HRA and its Impact on Employees Performance: A Field Research in the Ministry of Education

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Abstract

The research aims to determine the impact of Human Resources Accounting (HRA) on employee’s performance. The research’s problem was embodied in the lack of interest in HRA, which was reflected on the performance of employees in the Ministry of Education; the research adopted the descriptive analytical approach, and the research community included the directors of departments and people at the headquarters of the Ministry of Education. The sample size was (224) individuals from the total community of 533. The questionnaire was adopted as the main tool for collecting data and information, as well as the interviews that were conducted by the researcher. In order to analyze the results of the field research, the researcher adopted a program (Spss.v26) and included the search main premise and three sub-hypotheses were represented by the relationships of influence. The data was statistically processed using several statistical methods including Mean, Standard Deviation, and Simple Linear Regression. The results of the research led to the acceptance of all the alternative hypotheses and the rejection of the null hypotheses that there is a lack of interest in HRA, and surely over their effect to HRA on the performance of employees at the Ministry of Education.

Keywords: Human resources accounting, employees performance.
1- Introduction

The interest in HRA began as a result of realizing the importance of the HR in organizations as a productive resource since the sixties of the last century, as the basic idea of HRA revolves around the economic value of the HR in the organization, which must be monitored and measured, such as increasing productive skill through the application of education and training programs staff.

The importance of the research lies in employing HRA to maximize the performance of employees, and one of the justifications for choosing this topic is to explore the ability of Iraqi organizations to apply HRA and its impact on the performance of employees. The Ministry of Education was chosen for its importance in developing the performance of educational and teaching staff and working to attract skilled workers and experiences from universities and their development. The researcher faced difficulties due to the novelty of the topic, which forced him to explain most of the paragraphs of the questionnaire to the research community. Through the results of the exploratory study carried out by the researchers and the results he reached, it was found that there is a weakness in the management of the ministry in understanding HRA, in addition to the fact that the performance of employees is tainted by many problems.

On this basis, the researcher's directions came to study HRA and the Employees Performance (EP) in detail and to search for ways to apply its dimensions to each of them, and the main question of the research is that does HRA affect the performance of employees in the Ministry of Education? The following questions emerge from the main question:

A. What is the level of interest in HRA in the ministry under study?
B. What is the performance level of the Employees in the studied ministry?
C. Is there an impact relationship of HRA on the EP in the studied ministry?

A. The importance of the study is highlighted by shedding light on HRA and realizing its importance in the ministry's office and its role in finding solutions that the aforementioned ministry suffers from with regard to HR costs.
B. Focusing on the importance of the HR by focusing on the concept of HRA and its impact on the performance of workers in the Ministry of Education.
C. Revealing the levels of HR accounting and EP within the researched organization.
D. Realizing the importance of HRA and the performance of employees in the organization in question.

Determining the direct effect for HRA on employee’s performance, Also the possibility of applying HRA, the extent by which it can be applied in Ministry of Education, providing recommendations that contribute to assist managers to enhance the performance efficiently and effectively manner, determining the level of EP and identifying the dimensions of performance. While, the hypothesis of the research represents a set of logical relationships for a group of variables in the form of a qualitative or quantititative group that brings together the main features of its potential indicators and their reflection on the reality of the organization in question. The influence relationships between the variables, as the one-way arrows indicate the influence relationships between the independent variable (HRA) and the dependent variable (EP).
1. Research's assumptions

2. **The main hypotheses**: “there is no significant effect of HRA by excluding it in the performance of workers and deporting them in the ministry under study” and branching out from the following sub-hypotheses:
   A. There is no significant effect of HRA by its dimensions on the quality of performance.
   B. It does not have a significant effect on HRA by removing it from the commitment.
   C. It does not have a significant effect on HRA by removing it in the appropriate time for work.

2. **Search measurement tool methods**

   The table shows the main and secondary research variables and their sequences that consist of two parts. The first includes seven dimensions of the independent variable amounting to (27) items, while the second includes the three dimensions of the dependent variable, which includes (13) items. The researcher used a five-degree Likert scale to classify the answer, which ranges between (1-5), the research measurement for HRA (Jassim, 2014: 216; Salem, 2008, 199; Abiola & Adiosa, 2020:17; Wickramasinghe,2006:85; Abu Jalida, 2018: 127; Dewi & Wibowo,2020:2040).
3- Research's population and sample:

The current research was chosen on the Ministry of Education, to be the place of application of the current research, and to conduct a survey of opinions about the level of availability of the researched variables (HRA, EP), as the ministry is one of the most prominent governmental organizations that work in the field of developing the performance of workers, developing the educational and teaching staff and working attracting talented individuals from colleges and universities, developing and sustaining them, and distributing them to the ministry's directorates and schools.

