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Research Paper

# The Role of Human Resources Maintenance in Achieving Organizational Agility

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## Abstract

*The study aims at acknowledging the effect of human resources maintenance on the types of organizational agility (sensing agility, decision-making agility, and acting agility) in the private universities / Kurdistan Region of Iraq. The study has used the analytical descriptive methodology, through using questionnaire to collect information from the members of the universities council in (11) private universities / Kurdistan Region of Iraq. The sample of the study includes (91) members of the university councils. The statistical program (SPSS. V. 21) has been used to analyze the data collected and to get the results of the hypotheses testing. The study found that the surveyed universities are implementing human resources maintenance in medium levels, and they practice the organizational agility in high levels. The study showed a positive correlation between human resources maintenance and organizational agility. The study also indicates that human resources maintenance has a significant impact on organizational agility at the surveyed universities. A number of suggestions were presented to focus on that the private universities need to pay more attention to the human resources maintenance activities as they have a positive impact on achieving organizational agility.*

## Keywords

**Human resources maintenance, organizational agility, sensing agility, decision-making agility, acting agility.**

ورقة بحثية  
دور صيانة الموارد البشرية في تحقيق الرشاقة التنظيمية دراسة استطلاعية  
لآراء عينة من أعضاء مجالس الجامعات الخاصة في إقليم كردستان /  
العراق

مجلة

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### المستخلص

تهدف الدراسة إلى التعرف على تأثير صيانة الموارد البشرية على أنواع الرشاقة التنظيمية (رشاقة الاستشعار، رشاقة صنع القرار، ورشاقة التطبيق) في الجامعات الخاصة / إقليم كردستان العراق. استخدمت الدراسة المنهج الوصفي التحليلي، من خلال استخدام استبيان لجمع المعلومات من أعضاء مجالس الجامعات في (11) جامعة خاصة / إقليم كردستان العراق. تضم عينة الدراسة (91) عضواً في مجالس الجامعات المبحوثة. تم استخدام البرنامج الإحصائي (SPSS. V. 21) لتحليل المعلومات التي تم جمعها وللحصول على نتائج اختبار الفرضيات. وكانت النتائج الرئيسة للدراسة هي أن الجامعات المبحوثة تنفذ صيانة الموارد البشرية في مستويات المتوسطة، وأنها تمارس الرشاقة التنظيمية في مستويات عالية. أثبتت الدراسة أن هناك علاقة إحصائية موجبة ذات دلالة إحصائية بين صيانة الموارد البشرية والرشاقة التنظيمية. وتشير الدراسة أيضاً إلى أن صيانة الموارد البشرية لها تأثير معنوي في الرشاقة التنظيمية في الجامعات المبحوثة. تم تقديم عدد من الاقتراحات التي تركز على أن الجامعات الخاصة تحتاج إلى إيلاء المزيد من الاهتمام لأنشطة صيانة الموارد البشرية لأنها لها تأثير معنوي إيجابي في تحقيق الرشاقة التنظيمية.

### الكلمات الرئيسية

صيانة الموارد البشرية، الرشاقة التنظيمية، رشاقة الاستشعار، رشاقة صنع القرار، رشاقة التطبيق.



## 1- Introduction:

Currently, most organizations are under tremendous pressure to work in a dynamic environment, with continually changing volatile events that have a great influence on the organization. These changes forced all contemporary organizations to adopt new methods and strategies to adapt with the current environmental conditions. The organizational agility is one of these methods that can be adopted by contemporary organizations to deal with new environmental conditions (Saha , *et al.*, 2017, 323-334). Indeed, organizational agility is a modern management philosophy through which all organizations, including universities, can achieve survival and prosperity in an environment of contemporary organizations characterized by intense competition, rapid change, and extreme complexity (Nafei, 2016, 297-309).

On the other hand, in contemporary organizations human resources are seen as one of the most important capital, and there is no factor to substitute it. Human resource also is one of those capital resources of an organization which not only increases the efficiency and the effectiveness of the organization, but also acts as a sheer source of competitive advantage which is inimitable (Beheshtifa and Safarian, 2013, 198). Considering this fact, managers should accurately focus on human resources maintenance for achieving organizational agility.

Based on the above, the current study is designed to diagnose the role of the maintenance of human resources in achieving organizational agility. The private universities in the Kurdistan Region / Iraq are selected as a field of the current study. The study included five parts, the first devoted to the methodology, the second presents the theoretical framework for the study variables, the third presents the results of the study, the fourth presented and discussed the results, while the fifth presents conclusions and suggestions.

