Journal of Informatics Education and Research
ISSN: 1526-4726
Vol 4 Issue 2 (2024)

The Impact of Competency Management on Improving the Quality of Health Services in Health Institutions: A Field Study of Public Health Institutions in the State of El Oued

Lalmi Khelaifa
khelaifa81@gmail.com
University of El-oued

Younes Zine
University of El-oued
zine-younes@univ-eloued.dz

Received*: 25/05/ 2024 *Accepted: 25/07/2024* *Published: 02/08/2024

Abstract

This research paper aims to shed light on the impact of competency management on improving the quality of health services. It begins by introducing the basics of competency management and discussing the prevailing approaches to its implementation. It then delves into the concepts related to the quality of health services and attempts to understand the relationship between these two variables using a questionnaire administered to the stakeholders involved in the process. The results indicate that competency management practices (recruitment, competency development, competency assessment, etc.) in the study institutions (public health institutions in the State of El Oued) do not contribute to improving the quality of services provided to patients. Therefore, it is necessary to reconsider the institution's policy on competency management and address its weaknesses to achieve outputs that are well-received by its recipients (patients).

Keywords: Competency management, Public health institutions, Quality, Health services.

Introduction

Driven by rapid global changes, intense competition, and other factors, healthcare leaders are increasingly prioritizing the human element. This has led to the adoption of sound policies that emphasize competency development and investment. Such investments have proven to be essential in enhancing the quality and range of healthcare services delivered.

In this study, we shed light on the human aspect as a key factor in providing health services. Health organizations, if they want to invest in their human resource, must implement human competency management, which allows for the creation of new skills and knowledge, thus moving from low-quality health services to new services that meet the aspirations of health service recipients.

Based on this proposal, the following problem can be raised:

To what extent does competency management affect the improvement of the quality of health services provided in public health institutions?

The following main hypothesis can be raised:

1- General hypothesis of the study:

- There is a statistically significant correlation at the significance level of 0.05 for competency management on improving the quality of health services provided in Algerian public health institutions.

2- The first main hypothesis:

- There is a statistically significant correlation at the significance level of 0.05 for recruitment through (attraction, selection, and appointment) on improving the quality of health services provided in Algerian public health institutions.

Five **sub-hypotheses** fall under this main hypothesis:

1. There is a statistically significant correlation at the significance level of 0.05 for recruitment through (attraction, selection, and appointment) on the responsiveness dimension.
2. There is a statistically significant correlation at the significance level of 0.05 for recruitment through (attraction, selection, appointment) and the tangibility dimension.
3. There is a statistically significant correlation at the significance level of 0.05 for recruitment through (attraction, selection, and appointment) on the reliability dimension.
4. There is a statistically significant correlation at the significance level of 0.05 for recruitment through (attraction, selection, and appointment) on the assurance dimension.
5. There is a statistically significant correlation at the significance level of 0.05 for recruitment through (attraction, selection, and appointment) on the empathy dimension.

3- The second main hypothesis:

- There is a statistically significant correlation at the significance level of 0.05 for compensation and development: through (salary, incentives, promotion, and training) on improving the quality of health services provided in Algerian public health institutions.

Five **sub-hypotheses** fall under this main hypothesis:

1. There is a statistically significant correlation at the significance level of 0.05 for compensation and development: through (salary, incentives, promotion, and training) on the responsiveness dimension.
2. There is a statistically significant correlation at the significance level of 0.05 for compensation and development: through (salary, incentives, promotion, and training) on the tangibility dimension.
3. There is a statistically significant correlation at the significance level of 0.05 between compensation and development: through (salary, incentives, promotion, and training) and the reliability dimension.
4. There is a statistically significant correlation at the significance level of 0.05 for compensation and development: through (salary, incentives, promotion, and training) on the assurance dimension.
5. There is a statistically significant correlation at the significance level of 0.05 for compensation and development: through (salary, incentives, promotion, and training) on the empathy dimension.