After that, 224 questionnaires were distributed (42%) from the population. Table (2) shows the research population and sample.

| Valid questionnaires | Not refundable | Distribution/Community | The society |
|----------------------|----------------|------------------------|-------------|
| 224                  | 0              | 224                    | 533         |
| 100%                 | 0%             | 42%                    | 100%        |
| 19.2%                | 43             | Head of the Department |
| 80.8%                | 181            | Division official      |
| 100%                 | 224            | Total                  |

Previous studies: The Past Studies of HRA

| I- A study title | HR accounting as a measurement tool. HR accounting as a measurement tool. |
|------------------|---------------------------------------------------------------------------|
| Researcher's name and year | Toulson & Dewe, 2004 |
| Place of study | New Zealand. |
| Study method and tool | Analytical survey method - questionnaire. |
| Sample volume | 1000 employees. |
| Purpose of the study | Reveal why HR accounting is important and how it relates to organizational strategies and HRs. |
| Statistical methods | Regression analysis, test Bartlett. |
| Results | Provide descriptive information on various priority organizational, personal and HR measures. |
| Similarities with the current study | I agreed with the current research that HRA is an independent variable, and the use of a questionnaire. |
| The difference with the current study | Large sample size, applied field New Zealand business environment. |
| The extent of the benefit | Strengthening the theoretical side of research in relation to related studies. |
Studies related to EP:

| Study title                                                                 | Researchers' name and year | Place of study | Study method and tool | Sample volume                  | Purpose of the study                                                                 |
|----------------------------------------------------------------------------|---------------------------|----------------|-----------------------|--------------------------------|-------------------------------------------------------------------------------------|
| Factors influencing EP: The role of HR management practices and work engagement. | Krishnaveni & Monica (2018) | India          | Survey study, questionnaire. | 205 IT directors and 41 senior managers. | Knowing the impact of HR management practices (empowerment, efficiency development, rewards, work participation) on EP. |
| Factors affecting EP: The role of HR practices and work immersion.          |                           |                |                       |                                | Least squares regression, Cronbach's alpha.                                           |

Results:
HR management practices significantly affect employees' performance, and vice versa.

Similarities with current studies:
The study agreed that the performance of the workers is a dependent variable, using the questionnaire.

The difference with the current study:
Small sample size, applied field, business environment, India and focus on the information technology sector.

The extent of the benefit:
Strengthening the theoretical aspect of research regarding the performance of employees.

A. Studies Linking between the researched variables

| 1- A study title | HR Accounting and Firm Performance Accounting for HRs and company performance |
|------------------|--------------------------------------------------------------------------------|
| Researchers' name and year | (2014) Okpako et al |
| Place of study | Nigeria. |
| Methodology and study tool | Survey, questionnaire. |

Purpose of the study:
The main objective of the study is to determine the relationship between HR accounting and organization performance.
The secondary goals are represented by the following three goals:
A. Check effect cost development and training for the performance of the organization.
B. Determine the relationship between cost Accommodation and organization performance.
C. Ensure the relationship between the cost of safety and health of employees and the performance of the organization.
**Statistical methods** | Regression Analysis.
---|---
**Results** | There is a positive relationship between HRA and the growth of the organization.
**Similarities with the current study** | I agreed with the current study by adopting HRA as an independent variable and using a questionnaire.
**The difference with the current study** | Small sample size, applied field, Nigerian Work Environment.
**The extent of the benefit** | Strengthening the theoretical side of the research.

**HRA**

HRs are one of the most important assets in the organization, as they differ from material assets that do not have feelings or emotions, if human assets are subject to different types of emotions and feelings, and human assets are not consumed unlike physical assets, so the measurement and evaluation of HRs along with other assets required to know the cost total organization (Anil et al.,2020:21). Therefore, the interest began in the sixties of the last century with the concept of HRA, when the scientists of organizational behavior criticized the traditional accounting practices that ignore the measurement and evaluation of workers in all organizations, and they stressed that appropriate procedures, methods and models must be developed to create value and Cost Employees of the organization(Prajapati et al,2016:7-8).

In 1973, the American Accounting Association defines HRA as “the process of measuring and defining data and information about employees and communicating them to the relevant authorities” (Mudrakove, 2016:10).

The importance of HRA is increasing as it contributes to managing expenses that provide future returns and develop the Organization, so the expenses related to HR are recorded in the balance sheet as assets, unlike the old accounting system, which considers these expenses as cost that reduces the organization’s net profit (Cherian & Farouq, 2013: 75), and highlights in the process of accounting and administrative decision-making, it is an effective tool in decision-making, it helps in developing administrative decisions and prevents wasting HR, increases the performance of human assets, improving job satisfaction and leading to improve the quality of performance (Hossain et al, 2014: 38).

**4- Dimensions of HR accounting**

A. Costs of recruitment: costs incurred by the organization when searching for workers through advertising, communications and other means, for the purpose of appointing them to certain jobs (Al-Mutairi, 2010: 27).

B. Costs of selection: the costs that the organization spends in order to identify new workers who will occupy specific jobs and determine the appropriate place for them, including (interview costs, administrative costs for employment tests, and all other costs paid by organizations in order to select workers(Flamholtz, 1999:58).
C. Recruitment costs: represent the actual costs incurred by the organization when appointing new employees in its organizational structure, such as the costs of job advertisements in public agencies (television, newspaper), the expenses of concluding the contract, and the costs of the recruitment committee (Al-Jaidi, 2007: 55). The purpose of these costs is recruiting workers to the organization and in the right place, and these costs vary according to the job levels in the organization (Flamholtz, 1999:58).

