

The Role of Human Resources Flexibility in Enhancing Sustainable Performance: The Mediating Role of the Agile Workforce

Bushra Mohammed Alwan ¹, Saleh Mahdi Mohammed Al-Hasnawi ², Mohammed Hussein Alali ³, Ruaa Salih Mahdi ⁴

¹ College of Education for Human Sciences, University of Kerbala, IRAQ

^{2,4} Business Administration Department, Faculty of Administration and Economics, University of Kerbala, IRAQ

³ University of Kufa, Iraq

Abstract:

The research aims to explore the mediating role of the agile workforce in strengthening the relationship between the role of human resources flexibility and enhancing sustainable performance at the level of the health institution affiliated with the Hussein shrine in the Holy Governorate of Karbala. The field of research is the main question that represents the intellectual problem of the study: Does adopting human resources flexibility contribute to the health institution? Researched on enhancing sustainable performance through the mediating role of an agile workforce. The research was applied in the health institution affiliated with the Hussein Shrine in the Holy Governorate of Karbala on a random sample of (144) employee respondents out of (220) members of the total study population, using a questionnaire form prepared for this purpose. Statistical methods were used to analyze the data, including equation modeling. Structural and path analysis using SPSS V.28, AMOS 26. The researchers reached a set of conclusions, the most important of which is the existence of a significant direct influence relationship between the research variables and the presence of a considerable indirect influence of the agile workforce in the relationship between adopting resource flexibility Humanity and enhancing sustainable performance. Based on the conclusions reached by the researchers, they were able to formulate some recommendations to improve levels of response to work requirements, the most important of which is increasing interest in the agile workforce in the health institution investigated in the field of research, as it represents the basic foundation for enhancing and improving survival and continuity, especially in light of a severe environment. Change gives workers at all levels the right to participate in decision-making in order to improve its environmental performance, and supports workers in the organization in putting new skills into use at high speed.

Keywords: human resources flexibility, sustainable performance, agile workforce.

Introduction

In light of the rapid environmental developments and the diversity of human resources sources, it has become necessary to work with a human resources flexibility strategy that contributes to the success of organizations, as it is considered the basic foundation for sustainable performance mediated by agile workforces.

Human resources flexibility is the ability of companies to deal with external and internal challenges, thus creating competitive opportunities and the ability to reduce losses from a technical standpoint (1). (Alolayyan & Alyahya, 2023:1)

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The agile workforce includes all employees' characteristics, attitudes, skills, and capabilities that enable them to work flexibly and adapt to uncertain changes (Heidt & Pfnür, 2023:2147).

On the other hand, sustainable performance is when organizations have an interconnected digital architecture, a shorter and more diverse supply chain, a flexible and adaptable culture, wise leadership and a shared workforce, innovative digital technologies, and a financial emergency plan that can withstand environmental challenges. Sustainable performance is defined as the result of organizational processes, which uses resources to achieve results in terms of economic performance (e.g., increased profit, increased sales, cost management, investments), social performance (e.g., quality of work, life, corporate social responsibility, business networks), and environmental performance (For example, ecological friendliness, value delivery, and customer satisfaction (Gao et al., 2023:7).

The research consisted of four sections: the first dealt with methodology, the second section dealt with the theoretical aspect, the third section was devoted to the practical element, while the research concluded with the fourth section, conclusions and recommendations, which were presented in light of the statistical effort.

1-methodology

The research deals with the problem, objectives, importance, methodology, tools for collecting information, analysis, and statistical processing.

1-1- the problem

The problem of the research is represented by the limited interest on the part of Iraqi companies in general and the researched institution in particular in sustainable performance through the human resources possessed by the research sample institution, which retains flexibility in its human resources to develop and sustain them in the long term to keep pace with the changes occurring in the business environment, as The research problem begins by focusing on the main question: to demonstrate the indirect effect between human resources flexibility and sustainable performance mediated by the agile workforce, as sustainable performance is the basic pillar of organizational excellence and its main support.

It is the flexibility of human resources. To clarify the problem, the following questions are posed:

1. What is the impact of human resources flexibility on sustainable performance?
2. How does human resources flexibility impact an agile workforce?
3. What is the indirect effect between the agile workforce as an intermediary variable, human resources flexibility as an independent variable, and sustainable performance as a dependent variable?

1-2- Objectives

The objectives are manifested as follows:

1. Explaining the importance of adopting the flexibility of human resources in contributing to the growth of organizations.
2. Demonstrating the strength of influence between the variables that develop sustainable performance.
3. Utilizing the mediating variable in developing human resources flexibility.

1-3- Importance

Importance can be explained as follows:

1. Providing an intellectual and practical vision of the reality of human resources

flexibility and sustainable performance mediated by an agile workforce.

2. The research conclusions support the researched organization to adopt interest in the independent variable.
3. The importance is evident from the importance of the researched organization, which is related to human life under the spread of diseases, as well as scientific progress in medicine.

1-4- Hypothetical model

It represents the logical relationships that explain the picture of the reality you are interested in.

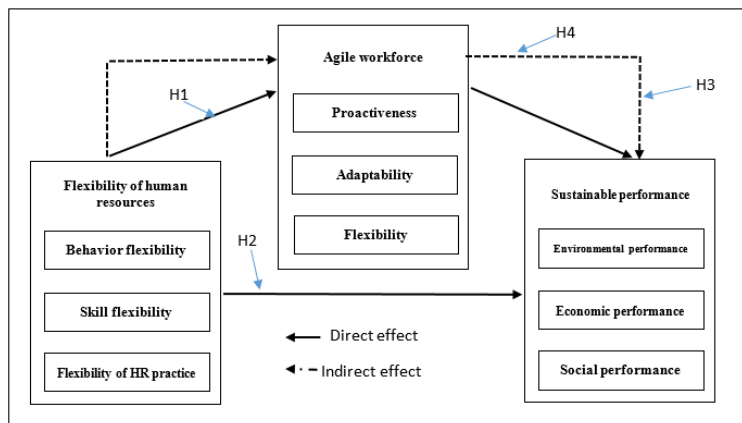


Figure (1) Hypothetical model of the study

1-5- Hypotheses

Through the title of the research, we can formulate hypotheses according to the following:

1. Human resources flexibility has a direct, statistically significant effect on the agile workforce in the health institution studied.
2. There is a direct, statistically significant effect of the agile workforce on sustainable performance in the health institution studied.
3. Human resources flexibility has a direct, statistically significant effect on sustainable performance in the health institution studied.
4. There is an indirect, statistically significant effect of the flexibility of human resources on sustainable performance through the agile workforce in the health institution studied.