## 2. Methodology:

### 2-1 The Problem of The Study.

able to diagnose many factors that relate to the lack of interest in the maintenance of human resources, which can be a reason for the inability of these universities to achieve organizational agility. More specifically, the study investigates the following questions:

- A. *What is the nature of the relationship between human resources maintenance and organizational agility in the surveyed universities?*
- B. *Does human resource maintenance affect the organizational agility in the surveyed universities?*

### 2-2 Objectives of the Study.

The Study Seeks to Achieve The Following Objectives:

- A. To investigate the level of practicing human resource maintenance in the survived universities.

- B. To investigate the level of practicing organizational agility in the survived universities.
- C. To reveal the nature of the relationship between human resources maintenance and organizational agility in the surveyed universities.
- D. To identify the impact of human resource maintenance on organizational agility in the surveyed universities.

### 2-3 Importance of The Study.

The academic importance of the study is reflected in the modernity of the previous studies dealing with variables of this study (human resource maintenance and organizational agility), and in the scarcity of the previous studies that addressed these variables in the environment of the Kurdistan Region / Iraq. The field importance of the current study is that the surveyed universities can benefit from their results in enhancing their level of application human resources maintenance, and organizational agility.

### 2-4 The Hypothetical Model of The Study.

The figure (1) below presents the **hypothetical model** of the current study , The **hypothetical model include two variables one of which** is the independent variable , which is human resources maintenance , and includes of five activities (Preventive activities, medical care, social services, job stability, and Retirement services), and the other is the dependent variables which is organizational agility , and includes three dimensions (sensing agility, and decision-making agility, acting agility).

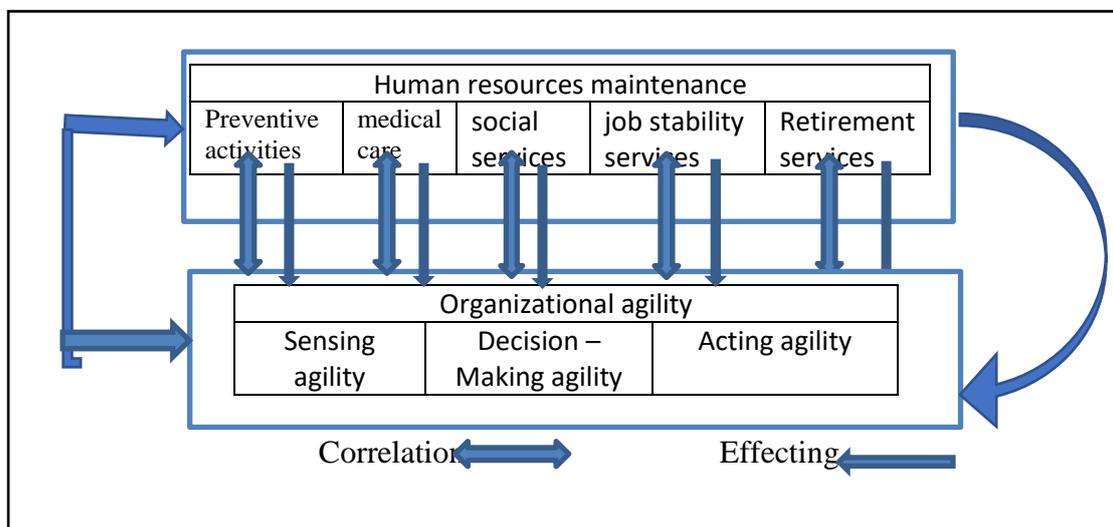


Fig (1): The hypothetical model of the study

### 2-5 The Hypotheses of The Study.

The current study adopted the following hypotheses, and it will be tested at a significant level of (0.05):



- H1:** There is a positive significant correlation between human resources maintenance and organizational agility in the universities covered by the study. From this hypothesis, each of the following sub-hypotheses arises:
- H1<sub>a</sub>:** There is a positive significant correlation between human resources maintenance and sensing agility .
- H1<sub>b</sub>:** There is a positive significant correlation between human resources maintenance and decision-making agility.
- H1<sub>c</sub>:** There is a positive significant correlation between human resources maintenance and acting agility.
- H2:** Human resources maintenance is significantly impact on organizational agility in the universities covered by the study. From this hypothesis, each of the following sub-hypotheses arises:
- H2<sub>a</sub>:** Human resources maintenance is significantly impact on sensing agility.
- H2<sub>b</sub>:** Human resources maintenance is significantly impact on decision-making agility.
- H2<sub>c</sub>:** Human resources maintenance is significantly impact on acting agility.

## 2-6 Questionnaire Development and Data Collection.

We opted to gather the field information from respondents using a questionnaire consists of three parts. The first part covered the demographic information. The second part included (35) items related to human resources maintenance; the third part included (21) items related to organizational agility. All the items of the questionnaire are 5-point Likert scale (ranging from strongly agree to strongly disagree) and adapted from prior studies after making some changes to some items (Nafei, 2017: 297-309; Park, 2011:28-38; Thao, 2012: 36; Samara, 2014).

