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EFFECT OF HUMAN RESOURCE FLEXIBILITY IN PROMOTION INNOVATION PERFORMANCE

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Article history:	Abstract:
Received: November 10 th 2022 Accepted: December 11 th 2022 Published: January 18 th 2023	The current research aims to determine the effect of human resource flexibility as an independent variable on enhancing Innovation performance as a dependent variable. The Directorate of Education of The Governorate of Misan has been selected as a field of research, with the research community being one of the administrative leaders in the aforementioned directorate. A purposive sample of (38) staff members has been surveyed and analyzed using a questionnaire prepared for this purpose as a tool for collecting the necessary data. The dataset retrieved from the questionnaire was processed using statistical programs (spss V. 26) and Excel. The research has reached a number of conclusions, most notably: statistical results indicate that the research sample has the flexibility in its practice to adapt to the changing environment, in addition to constantly improving and changing practices in order to achieve the alignment of human resources with the changing system. The research yielded a number of recommendations, the most prominent of which is to strengthen cooperation and coordination between the Directorate of Education of Misan and its counterparts in other provinces. This is in order to benefit from the accumulated expertise of these directorates, whether in terms of preparing curricula and school plans, or in holding scientific conferences and seminars, in a way that contributes to the dissemination and sharing of knowledge among them. This is to enhance their creative behavior and thereby Innovation performance.

Keywords: Flexibility of human resources, Innovation performance

INTRODUCTION:

Innovation plays a crucial role in the survival and continuation of organizations in a fierce competition in an uncertain, dynamic and complex environment. The Innovation process is critical for organizations to create strategic flexibility and maintain competitive advantage. Therefore, these new features require organizations to have characteristics such as adaptability, changes and learning capabilities. Compared to traditional human resources management, the need for flexible human resources management is clear as it focuses on enhancing employee flexibility in jobs, skills and behaviors according to organizational needs. These include a series of strategies of human resources management to influence employee psychology, guide their behavior, and ultimately achieve and align personal and organizational goals together to create an innovative environment for workers. Indeed, innovative performance is the main driver of business performance and is intrinsically linked to the activity of organizations. Flexible qualities of human resources management are indispensable in society.

1. THE GENERAL FRAMEWORK AND METHODOLOGY OF THE RESEARCH :

1.1 Research problem:

The problem of research stems from the intensity of competition, accelerated work, and globalization in the world of business today in providing advanced services that suit customers' desires and needs. In light of this development, organizations have to search for a deeper philosophy and a more comprehensive vision, which depends on choosing the areas that ensure their great superiority. This requires the presence of flexible human resources to support the innovative capacities in these organizations. The problem of research is therefore summarized as follows:

- 1) Does The Directorate of Education of Misan exercise research in human resource flexibility?
- 2) Is there a correlation between human resource flexibility and innovative performance?
- 3) Does the flexibility of the human resources effect the promotion of the innovative performance of the research department?



1.2 The importance of research:

The importance of current research can be identified as a practical and objective attempt to highlight some of the characteristics of human resource flexibility and its relation to innovative performance, as follows :

- 1- This research has dealt with contemporary and modern topics of great importance to the work of organizations, exemplified by the flexibility of human resources and innovative performance, as through the process of balance between them the research sample becomes an innovative organization and enables it to play a positive role in society.
- 2- Determining the status of the Directorate of Education of Misan’s research with respect to human resource flexibility and innovative performance.
- 3- Supporting the Directorate of Education of Misan Research Sample in building a competitive advantage distinct from other directorates.
- 4- The field importance of this research lies in trying to provide the scientific basis on which the Directorate of Education of Misan can base its research in light of the clarification of the flexibility of human resources, their components and their role in innovative performance.

1.3 Research objectives:

The main objective of the research is to demonstrate the effect of human resource flexibility on enhancing the Innovation performance of the research sample in the Misan Educational Directorate, as well as to identify other sub-objectives for the research broken down by the focal points of this research, as follows :

- 1- Diagnosis of Human Resource Flexibility and Innovative Performance in The Directorate of Education of Misan .
- 2- Following the pathways between HR flexibility and Innovative performance in The Directorate of Education of Misan .
- 3- How important each dimension of human resource flexibility is and which is more influential in Innovative performance.
- 4- Identifying the ability of the research sample to apply human resource flexibility dimensions within its activities.