2-The theoretical side

This research will address the intellectual and theoretical frameworks for the research variables (human resource flexibility, sustainable performance, and agile workforce) according to the following: -

2-1- HR Flexibility

2-1-1- HR Flexibility Concept

Human resources flexibility is the ability of human resources management to facilitate the organization's ability to adapt the environment highly effectively to changing environmental variables and respond to them on time (Zolin et al., 2011:1098). Human resource flexibility enhances a company's ability to adapt effectively and on time to changing imperatives imposed by the environment or within the company (Veise et al., 1791: 2014). The concept of human resource flexibility is an important construct that may

enable managers and management scholars to gain a greater understanding of the role of human resource management in enhancing company performance (Way et al., 2015:1098). What is meant by the flexibility of human resources is their general ability to adapt employee characteristics (such as knowledge, skills, and behaviors) to changing environmental conditions (Karman, 2019:326). Human resource flexibility is a human resources management measure the organization takes to deal with changes in the market environment to emphasize business flexibility, which, with a different combination, can generate distinct flexibility effects (380: Huang & Hsu, 2019).

2-1-2- The importance of HR flexibility

Human resources flexibility is one of the important topics in organizational thought, as this term has roots in postmodern theories and resource theories. It contains the company's capabilities to adapt to important and unexpected environmental changes. Therefore, employment policies in developed countries are proposed in a way that responds to this need, as well as requires... Dynamic and changing environments and incompatible organizational purposes flexibility in human resources (1792: 2014Veise et al.,) The importance of flexibility in human resources can be summarized as follows:

1. The flexibility of human resources allows for the realization of the skills, experiences, and information that are possessed by employees inside the organization. These can be translated into human energy and directed toward the diagnosis and implementation of demands. (8 (Abu-Nahel et al., 2020: 2).
2. Human resources flexibility helps organizations enhance the participation of new working individuals in decision-making, improve job performance, and provide flexibility to its working members while performing their duties (Bal & De Lange, 2015:2).
3. Human resource flexibility is important in entrepreneurial ventures that must respond to new business development's changing challenges (Zolin et al., 2011:1097).
4. Human resources flexibility helps adopt innovative and good solutions in the organization because the ability to develop skills means that individual employees can respond better to stimuli in the business environment (Hui et al., 2010:990).

2-1-3- Dimensions of HR flexibility

Abu-Nahel et al., 2020:29 identified three dimensions of human resource flexibility, which are as follows:

1. Flexibility of Behavior: Flexibility of behavior is the ability to demonstrate a variety of behavioral roles under different circumstances and environments. Employee behaviors are actions or arrangements that employees adopt in their jobs if an employee who used special actions in repeated work situations chooses the same action in a situation. Now, his behavior will be inflexible. On the contrary, if employees seek new arrangements to carry out daily activities or new circumstances, their behavior will be flexible (Sabuhari & Irawanto, 2020:207). Therefore, the term "behavioral flexibility" is more tolerant of... Non-repetitive behavior and most employees respond to new circumstances creatively and do not rely on fixed, expected, and pre-determined patterns. Therefore, human resources flexibility has an internal orientation because it refers to employees' skills, capabilities, and behaviors that lead to options to pursue new and appropriate strategic alternatives (Veise et al., 1792: 2014).

2. Flexibility of Skill: The concept of flexibility in human resources pertains to the ability of employees to rapidly implement and transfer a variety of alternatives and options. The organization's high efficiency is attributed to the fact that the employees possess a wide range of skills that enable them to perform a variety of job tasks (Veise et al., 1791: 2014). This skill flexibility is defined as a set of actual and potential alternative uses that can be

applied to the skills of the employees. This skill flexibility is what can be used to identify different patterns of thinking and acquire the ability to transfer these patterns and shift the direction of thinking. Proportionality is the ability to implement and comprehend things in a variety of ways during the transition from conventional thinking to responding, reacting, and capturing them. The effective and efficient performance of employees is contingent upon the skills and knowledge that define them, which are acquired through business operations and refined through training (Abu-Nahel et al., 2020: 29).

3. Flexibility of Human Resources Practice: It has been categorized. Many administrative theorists regard it as a collection of activities that are designed to create human resources strategies, implement them, and guide them toward the improvement of performance and the development of the competency, skill, and knowledge of human resources in order to achieve strategic objectives. The flexibility of human resources management practices is derived from the organization's capacity and size to implement administrative practices, including planning, hiring, training, job analysis, and adapting to the demands of the environment, in a manner that is conducive to the organization's competitive advantage and advantage (Abu-Nahel et al., 2020: 29). Flexibility in human resources practice, which has been defined, refers to It is the extent to which the company's human resources implementation can adapt to different situations, in various locations, or company units, and the speed of adaptation (Sabuhari & Irawanto, 2020:207).

2-2- Sustainable performance. sustainable performance

2-2-1- The concept of sustainable performance

Sustainable performance results from the organization's ability to invest resources and direct them towards achieving goals. Performance is a reflection of how the organization uses its human and material resources and uses them in an optimal manner that leads to achieving the desired goals (Pluchart, 2011: 4). Sustainable performance is a business and investment strategy that aims to balance the requirements of current and future stakeholders by utilizing best business practices. Artiach et al. (2010) And (Singh & El-Kassar, 2019:1264) see it as the ability of organizations to respond not only to their short-term financial goals but also to their future goals. Sustainable performance is adopting things that meet the organization's Protecting, sustaining, and enhancing the human and natural resources that will be required in the future, while also meeting the requirements of its stakeholders (Yusliza et al., 2020:6).

Sustainable performance is maintaining productivity processes, natural or manufactured, by replacing used resources with resources of equal or greater value without harming or endangering natural biological systems (Mammeri & Saous, 2021:13).