To determine the reliability of the questionnaire Cronbach's alpha coefficient conducted. According to (Hair, *et al.*, 1995), Cronbach's Alpha score of at least 0.70 can be considered as acceptable of internal consistency. The results reported that the values of Cronbach's alpha coefficient is (0.87) for human resources maintenance scale, and (0.89) for Organizational agility scale, therefore the two scales have a good level of reliability.

To determine if the collected data follow the Natural Distribution for statistical analysis or not, we use Kortbashov equation. The results reported that the calculated values of P-Value are (0.531) and (0.752) for human resources maintenance and organizational agility, respectively. Both values are higher than the value of the mean value of the study (0.05) and the conditions of statistical analysis can be applied.

## 3. The Theoretical Framework:

### 3-1 The Concept and Activities of Human Resources Maintenance.

Human resources maintenance is defined by (Kota, 2011,8) as a process focuses on providing care, welfare activities, and development for all human resources.



(Moghadam, *et al.*, 2013, 2) defines it as a range of activities related to occupational safety schemes, medical care, and the well-being of human resources. (Nalla & Varalaxmi, 2014, 64) describes Human resources maintenance as the process through which the organization commits to provide suitable working conditions for human resources, that make them settle in the organization.

According to (Samara ,2014 ,27) human resources maintenance is broader concept than being limited to wages, safety in workplace, but it include identifying human resources from the work itself which can be different from the organization's expectation. These expectations may be not easy, and therefore, it is needed to discuss the needs and expectations of human resources these expectations may not be easy, and therefore the management of the organization should discuss the needs and expectations of human resources with individual and groups, and working to achieve them. Human resources maintenance objectives are maintaining the occupational health and safety of human resources at worksites of organization to achieve high performance (Sherwani, 2006, 21). Paul (2013:7) adds other aims for the human resources maintenance which are the provision of financial security in the event of illness, disability or temporary disability, and the provision of pension in old age for them. Nalla & Varalaxmi (2014: 64) emphasizes that the goal of human resources maintenance is to maintain the high level of human resource management function in the organization. The researchers introduce the procedural definition of human resources maintenance as: a set of activities offered by the university through which the university commits to provide suitable working conditions for their human resources during the service and ensuring a suitable living for them after retirement. Regarding the activities of human resources maintenance and for the purposes of the current study, the following five activities, have been approved as they are agreed upon by most researchers (Samara, 2014:27-29; Bozorgik *et al.*, 2014,1110-1112):

#### **A. Preventive actions.**

The preventive actions are related to the human resources safety in the work place (Samara, 2014,28). The aims of preventive actions are to maintain the health and safety of human resources from accidents, diseases and deaths and reduce them in the workplace, providing a safe and comfortable working environment, and not being subjected to visual, psychological, and nervous fatigue in order to improve their performance and increase their productivity (Mohamad, *et al.*, 2013,53-59).

#### **B. Medical care actions.**

These actions are related to the provision of appropriate treatments to the human resources for the injuries occurring in the, including the provision of an adequate working environment. The provision of health centers within the organization to provide health and medical services for simple situations in which human resources are exposed to work, treatment in hospitals and outpatient clinics when exposed to difficult conditions, and to maintain overall hygiene in the organization (Bozorgik *et al.*, 2014 ,1112) .



### C. Social and welfare service.

These services include consults, social and sport activities, and so on. . The Organizations provide these services in order to maintain its human resources, reduce the rate of job leakage work, and develop high organizational loyalty. These services also provide a good relationship between human resources and the organization (Beheshtifa and Safarian, 2013, 199).

### D. Job stability.

It is a state of safety and reassurance that human resources within the organization feel, and that they are necessary to ensure that it carries out the work entrusted to it efficiently and effectively (Bozorgik *et al.*, 2014,1110-1117. )

### E. Retirement services.

They are actions and plans after human resources' retirement (Samara, 2014,28). It is the human resource rights upon their organization, and includes financial rights such as end of service benefits, pension, membership in social clubs, cooperatives and others (Beheshtifa and Safarian, 2013: 199).

Based on the foregoing, the researchers see that all the definitions of human resources maintenance and the activities presented by the researchers confirm that the philosophy of human resources maintenance is focused on keeping and maintaining human resources in the workplace, and emphasizing the continuing efficiency and capabilities of human resources and not being exhausted in the organization, as well as raising human resource morale and achieving high levels of job satisfaction.