1.4 Hypothetical Model of the research

The systematic treatment of the research problem and its hypotheses requires the development of a virtual model that expresses the relationship between the main and sub-variables of the research, represented by the independent variable the flexibility of human resources and the dependent variable Innovation performance. This is in order to determine the nature of the relationship between them, test hypotheses and analyze their results, as shown in Figure (1) below:

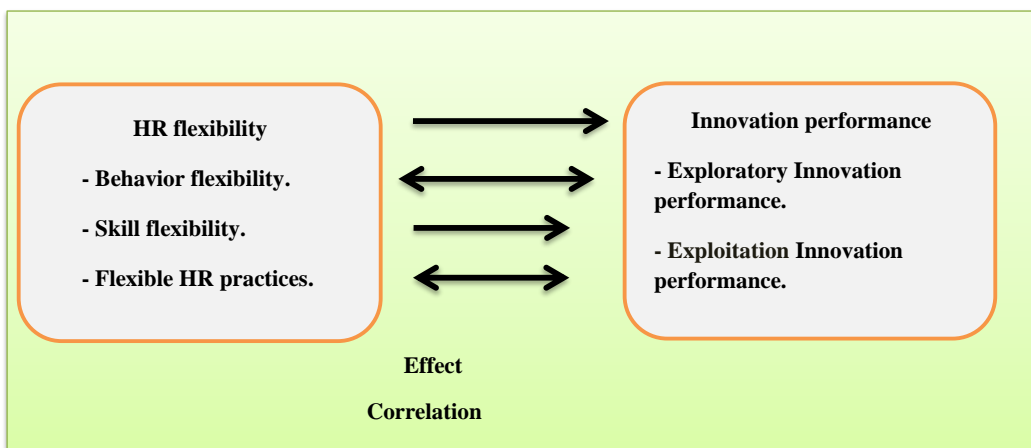


Figure (1): Hypothetical research model (Source: prepared by the author)



1.5 Research hypotheses:

Two main hypotheses can be formulated as an attempt to answer the questions addressed in the research problem, which are as follows:

- The first hypothesis: - this hypothesis states that (there is a significant correlation between the flexibility of human resources and Innovation performance).
- The second hypothesis: - this hypothesis states that (the flexibility of human resources affects the promotion of Innovation performance).

2. Research Methodology

1. Research community and sample:

The Directorate General of Education in Misan Governorate, which is affiliated to the Iraqi Ministry of Education was chosen as the research community to

conduct this research. The researcher relied on the method of the purposive sample that included technical and administrative assistants and heads of departments in the directorate. A total of (40) questionnaire forms were distributed with (38) of them were deemed valid for statistical analysis.

2. Research Methods:

The researcher relied in the process of collecting data and information theoretically on books, journals, dissertations, theses and the Internet. Practically, we relied on the questionnaire form, which is a basic and important source for collecting data from the individuals under research. Table (1) below shows the variables of the questionnaire form: -

Table (1): Variables in the Questionnaire form

	The reliable source for the measurement	Main Variable	sub variable	The number of Items
1	(Úbeda-García et al., 2017)	HR flexibility	Behavior flexibility	4
			Skill flexibility	4
			Flexible HR practices	4
			Total	12
2	(Gonzalez & de Melo, 2018)	Innovation Performance	Exploratory Innovation performance	3
			Exploitation Innovation performance	3
			Total	6
			Grand Total	18

Source: prepared by the researcher based on the output of the questionnaire

3. Theoretical framework:

3.1 Flexibility of human resources

The optimal use of human resources is an important success factor that contributes to long-term competitiveness, so how to build a knowledge-oriented human resources system, form an appropriate culture and create a creative climate for employees has become one of the most important issues for organizations.

1- The concept of flexibility of human resources:

Providing a clear definition of the concept of human resource flexibility is as difficult as other terms in the administrative sciences, where concepts have

varied and varied due to different trends and approaches that can be adopted in their definition. However, a comprehensive concept has not been agreed upon due to the different opinions of researchers on this concept. Within the strategic approach to human resources management, researchers have called for flexibility in human resources systems and processes to help the organization adapt to a complex and dynamic environment (Úbeda-García et al, 2017:5), so researchers must make greater efforts to disentangle the meaning and components of human resources flexibility.



Table (2): Contributions of some researchers towards the concept of flexibility of human resources

Researcher – year – page number	Concepts
1 (Martínez-Sanchez et al, 2007: 210)	The ability of an organization to quickly reconfigure resources and activities in response to environmental demands, and because achieving alignment between the organization and the environment is difficult, organizations that are able to do so possess the capacity that can be an important factor for sustainable competitive advantage.
2 Beltrán-Martín et al, 2008: 6.)	Capabilities that allow the organization to respond to changes in market demands, adapt and work successfully in dynamic environments.
3 (2012: 24 , Kozica & Kaiser)	The ability of organizations to deal with the dynamics and uncertainty of their environments through rapid change in their organizational procedures or resource bases.
4 (Úbeda-García et al, 2017: 5)	The extent to which human resources possess the skills and behaviors that provide the organization with an opportunity to develop strategic alternatives in its competitive environment.
5 (Abu-Nahel et al, 2020: 28)	The ability of the human resources system to facilitate the ability of an organization to adapt effectively and in a timely manner to the diverse changes of its environment or from within the organization itself.