Study Objectives:

The current research paper aims to achieve specific objectives that are consistent with the subject of the study and are as follows:

- ✓ To know the effect of human competency management on improving the quality of health services in public health institutions.
- ✓ To determine the level of human competency management in public health institutions in the State of El Oued.
- ✓ To assess the extent to which health service providers are aware of the need to adopt competency management as a new administrative approach, through which it is possible to achieve health services that meet the desired level of service recipients.
- ✓ Reaching Results and Recommendations to Assist Algerian Hospital Management in Human Competency Management for Enhanced Patient Care

Methodology of Study:

A descriptive and analytical approach was employed in the conceptual part of the study, through a review of some Arabic and foreign references. The field study was conducted using an analytical approach by distributing a questionnaire to

healthcare providers in public health institutions in the Oued to achieve expressive, reliable, and significant results. The Statistical Package for the Social Sciences (SPSS) version 23 was used.

I. Fundamentals of Competency Management:

Competency management is one of the qualitative activities of human resource management.

1) Definition of Competency Management:

Aubret; **Gilbert**; and **Pigeyer** (2002) defined competency management as "the set of activities and practices that use competencies and evaluate them as a link between the various functions of human resource management, and therefore it is a cornerstone of many other functions within the organization[1]".

It has also been defined as "a system used to assess skills, knowledge, and performance within the organization and to identify gaps, provide training, compensation, and recruitment programs, and is based on the current and future needs of the organization"[2].

It has also been defined as "a management technique or the method drawn up by the organization's leadership that sees its competencies and their development as a factor in raising performance and creating the value of the organization, and these competencies can be individual, collective, or organizational"[3].

Through it, competency management can be considered a management system for the organization's behavior towards its employees, aimed at optimizing the use of competencies by recruiting, selecting, training, and motivating its human competencies to achieve the organization's strategic goals and ensure its ability to withstand internal and external challenges and changes in its environment. This can only be achieved by providing an appropriate working environment for its human resources and ensuring that their energies are unleashed.

2) Competency Management Internships:

The stages of competency management are represented in several steps as follows [4]:

- Good knowledge of the human resources structure through the use of quantitative indicators such as the age pyramid and the distribution of training levels... etc., with a comparison with competitors in addition to qualitative and qualitative indicators.
- Anticipation of future work: This is an important element and assumes a clear strategic vision that can translate these trends into the organization's needs for strategic competencies.
- Planning Based on the foregoing, recruitment, training, and inter-job mobility plans can be developed. These three steps are considered the basic work methods for competency management.

3) Approaches to Competency Management:

There are several common approaches to competency management, including [5]:

- **Knowledge-based approaches**: They are the determinant of competencies and rely on two sources, theoretical and practical.
- **Skills-based approaches:** These approaches do not limit themselves to theoretical knowledge only, but integrate skills, so they embody the concept of successful work. The effectiveness of these approaches is evident in manual professions that rely more on practices and training, experience, observation... etc.
- **Behavior-based approaches**: These approaches are based on evaluating behaviors by preparing lists of competent individual competencies that are used in selection and guidance.
- **Approaches based on the integration of knowledge, skills, and behaviors:** This is aimed at making the developed tools and means more integrated, as many organizations have recruited the necessary means and capabilities to prepare an accurate description of competencies in terms of their three components (knowledge, skills, and behaviors).

- **Approaches based on cognitive competencies:** The evaluation process is relatively simple and can therefore be used on a wide scale, especially in managing job transfers between human resources and sectors in the face of structural changes.
- **Activity-based approaches:** These approaches aim to identify the activities in which the human resource appears when performing the various competencies required for that purpose, and the gap between the required competencies and the actual competencies is shown.

4) Dimensions of Competency Management:

The organization aims to manage and monitor the competencies it possesses by relying on the method and how to apply those knowledge and skills and put them into effect.

Diagnosis and Attraction of Competencies: The organization seeks in its search for individual and collective competencies that are not apparent within the organization and that aim to improve the organization's effectiveness and achieve its goals and set plans for its activity or products. The organization must identify these competencies and provide the appropriate environment to employ their capabilities and skills in terms of work tools and motivation. After identifying those collective competencies, the organization must develop a graphical map showing the locations of those competencies in terms of their activities, specializations, and fields of work[6].