D. Health and safety costs: represent the expenses incurred by the organization for non-productive working hours for employees and include sick leave, maternity leave and military service, training leave, holiday leave and regular events, accidents in the workplace (Oxenburgh & Marlow, 2005:10-11).

E. Compensation costs: are the costs incurred by the organization every time the worker moves from the current level to the new one or the same degree with moving to another job. These costs represent a part of the total costs.

F. Training costs: represent the costs incurred by the organization in order to adapt the new employees to the organized jobs and include (the Salaries of unproductive new employees, and the costs of trainers) (Al-Mutairi, 2010: 28).

G. Learning costs: these are the costs that an organization spends them in order to train and improve the level of performance expected of the worker when performing his job or at a job level higher than the current level (Jassim, 2014: 49). The costs of education are also defined from an operational point of view as the costs incurred by the organization in order to reach the level of productivity expected of the worker in a particular situation.

5- Performance of the employees

The term of “performance” comes from the Latin_ Performer), which means to give from to something, from which the English word (Performance), which means how the organization achieves its goals, or accomplishes (work) tasks (Mazhouda, 2001: 86), either in the French Dictionary (Larousse) is the word Performance) Performance English word derived from old French Performance (taken from the word) which means accomplished, completed or performed (Larousse, 2001:766). Likewise, performance means the behaviors that stem from the workers who perform the work and that transform performance from abstraction to work that achieves results (Armstrong & Taylor, 2014:59). Therefore, performance is the level of individual work completion after making efforts ,defines performance as a set of goals and results that the organization seeks to obtain and achieve through its employees( Ngowi, 2014: 6).

The importance of the performance of workers is highlighted by the feeling of satisfaction with their work, so they will have higher job performance, and thus job retention and a lower turnover rate compared to workers who are not satisfied with their jobs, so the organization’s management finds it easy to motivate high-performing workers in order to achieve the organization’s goals (Elnaga & Imran, 2013: 140). Appropriate performance is a prerequisite for reviewing observations and setting goals (Boxall et al, 2007: 366). Therefore, the performance of employees is an important factor for the success of the organizations as it is a concept that describes the capabilities of the worker in using his skills and capabilities in achieving the goals and objectives of the organization (Altindaga & Kosedagi, 2015: 274).
The performance of the employees plays an important role in the organizational performance, as the workers contribute to achieving the goals of the organization. The factor is the main source of competitive advantage for the services provided by the organization (Ying, 2012:16).

6- Dimensions of EP

6-1 Performance quality

It means the level of quality or accuracy and the degree of conformity of the performance performed to specific specifications and conditions. In some works, the quantity or speed of performance may not be required as much as the quality and quantity of the performance performed and falls under the qualitative criterion. Performance has many measures that measure the degree of performance free from errors: the degree of innovation and creativity in performance and the degree of conformity of production to specifications (Al-Rashidi, 2014: 37).

7- Commitment

The concept of commitment is one of the well-established concepts in the behavioral and administrative sciences, and it has evolved with the development of management theories and the nature of the relationship between workers and the organization. The results of past studies have led to the high cost of negative phenomena resulting from (delays in work, absence, low degrees of job satisfaction and high rates of work turnover). Therefore, accurate diagnosis of levels of commitment by management represents one of the basic indicators for predicting the behavior of employees within the organization and, thus, avoiding the negative behavior referred to above (Ramdhani et al, 2017:827).

8- The right time to work

Timing means that tasks are completed faster than the specified time (Ulfa et al, 2020:3), and the appropriate timing of work refers to the completion by the organization’s employees of the tasks and responsibilities assigned to them by the management in the specified time in order to achieve the goals of the organization (Edward & Susant, 2019:33).

Third: The relationship between HR accounting and EP.

The application of the concept of HRA in a successful organization contributes to determining the cost of human assets in it and the future return achieved from them, as well as its primary role in developing value, and thus increasing the performance of the organization. He argued (Likert that changes in causal variables such as leadership strategies, organizational structures, and management style do not only lead to improved productivity, results or costs, but also lead to improved motivation, loyalty, attitudes, perceptions and performance for all employees at the organization (Parijan, 2014: 39).

9- The Practical Aspect

9-1 Presentation, diagnosis and analysis of HRA:

There was shown little interest (55%) in the process of determining the costs of its employees, and at their various job levels, which they bear when they engage in work, the transmission of information related to the costs of acquisition and development, “I obtained in total” mean (2.75) of moderate availability, but less than the hypothetical mean (3), and with (St. d= 0.316) indicating the agreement and consistency of opinions about this weakness, HRA obtained a
relative coefficient of variation (11.4%), but at the level of the seven dimensions, the following was found:

The research’s results reached to find: (cost of learning) with coefficient of variation (15.2%), standard deviation (0.494), mean (3.24), and it is practiced in agreement and homogeneity of the sample’s opinions about a relative interest (64.8%) average in “the costs incurred by the ministry in order to train workers and reach them to the desired performance in the future if assigned jobs are assigned them”, and as shown by the results of Table (3).

While the assignment cost variable was the second order with a relative coefficient of difference (20.1%), and with an arithmetic mean (2.69), moderately available, and less than the hypothetical mean (3) for the research, and the consistency and agreement of the sample with a standard deviation (0.541) on its weak relative interest (53.8%) in its interest in the procedures concerned with concluding the contract, travel expenses and other matters It includes the various administrative costs required to locate the new employee in his work.