Source: Prepared by the researcher based on the mentioned literature.

The researcher believes that the flexibility of human resources are the skills, experience and knowledge of the organization's employees, which can be converted into human energies. These in turn can be directed to diagnose needs, carry out complex tasks, and boost the organization's ability to perform a wide range of tasks and adapt quickly to environmental changes to achieve sustainable competitive advantage.

2- The importance of human resource flexibility:

Flexible human resources are an important component of an HRM strategy that supports organizations' internal ability to obtain benefit. A sustainable competitive advantage is a prerequisite so that it can adapt quickly and effectively to environmental changes (Sabuhari, 2020, p. 1778).

The flexibility of human resources is positively related to employee participation and performance. It is also positively related to cultural adaptation and performance of human resources. When individuals have the opportunity to use flexibility, they gain more resources to achieve work-related goals. They also have greater control over their work, and therefore the use of flexibility provides the resources necessary to face the potential stress that occurs from balancing work obligations and special obligations. Thus, resources provide employees with more energy to invest in the job (Bal & Lange, 2015, pp. 7-8). Beltrán-Martín et al, 2008, p. 6) added that one of the main features of flexible HR is the ability of employees to accomplish a

large number of diverse tasks. This means that staff are able to work on different tasks and under diverse conditions and that the costs and time required to mobilize staff into new duties or jobs are low.

3- Dimensions of human resource flexibility:

A) Behavior flexibility:

Behavioral flexibility is defined as the extent to which employees adapt to new circumstances rather than routine behaviors in the organization. It is also the extent to which these behaviors are applied, that is, behavioral flexibility is the extent to which employees have extensive knowledge of behavioral texts that are appropriately presented in different situations, and the speed with which employees can adapt their behavior to a particular situation (Bhattacharya & Doty 2005, p. 3).

Researchers believe that behavioral skills are important because they demonstrate how to deal with changes that occur both at the level of the organization and the external environment in line with the goals and mission of the organization through extensive knowledge and programs capable of bringing about the process of change. Therefore, behavior is to deal with events in a way that aids administrative processes and reduces friction between management and employees (Abu-Nahel et al, 2020, . 29).

Úbeda-García et al. (2017, p. 6) stated that if employees are able to use different procedures



when faced with new circumstances, their behaviors are flexible and expressed differently. Staff with flexible behaviors adapt their responses to previously unknown circumstances on an improvised basis instead of following a predefined procedure. There are a variety of reasons why flexible behaviors between employees are a valuable resource for the organization (Úbeda-García et al, 2017, p. 7). These run as follows:

- Employees who can successfully cope with various emergencies in their workplace allow the organization to achieve cost savings resulting from not adapting to change.
- Behavioral flexibility makes it easier to implement change processes in an organization, insofar as it gives the organization real opportunities to respond appropriately to a wide range of situations.

B) Skill flexibility

It can be argued that skill flexibility differs from behavioral flexibility in the fact that employees may be motivated to act flexibly but lack the knowledge or skills required to do so. The flexibility of skill for human resources refers to the skill of the staff member through the existence of a range of alternatives and options that can be implemented and rapidly transferred through the organization's staff and those with broad skills that enable them to perform different functional tasks. In other words, the organization is highly competent through its possession of skilled staff. The effective and efficient performance of staff depends on the skills and knowledge of the staff acquired through doing business and refining them through training. (Abu-Nahel et al., 2020, p. 29). Flexible staff are trained and recycled as necessary. They anticipate future skill needs and show enthusiasm for learning new task methods, and conceive every event within the organization as a means of learning something important for the future (Úbeda-García, García, 2017, p. 7). Sanell, (1998, p. 64) noted that skill flexibility is a set of actual and potential alternative uses that can be applied to employee skills, and how individuals with different skills can be redeployed quickly.

C) Flexible HR practices:

These have been categorized by many administrative thinkers as a set of activities that develop and operationalize human resources strategies and are geared towards improving performance, enhancing competence, skill and

knowledge of human resources to achieve strategic goals (Abu-Nahel et al., 2020, p. 29).