Attraction is one of the activities that affect the organization's performance and is defined as "the task of attracting the required competencies according to the descriptions and requirements of each job currently available or that can be predicted in the future"[7]. Today, organizations have a growing need for skilled, qualified, and technologically adept human resources due to the developments witnessed in the global arena due to globalization, free trade, rapid and remarkable technological advancements, and the organizations' belief that customer satisfaction is the only way to ensure their survival[8]

Retention of Competencies: Retaining any organization's competencies is considered an important activity because it uses several methods to retain skilled and qualified employees to reduce recruitment and training costs. It can use the most appropriate and most effective methods to retain these competencies.

Since the human competencies that the organization possesses are an intangible asset and cannot be managed in the same way that the rest of the organization is managed, for any reason, they will take their competencies with them. This means that any investment the organization has made in training, development, or any other area will be lost"[9].

Development of Competencies: Systems based on competency development allow for organizational learning through work and experience. Its operations can only be activated if there is organizational contribution through the provision of effective management methods and individual contribution through the employee's acquired knowledge and the efforts they make to develop their competencies and improve their performance[10].

The modern organization needs a high level of open and continuous training, motivation for teamwork, and development of diverse and different competencies with high performance. It also needs to strengthen individuals through:

- Orienting new employees and familiarizing them with various types of activities and functions.
- Keeping pace with the transition of jobs from one sector to another.
- Improving skills increases individual capacities and raises their performance level to meet specific performance standards.
- Preparing individuals to face the challenges imposed by the external environment on organizations in various fields.

II. Quality of Health Services:

We will try to understand the quality of services through its concept, especially since health services have a set of characteristics that distinguish them from other services, given that healthcare is provided to the patient by several parties (hospital administration, doctors, nurses, etc.) and a failure to deliver this service to the patient exposes them to many risks that should be avoided as much as possible.

1) Concept of Quality of Health Services:

The topic of quality of health services has become one of the fundamental topics in marketing health care services. This topic is also of interest and focus to hospital administrations, beneficiaries of health care services, doctors, and funding bodies for these services. These multiple parties focus on the topic of quality of health services to achieve their goals and interests, as errors and mistakes in the quality of health care are unacceptable and their effects extend beyond material damage to physical and psychological harm, and it is necessary to strive for a defect-free health practice[11].

Dona Bedian defined it as: "the application of medical sciences and technologies to achieve the maximum benefit for public health, without increasing exposure to risks, and on this basis, the degree of quality is determined by the best balance between risks and benefits"[12].

Quality of health services has also been defined as: "a form of the methods used by the health organization to distinguish itself from other similar health organizations in the activity by forming an image of the health organization through which the personality of the organization is determined at all levels"[13].

2) Types and Characteristics of Quality of Services:

The main types of service quality are divided into the following two types [14]:

2.1) Technical Quality:

This type of quality requires relying on employees with distinguished experience and knowledge of services and their various procedures. This type is suitable for complex banking services such as retirement and pension plans, where technical knowledge is a clear and primary requirement.

2.2) Functional Quality:

This type focuses on the service coincidence and how the service is provided. It requires psychological interaction between the organization and its customers. The organization's management must strive to enhance the quality of its services by identifying the strategic goal of service quality, monitoring customer needs and expectations, measuring quality and customer satisfaction, and then reorganizing around the customer, identifying new roles for the organization's managers and supervisors, and achieving productivity benefits, measuring and reducing service costs, and building a strong foundation for gaining customer loyalty. Keith and Denton identified the following steps that the organization's management should follow:

- A clear vision from the management and understanding, respecting, and following up on the customer.
- Providing appropriate support from the management in addition to developing a strategic environment.
- Understanding the business and its components, and using quality service improvement criteria.
- Using appropriate techniques and setting performance measurement standards.
- Demonstrating the need for innovation and attracting the right people, training and qualifying them, refining their talents and skills, and establishing incentive and reward systems.

The main characteristics of quality of services have also been divided into three basic characteristics [15]:

2.3) Physical Quality: This relates to the environment surrounding the service delivery.

2.4) Corporate Quality: This relates to the image of the service organization and the mental impression of it.

2.5) Interactive Quality: This represents the results of the service operations.