The training cost variable was the third level of importance with a relative coefficient of difference (20.6%). A standard deviation was (0.577), indicating agreement and consistency in the sample’s opinions about the ministry’s relative (56%) limited interest in training costs, which led to its appearance with an arithmetic mean (2.80) moderately available but less than the hypothetical mean of the research, which constituted a limitation of its interest in the costs of developing and improving its personnel, including training programs.

While (cost selection) in which HRS was measured in the Ministry of Education and with a relative coefficient of variation (20.8%), and a standard deviation (0.524), indicating high agreement and harmony in the sample’s opinions about the availability of the dimension with a moderate arithmetic mean (2.51), but less than the hypothetical mean (3), which constituted a weak relative interest (50.2%) by the ministry in The costs she incurs to determine who should get her jobs, especially when she begins responding to applicants selected to fill her specific jobs, and includes interviewing the candidate as a full-time number of managers or specialists at work or seeking the assistance of some experts from inside and outside the ministry and providing some practical tests.

The health and safety costs have coefficient of variation (21.1%), standard deviation (0.608), and mean (2.88), less than the hypothetical mean of the research, which constitutes a limited relative interest (57.6%) in the costs incurred by the ministry in order to provide the necessary protection for the health and safety of its members, which includes costs accidents, as shown by the results of table (3).

The (compensation costs) were resolved by (c.v= 24.1%), mean (2.94) of moderate availability, but it indicates the weighting of the hypothetical mean on it, which made the ministry’s relative interest (58.8%) weak, and with the agreement of the sample’s opinions and the consistency and convergence of its answer with a standard deviation (0.710) to confirm the weak interest of the ministry in the costs of the operations. As a result, employees are promoted from their current grades to higher grades or remain in the same job grade.

Finally, it was resolved after the cost of polarization in the seventh order and with a relative coefficient of variation at the general level (24.6%), as the ministry showed a relative (43.4%) weak interest in the costs of attracting new workers,
emanating from the search for HRs through advertising, media, correspondence and others, as it bears the costs resulting from responding to applicants to contract with it, as well as those rejected of them, as the dimension obtained as a result of this weak interest the availability of an arithmetic mean (2.17) low on the general level and a standard deviation of (0.535) indicating agreement and homogeneity on this weakness.

The researchers note that the ministry prefers to pay attention to development costs at the expense of acquisition costs, as the arithmetic mean of development costs is (2.99), and it is practiced with limited interest (59.7%), while the arithmetic mean of acquisition costs (2.65) was moderate, but the relative interest (53%) is weak.

Table (3) Presentation and analysis of HRS data. (n=224)

| T                | The paragraphs                                             | Arithmetic mean | Standard deviation | Relative importance% | Coefficient of variation% |
|------------------|------------------------------------------------------------|-----------------|--------------------|----------------------|--------------------------|
| polarization cost|                                                           | 2.17            | 0.535              | 43.4                 | 24.6                     |
| Cost the selection|                                                          | 2.51            | 0.524              | 50.2                 | 20.8                     |
| Appointment cost |                                                          | 2.69            | 0.541              | 53.8                 | 20.1                     |
| Health and safety costs |                                                      | 2.88            | 0.608              | 57.6                 | 21.1                     |
| Compensation costs |                                                      | 2.94            | 0.710              | 58.8                 | 24.1                     |
| Training cost    |                                                          | 2.80            | 0.577              | 56                   | 20.6                     |
| learning cost    |                                                          | 3.24            | 0.494              | 64.8                 | 15.2                     |
| HR Accounting    |                                                          | 2.75            | 0.316              | 55                   | 11.4                     |

9-2 Presentation, diagnosis, and data analysis of employees’ performance:

The median variable was measured performance of employees in the Ministry of Education through dimensions (quality of performance, commitment, timeliness of work, (13) paragraphs, and through the means and methods of descriptive analysis adopted in the analysis of the primary data after it was confirmed through the confirmatory factor analysis and the reliability coefficient, which led to the following:

The Ministry of Education showed its relative interest (64.8%). The average in its resort to measuring the results (outputs) achieved by its members against their inputs, and in total obtained an arithmetic mean (3.24) Moderate availability, but greater than the hypothetical mean)3(for search, standard deviation(0.479) indicates the agreement and harmony of opinions about this weakness, so the performance of the workers as a whole got a relative coefficient of difference)14.7%. As for the four dimensions in which it was measured, the following was found: happened (the right time to work) on the first order and with a relative coefficient of variation (18.4%), and in the middle of my account (3.28) moderate and greater than the hypothetical mean, with a standard deviation)0.606(Indicates consistency and convergence in response levels about
the ministry's relative interest (65.6%) average in its members completing the work on time without delay and in a manner that makes their job performance distinct from the previous one.

The level of workers’ performance as a dependent variable, it came after commitment (with a relative coefficient of variation (19.4%), got relative attention (66.4%). The average is the employees’ adherence to work schedules, attendance and departure schedules, start and completion times, as well as their adherence to the policies, rules and regulations of the ministry and the job behavior it imposes on them that is subject to its culture (3.32) moderate, standard deviation (0.645), which indicates the agreement and consistency of the answers.