These practices can be adapted and applied to a variety of situations or in various units or sections of the organization, as well as the speed with which these modifications and applications are made (Bhattacharya & Doty 2005, p. 3). Arguably, the ability of the organization to implement alternative human resources practices easily and effectively, the flexibility in practices may create value within the organization in several ways (Úbeda-García et al, 2017), and as follows:

- I) When an organization's status is subject to changes, the organization can quickly alter its practices. For example, a job-description-based pay system must create resistance to change, yet the flexible pay policy associated with profit measures adapts faster to changes in terms of increased or decreased earnings.
- II) Flexibility in human resources practices will likely lead to flexible behaviors among staff. In the previous example of changing compensation plans, it becomes easier for staff to adapt to the change required by the organization because their rewards are determined by the success of the organization.
- III) The flexibility of the exercise of human resources enables the organization to introduce similar practices in different units and to achieve coherence throughout the organization.

3.2 Innovation performance:

Innovation is one of the main benefits for all organizations that need new and innovative ideas in order to survive. The emergence of Innovation not only enables organizations to achieve a competitive advantage compared to competitors but is also an appropriate tool to improve the performance of the organization. Innovation and new actions based on new ideas are therefore essential to sustain this feature.

I. The Concept of Innovation Performance:

Despite its importance in the organizational literature, there is still no universally accepted definition of Innovation. There is some element of ambiguity in the meaning of Innovation because there are many diverse definitions in the literature, ranging from very specific definitions to very broad ones. Creativity in the organizational context is often identified as the product of a collective effort in the context of the organization. It involves



adapting existing ideas to develop new knowledge. The interactive perspective of Innovation indicates that an effective translation of ideas depends on a variety of individual and situational traits such as motivation, skills, personality and contextual

features (Zhang & Grippa, 2013, p. 2). Many researchers have approached the concept of innovative performance according to chronology, illustrated through Table (3) and as follows:

Table (3): Some researchers' intellectual contributions to the concept of creative performance.
 Source: Prepared by the researcher based on the mentioned literature.

	Researcher / Year & page number	Concepts
1	Cheng et al, 2008, p. 1178.)	The ability to generate original and possible ideas, often necessary for personal and professional success.
2	(Stobbeleir et al, 2011, p. 1811)	The extent to which employees generate new and useful ideas regarding actions and processes at work, as a function of individual differences. The characteristics of the context surrounding employees and the interaction between the two.
3	(Rahimiat et al., 2015, p. 82)	Anything that has been revised as achieved and that it stabilizes the organization's position of competitors and enables competition in the long run. That is, Innovation is a broad concept that means the process of using knowledge or information to create or introduce new things.
4	(Jang, 2017, p. 995)	Producing new and appropriate ideas, processes or solutions for an open task. Moreover, innovative tasks are tasks that do not have one correct answer and require an individual or team to generate and select ideas.
5	(Dweck, 2018, p. 4)	A real investment in the skills, capabilities and motivations of employees within the organization. Certainly, the performance of employees is the main measurement tool for the success of human resources programs in achieving competitive advantage that depends only on creativity. In this sense, performance is the achievement of the mission of the organization and its employees.

Through the foregoing, the researcher sees that Innovation performance is behaviors that include the creation of original ideas and then applying them through individuals' possession of the capabilities and creative traits that contribute to identifying opportunities and finding new ways, which enhances the process of using knowledge and information in the organization.

II. The importance of Innovation performance:

Innovation has become the cornerstone of achievement for every organization in the business world. So, innovation is today an essential part of organizational strategies to achieve and maintain a competitive edge in the marketplace (Shahzad & Shahbaz, 2017, p. 66).

- Human resources-related factors: Providing training opportunities for workers to acquire skills that will positively influence change; provide security and job stability to enhance self-confidence and development; and provide opportunities for career growth.
- Structural factors include elements of a structure or model that embraces flexibility and

decentralization in decision-making as well as responsiveness to rapid changes in the internal and external environment.

III. Dimensions of innovative performance:

A) Exploratory innovative performance:

As competition intensifies and the pace of change accelerates, organizations need to reinvent themselves by exploiting existing competencies and exploring new ones. The concept of exploration has emerged as a central theme in research on organizational learning, strategic innovation and technological innovation (Jansen et al., 2006, p. 3). Exploratory creativity is radical and designed to meet the needs of customers or emerging markets, offering new designs, creating new markets, and developing new distribution channels. Exploratory creativity requires new knowledge of the organization or departures from current knowledge (Benner & Tushman, 2004, p. 243). Phelps (2010, p. 893) added as a process of discovery that typically creates



new solutions to the elements that create value-based solutions to the problems. This type of innovation is important for organizations operating in more dynamic environments and is key to the organization's long-term survival (Alexiev et al., 2010, p. 2).