2-2-2- The importance of sustainable performance

The global market has become highly competitive in the past few decades, forcing organizations to face the challenge of continuous improvement to achieve sustainable customer satisfaction and organizational competitiveness. The ever-increasing competition in the market has put enormous pressure on organizations to continuously improve the quality of products and services for organizational growth. Sustainable performance to enhance its position and reputation, as de Jonge & Peeters (2019:1) and Hartini et al., 2021:1-2) explained the importance of sustainable performance in several points, which are as follows: -

1. Activating and activating the role of competition among each section of the economic unit and between similar units and working on making effective strategic decisions to improve its performance.
2. Effective contribution to reducing costs to a minimum by setting important performance standards.

3. Sustainable performance effectively rationalizes energy consumption, wastes natural and material resources, and eliminates environmental pollution to improve ecological life.
4. Sustainable performance attracts more creative and distinguished businesses, contributes to better performance, produces products, activities and practices in new markets, and achieves a competitive advantage for sustainable economic units compared to other monetary units that do not adopt sustainable practices.
5. Sustainable performance can be adopted to evaluate past and current performance and can be used in future planning and decision support.

2-2-3- Dimensions of sustainable performance

There are three dimensions of sustainable performance identified by (Yusliza et al., 2020:43), which are as follows: -

1-Environmental performance: When firms engage in technological competition, they frequently employ technologies that enable them to optimize resource utilization efficiency while also prioritizing environmental sustainability through a focus on pollution control and waste reduction. Hence, environmentally careful operational actions can lead to the development of contemporary technology. The organization, or more precisely, the entirety of the company's practices and attitudes aimed at attaining environmental equilibrium. The NRBV hypothesis posits that firms can enhance their reputation and boost profitability by meeting significant stakeholders' environmental expectations through the use of new technologies, hence gaining their trust. Therefore, by consistently monitoring and periodically comparing the Corporate Environmental Performance (CEP), organizations can effectively encourage their members or employees to collectively address and reduce environmental risks. Additionally, this practice can also improve the organization's comprehension of potential solutions and the technological setup of functional processes (Sahoo & Upadhyay, 2023:554).

2-Economic performance: Economic performance includes the ability of organizations to reduce costs associated with materials purchased and consumed and to address environmental accidents (Zhu & Choi, 2017:4). Sustainable economic performance is aimed at reducing overall supply chain costs and dealing with specific solutions to reduce transportation and supply chain design costs. Most studies had a social and environmental impact as secondary goals, which included reducing total carbon emissions, water footprint, and job creation (Kamble & Gawankar, 2020:183).

3-Social performance: Social performance pertains to the manner in which the organization interacts with its employees, society, and consumers. Implementing a variety of social practices, particularly those that pertain to employee rights, training and career development, customer-related issues, and support for social problems, is highly valued by stakeholders who recognize the company's commitment to responsibility in its products and services. Increased personal satisfaction and loyalty will result from the establishment of stable and equitable relationships between employees and management within the organization. (López-Penabad et al., 2023:1406). Social performance can be explained as the ability of business organizations to make their human resources effective. Organizations also seek to achieve social welfare and community health, avoid occupational risks, and maintain the safety of working individuals (Paulraj, 2011: 3).

2-3- Agile workforce

2-3-1- The concept of the agile workforce

The term agile workforce is one of the attributes of a broad framework capable of enhancing the competitive environment to face all sudden environmental changes. The agile workforce consists of a set of attributes (flexibility, motivation, adaptability, training, participation, and

empowerment), and these attributes are used to respond. Fast and flexible to sudden changes and easily adapting to unexpected changes that occur in the surrounding environment (AL- Mahmeed, 2018:17). (Muduli & Ganes, 2018:1) explain that the concept of an agile workforce is a group of working individuals who have a broad vision and capabilities to deal with the disturbances that occur in the market and through which they can benefit from the positive side of these dynamic conditions, such as sudden shifts in customer preferences.

An agile workforce is the ability of individuals working in the organization to respond quickly and exploit the benefits of unexpected changes in the surrounding environment (Evangelist-Roach, 2020: 32).

2-3-2- The importance of an agile workforce

As a result of the rapid changes in the business environment, agile workforces emerged to confront the changes that occur in the work environment, where working individuals would meet among themselves to find solutions to the problems that arise in the work environment, find solutions for them, search for new opportunities, and participate in creating products and services, and this was It is called organizational intelligence (Sohrabi et al., 2014:279). The importance of an agile workforce lies in several points, as follows: -

1. The agile workforce is primarily concerned with the speed of response, and it consists of organizational flexibility to be very fast and effective. As others consider it, organizational flexibility combines appropriate, rapid, effective, and proactive change (Woodhead & Raman, 2021:3).
2. It is necessary to realize the importance of an agile workforce in building and developing agile organizations because it is believed that flexibility and organizational agility depend on the agility of the workforce and modern technology and thus lead to improved quality and improved customer service (Ripatti, 2016:13).
3. An agile workforce contributes to responding quickly and correctly to change and its ability to exploit changes and use them as opportunities (Petermann & Zacher, 2022:2).
4. Agile workforces in organizations play an important role in combining vision and operational management, which means disseminating ideas and integrating them into the organization's activities, as well as the ability to quickly identify market opportunities (Rzepka & Bojar, 2020:385).

2-3-3- Dimensions of an agile workforce

In determining the dimensions of the agile workforce, the researchers relied on (Junior, 2021: 162) and (Evangelist-Roach, 2020: 35) scales because they are the most consistent and compatible with the research objectives, which are as follows:

1-Proactiveness: Proactive activity has emerged as a very important behavior in business organizations, and studies have proven that it is associated with positive, organized, and unique results. The proactive personality has been identified as a stable personal trait that adopts many positive work behaviors and results. The behaviors have been described. Proactiveness is the proactive, self-initiated actions of working individuals to change and improve themselves or their environment (Otto et al., 2019:3). As Das & Suar (202:34) see, workforce flexibility includes proactiveness, adaptability, and flexibility Human resource activities, including job autonomy, job enrichment, employee engagement, employee training, multitasking, and multiskilling, contribute to workforce flexibility. Consequently, an agile workforce enhances company performance.