Finally, the dimension (quality of performance) ranked third in terms of priority of agreement and with a relative coefficient of variation (20.3%), and in the middle of my account (3.10) denotes the moderation of availability above the hypothetical mean, with a standard deviation (0.632) indicates consensus and consensus on the ministry's relative interest (62%) . The average in accuracy in the completion of work by its personnel and is related to reliability and skill.

Table (4) Presentation and Analysis of EP Data (n=224)

| T        | The paragraphs             | Arithmetic mean | standard deviation | Relative importance% | Coefficient of variation% |
|----------|----------------------------|-----------------|--------------------|----------------------|--------------------------|
| performance quality | 3.10                      | 0.632            | 62                 | 20.3                 |
| Commitment | 3.32                      | 0.645            | 66.4               | 19.4                 |
| The right time to work | 3.28                      | 0.606            | 65.6               | 18.4                 |
| performance of employees | 3.24                      | 0.479            | 64.8               | 14.7                 |

Third: The main hypothesis involved test Effect Accounting for HRs in the performance of employees:

The fourth main hypothesis of the research started that (there is no significant effect of HRA with its dimensions on the performance and dimensions of employees). For the purpose of verifying the validity of the hypothesis of the researcher, the multiple linear regression model was implemented, as well as the value indicators of $T_{scheduled}$ (1.96) and the value of $F_{tabular}$ (3.841) at the level of significance (0.05) to reject and accept the hypotheses, for the main hypothesis and its sub-hypotheses emanating from the fourth main hypothesis and my agency:

1. Verification of the first sub-hypothesis:

The model included a seven-dimensional impact test (recruitment costs, selection costs, recruitment costs, health and safety costs, compensation costs, training costs, and learning costs) which represents HRA the quality of performance. As an approved dimension, the ministry is trying to improve it by directing HRA, and according to the results of Table (3), the following becomes clear.
(Health and safety costs and learning costs) impact on the quality of the performance with standard beta value(0.170);(0.152) respectively, at the level of significance (P=0.021-0.025), with a value of (T)computed(2.331-2.260), while the value of the constant (1.205)at the level of significance(0.002) and in the value of (T)computed (3.179), that is, when the value of the marginal slope is equal to zero, or the value of the two dimensions combined is equal to zero, then the value of the quality of performance in the Ministry of Education is equal to the value of the constant(1.205), and this indicates that its availability and its value can be affected through the two dimensions, while there was no effect of the other five dimensions (the cost of polarization, the cost of selection, the cost of appointment, the cost of compensation, and the cost of training) on the quality of performance due to the level of morale more than (0.05), and the value of the t-test is less than its scheduled value. While the model explained the percentage (8.9%)of the changes that occur in the quality of performance, while the remaining percentage is attributed to the model(91.1%) For other variables that were not included in the tested research model, as the value of the corrected model determination factor was AR²=(0.089), while it was Values (F)computed(4.094) for the model, and from all of the above, the null hypothesis is rejected, and the alternative hypothesis is accepted (HRA in its dimensions affects the quality of performance a positive moral effect), while the estimated equation was For the model:

\[ \text{performance quality (Y)} = 1.205 + 0.170 \times \text{(Health and Safety Costs)} + 0.152 \times \text{(Learning cost)} \]

2. Verification of the second sub-hypothesis:

The model included a seven-dimensional impact test (Recruitment costs, selection costs, recruitment costs, health and safety costs, compensation costs, training costs, and learning costs), which represents HRA at Commitment . As an approved dimension, the ministry is trying to improve it by directing HRA, and according to the results of Table 30. The following becomes:

The cost recruitment and training costs impact on commitment with standard beta value (0.180);(0.155) respectively, at the level of significance (P = 0.011-0.025), with a value of (T)computed(2.562-2.261), while the value of the constant (1.748)at the level of significance(0.000) and in the value of (T)computed(4.456) i.e., when the value of the marginal slope is equal to zero, or the value of the two dimensions combined is equal to zero, then the value of the commitment in the Ministry of Education is equal to the value of the constant(1.748).This indicates that its availability and its value can be affected through the two dimensions, while there was no effect of the other five dimensions (the cost of polarization, the cost of selection, the cost of health and safety, the cost of compensation, and the cost of learning) in the commitment because the level of morale is more than (0.05), and the value of the t-test is less than its scheduled value. While the model explained the percentage (6.3%)of the changes that occur in the obligation, while the remaining percentage is attributed to the model(93.7%) For other variables that were not included in the tested research model, as the value of the corrected model determination factor was(AR²=0.063), About morale level (0.003), web values (F)computed(3.941) for the model, and from all of the above, the null hypothesis is rejected, and the
alternative hypothesis is accepted (HRA in its dimensions affects commitment a positive moral effect), while the estimated equation was For the model:

\[
\text{Commitment (Y)} = 1.748 + 0.180 \times (\text{Appointment cost}) + 0.155 \times (\text{Training cost})
\]

3. Verification of the third sub-hypothesis:

The model included a seven-dimensional impact test (Recruitment costs, selection costs, recruitment costs, health and safety costs, compensation costs, training costs, and learning costs) and represents HRA at the right time to work. As an approved dimension, the ministry is trying to improve it by directing HRA, and according to the results of the table (3) The following becomes clear.