B) Exploitation Innovation performance :

Exploitation innovation involves things such as refinement, selection, production, efficiency and implementation (March, 1991, p. 71). It is defined as investing resources to acquire completely new knowledge, skills and processes (Atuahene-Gima, 2005, p. 2). Investment innovation means local research that builds upon existing technological capabilities of the organization, while exploration involves research away from new capabilities. The organization's local research provides advantages in making incremental innovations, while distance seeking may bring opportunities for the organization to achieve radical innovations (Li & Schoenmakers, 2008, p. 15). Lubatken al, (2006, p. 648 as) added that exploration involves the use of clear knowledge bases, e.g. by assimilating and integrating them, incremental improvements can be made

to existing technological or marketing trajectories. So, the intention of investing is to respond to current environmental conditions by adapting existing technologies and further meeting the needs of existing customers.

4. The practical framework of the research

4.1 Normal distribution test

The distribution of data, whether normal or abnormal, determines the use of informational or non-parametric statistics. The normal distribution is based on the use of parameter statistics, whereas the abnormal distribution is based on the use of non-parametric statistics. To determine the nature of the distribution of current research data, the researcher relied on the Shapiro-Wilk test because the sample is less than 50 to confirm this. The nature of the distribution of data for the resource flexibility variable is defined by the test results shown in Table (4) as a value The Shapiro-Wilk statistic is 0.960 and the significant level of the test statistic is 0.0188, which is higher than the standard level of 0.05 and therefore not statistically significant. This means rejecting the first hypothesis and accepting the alternative hypothesis that all human resource flexibility variable data are subject to normal distribution, thus enabling the researcher to use the parametric statistics in analysis and testing.

Table (4): Test of normal distribution of research variables

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
HR flexibility	0.125	38	0.141	0.960	38	0.188
Innovation performance	.077	38	.200*	.984	38	.860

a. Lilliefors Significance Correction

Source: program output (SPSS.V26).

4.2 Testing Tool Reliability

Reliability represents the degree to which individual differences can be measured in harmony when answering a given scale. It is a characteristic of a good test that it is consistent and the measure is fixed when measuring what is built up to measure it (Zoid and Hesham, 2005, p. 145). In order to determine the validity of the scale and the stability of the resolution form, the researcher relied on the Cronbach-Alpha test, as shown in Table (5).

The distribution of data for the Innovation performance variable can also be determined by the results of the test shown in Table 5 that the value of the Shapiro-Wilk statistic is 0.984 and the significance level of the test statistic is 0.860, higher than the standard level of 0.05 and therefore statistically non-significant,. This means rejecting the first hypothesis and accepting the alternative hypothesis that all data of the Innovation performance variable are subject to normal distribution, thus enabling the researcher to use the parametric statistics in the analysis and testing.

Table (5): Reliability coefficients for the main variables and their dimensions

	variables and dimensions	Cronbach alpha coefficient
1.	Behavior flexibility	0.948
2.	Skill flexibility	0.945
3.	Flexible HR practices	0.935
4.	HR flexibility	0.932



5.	Exploratory	Innovation performance	0.942
6.	Innovation	performance Exploitation	0.935
7.	Innovation performance		0.930

Source: Prepared by the researcher based on the outputs of the program SPSS V.26.

It can be noted from Table (6) that the values of the Cronbach alpha coefficient for the main research variables and their sub-dimensions ranged between (0.948- 0.930). These values are considered acceptable in descriptive studies as they are high values compared to the standard Cronbach alpha values of (0.70). Thus, the research tool seebecame valid for the final application as it is characterized by accuracy, reliability and high validity.

4.3 Analysis, description and diagnosis of research variables:

4.3.1 Description and diagnosis of the variable reality of human resource flexibility

This variable consists of three sub-dimensions, as follows:

A. Behavior flexibility:

The statistical results in Table 6 show that the arithmetic mean of the general equilibrium of the behavior flexibility dimension was 3.83, with a general standard deviation of 0.587, a relative difference factor of 15.33%, and a response intensity of 76.78%. This dimension received a "high" response level, which confirms its importance at the level of the sample members. This confirms that the Misan Education Directorate possesses employees who have extensive knowledge of the behavioral texts that are appropriately presented in different situations.

Table (6): Descriptive statistics of human resource flexibility

Item	standard deviation	Arithmetic mean	coefficient of difference %	answer level	Answer intensity %	Items arrangement
Behavior flexibility	0.587	3.83	%15.33	high	%76.6	1
Skill flexibility	0.723	3.42	%21.14	high	%68.4	2
Flexible HR practices	.683	3.48	%19.63	high	%69.6	3
HR flexibility	0.585	3.57	%16.39	high	%71.4	-

Source: Prepared by the researcher based on the output of the statistical programs (Excel 2010, SPSS V.26)

B. Flexibility of skill:

Results shown in Table (6) give descriptive statistics of the research sample responses for the skill flexibility dimension, with an arithmetic mean of (3.42), standard deviation (0.723) and a relative difference factor of (21.14%) and response intensity (68.4%). This indicates good consistency in the research sample responses to this item, and within a "high" response level. This indicates that the presence of employee skills is identified through the presence of a range of alternatives and options that can be implemented and quickly conveyed through the organization's staff with broad skills that enable them to perform various job tasks.