2-The ability to adapt: The ability to adapt means the willingness of working individuals to modify their behaviors such as (personal, social, and cultural relationships) and make them fit the new environment better (Evangelist-Roach, 2020: 35). What is meant by adaptability is

the ability of business organizations to adapt to changes that occur in the internal and external environment of the organization, and here the role of adaptability is highlighted through the ability of working individuals to adapt their behaviors to the changing work environment or the requirements of a new situation or event (Gorostiaga et al., 2022:84).

3-Flexibility: The flexibility of working individuals includes network-based learning and adaptive activities that show the availability of resources, the motivation of working individuals, and their ability to use resources. Flexibility can be developed through training and work experience, special knowledge in the organization, or relevant personal traits. By working and efficiently (162: Junior, 2021).

Organizational flexibility from an HR perspective includes: (1) responsiveness to change, (2) efficiency, (3) flexibility, and (4) rapidity. Leadership, reward systems, organizational culture, suppliers, consumers, IT applications, and employees are all potential avenues for fostering organizational resilience. Three determinants comprise the organizational resilience framework: (1) a scalable workforce, (2) rapid organizational learning, and (3) adaptable organizational infrastructure. A vast agile workforce is essential for the establishment of an agile organization. Workforce agility is contingent upon the manner in which employees manage and react to fluctuations in unexpected market conditions (Das & Suar, 202:34).

3-The practical side

3-1- the study population and sample

The appropriate choice of the place to apply the study and the studied community are among the basic aspects that achieve the accuracy and validity of the results and test the study hypotheses. Therefore, the health institution affiliated with the Hussein Shrine in the Holy Governorate of Karbala will be a practical place to implement the study. Because of the great importance that this studied health institution occupies in The health sector in Iraq in general and in Karbala Governorate in particular, where the sample size was chosen based on statistical tables (Krejcie (1970:608)), where the population number of all individuals and employees of the health institution studied was (220) individuals, and therefore, according to the statistical tables, the sample size The ideal is at least (140) people. To ensure that the study requirements are met, the researchers distributed (150) questionnaires to a random sample of workers in some health institutions in the Holy Governorate of Karbala, as shown in the table below.

Table (1) Response of members of the researched sample

the condition	Spreader	Falsehood	Non-refundable	suitable for analysis
the number	150	1	5	144
percentage	100.00%	0.7%	3.3%	96.0%

The study sample obtained different characteristics, whether in terms of personal or professional characteristics, which were represented by (age, gender, academic qualification, number of years of service, job position), as shown in the table below:

Table (2) Demographic information for the study sample

the age	Repetition	The ratio
18 - 30 years old	54	37.5%
31 – 40 years	44	30.6%
From 41 - 50 years old	24	16.7%
51 years and over	22	15.3%
the total	144	100
The humankind	Repetition	The ratio
Male	97	67.4%
Feminine	47	32.6%
the total	144	100
Qualification	Repetition	The ratio
Bachelor's	42	29.2%
Higher Diploma	43	29.9%
Master's	22	15.3%
Ph.D	37	25.7%
the total	144	100
Number of years of service	Repetition	The ratio
Five years and less	36	25.0%
From 6 to 10 years	52	36.1%
From 11 to 15 years	21	14.6%
16 years and over	35	24.3%
the total	144	100
Career Center	Repetition	The ratio
Director general	4	2.8%
Head of the Department	22	15.3%
Division manager	53	36.8%
Unit manager	65	45.1%
the total	144	100

3-2- Measuring the reliability coefficient, coding the study scale, and the normal distribution of the data

- This is for easy handling of data in SPSS and Amos. Ver .26 We denote the study scale.
- To ensure real results that best represent the population under study are reached, the appropriate statistical method must be determined for the nature of the drawn data and that it is compatible with its distribution since the test was applied to the study variables. By extracting the coefficient of flatness and torsion, most studies indicate that their acceptable values must be... If it is limited to (+1.96-1.96), based on (Hair et al., 2010), the data is normally distributed.
- Cronbach's Alpha coefficient, which is considered reliable when it is identical to or greater than 0.70, is also used to determine the level of reliability (Nunnally & Bernstein, 1994).

The conditions for normal distribution and reliability coefficient of the scale were met, as in the following table:

Table 3: Study scale coding

The dimension	cod	Number of questions	Kurtosis	Skewness	Cronbach alpha	the scale
Flexibility of behavior	FB	5	.824	-1.185-	87.80%	Abo-Nahel, et al, 2020: 29
Skill flexibility	FK	5	1.155	-1.371-	94.60%	
Flexibility of HR practice	FHRP	5	1.219	-1.410-	%91.20	
Human resources flexibility	HRF	15	.325	-.883-	91.20%	
Proactiveness	PR	5	1.766	-1.343-	87.50%	Yusiliza, et al, 2021: 43
Adaptability	AD	5	1.328	-1.171-	79.40%	
Flexibility	FL	5	.482	-.674-	88.90%	
Agile workforce	AWF	15	1.399	-1.643-	85.27%	
Environmental performance	EP	5	1.450	-1.599-	85.60%	Junior, 2021: 162
Economic performance	ECP	5	1.055	-1.129-	91.10%	
Social performance	SP	5	.979	-1.105-	93.10%	
Sustainable performance	SP	15	1.405	-.898-	89.93%	

"Source: Prepared by the researcher"

3-3- Descriptive statistics for the study variables

Through this paragraph of the analysis, we seek to identify the reality of the study variables by studying the dimensions of each variable for the opinions of a sample of workers in some of the health institutions affiliated with the Hussein Shrine in the Holy Governorate of Karbala (144 respondents), where the level of response to the opinions of the sample studied will be determined according to their answers based on a scale (Likert quintile based on the sample's answers to the questionnaire questions.

The arithmetic mean range of the respondents' responses is represented in the table below.

Table (4): Weighted average and response level

Answer scale	Answer direction	Weights		Weighted average	
very good	I strongly agree	100%	84.2%	5	4.21
good	I agree	84%	68.2%	4.2	3.41
middle	Neutral	68%	%52.2	3.4	2.61
weak	I do not agree	52%	36.2%	2.6	1.81
Very weak	I strongly disagree	36%	20%	1.8	1

The comparison of the dimensions and dimensions was based on obtaining the lowest the coefficient of variation (C.V) and the highest level of relative importance, as this indicates high consistency and high response. Additionally, the level of availability, practice, interest, and homogeneity by the health institution that was studied for the main dimensions and variables was also taken into consideration.