## 3-2 The Concept and Dimensions of Organizational Agility.

Organizational agility is defined as set of organizational sense-response actions that are typical for organizations operating in an environment characterized by turbulence, unpredictability, and rapid change (Nadkarni and Narayanan, 2007: 245). According to (Tallon, and Pinsonneault, 2011: 464), they conceptualize agility as an organizational ability to “detect and respond to [environmental] opportunities and threats with ease, speed, and dexterity. According to (Yeganegi, and Azar, 2012: 2538), they define organizational agility as the ability of the organization to respond quickly and successfully to environmental changes. Sanadgol (2014: 317) defines organizational agility as the ability of the organization to move quickly, effectively, easily, and think quickly with a smart way of meeting business requirements. (Madeleine and Louise, 2018, 32) define organizational agility as an “emerging management concept” that prepares the organization to make rapid decisions in the dynamic and unpredictable market dominating today. Regarding the importance of organizational agility, (Nafie, 2016:298) believes that organizations characterized by organizational agility are able to achieve their goals and carry out their tasks successfully, as they are able to exploit opportunities and avoid risks. In the view of (Oosterhout *et al.*, 2006,132-145). Organizational agility provides flexibility in the organizations activities, so they are able to respond



quickly and effectively to unexpected changes. The researchers introduce the following procedural definition of organizational agility: The university ability to monitor and control changes in the environmental factors quickly, speedily, and successfully. Regarding the dimensions of organizational agility, the following three dimensions have been approved for the purpose of the current study, namely: sensing agility, decision-making agility, and acting agility, as they are agreed upon by most researchers (Nafei , 2017, 297-309; Park, 2011,28-38; Thao.2012, 36).

#### **A. Sensing agility.**

(Park , 2012 ,28) defines sensing agility as the ability of the organization to timely monitoring and control changes in the environmental factors (Customers, competitors, technology). Thao (2012: 36) refers to Sensing Agility as the capacity of organization to access the information that enables them to adapt for changes quickly, through a systematic environmental survey.

#### **B. Decision-making agility.**

It is defined as the ability of an organization to collect the relevant data from a variety of sources and provide information to enable decision makers to make speedily appropriate decisions, as well as analyzing opportunities and threats in the environmental events, and developing plans (Nafie, 2016,299).

#### **C. Acting agility.**

It is defined as the pooling of resources and realignment of process to suit changes in the environmental factors (Eisenhardt and Marin, 2000,1107). The acting agility provides organizations with the needed speed in responding to emerging new opportunities in the business environment, with acting agility organizations can increase the effectiveness of their operations through the purposeful translation of opportunities into adequate actions (Holotiuk *et al.*, 2018,4). In the context of the foregoing, the researchers believe that the philosophy of organizational agility lies in the rapid, continuous and correct response by the organization to unexpected environmental changes without wasting organization's capabilities and the sustainability of these capabilities, as well as the compatibility between the organizations' outputs and the ever-changing environmental requirements, in a way that guarantees them success and survival in the contemporary environment characterized by rapid change, complexity, and intense competition.

### **3-3 Human resources maintenance and organizational agility: A theoretical relationship.**

In the view of (Dyer & Shafer, 1998: 7-8), organizational agility is promoted by focusing organizations on a good design of human resources functions, focusing on activities that increase the sense of human resources in common goals with the organization, and interest in developing their capacities. According to (Marrewijk and Wer, 2003), human resources can be an obstacle to achieving organized agility. The resistance of human resources to organizational agility resulting from



resistance to change in general leads to the inability of the organization to respond quickly to changes in environmental factors and adapt to environmental events.

According to (Stekelenburg, 2012,7), organizations depend on the capabilities and competencies of its workforce, both managers and workers, to learn and progress with changes. Consequently, when considering human resources as the most important assets in an organizations asset structure, we need to think about the capability to reconfigure and transform human resources to business needs with the result to create organizational agility. (Mehrabi, *et al.*, 2013, 217) confirm that the organization's possession of human resources, especially its distinctive ones, is one of the factors that help achieve organizational agility.

Sanadgol (2014: 218) believes that human resources in the organization usually believe that their methods of work are correct and very useful and do not easily recognize changes because they involve retraining and important shifts in work, and changes can affect Achieve their own goals and lead to job dissatisfaction, and therefore the organization must convince human resources that the goals of the organization do not conflict with their own goals. Saha, *et al.*, 2017,323-334) confirm that the human resources are central in an Agile organization, and one of human resources' roles is to support and improve their situation, human resources can take part in the creation of an environment where employees are motivated and productive.

According to (Madeleine and Louise, 2018,94), human resources may facilitate the process of mapping current competence within the organization to support the organizational agility; this could make it possible to find the employees with the right competence for the new agile organization. Human resources should facilitate this process in collaboration with managers and leaders in the organization. By mapping the current competence in the organization, it is possible to identify knowledge and competence gaps that will be essential in the future.