C. Flexible HR practices:

As indicated above, the overall weighted average of the flexibility dimension of human resources practices was 3.48 with a standard deviation of 0.683, a relative difference factor of 19.63% and a response

intensity of 69.6%. This dimension received a "high" level of response, underscoring its importance at the individual sample level. This indicates a range of activities that develop and implement human resources strategies and are geared towards improving performance and enhancing merit, skill and human resources knowledge to achieve strategic objectives.

After reviewing the statistical description of all dimensions of the HR flexibility variable and the resulting research sample responses to its sub-dimensions, and table 6 Descriptive statistics and the general order of the dimensions of the HR flexibility variable on the ground which reflects the extent to which the members of the research sample are interested in these dimensions, as follows (flexibility of behavior, flexibility of HR practices and flexibility of skill) respectively.



For the main HR elasticity variable, it achieved an overall weighted mean arithmetic of 3.57 and its standard deviation value of 0.585, which indicates the scattering of the sample responses from their arithmetic mean, and a relative difference factor of 16.39%. The achieved response intensity was 71.4%, thus achieving a "high" response level. This

indicates that this variable is of high importance depending on the responses of the sample members. In order to represent the level of significance of the sub-dimensions of the human resources flexibility variable graphically at the level of the research sample, the columns were selected for this purpose and according to the values of the mathematical milieus achieved and the figure (2) shows this:

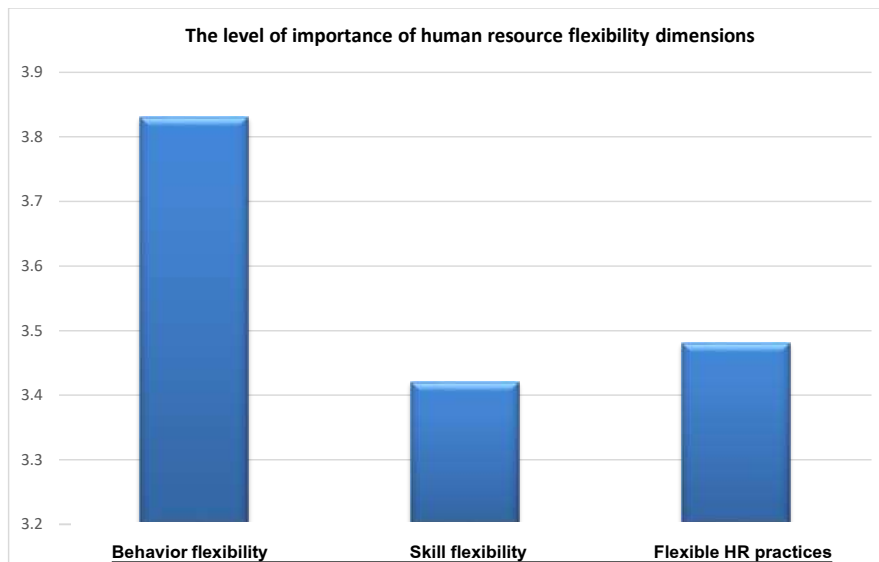


Figure (2): Illustration of the dimensions of the human resource flexibility variable
 Source: prepared by the researcher based on the program (Excel).

4.3.2 Description and diagnosis of the reality of the Innovation performance variable:

This variable consists of two sub-dimensions as follows:

A) Exploratory Innovation performance :

The results in Table 7 show that the weighted arithmetic average for the dimension of exploratory Innovation performance was 3.49 with a general standard deviation of 0.738, a relative difference factor of 21.15%, and a response intensity of 69.8%. This dimension received a "high" response level, confirming its importance at the level of the sample members. This confirms that there is radical innovation

designed to meet the educational and training needs of the Misan Education Directorate.

B) Exploitation Innovation performance :

The results in Table 7 show that the arithmetic mean overall weight of the IPR dimension was 3.33 with a general standard deviation of 0.834, a relative difference factor of 25.05% and a response intensity of 66.6%. This dimension received a "high" level of response, confirming its importance at the level of the sample members. This indicates an exploitation of resources to acquire completely new knowledge, skills and processes in the Misan Education Directorate.