3-3-1- Flexibility of human resources

It is evident that the human resources flexibility variable attained an overall mean of (3.321) with a deviation of (0.862), as shown in the table and figure below, which provide a

summary of the results with regard to this variable. where it achieved its the coefficient of variation (C.V) (25.96%), as the dimensions of the variable are centered towards neutrality. The results indicate that the level of The studied health institution's interest in the development and flexibility of human resources was moderate, as the studied health institution must reconsider the design of human resources management features and practices to adapt to the medium and long-term goals of the organization and support the organization's employees to put new skills into use at high speed, as well as adopting the health institution's culture of participation and interaction. In making decisions to achieve better results, as for the dimensional level, the results showed the following

- The dimension (flexibility of behavior) achieved an mean of the arithmetic of (3.321) with a deviation of (0.862), where its the coefficient of variation (C.V) was recorded at (25.96%), as it occupied the (second) level in terms of the order of importance.
- The dimension of (skill flexibility) achieved the highest mean of the arithmetic of (3.391) with a deviation of (0.735), as it recorded its lowest the coefficient of variation (C.V) (21.68%), as it occupied the (first) level in terms of the order of importance.
- The dimension (flexibility of human resources practice) achieved the lowest mean of the arithmetic of (3.251) with a deviation of (0.989), as it recorded its highest the coefficient of variation (C.V) (30.42%) as it occupied the (last) level in terms of the order of importance.

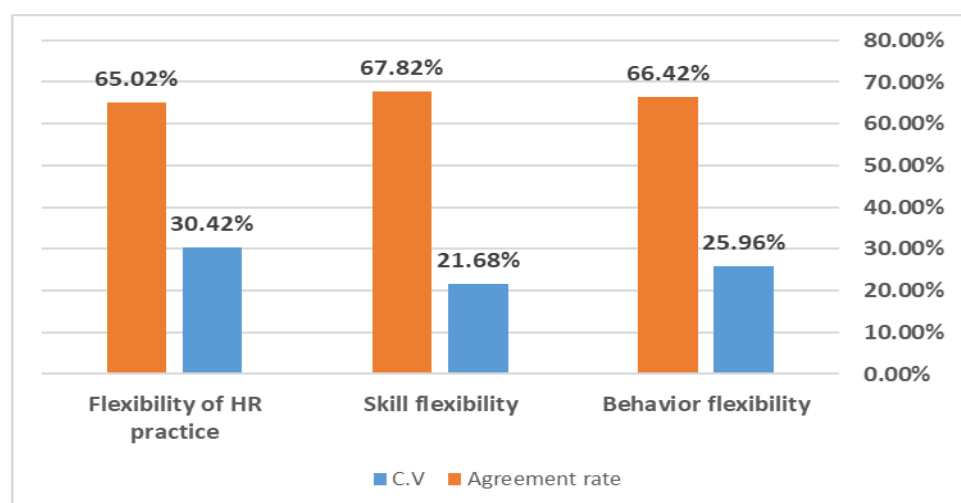


Figure (2) The coefficient of variation (C.V) and percentage of agreement for the dimensions of the human resources flexibility variable

Table (5) Summary of descriptive indicators for the dimensions of the human resources flexibility variable

Dimensions of the human resources flexibility variable	MEAN	S.D	C.V	Agreement rate	Disagreement rate	Answer direction	NO.
Behavior flexibility	3.321	0.862	25.96%	66.42%	33.58%	Neutral	2
Skill flexibility	3.391	0.735	21.68%	67.82%	32.18%	Neutral	1
Flexibility of HR practice	3.251	0.989	30.42%	65.02%	34.98%	Neutral	3
Flexibility of human resources	3.321	0.862	%25.96	%66.42	%33.58	Neutral	

"Source: The researcher, based on the statistical program SPSS.28."

3-3-2-Agile workforce

There is a clear indication that the agile workforce variable attained an overall mean of (3.306) with a deviation of (0.913), as shown in the table and figure that follows. In general, the findings with this variable are summarized in the following table and figure. as it

achieved a the coefficient of variation (C.V) for it (27.63%), as the dimensions of the variable are centered towards neutrality. The results indicate that the level of interest of the health institution studied in an agile workforce was moderate. The studied health institution must reconsider its interest in getting working individuals out of ambiguous situations comfortably, support and encourage cadres to use the electronic system harmoniously with the new changes and search for innovative and effective means. To accomplish work, as for the dimensional level, the results showed the following

- The (proactive) dimension achieved an mean of the arithmetic of (3.341) with a deviation of (0.962), where its the coefficient of variation (C.V) was recorded at (28.79%), as it occupied the (second) level in terms of the order of importance.
- The (adaptation ability) dimension achieved the lowest mean of the arithmetic of (3.216) with a deviation of (1.019), as it recorded its highest the coefficient of variation (C.V) (31.69%), as it occupied the (last) level in terms of the order of importance.
- The (Flexibility) dimension achieved the highest mean of the arithmetic of (3.361) with a deviation of (0.759), as it recorded its lowest the coefficient of variation (C.V) (22.58%), as it occupied the (first) level in terms of the order of importance.