III. Field Study:

1) Study Population and Sample:

Scientific research requires a clear and accurate definition of the study population in line with the research title, its problem, and its objective. In this regard, the study population for this article "The Impact of Competency Management in Health Institutions on Improving the Quality of Health Services, "A Field Study of Public Health Institutions in the Oued " is represented by the administrative staff of these institutions, as they are responsible for improving the quality of services and its effectiveness.

The public sector was chosen to conduct this field study due to the size of this sector, which represents the majority compared to the private sector. It is also worth noting that the number of public health institutions in the governorate is (12) public health institutions and the number of administrative staff is (363) employees. According to Morgan's table, a population of 363 [16]individuals, the sample to be interviewed is (186). As for the institutions under study, three hospitals were selected, namely: (EPH El Oued, EHS El Oued, and EHO El Oued), and four neighborhood health institutions, namely: (EPSP El Oued, EPSP El Debila, EPSP El Talib El Arabi, EPSP Qamar).

Study Hypotheses :

The study was divided into one general hypothesis divided into two main hypotheses, and each main hypothesis was divided into five sub-hypotheses.

The study and identification of the contribution are done by analyzing the relationship between the variables and dimensions, so it will be tested by following the method of moving from the part to the whole, which is imposed on us by the research methodology, which is testing the sub-hypotheses, then the main ones, and then the general ones. This will be done as follows:

2.1) Testing the First Main Hypothesis and Its Sub-Hypotheses:

It will be tested by following the method of transition, as we said, from the part to the whole, which is testing the sub-hypotheses and then the main ones.

2.1.1) Testing the First Sub-Hypothesis:

The content of this hypothesis is as follows:

There is a statistically significant correlation at the significance level of 0.05 for recruitment through (attraction, selection, and appointment) on the responsiveness dimension.

The following table gives us the test results:

Table 01: Correlation Coefficient between the Variables

Variable	Pearson Correlation Coefficient (r)	Significance Level SIG
The relationship between recruitment (attraction, selection, appointment) and responsiveness dimension	0.204	0.006

Source: Prepared by the researcher using the SPSS statistical program

Based on the table presented, the correlation coefficient between recruitment, selection, and appointment practices and the responsiveness dimension was found to be 0.204. This correlation is statistically significant, as the level of significance (p-value) is 0.006, which is less than the adopted significance level of 0.05. Therefore, we reject the null hypothesis, which states that there is no correlation between the two variables, and accept the alternative hypothesis, which states the following:

There is a weak but statistically significant correlation at a significance level of 0.05 between recruitment, selection, and appointment practices and responsiveness, according to the opinions of administrative workers in the studied hospitals.

This result can be explained by the fact that the recruitment process through (attraction, selection, and appointment) in public health institutions is not sufficiently flexible. It is carried out according to ineffective standards and mechanisms that ultimately do not guarantee the recruitment of qualified personnel. Therefore, the existence of a weak correlation between recruitment and responsiveness is logical and understandable.

2.1.2) Testing the Second Sub-Hypothesis of the Study

The content of this sub-hypothesis is as follows:

There is a statistically significant correlation at a significance level of 0.05 between recruitment, selection, and appointment practices and the tangible dimension.

The following table gives us the test results:

Table 2: Correlation Coefficients Between Variables

Variable	Pearson Correlation Coefficient (R)	Significance Level (SIG)
Correlation between recruitment (attraction, selection, appointment) and tangibility dimension	-0.018	0.808

Source: Prepared by the researcher using the SPSS statistical program

Based on the table presented, the correlation coefficient between recruitment, selection, and appointment practices and the tangible dimension was found to be -0. 018. This correlation is not statistically significant, as the level of significance (p-value) is 0.808, which is greater than the adopted significance level of 0.05. Therefore, we accept the null hypothesis, which states **that there is no correlation between recruitment, selection, and appointment practices and the tangible dimension**, according to the opinions of administrative workers in the studied hospitals.

The absence of a correlation between recruitment, selection, and appointment practices and the tangible dimension is understandable since this dimension encompasses the physical aspects of the service (buildings, equipment, facilities, and sanitary facilities). These elements fall under the purview of supervision, meaning that the role of individuals is limited to the utilization and maintenance of existing infrastructure.