Table (7): Descriptive statistics of Innovation performance

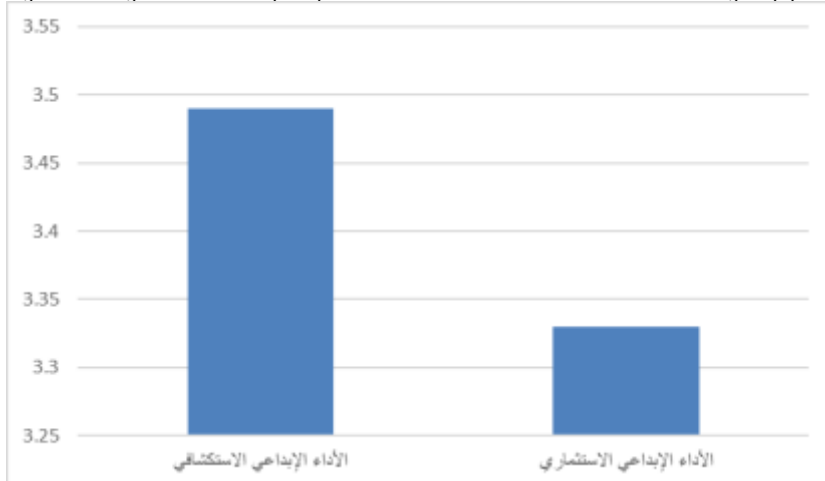
Item arrangement	standard deviation	Arithmetic mean	coefficient of difference %	answer level	Answer intensity %	Items Arrangement
Exploratory Innovation performance	0.738	3.49	%21.15	High	%69.8	1
Exploitation Innovation performance	0.834	3.33	%25.05	High	%66.6	2
Innovation performance	0.740	3.41	%21.7	High	%68.2	-

Source: Prepared by the researcher based on the output of the statistical programs (Excel 2010, SPSS V.26)

After reviewing the statistical description of all dimensions of the Innovation performance variable and the resulting research sample responses regarding its sub-dimensions, Table (7) shows the descriptive statistics and the general order of the dimensions of the Innovation performance variable, which reflects the extent to which the members of the research sample are interested in these dimensions. These are ranked as follows (exploratory Innovation performance, exploitation Innovation performance), respectively. For the main Innovation performance variable, it achieved a general weighted mean of (3.41) and a

standard deviation value of (0.740). This indicates the dispersion of the sample answers from their arithmetic mean, and a relative difference factor of (21.7%). The relative importance achieved was (68.2%), and thus achieved a "high" response level. This indicates that this variable has a high degree of significance depending on the responses of the sample members.

In order to represent the level of importance of the sub-dimensions of the Innovation performance variable graphically at the level of the sample, the graphs were created for this purpose and according to the values of the arithmetic mean achieved. Figure (3) illustrates this:



Exploratory Innovation performance

Exploitation Innovation performance

Figure (3)
Illustration

of the dimensions of the Innovation performance variable
Source: prepared by the researcher based on the program (Excel).

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4.4 Testing and interpreting the results of the research variables:

4.4.1 Testing correlations between research variables:

The researcher used the simple correlation coefficient (Pearson) to test the main hypothesis related to the correlations between the independent variable (human resource flexibility) and the dependent variable (Innovation performance). In order to assess the strength of the correlation coefficient, the evaluation will be adopted by dividing it into five categories, as shown in Table (8):

Table (8): Interpretation of the correlation value

	Correlation coefficient value	Interpretation of the correlation
1.	There is no correlation	$r = 0$
2.	Completely positive or negative	$r = \pm 1$
3.	Weak positive or negative	$0.30 (-0.00) \pm$
4.	Strong positive or negative	$(0.31-0.70) \pm$
5.	Very strong positive or negative	$(0.71-0.99) \pm$

Source: (Saunders, & Thornhill, 2009, p. 459).

Table (9) displays simple correlation coefficients (Pearson) among the current research variables, and indicates the type of test (2-tailed), in addition to its inclusion of an abbreviation (Sig.), which refers to the test of significance of the correlation coefficient by comparing the calculated (t) value with the tabular one without showing its values. The sign (**) on the correlation coefficient indicates that the correlation coefficient is significant at the level of (0.01) and with a confidence level of (0.99), while the sign (*) indicates its significance at the level of (0.05) with a confidence level of (0.95).

Table (9): Correlation coefficients between the flexibility of human resources and creative performance

The independent Variable	HR flexibility
The dependent Variable	
Innovation performance	0.767**
Sig. (2-tailed)	.000
result (resolution)	There is a strong and significant correlation at the level.000 between Human resource flexibility and Innovation performance

**** Correlation is significant at the 0.01 level (2-tailed). N 38**

Source: program output (SPSS V.26)

Thus, the main correlation hypothesis can be tested, which states (there is a significant correlation between human resources flexibility and Innovation performance), as the results of Table (9) indicate that there is a strong positive significant correlation between the research variables, as the value of the correlation coefficient between them (0.767**. This value indicates the strength of the positive relationship between these two variables at the significance level (0.01) with a confidence level of (99).0.).