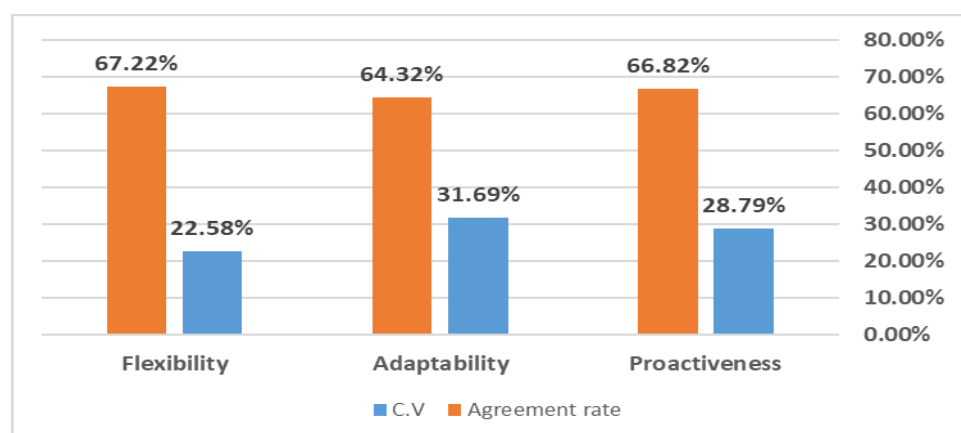


Figure (3) The coefficient of variation (C.V) and percentage of agreement for the dimensions of the agile workforce variable

Table (6) Summary of descriptive indicators for the dimensions of the agile workforce variable

Dimensions of Agile workforce	MEAN	S.D	C.V	Agreement rate	Disagreement rate	Answer direction	NO.
Proactiveness	3.341	0.962	28.79%	66.82%	33.18%	Neutral	2
Adaptability	3.216	1.019	31.69%	64.32%	35.68%	Neutral	3
Flexibility	3.361	0.759	22.58%	67.22%	32.78%	Neutral	1
Agile workforce	3.306	0.913	27.63%	66.12%	33.88%	Neutral	

"Source: The researcher, based on the statistical program SPSS.28."

3-3-3- Sustainable performance

In general, the table and figure that follows provide a summary of the findings with regard to the sustainable performance variable. It is evident that the variable obtained an overall mean of (3.312) with a deviation of (0.847), as shown in the table and figure. where it achieved its the coefficient of variation (C.V) (25.57%), as the dimensions of the variable are centered towards neutrality. The results indicate that the level of interest in The studied health institution's sustainable performance was average, as the studied health institution must reconsider providing the necessary supplies to maintain a safe work environment for workers and increase its investments in economic projects to achieve higher growth rates, as well as encouraging a culture of social responsibility among all individuals working in it. At

the dimensional level, the results showed the following

- The (Environmental Performance) dimension achieved the highest mean of the arithmetic of (3.388) with a deviation of (0.662), as it recorded its lowest the coefficient of variation (C.V) (19.54%), as it occupied the (first) level in terms of the order of importance.
- The dimension of (economic performance) achieved an mean of the arithmetic of (3.326) with a deviation of (0.919), as its the coefficient of variation (C.V) was recorded (27.63%) as it occupied the (second) level in terms of the order of importance.
- The (Social Performance) dimension achieved the lowest mean of the arithmetic of (3.221) with a deviation of (0.959), as it recorded its lowest the coefficient of variation (C.V) (29.77%), as it occupied the (last) level in terms of the order of importance.

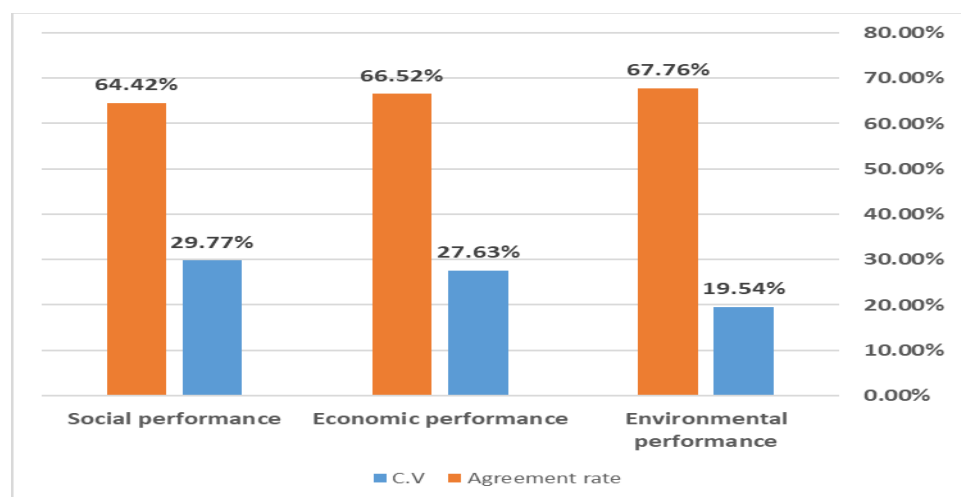


Figure (4) The coefficient of variation (C.V) and percentage of agreement for the dimensions of the sustainable performance variable

Table (7) Summary of descriptive indicators for the dimensions of the sustainable performance variable

Dimensions of Sustainable Performance	MEAN	S.D	C.V	Agreement rate	Disagreement rate	Answer direction	NO.
Environmental performance	3.388	0.662	19.54%	67.76%	32.24%	Neutral	2
Economic performance	3.326	0.919	27.63%	66.52%	33.48%	Neutral	3
Social performance	3.221	0.959	29.77%	64.42%	35.58%	Neutral	1
Sustainable performance	3.312	0.847	25.57%	66.23%	33.77%	Neutral	

"Source: The researcher, based on the statistical program SPSS.28."

3-4- Testing and analyzing the study hypotheses

Structural equation modeling is a statistical method for studying and modeling the relationship between variables. It shows the dependence of one variable, called the dependent variable, on one or more variables, called the independent variables, and a variable and an intermediary, called the mediating variable. A mathematical model that describes the correlation between the dependent variable, the independent variables, and the mediating variables.

Within this paragraph, the outcomes of the impact hypothesis tests will be reviewed, and the following hypotheses will be evaluated in sequential order:

1- The first main hypothesis (H1): There is a direct, statistically significant effect of the flexibility of human resources on the agile workforce in the health institution studied.

