotheses were accepted. The findings showed that HRMS effectively develops innovation in human elements. Thus, recruiting those who have innovation skills is significantly important. This process consists of developing appropriate plans to search for talented HR, determining their locations, and how to attract them to work in the organization. The appropriate means of determining, and the bodies that undertake the operations of divergence are determined by selecting the central bodies or company bodies according to the numbers to be attracted.

HRM represents a significant resource in organizations and is considered one of the organization's intangible assets. In this regard, organizational innovation plays a significant role in enhancing

organizational performance. Where organizational innovation becomes a necessity, mostly when companies and organizations want to improve their performance and maintain business competitiveness (Das et al., 2018). Through innovation in human elements, organizations can focus on all their human capital assets and therefore improve organizational performance (Chen and Huang, 2009). In this context, organizational innovation, and talent also represent the human capital of the organization and are essential to the success of the business organizations. Since organizational innovation is an important asset that the company should strive to preserve, consequently, the human resources department must anticipate the staffing needs of the business in the future while recruiting, hiring, and retaining the best talent in the organization. The most successful companies pride themselves on employing the world's best talent. To do this effectively, the HR department needs to identify the different competencies required for each job, such as the skills, abilities, and knowledge required to perform the various tasks effectively. Human resources is also an effort between individuals, work, and an attempt to link based on activities with integrated cultural and structural dimensions, which explain into the planning and development programs. The purpose of which is to influence the quality and quantity of work in the organizations towards enhancing innovation efforts and organizational performance (Katou and Budhwar, 2010; Seck and Diehl, 2017).

## **7. Conclusions**

The results related to correlations analysis showed positive and significant causal relationships between human resources management strategies (HRMS) in terms of recruitment strategy, training, and development strategy, performance evaluation strategy, compensation, and rewards strategy with organizational innovation and organizational performance. These results confirm that HRMS is important for organizations to influence employees' behavior, and skills, which is essential for organizations to reach organizational innovation. The role of HRMS in organizations is dual that related to the policies, practices, and management efforts to improve

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organizational performance. Results demonstrated that HRMS positively and significantly impacted organizational innovation. In addition, the results showed that organizational innovation positively and significantly impacted the organizational performance of investment boards in northern Iraq. Furthermore, the result showed that HRMS positively and significantly impacted organizational performance. The results also showed that organizational innovation positively and significantly mediated the HRMS impact on organizational performance.

### **7.1. Theoretical and Managerial Contributions**

First of all, this research contributes to the literature related to HRMS, innovation in human elements, and performance by illustrating that organizational innovation mediates the relationship between HRMS and organizational performance. For instance, innovation becomes a requirement, particularly when companies and organizations wish to improve their performance and maintain sustainable competitiveness. Innovation practices allow organizations to put all their human capital into improving organizational performance. Since HRMS is the crucial factor for establishments like investment boards in Iraq to reach goals that include enhancing their performance. The relationship of the HRMS with innovation and performance is also a vital factor as the human element make organizations successful.

As for managerial contributions, the current research provides beneficial information to the branches management of investment boards in Iraq regarding the significant role of HRMS in the attainment of more involved and creative human capital with improved performances. As results showed that the developments in HRMS effectively enhance innovations in human elements, and organizational innovation provides an inclusive context that allows organizations and companies to make positive changes and works to improve organizational performance. Thus, the research will also contribute valued information on the relationship between HRMS to innovation, and performance in Iraq.

## 7.2. Limitations and Suggestions for Future Research

This research may not be without limits as the data collection tool was the survey and self-designed. The empirical data were obtained from managers and employees working for the branches of investment boards in northern Iraq. Therefore, the research narrows down its data to explore and find the mediation role of organizational innovation in the relationship between HRMS and organizational performance. Based on that, the research indorses that future research is conducted in other industrial companies or organizations to explore whether alike conclusions will be reached using consistent and specific purposes. Larger empirical data or samples could produce better findings to the generalization of the results shown in this research. Future research can also use organizational innovation as a mediation mechanism.

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**Ethics Statement:** The authors declare that ethical rules are followed in all preparation processes of this study. In case of detection of a contrary situation, BİİBFAD Journal does not have any responsibility and all responsibility belongs to the authors of the study. Ethical approval for this study was obtained from Bingöl University Scientific Research and Publication Ethics Committee (Date: 14.01.2022 / No: E.43595)

**Author Contributions:** 1st author's contributed to the determination of the subject, literature, data analysis and reporting sections. 2nd author's contributed to the literature and collection of data. 1st author's contribution rate is approximately 50%, 2nd author's contribution rate is 50%

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