Effect found (Training cost) at (The right time to work) with standard beta value (0.166), at the level of significance (P=0.018), with a value of (T(computed)) (2.391), while the value of the constant (1.866) at the level of significance (0.000) and in the value of (T(computed)) (5.020), that is, when the value of the marginal slope is zero, or the value of training costs is zero, then the value of the appropriate time to work in the Ministry of Education is equal to the value of the constant (1.866). This indicates that its availability and its value can be affected through the independent dimension, while there was no effect of the other six dimensions (the cost of polarization, the cost of selection, the cost of appointment, the cost of health and safety, the cost of compensation, the cost of learning) in the appropriate time of work due to the fact that the level of morale increases about (0.05), and the value of the t-test is less than its scheduled value. While the model explained the percentage (6.6%) of the changes that occur in the obligation, while the remaining percentage is attributed to the model (93.4%). For other variables that were not included in the tested research model, as the value of the corrected model determination factor was \(AR^2=0.066\), about morale level (0.016), web values (F(computed)) (4.217) for the model, and from all of the above, the null hypothesis is rejected, and the alternative hypothesis is accepted (HRA in its dimensions affects the appropriate timing of work a positive moral effect), while the estimated equation was for the model:

\[
\text{time to work (Y)} = 1.866 + 0.166 \times (\text{Training cost})
\]

4. Checking the fourth main hypothesis:

The model included a seven-dimensional impact test (recruitment costs, selection costs, recruitment costs, health and safety costs, compensation costs, training costs, and learning costs), which represents HRA at performance of employees. As an approved dimension, the ministry is trying to improve it by directing HRA, and according to the results of Table (5), the following:

(Health and safety costs, training costs, and learning costs) impact on (performance of employees) with standard beta value (0.158); (0.159); (0.159) respectively, at the level of significance (P=0.018-0.029-0.017), with a value of (T(computed)) (2.195-2.387-2.402), while the value of the constant (1.606) at the level of significance (0.000) and in the value of (T(computed)) (5.676), that is, when the value of the marginal slope is equal to zero, or the value of the three dimensions combined is equal to zero, the value of the performance of workers in the Ministry of Education is equal to the value of the constant (1.606). This indicates
that its availability and its value can be affected through those dimensions, while there was no effect of the other four dimensions (the cost of polarization, the cost of selection, the cost of appointment, the cost of compensation) on the performance of workers due to the level of morale being more than (0.05), and the value of the t-test is less than its scheduled value. While the model explained the percentage (11.5%) among the changes that occur in the performance of employees, and this indicates the synergy of the dimensions, while the remaining percentage of the model is attributed to (88.5%) for other variables that were not included in the tested research model, as the value of the corrected model determination factor was ($AR^2=0.115$), about morale level (0.000), web values ($F$) computed (5.122). For the model and from all of the above, the null hypothesis is rejected, and the fourth main hypothesis is accepted (HRA in its dimensions affects the performance of employees a positive moral effect), while the estimated equation was for the model:

$$EP (Y) = 1.606 + 0.158 \times \text{(Health and Safety Costs)} + 0.159 \times \text{(Training cost)} + 0.159 \times \text{(Learning cost)}$$

Table (5) The impact of the dimensions of HRA on the performance of employees and its dimensions

| The Dimensions supported | Statistical methods | polarizaton cost | Cost the selectio | Appoimtment cost | Health and safety costs | Compen | sation costs | Train | ng cost | learn | ing cost |
|--------------------------|---------------------|------------------|------------------|------------------|------------------------|-------|--------------|-------|--------|-------|----------|
| The quality of the performance | $\beta_s$ | 0.121 | 0.064 | 0.053 | 0.170 | -0.005 | 0.045 | 0.152 |
| AR$^2$ | 0.089 |
| F | 4.094 (0.000) |
| T | 1.830 | 0.923 | 0.770 | 2.331 | 0.061 | 0.662 | 2.260 |
| $\alpha$ | 1.205 (0.002, 3.179) |

| The commitment | $\beta_s$ | 0.018 | -0.051 | 0.180 | 0.083 | -0.053 | 0.155 | 0.122 |
| AR$^2$ | 0.063 |
| F | 3.941 (0.003) |
| T | 0.273 | -0.725 | 2.562 | 1.121 | -0.682 | 2.261 | 1.794 |
| $\alpha$ | 1.748 (0.000, 4.459) |

| The Right time to work | $\beta_s$ | -0.010 | 0.095 | 0.065 | 0.109 | -0.066 | 0.166 | 0.089 |
| AR$^2$ | 0.066 |
| F | 4.217 (0.016) |
| T | -0.155 | 1.337 | 0.910 | 1.454 | -0.842 | 2.391 | 1.289 |
| $\alpha$ | 1.866 (0.000, 5.020) |

| performance of employees | $\beta_s$ | 0.057 | 0.046 | 0.132 | 0.158 | -0.054 | 0.159 | 0.159 |
| AR$^2$ | 0.015 |
| F | 5.122 (0.000) |
| T | 0.875 | 0.662 | 1.926 | 2.195 | -0.711 | 2.387 | 2.402 |
| $\alpha$ | 1.606 (0.000, 5.676) |

Source: program outputs (SPSS V.26)
10- Conclusions and recommendations

1. It became clear that there is a clear weakness and absence of an understanding of HRA in general in the Ministry of Education. There is an absence of calculating the costs of HRs management practices in the ministry, and that it does not include these costs for the purpose of measuring the verified feasibility.