2.1.3) Testing the Third Sub-Hypothesis

The third sub-hypothesis states that there is a statistically significant correlation at a significance level of 0.05 between recruitment, selection, and appointment practices and the reliability dimension.

The following table gives us the test results:

Table 03: Correlation Coefficient between the Variables

Variable	Pearson Correlation Coefficient (R)	Significance Level (SIG)
Correlation Between Recruitment, Selection, and Appointment Practices and Reliability Dimension	0.016	0.828

Source: Prepared by the researcher using the SPSS statistical program

Based on the table presented, the correlation coefficient between recruitment, selection, appointment practices, and reliability dimension was found to be 0.016. This correlation is not statistically significant, as the level of significance (p-value) is 0.828, which is greater than the adopted significance level of the study (0.05). Therefore, we accept the null hypothesis, which states **that there is no correlation between recruitment, selection, and appointment practices and the reliability dimension**, according to the opinions of administrative workers in the studied hospitals.

The absence of a correlation between recruitment, selection, and appointment practices and the reliability dimension, which refers to the degree of reliance on the service provider and the accuracy of their performance of the requested service, can be explained by the lack of alignment between the real needs for employees and the actual recruitment process. This suggests a need to review the methods and procedures of recruitment to identify and address any existing shortcomings.

2.1.4) Testing the Fourth Sub-Hypothesis of the Study

The content of this sub-hypothesis is as follows:

There is a statistically significant correlation at a significance level of 0.05 between recruitment, selection, and appointment practices and the assurance dimension.

The following table gives us the test results:

Table 04: Correlation Coefficient between the Variables

Variable	Pearson Correlation Coefficient (R)	Significance Level (SIG)
Correlation Between Recruitment, Selection, and Appointment Practices and the Assurance Dimension	0.137	0.065

Source: Prepared by the researcher using the SPSS statistical program

Based on the table presented, the correlation coefficient between recruitment, selection, and appointment practices and the assurance dimension was found to be 0.137. This correlation is not statistically significant, as the level of significance (p-value) is 0.065, which is greater than the adopted significance level of the study (0.05). Therefore, we accept the null hypothesis, which states that **there is no correlation between recruitment, selection, and appointment practices and the assurance dimension**, according to the opinions of administrative workers in the studied hospitals.

The absence of a correlation between recruitment, selection, and appointment practices and the assurance dimension (the ability of administrative staff to gain trust and credibility) according to the opinions of administrative workers in the studied hospitals can be explained by the fact that the recruitment process is often conducted independently of the actual realities of public health institutions. If the recruitment process were more closely aligned with the institution's needs, there would likely be a stronger connection between these two important elements, as this would ultimately benefit patients and ensure their well-being during their stay in the hospital.

2.1.5) Testing the Fifth Sub-Hypothesis of the Study

The content of this sub-hypothesis is as follows:

There is a statistically significant correlation at a significance level of 0.05 between recruitment, selection, and appointment practices and the empathy dimension.

The following table gives us the test results:

Table 05: Correlation Coefficient between the Variables

Variable	Pearson Correlation Coefficient (R)	Significance Level (SIG)
Correlation between Recruitment (Attraction, Selection, Placement) and Empathy	0.086	0.250

Source: Prepared by the researcher using the SPSS statistical program

As observed in the table above, the correlation coefficient between recruitment practices (attraction, selection, and appointment) and empathy was found to be 0.086. This correlation is not statistically significant, as the significance level (p-value) is 0.250, which is greater than the significance level adopted in the study (0.05). Consequently, the null hypothesis, which states **that there is no correlation between recruitment practices (attraction, selection, and appointment) and empathy** according to the opinions of administrative staff in the studied hospitals, is accepted.

The absence of a correlation between recruitment practices (attraction, selection, and appointment) and post-empathy, which refers to the degree of care and attention provided to beneficiaries, particularly in addressing their concerns and finding solutions in a humane and refined manner, as perceived by the administrative staff of the studied hospitals, can be explained by the disconnect between the skills and competencies of the recruited employees and this aspect of patient care.