#### 4. Results:

##### 4-1 Study Population and Demographic Profile.

The population in this study consists of the university councils members of the private universities in Kurdistan Region / Iraq. The number of private universities in the Kurdistan Region is (19) university during the academic year 2018/2019. The number of the university councils members are (123). The questionnaire was distributed to all members of the university councils in (11) universities (N=107). (8) Universities were excluded due to the inexistence of the council members to complete the questionnaire. A total of (107) questionnaires were distributed, (91) were valid i.e. (85 %.), table (1) shows the distribution of respondents according to the surveyed universities.

**Table (1): Distribution of Respondents by Universities**

| No.   | Universities Names                         | Number of Distributed Questionnaire | Number of Valid Questionnaire |
|-------|--------------------------------------------|-------------------------------------|-------------------------------|
| 1     | International University Erbil             | 9                                   | 6                             |
| 2     | Ishik University- Erbil                    | 11                                  | 10                            |
| 3     | Bayan University                           | 8                                   | 7                             |
| 4     | Cihan University- Erbil                    | 23                                  | 22                            |
| 5     | Cihan University- Duhok                    | 7                                   | 7                             |
| 6     | Cihan University- Sulaimani                | 7                                   | 6                             |
| 7     | Lebanese French University                 | 8                                   | 6                             |
| 8     | Nawroz University                          | 8                                   | 7                             |
| 9     | Knowledge University                       | 10                                  | 8                             |
| 10    | Catholic University                        | 5                                   | 5                             |
| 11    | Komar University of Science and Technology | 9                                   | 7                             |
| Total |                                            | 107                                 | 91                            |

Source: Results of Statistics Software SPSS

Table (2) shows the demographic characteristics of the respondents. The table shows that the males are the majority (95.6%) and (% 4.4) are females. More than half of the respondents (55%) are in the age more than 50 years old. The respondents distribution regarding their academic degrees is as follows: (28.6%) had Master Degree, (71.4) hold a PhD... As for their scientific title, the majority were professor (46.1%). Regarding the scientific title; (7.7%) were professor, (46.1%) of them were assistant professors, (28.6%) were lecturers, and the remaining respondents (17.6) were assistant lecturers.

**Table 2: Demographic Characteristics of The Respondents**

| Demographic characteristics | Groups             | Frequency | Percentage |
|-----------------------------|--------------------|-----------|------------|
| Gender                      | Male               | 87        | 95.6       |
|                             | Female             | 4         | 4.4        |
| Age                         | Less than 30 years | 20        | 22         |
|                             | 30 years-45 years  | 21        | 23         |
|                             | More than 45 years | 50        | 55         |
| Academic qualification      | Master             | 26        | 28.6       |
|                             | Doctoral           | 65        | 71.4       |



|                                                 |                                  |    |      |
|-------------------------------------------------|----------------------------------|----|------|
| Scientific title                                | Assistant Lecturer               | 16 | 17.6 |
|                                                 | Lecturer                         | 26 | 28.6 |
|                                                 | Assistant Professor              | 42 | 46.1 |
|                                                 | Professor                        | 7  | 7.7  |
|                                                 | Lecturer representative          | 6  | 6.6  |
| Current position                                | Dean, vice dean, head department | 72 | 79.1 |
|                                                 | Vice president of university     | 9  | 9.9  |
|                                                 | President of university          | 4  | 4.4  |
| Years of working at the current position        | Less than 3 years                | 52 | 57.1 |
|                                                 | 3-7 years                        | 28 | 30.8 |
|                                                 | More than 7 years                | 11 | 12.1 |
| Years of working at the higher education sector | Less than 5 years                | 12 | 13.2 |
|                                                 | 5-10 years                       | 6  | 6.6  |
|                                                 | More than 10 years               | 73 | 81.2 |

Source: Results of Statistics Software SPSS

Regarding their current positions; (79.1%) of them were Deans, or Vice deans, or Head of departments. The respondent's distribution regarding the years of working in the current position is as the follows: Less than (3) years (57.1%), (3-7) years (30.8%), and more than (7) years (12.1%). As for the numbers of years respondents working in the higher education sector, the data in table (2) indicated that (13.2%) of them have less than (5) years, (6.6%) of them are working for (5-10) years, and (81.2%) of them have work above (10) years.

Based on Demographic characteristics, the vast majority of university council members are male, of them are elderly people and most are older, reflecting the low proportion of young members of the university council. The results indicate that most of them hold PhD degrees, yet there are quite a few (36.2) holding academic assistants or lecturers. As for the positions they occupy, most of the respondents hold the position of Dean or Associate Dean, The results show that most of the respondents have a short service in their current position ( not exceeding (3) years), and this could be due to the recent establishment of the surveyed universities .