To test the study hypotheses, the researcher designed a structural model. A representation of the structural model that the researcher developed and suggested can be found in the following figure.:

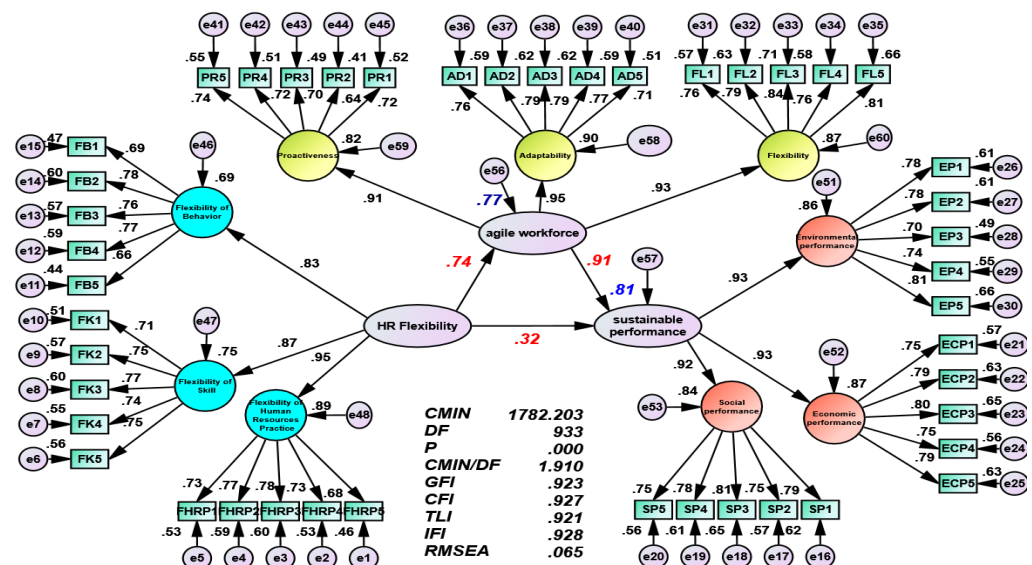


Figure (5) The effect between human resources flexibility and sustainable performance by averaging the agile workforce

Source: "AMOS Program Output. 26"

The results that the researcher acquired from the statistical analysis that was relevant to the criteria for accepting or rejecting the impact model are included in the table that can be found below:

Table (8) The direct and indirect impact of the study hypotheses

Path				Indirect effect	direct effect	S.E	C.R	R2	Sig.	
Human resources flexibility	→		Agile workforce	---	0.743	0.081	19.329	0.771	0.000	
Agile workforce	→		Sustainable performance	---	0.906	0.052	12.100	0.923	0.000	
Human resources flexibility	→		Sustainable performance	---	0.321	0.122	3.435	0.203	0.000	
Human resources flexibility	→	Agile workforce	→	Sustainable performance	0.673	---	0.036	32.154	0.812	0.000
The amount of improvement brought about by an agile workforce										
Human resources flexibility	→	Agile workforce	→	Sustainable performance	0.352	---	0.086	28.719	0.609	0.000

"The researcher prepared the source based on the outputs of the (AMOS.V.24) program".

The findings presented in the table above indicate the existence of a direct effect that is statistically significant at a level of significance lower than 5% for the human resources flexibility axis in the agile workforce axis. The effect value reached (0.743), with a critical percentage of (19.329), which is a significant value due to the fact that the p-value was equal to zero, and as a result, it is lower than the level of significance of 5%. We are able to draw the conclusion that there is a direct connection between the two. To put it another way, a

rise of one unit in the value of the human resources flexibility axis results in a rise of 0.743 units in the value of the agile workforce axis. Furthermore, the flexibility of human resources accounts for a percentage of the variance, which is 71.1%. This is due to the fact that the agile workforce is responsible for the remaining proportion, which is 28.9%, which is related to other variables that were not included in the study model. This means greater flexibility of human resources by supporting workers in the organization to put new skills into use at high speed and with tolerance for well-intentioned mistakes. It treats them as learning opportunities, and workers acquire new skills quickly as the agile workforce increases in the health institution studied.

2- The second main hypothesis (H2): There is a direct, statistically significant effect of the agile workforce on sustainable performance in the health institution studied.

According to the findings presented in the table above, there is a direct effect that is statistically significant below the 5% level of significance for the agile workforce axis in the sustainable performance axis. The value of the impact reached (0.906), with a critical ratio of (12.100), which is a significant value due to the fact that the p-value was equal to zero and is therefore less than the 5% level of significance. As a result, we are able to draw the conclusion that there is a relationship between the two variables. To put it another way, a one-unit rise in the value of the agile workforce axis results in a 0.906-unit increase in the value of the sustainable performance axis. Furthermore, the agile workforce is responsible for explaining a percentage of the variance that occurs in Sustainable performance, which accounts for 92.3% of the total variance. The remaining 7.7% of the variance accounts for other variables that were not included in the study model. This means that the more agile the workforce increases through continuous training on learning to use modern technologies in the workplace and supporting and encouraging cadres in the organization to use The electronic system is in line with new variables, as well as searching for innovative and effective means to accomplish agile work, the more sustainable performance (environmental performance, economic performance, social performance) in the health institution studied increases.

3- The third main hypothesis (H3): Human resources flexibility has a direct, statistically significant effect on sustainable performance in the health institution studied.

The results of the table above indicate the existence of a direct effect with significant significance below the 5% significance level for the axis Human resources flexibility in the sustainable performance axis. The impact value was (0.321), with a critical ratio of (3.435), which is a significant value since the p-value was equal to zero. It is less than the 5% level of significance, which leads us to the conclusion that there is a direct effect relationship. In other words, a one-unit increase in the value of the human resources flexibility axis results in a 0.321-unit increase in the sustainable performance axis. Furthermore, the variance in Sustainable performance is accounted for by a percentage of human resources flexibility (20.3%). The remaining percentage (79.7%) is attributable to variables that were not incorporated into the study model, meaning that this percentage of influence and explanation is weak and cannot be relied upon in enhancing sustainable performance (environmental performance, economic performance, social performance) in the health institution studied.

4- The fourth sub-hypothesis (H4) There is an indirect, statistically significant effect of human resources flexibility on sustainable performance through the agile workforce in the health institution studied.

The following table's findings demonstrate that a one-unit increase in human resource flexibility combined with an agile workforce improves sustainable performance by one standard weight (0.673), one critical value (32.154), and one standard error (0.036).

The above table's results further demonstrate that, of the variety in sustainable performance

in an agile workforce, human resource flexibility accounts for a portion (81.2%), with the remaining value coming from sources beyond the purview of the study.