2. Although the learning costs got a moderate arithmetic mean, the calculated costs include only determining the amount of the salary, allowances and some deductions that the full-time graduate receives, as well as the allowances he deserves after completing his studies. Except there is no calculation of the costs incurred by the full-time study department, such as the costs of the replacement employee, the low quality of work and others.

3. It is evident from the results that the performance of the employees in the ministry was acceptable in all its dimensions in terms of quality of performance, commitment and appropriate timing, and the reason for this is that the Ministry of Education is one of the ancient ministries in Iraq and has clear work contexts, as well as the availability of competencies of a good level within the ministry and is subject to the direct supervision of ministry.

4. The personnel of the Ministry of Education showed their commitment to work schedules and their adherence to positive behavioral values in a moderate manner, and that their early attendance to work and their departure did not meet the ambition.

5. Showing the interest of the ministry's personnel in the appropriate timing of work, which gave the ministry the ability to meet the wishes of its auditors and accomplish them in a timely manner, especially as they accomplished their duties before the deadline in most cases.

Recommendations

1. Giving sufficient attention by the Ministry of Education to the issue of HRA and how to calculate the costs of HR management practices. This can be done according to the following:
   a. Holding workshops and lectures for the ministry’s advanced owners to clarify the concept and importance of accounting for how it is applied and the necessary requirements for that.
   B. Paying attention to the feasibility of compensation costs such as salaries, wages and incentives, in order to calculate these costs represented by the time employees spend on completing salaries, printing costs, and others.

2. Determine the study vacations inside and outside the country according to the need of ministry, and calculate the costs of the substitute employee and the quality of his performance in completing the tasks and the returns of ministry from the study compared to the costs for it.

3. Although the performance of the employees was good, the workers should possess various skills and tasks and bear greater responsibility through training and developing their capabilities in order to complete their duties on time and work to meet the requests of the auditors as quickly as possible in accordance with the regulations and instructions and explain the procedures to them clearly.

4. The necessity of providing transportation for all workers in order to ensure their commitment, their early attendance and smooth leaving when they stay late to complete some urgent tasks and assignments.
5. Paying attention to the needs of employees and providing them at the right time and providing material and moral incentives that make them feel important within the organization.

References

1. Abiola, James, O & Adisa, Rilwan, Ayinda, (2020), "Influence of HR Accounting Practices on Managerial Decision-Making", Archives of Business Review, Vol. 8, No.5, PP 8-18.
2. Abu Jleida, Saeed Samir, (2018), "The impact of HR management strategies on the performance of workers in Libyan telecommunications companies", A Master's thesis, Middle East University, Amman.
3. Al-Jaidi, Sanaa Abdel-Hadi, (2007), “The Role and Importance of Accounting Measurement for HRs in the Palestinian Universities in the Gaza Strip.”, An Applied Analytical Study, A Master's Thesis, College of Commerce, Islamic University, Gaza.
4. Al-Mutairi, Hamad Fahd Daasan, (2010), “Application of HRA in Public Shareholding Companies in the State of Kuwait”, justifications, principles, and obstacles”, Master's thesis, College of Business, Middle East University, Amman.
5. Al-Rashidi, Muhammad Tabarak Muhammad, (2014), “The effect of using the method of management by objectives on the performance of employees”, An applied study at the National Petroleum Corporation in the State of Kuwait, MA Thesis, Middle East University, Amman.
6. Altindaga, Erkut & Kosedag, Yeliz, (2015), "The Relationship between Emotional Intelligencce of Managers, Innovative Corporate Culture and EP", Procedia-Social and Behavioral Sciences, P 270-282.
7. Armstrong, Michael & Taylor, Stephen, (2014), "Handbook of HR Management Practice", 13th ed, Ashford Color press Ltd, UK.
8. Abbas, Zayad Ali, (2021) Strategic dialogue and its impact on Entrepreneurial Strategic Compass, analytical research, in the Ministry of Forging Affairs.
9. Boxall, Peter & Purcell John, and Wright, Patrick. (2007), "HR Management", Oxford University Press Inc., New York.
10. Dewi, Nuning, Nurna & Wibowo, Rudi, (2020), “The effect of leadership style, organizational culture and motivation on EP,” Management Science Letters 10, PP2037-2044.
11. Edward, Yusuf Ronny & Susanti, (2019), “The Effect of Organizational Culture and Work Motivation on EP with Job Satisfaction as an Intervening Variable at PT. Berkat Bima Sentana”, IOSR Journal of Business and Management, Volume 21, Issue 11 .Series. III, PP 31-38.
12. Elnaga, Amir and Imran, Amen, (2013), "The Effect of Training on EP", European Journal of Business and Management, Vol.5, No.4, PP137-147.
13. Flamholtz, Eric, G, (1999), "HR Accounting Advances in Concepts, Methods and Applications", 3th ed, Kluwer Academic Publishers, New York.
14. Hossain, Md. Azmir & Akhter, Nazma and Sadia, Nabila, (2014), "An Empirical Analysis on importance of HR Accounting (HRA) Practices in the Organizations", International Journal of Ethics in Social Sciences, 2(2), PP37-54.
15. Jasim, Raghad Hashem, (2014), “Analysis of the relationship between accounting for HRs and quality costs and their impact on reducing production costs”, PhD thesis, Ismailia College of Commerce, Suez Canal University, Port Said.