The results show that most respondents have long service in the higher education sector Exceed (10) years, hence they have a good experience In the field of higher education activities obtained by working in positions other than their current positions or in other universities.

#### 4-2 Descriptive Statistics.

**The Mean(M) values were calculated to** describe the levels of adopting human resource maintenance and the organizational agility in surveyed universities, and classified into three levels as follows: High(if the Mean value is 3.7 or higher),



moderate (if the Mean value is 2.34 and 3.67), and low (if Mean value is less than 2.34). The study relied on Standard Deviation (SD) for measuring the degree of the data dispersion from the Mean. While the study relied on ranking Coefficient of agreement (CA).

#### 4-2-1 The description of Human Resource Maintenance

Table (3) presents the descriptive statistics results of the respondents' opinions about the level of practicing human resources maintenance in the surveyed universities. These results show the following:

- The most of respondents agree that the surveyed universities are practicing human resources activities at moderate level (M = 3.49, SD = 0.86).
- Preventive activities achieved the first rank in terms of importance level among all human resources activities (CV = 20%), reflecting the agreement of most respondents about practicing preventive activities at high level in the surveyed universities.
- Medical care activities were ranked last in terms of importance level among all human resources maintenance activities (CV = 32%), reflecting the agreement of most respondents about the practicing of medical care activities in the surveyed universities at moderate level.

**Table (3): The description of Human Resource Maintenance**

| Variables                             | M    | SD   | CV% | Level    | Rank  |
|---------------------------------------|------|------|-----|----------|-------|
| Preventive activities                 | 3.87 | 0.79 | 20  | High     | 1     |
| medical care                          | 3.12 | 0.99 | 32  | Moderate | 5     |
| social services                       | 3.49 | 0.79 | 23  | Moderate | 3     |
| job stability                         | 3.77 | 0.78 | 21  | High     | 2     |
| Retirement services                   | 3.2  | 1.00 | 31  | Moderate | 4     |
| Human resource maintenance (over all) | 3.49 | 0.86 | 25  | Moderate | ----- |

Source: Results of Statistics Software SPSS

#### 4-2-2 The description of Organizational Agility

Table (4) presents the Means, Standard deviations, and Coefficients of agreement of variation of the respondents' opinions about the level of practicing organizational agility in the surveyed universities from the universities boards' view. These results show the following:

- The level of organizational agility (overall) was high (M = 3.92, SD = 0.80).
- The levels of the three dimensions of organizational agility (Sensing agility, decision-making agility, and acting agility) are also high.
- The highest importance level was for decision-making agility with (CV = 19)



- Sensing agility were ranked last in terms of importance level among all organizational agility dimensions (CV=21%).

**Table (4): The description of organizational agility**

| Variables                         | M    | SD   | CV% | level | Rank  |
|-----------------------------------|------|------|-----|-------|-------|
| Sensing agility                   | 3.89 | 0.83 | 21  | High  | 3     |
| Decision-making agility           | 3.96 | 0.76 | 19  | High  | 1     |
| Acting agility                    | 3.91 | 0.80 | 20  | High  | 2     |
| Organizational agility (over all) | 3.92 | 0.80 | 20  | High  | ----- |

Source: Results of Statistics Software SPSS

#### 4-3 Results of The Study Hypotheses Test.

##### 4-3-1 Results of The First Main Hypothesis Test.

In order to test the first main hypothesis of the study and its sub-hypotheses, the Correlation Coefficient values between the study variables are based on, and table (5) shows these values the results indicate the following:

- There is a significant positive correlation at level ( $p < 0.01$ ) between human resource maintenance (overall) and organizational agility ( $R=0.799$ ),
- There is a significant positive correlation at level ( $p < 0.01$ ) between human resource maintenance (overall) and the three dimensions of organizational agility (Sensing agility ( $R=0.714$ ), decision making agility ( $R=0.703$ ), and acting agility ( $R=0.785$ )).
- All activities of human resources maintenance are highly correlated at level ( $P < 0.01$ ) with organizational agility, sensing agility, decision-making agility, and acting agility.

Based on the results above, the validity of the first hypothesis of the study and its sub-hypotheses can be seen.