Based on the foregoing, it is possible to accept the hypothesis that states (there is a significant correlation between the flexibility of human resources and Innovation performance).

Testing the correlation relationships between the search variables:

- i) For the purpose of testing the hypotheses of influence between the flexibility of human resources and Innovation performance, the researcher relied on the following statistical tools:



The statistical results shown in Table (10) show that the calculated value of (F) reached (51.30) at the level of significance (0.01) and accordingly accept the hypothesis. This means that there is a significant effect

between the flexibility of human resources and Innovation performance with a degree of confidence (99%).

Table (10) Calculated f value

ANOVA						
Model		Sum of squares	Df	mean square	F	Sig.
1	Regression	11,908	1	11,908	51,308	.000b
	Residual	8,355	36	.232		
	Total	20,263	37			

a. Dependent Variable: the performance-creative
 b. Predictors: (Constant), Flexible-human-resources
 N=38

Source: program output (SPSS V.26).

ii) The value of the coefficient of determination (R²) Table (11) shows the value of the coefficient of determination of (0.588). This means that the variable of flexibility of human resources explains (59%) of the changes in creative performance, while the remaining 41% is due to other variables not included in the research model.

Table (11) R² Value.

Model Summary				
Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.767a	.59	.576	.48175

1. Predictors: (Constant), Flexibility-HR
 N=38

Source: program output (SPSS V.26).

iii) The marginal slope (β) from the results of Table (12)

The marginal slope was (0.97), which means that the increase in the level of flexibility of human resources by one unit of standard differences will lead to a visit to Innovation performance by 97%. Since the impact is actually significant, we can accept the hypothesis that states (the flexibility of human resources affects the enhancement of Innovation performance).

Table (12) Marginal Slope (β)

				Coefficients		
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	std. Error	beta		
1	(constant)	-.051	.490		-.105	.917
	Flexible-human-resources	.968	.135	.767	7,163	.000

a. Dependent Variable: Creative-Performance .a
 N=38

Source: program output (SPSS V.26).

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Conclusions: In the light of the findings of the research, the following conclusions were reached :

- The statistical findings indicate that the research sample has staff who are able to change their habits and have sufficient behavioral flexibility to adapt to work and



environmental requirements whenever required.

- 2- The statistical results showed that the research sample had staff with a variety of skills that could be utilized and rotated between different jobs when needed.
- 3- Statistical findings indicate that the sample research has the flexibility of practices to adapt to the demands of the changing environment, as well as to promote continuous change and improvement in those practices in order to harmonize the human resources system with the changing business requirements.
- 4- The results showed that the sample research has a clear tendency to engage in exploratory activities, a practice (radical innovation) designed to meet educational and training needs to promote incremental improvements in processes.

5- The findings showed that the sample research attaches great importance to its investment of resources in order to acquire knowledge and skills that will help it to introduce new techniques into its operations without significant resistance.

6- The statistical results confirmed a correlation and effect between the independent variable (human resource flexibility) and the dependent variable (Innovation performance) at the general and individual level.

5.2 Recommendations:

Based on the conclusions reached, the research led to the following set of recommendations:

- 1- There is a need to take advantage of behavioral flexibility, which relates to concepts and behavioral texts, and the abilities possessed by the research sample to avoid different situations and circumstances. These texts provide common meanings and behaviors that facilitate coordination of activities within the social system, allowing individuals to perceive and absorb changes in the competitive environment.
- 2- Management leaders in the research sample should give adequate attention to the flexibility of staff skills by focusing on training and continuous learning as well as applying new knowledge and organizational skills to changing circumstances.
- 3- The research sample's attention to human resources practices requires that it cover a range of activities that develop and implement

human resources strategies and are geared towards improving performance and enhancing human resources merit and knowledge to achieve strategic objectives.

- 4- Encouraging the administrative leaders involved in the research to present new ideas and follow up on their implementation, in a way that contributes to the promotion of Innovation performance through the formulation of training and development programs that promote performance. This is in addition to activating the incentive system on the basis of professional standards that include excellence and creativity in performance, and giving them the reward that suits them and the value that those ideas carry for the educational process in them.
- 5- Continuous assessment of the capacity of the Directorate's research sample to efficiently and effectively utilize its various resources with the assistance of consultants on possible ways of developing these resources.
- 6- Strengthening cooperation and coordination between the Misan Education Directorate and its counterparts in other provinces with a view to benefiting from the accumulated expertise of those directorates. This can take the form of preparation of curricula and school plans or holding scientific conferences and seminars, in a way that contributes to the dissemination and sharing of knowledge among them, in a way that enhances their creative behavior and thus their Innovation performance.

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