16. Krishnaveni, R & Monica, R. (2018), factors in flunking EP: the role of HR management practices and work engagement", Int, J Business performance management p.450-475.

17. Larousse de la langue Dictinnaire franchise, Belgique , ( 2001).

18. Mazhouda, Abdel Malik, (2001)," Performance between efficiency and effectiveness concept and evaluation ", Journal of Human Sciences, University of Muhammad Khudair Biskra, First Issue, Pages 85-100.

19. Mudrakova, A, (2016) , "HR accounting", Thesis Submitted to the University Masaryk Faculty of Economics and Administration for the Award of the Degree of Doctor , slovencine.

20. Ngowi, Perez A., (2014), "Assessment of E Mployees Performance In Commercial Banks In Tanzania: A Case of Stanbic Bank Tanzania Limited, Thesis Master of HR Management of the open University Tanzania .

21. Okpako, P, O & Atube, E, N And Olufawoye O, H, (2014 ), "HR Accounting And Firm Performance" , Global Journal of Commerce & Management Perspective., Vol.3(4), Pp232-237.

22. Oxenburgh, Maurice and Marlow, Pepe, (2005), “The Productivity Assessment Tool: Computer-based cost benefit analysis model for the economic assessment of occupational health and safety interventions in the workplace,” Journal of Safety Research-ECON proceeding 36, pp209 -214.

23. Parijan , Knadijah Khodabakhshi , (2014), " Impact of HR Accounting Information Disclosure on Firm Value: A Study on Selected Companies in Bombay Stock Exchange" , Thesis Submitted to The University of Mysore, Mysore In Fulfillment Of The Requirement For The Award of the Degree of Doctor of Philosophy in Management Science India.

24. Rahaman, Mustafizur & Hossain, Amzad and Akter, Tabassum, (2013), “Problem with HR Accounting and A Possible Solution”, Research Journal of Finance and Accounting, Vol.4, No.18, ppl-10.

25. Salem, Fadel Kamal, (2008), “The importance of measurement and accounting disclosure about the cost of HRs and its impact on financial decision-making." An applied study on joint stock companies in the Gaza Strip, unpublished master's thesis, Palestine .

26. Toulson, Paul K and Dewe, Philip, (2004), "HR accounting as a measurement tool", HR Management Journal, Vol 14 no 2, PP 75-90.

27. Ulfa, Marlina & Hamid, Nurdjanah and Rasyid, Wahda, (2020), “The Influence of Organizational Culture, Leadership, and Motivation through Job Satisfaction on EP”, Hasanuddin Journal of Business, Volume 2 no1, ppl-14.

28. Wickramasinghe, Rdmp. (2006 )," HR Accounting Framework for Sri Lankan Software Industry "This dissertation was submitted to the Department of Computer Science & Engineering, of the University of Moratuwa in partial fulfillment of the requirement for the Degree of Master of Business Administration Department of Computer Science and Engineering University of Moratuwa.

29. Ying, Zhang Ying, (2012), "The Impact of Performance Management System on EP Analysis with WERS 2004".
محاسبة الموارد البشرية وتأثرها في اداء العاملين – بحث ميداني في وزارة التربية

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المستخلص

يهدف البحث إلى تحديد تأثير محاسبة الموارد البشرية في أداء العاملين. وتجسد مشكلة البحث ضعف الاهتمام بـمحاسبة الموارد البشرية مما انعكس على أداء العاملين في وزارة التربية. واعتمد المتغير الوصفي التحليلي. وشمل موضوع البحث مدراء الأقسام والشعب في مقر وزارة التربية وبلغ حجم العينة (224) فردًا من المجتمع الكلي والبالغ (533). واعتمدت الاستبانة كأداة رسمية لجمع البيانات والمعلومات فضلًا عن المقابلات التي أجريها الباحث. ولتحليل نتائج البحث الميداني اعتمد الباحث برنامج (SPSS). وتحمل الباحث فرضية رئيسيّة و(3) فرضيات فرعية تمثلت بعلاقات التأثير. وتم معالجة البيانات إحصائيًا بالاعتماد على أساليب الإحصائية متعددة منها (الوسط الحسابي، الانتشار المعياري، الانحراف المعياري، البسيط) وافضت نتائج البحث إلى قبول جميع الفرضيات البديلة ورفض فرضيات التمدد. واتضح أن هناك ضعف في الاهتمام بـمحاسبة الموارد البشرية. وان هناك تأثير مهم لـمحاسبة الموارد البشرية في أداء العاملين في وزارة التربية.

المصطلحات الرئيسية للبحث: محاسبة الموارد البشرية، أداء العاملين.