**Table 5: Correlation Coefficient values between the studies variables**

| Variables                              | Sensing agility | Decision-making agility | Acting agility | Organizational agility (over all) |
|----------------------------------------|-----------------|-------------------------|----------------|-----------------------------------|
| Preventive activities                  | .733**          | .689**                  | .714**         | .756**                            |
| medical care                           | .556**          | .504**                  | .596**         | .587**                            |
| social services                        | .622**          | .642**                  | .704**         | .695**                            |
| job stability                          | .714**          | .695**                  | .748**         | .763**                            |
| Retirement services                    | .485**          | .519**                  | .618**         | .573**                            |
| human resources maintenance (over all) | .714**          | .703**                  | .785**         | .779**                            |

\*\* Significant at (0.01) level n=91

Source: Results of Statistics Software SPSS



#### 4-3-2 Results of The Second Main Hypothesis Test.

Regression analysis was conducted in order to test the second main hypothesis of the study and its three sub-hypotheses.

Table (6) shows the simple regression analysis between human resources maintenance as independent variable and organizational agility as dependent variable. The results indicated that human resources maintenance impact significantly at on organizational agility ( $F=137$ ,  $p=0.00$ ). Based on the value of ( $R^2$ ), the results show that human resources maintenance explained (61%) of the variance in the values of organizational agility, and (39%) of these value is explained by others variables out of the current study model.

**Table (6): Regression Analysis Between Human Resources Maintenance and Organizational Agility**

| Model      | Sum of Squares | Do. | Mean Square | $R^2$ | F   | Sig.              |
|------------|----------------|-----|-------------|-------|-----|-------------------|
| Regression | 19.357         | 1   | 19.357      |       |     |                   |
| Residual   | 12.551         | 89  | .141        | 0.61  | 137 | .000 <sup>a</sup> |
| Total      | 31.908         | 90  |             |       |     |                   |

Dependent variable: Organizational agility, df (1, 89), F tab. = 3.96

Source: Results of Statistics Software SPSS

Table (7) shows the regression analysis between human resources maintenance as independent variable and the three dimensions of organizational agility (Sensing agility, decision-making agility, and acting agility) as dependent variables. The results indicated the following:

- Human resources management impact significantly on sensing agility at 0.01 level ( $t= 9.61$ ,  $R^2 =.51$ ,  $F =92.43$ ).
- Human resources management impact significantly on decision-making agility at 0.01 level ( $t= 9.31$ ,  $R^2 =.49$ ,  $F =86.38$ ).
- Human resources management impact significantly on decision-making agility at 0.01 level ( $t= 11.94$ ,  $R^2 =.62$ ,  $F =142.73$ ).
- According to (Beta) values, the strongest impact of human resources management appeared on acting agility, its value reached 0.785, while the weakest impact of human resources management appeared on Decision-making agility and its value reached 0.703.

**Table (7): Regression Analysis Between Study Variables**

| Dependent variables     | Unstandardized Coefficients |            | Standardized Coefficients | t     | $R^2$ | F      |
|-------------------------|-----------------------------|------------|---------------------------|-------|-------|--------|
|                         | B                           | Std. Error | Beta                      |       |       |        |
| Sensing agility         | 0.802                       | 0.083      | 0.714                     | 9.61  | 0.51  | 92.43  |
| Decision-making agility | 0.690                       | 0.074      | 0.703                     | 9.31  | 0.49  | 86.83  |
| Acting agility          | 0.830                       | 0.069      | 0.785                     | 11.94 | 0.62  | 142.73 |



In dependent variable: Human resources maintenance, \*\* Significant at level (P<0.01) significant at t tab. (df. 90) = 1.66, F tab. (1, 79) = 3.96.

Source: Results of Statistics Software SPSS

Based on the above, the results of the regression analysis supported the validity of the second main hypothesis of the study and its sub-hypotheses.

## 5- Discussion:

This study attempts to investigate the relationship between human resources maintenance and Organizational agility at private Universities in Kurdistan region/Iraq.

The description results showed a moderate level practicing human resources maintenance in the surveyed universities, and a high level of organizational agility in the surveyed universities, thus, these results reflect the high interest of the academic leaders to enhance the level of organizational agility in these universities.

According to the results of the descriptive analysis, the preventive activities achieved the first rank in terms of importance level among all human resources activities, This means that university leaders are more interested in providing preventive activities than other activities, because the conditions for establishing universities require the provision of physical conditions, recreational and social activities, health centers, buildings, green spaces, and other preventive activities that ensure an appropriate educational environment.

Based on the results of the correlation analysis between human resources maintenance and organization agility, which appeared positive and statistically significant, the higher the interest in human resources maintenance, the higher achievement of organizational agility in the surveyed universities, and vice versa as well. These results are consistent with the view of (Dyer & Shafer, 1998: 7-8) that high levels of organizational agility are associated with high levels of human resources maintenance.