Based on the aforementioned, it can be concluded that the table's results indicate that an agile workforce helped to strengthen the correlation between the flexibility of human resources and sustainable performance. This is demonstrated by the results, which show an improvement in standard estimates of (0.352) and a decrease in standard error of (0.086). There was a decrease in the level of risk that can help the organization improve its sustainable performance, as indicated by the improvement in the critical value of (28.719). Additionally, a significant rise in the interpretation of sustainable performance in the presence of an agile workforce was demonstrated by the data, which accounted for (0.609) of the performance variation. enduring.

To verify that the mediator affects the relationship between (human resources flexibility and sustainable performance), it will be tested using the Sobel test, as is clear in the figure below, as it appears from the Sobel test value of (6.51522), which is greater than the tabular t value (1.96). Therefore, this confirms that the mediating variable has an impact on the relationship between (strategic leadership and organizational performance)

Input:		Test statistic:	p-value:
t_a	16.154	Sobel test: 6.51522192	0
t_b	7.120	Aroian test: 6.50479409	0
		Goodman test: 6.52570006	0
Reset all		Calculate	

Figure (6) Sobel test based on t values

Source: Sobel test results

As demonstrated in the figure that is located above, the saturation values for the independent variable, which is the flexibility of human resources, the mediating variable, which is the agile workforce, and the dependent variable, which is sustainable performance, all showed a saturation percentage that was greater than 0.40. There was also a significant relationship between the three variables. According to the findings of the researcher, the prerequisites for confirmatory factor analysis have been satisfied, and the saturation percentages are the expected values. There was a considerable difference between the items, and they were greater than 0.40. There was a comparison made between the criteria for goodness of fit, and all of them were very similar to the conditions. Additionally, it was discovered that each and every one of them was higher than the critical value (CR) of 1.96, which is an indication that it provides support for the measurement's goodness of fit to the data.

4-Results and discussion

The study explains the most important conclusions reached by the research in both aspects (theoretical and practical), as well as the most important recommendations that can be generalized to the rest of the organizations to benefit from them, according to two requirements:

4-1- the results and their discussion

1. Overall, the human resources flexibility variable achieved a mean of (3.321) with a deviation of (0.862), as its the coefficient of variation (C.V) achieved (25.96%), as the dimensions of the variable are centered towards neutrality. The results indicate that the level of interest of the health institution studied in the development and flexibility of

human resources was moderate.

2. Overall, the agile workforce variable achieved a mean of (3.306) with a deviation of (0.913), as its the coefficient of variation (C.V) achieved (27.63%). As the dimensions of the variable are centered toward neutrality, the results indicate that the level of interest of the studied health institution in the agile workforce was moderate.
3. Overall, the sustainable performance variable achieved a mean of (3.312) with a deviation of (0.847), as its the coefficient of variation (C.V) achieved (25.57%), as the dimensions of the variable are centered towards neutrality. The results indicate that the level of interest of the studied health institution in sustainable performance was moderate.
4. Because the p-value was equal to zero and therefore less, there is a direct, direct, and significant effect below the 5% significance level for the human resources flexibility axis in the agile workforce axis. The effect value reached (0.743), with a critical percentage of (19.329), which is a significant value because the p-value was equal to zero. With a significance level of 5%, we are able to draw the conclusion that there is a relationship that has a direct impact. To put it another way, a rise of one unit in the value of the human resources flexibility axis results in a rise of 0.743 units in the value of the agile workforce axis.
5. The agile workforce axis in the sustainable performance axis experienced a direct effect with significant significance below the 5% significance level. The effect value reached (0.906), with a critical ratio of (12.100), which is a significant value due to the fact that the p-value was equal to zero and therefore less than the significance level. Based on the fact that the level of significance is 5%, we can draw the conclusion that there is a relationship that has a direct impact. To put it another way, a one-unit rise in the value of the agile workforce axis results in a 0.906-unit increase in the value of the sustainable performance axis.
6. There is a direct, direct effect with significant significance below the 5% significance level for the human resources flexibility axis in the sustainable performance axis, where the effect value reached (0.321), with a critical ratio of (3.435), which is a significant value since the p-value was equal to zero and therefore less than Based on the fact that the level of significance is 5%, we can draw the conclusion that there is a relationship that has a direct impact. To put it another way, a one-unit rise in the value of the human resources flexibility axis results in a 0.321-unit increase in the value of the sustainable performance axis.

Because the results show an improvement of (0.352) in the standard estimates, this was accompanied by a decrease of (0.086) in the standard error and an improvement in the critical value of (0.086). 7. The agile workforce contributed to improving the strength of the relationship between the influence of human resources flexibility on sustainable performance. This improved the strength of the relationship. 28.719), which indicates a reduction in the proportion of risk that has the potential to enhance the organization's capacity to improve its sustainable performance. In addition, the findings demonstrated a discernible rise in the interpretation of sustainable performance when an agile workforce was present. This rise accounted for 0.609 percent of the variance that was observed in sustainable performance.

4-2- conclusions

In light of the results of the research in both aspects (theoretical and practical), we will discuss the conclusions as follows:

1. The research addressed variables worthy of attention and related to the health environment that needs more support and care.

2. The research collected three complementary variables that addressed the problem of human resources flexibility to enhance sustainable performance.
3. The research is considered a complement to previous research findings and a starting point for future research in the era of scientific and cognitive progress.
4. The research revealed that most respondents had the vision to understand the research variables through the questionnaire form, contributing to achieving the goals.
5. The practical aspect of the research was explained by a positive correlation between the variable (human resources flexibility and sustainable performance in the presence of the mediating variable, the agile workforce), which achieves the research goal.

4-3- Recommendations:

The application presents some recommendations based on the conclusions, as follows:

1. The organization needs to support employees in putting new skills into use at high speed.
2. The necessity of modifying the human resources system of the researched institution to keep pace with the changing competitive environment.
3. Recommending the researched institution to make frequent changes in human resources to harmonize developments in knowledge and skills.
4. The necessity of adopting educational programs to spread environmental awareness among individuals working in the organization to protect the environment.
5. The recommendation of the research institution is to grant employees at all levels the right to participate in decision-making to improve its environmental performance.
6. It is necessary to support community activities, various bodies, and institutions within the organization's priorities.

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