The results showed that human resources maintenance has significant impact on organization agility; this means human resources maintenance is one of the predictors of organizational agility. As universities seek to conserve human resources, they will increase their capacity to institutionalize organizational agility by successfully sensing and responding to opportunities and reducing environmental threats in a timely manner through strategic monitoring of environmental events, decision-making and corrective action, Vital and root and enable them to use and make use of them easily. These results provide a clear message to the members of the University Councils This result provides a clear message to University Council members that if they want to achieve organizational agility at their universities, they should, they should take care of maintaining their human resources through increased attention to preventive activities, medical care, social services, job stability, and retirement services.

Based on the value of  $R^2$ , (61%) of the change in the values of organizational agility are explained by human resources maintenance. These result reflects the importance of human resources maintenance in achieving organizational agility,



and this result is in line with the view of ( Beheshtifa and Safarian, 2013: 198) who view human resources as important organizational resources, which not only increase the efficiency and effectiveness of the organization in achieving its objectives, but it also acts as a sheer source of competitive advantage which is inimitable.

Based on Beta values , the impact of human resources maintenance on acting agility was stronger than its impact on the two others dimensions of organizational agility (decision- making agility and sensing agility).This result reflect the important role of human resources maintenance in achieving acting agility .

## 6- Conclusions and Suggestions:

### 6-1 Conclusions.

1. The results showed that the implementation of human resources maintenance activities in the surveyed universities was at moderate levels, reflecting the shortcomings of university administrations in the field human resource maintenance.
2. The Preventive activities ranked first in terms of importance relative to the activities of human resources maintenance, which indicate that members of university council focusing on this dimension more than the others activities of human resources maintenance.
3. There is an agreement among most respondents agreed on the existence of high degree of organizational agility and the three types of organizational agility (*sensing agility, decision-making agility, and acting agility*) in the surveyed universities.
4. The Decision-making agility ranked first in terms of importance relative to the dimensions of organizational agility, which confirms the importance of this dimension for the members of university council.
5. The study proved the existence of a positive significant correlation between human resources maintenance and organizational agility; therefore, high levels of organizational agility are associated with universities whose academic leaders are interested in practicing human resources maintenance at high levels, and vice versa.
6. Human resources maintenance has a statistical positive impact on organizational agility; therefore, the university can increase the degree of organizational agility when they increase the degree of human resource maintenance.

### 6-2 Suggestions.

1. It is necessary for the private universities to pay attention to human resources maintenance programs since this has a great positive effect on the organizational agility on the three dimensions of organizational agility (*sensing agility, decision-making agility, and acting agility*).
2. Establishing a health insurance system related to programs in the provision



- of medical care for human resources and increases the adoption of human resources maintenance activities by the surveyed universities.
3. Providing adequate financial support to apply the philosophy of human resources maintenance in the surveyed universities by allocating part of the budget of these universities to support human resources maintenance programs and activities
  4. Increasing the interest of the university departments in maintaining human resources through holding periodic meetings with human resources to identify the problems facing them in the field of occupational safety, job stability, medical services, develop suitable solutions, and identify and provide for their needs.
  5. The need to work on the establishment of conditions of work suitable for the next to retire, and follow-up retirees and let them materially and morally.
  6. Promoting organizational agility in the universities through quick responding to unexpected events and changes in the environment factors and delivering innovative solutions.
  7. Dissemination awareness among human resources in the surveyed universities concerned with the importance of organizational agility through establishing a relevant training programs and training courses.
  8. Making the best use of the universities under study from the current research scale, and the results of field studies and practical studies provided by academic organizations in enhancing their capacities to adopt the concept of human resources conservation and institutionalization of organizational fitness.

### 6-3 Limitations and Future Researches.

The current study tends to diagnose the role of human resources maintenance in achieving organizational agility from the point view of senior management (members of university councils) , and they are responsible for all decisions at the university, including human resources maintenance and organizational agility, so there may be bias in their views .Therefore we propose another study to diagnose the role of human resources maintenance in achieving organizational agility from the point view of middle management ,or executive management , or the teaching staff in the surveyed universities , as conducting such a study can be useful for the purposes of comparing its results with the results of the current study.

This study included only (11) private universities from the total (18) universities, so we suggest that remain private universities be included in similar studies, with the aim of disseminating the results of the study more widely.

The study was limited to the private universities in the Kurdistan Region/Iraq, therefore, the findings may not be generalized to other organizations, and thus, it was proposed to conduct another study with the same variables as the current study in the public universities sector. The aim of conducting such a study is to find out the extent of differences in the level of private universities' practice of the current study variables, from the level of their practice in public universities due to their difference in financial and human resources.

To enhance the impact of human resource maintenance on organizational agility, we suggest, as future studies, the introduction of a moderate variable



between them, for example, environmental governance, organizational intelligence, and job engagement.

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