2.1.6) Testing of the First Main Hypothesis:

The first main hypothesis is as follows:

There is a statistically significant correlation at a significance level of 0.05 between recruitment practices (attraction, selection, and appointment) and the improvement of the quality of health services provided in Algerian public health institutions.

The following table gives us the test results:

Table 06: Correlation Coefficient between the Variables

Variable	Pearson Correlation Coefficient (R)	Significance Level (SIG)
Correlation between Recruitment Practices (Attraction, Selection, and Appointment) and the Improvement of the Quality of Health Services Provided in Algerian Public Health Institutions	0.25	0.001

Source: Prepared by the researcher using the SPSS statistical program

Based on the table above, the correlation coefficient between recruitment practices (attraction, selection, and appointment) and the improvement of the quality of health services provided in Algerian public health institutions was found to be 0.250. This correlation was statistically significant as the significance level was 0.001, which is less than the significance level

adopted in the study (0.05). Therefore, we reject the null hypothesis, which states that there is no relationship between the two variables, and accept the alternative hypothesis, which states that:

There is a weak but statistically significant correlation at the 0.05 significance level between recruitment practices (attraction, selection, and appointment) and the improvement of the quality of health services provided in Algerian public health institutions, according to the opinions of administrative staff in the studied hospitals.

Several factors can explain the weak correlation between recruitment practices and the quality of health services:

- Rigid and inflexible regulations and procedures in Algerian public health institutions
- Lack of alignment between recruitment criteria and quality standards
- Unfavorable working conditions due to a lack of resources and medical equipment.

2.2) Testing of the Second Main Hypothesis and Its Sub-hypotheses

The analysis of the second main hypothesis and its sub-hypotheses will follow the same approach used for the first main hypothesis, moving from the specific to the general. This involves testing the sub-hypotheses first, followed by the main hypothesis.

2.2.1) Testing the First Sub-hypothesis

Content of the sub-hypothesis:

There is a statistically significant correlation at the significance level of 0.05 for compensation and development: through (salary, incentives, promotion, and training) on the responsiveness dimension.

The following table gives us the test results

Table 07: Correlation Coefficient between the Variables

Variable	Pearson Correlation Coefficient (R)	Significance Level (SIG)
Correlation between Compensation and Development (Salary, Incentives, Promotion, Training) and responsiveness	-0.606	0.000

Source: Prepared by the researcher using the SPSS statistical program

From the table above, we observe that the correlation coefficient between compensation and development variables (salary, incentives, promotion, and training) was found to be -0.606. This correlation is statistically significant, as the significance level (p-value) is 0.00, which is less than the significance level adopted in the study (0.05). Consequently, the null hypothesis, which states that **there is no correlation between the two variables, is rejected. We, therefore, accept the alternative hypothesis**, which states that **there is a moderate inverse correlation at a significance level of 0.05 between compensation and development (salary, incentives, promotion, and training) and responsiveness** according to the opinions of the administrative staff of the hospitals.
The observed relationship can be attributed to the inadequacy of compensation and development practices, which negatively impacts the response dimension. This implies insufficient wages, leading to low overall compensation levels, the absence of a motivational incentive system, weak promotion rewards (if any exist), and deficient or nonexistent training opportunities. All these factors contribute to the established nature of the relationship.

2.2.2) Testing the Second Sub-Hypothesis :

the Second Sub-Hypothesis Sub-Hypothesis Statement:

This sub-hypothesis posits that a statistically significant correlation exists between compensation and development through (Salary, Incentives, Promotion, and Training) and the tangible dimension, at a significance level of 0.05.

The following table gives us the test results:

Table 08: Correlation Coefficient between the Variables

Variable	Pearson Correlation Coefficient (R)	Significance Level (SIG)
Correlation Between Compensation and Development: Through (Salary, Incentives, Promotion, Training) and Tangible dimension	0.714	0.000

Source: Prepared by the researcher using the SPSS statistical program

Based on the provided table, the correlation coefficient between compensation and development, encompassing (salary, incentives, promotion, training) and Tangible dimension, is determined to be 0.714. This value is statistically significant as the significance level (p-value) is 0.00, which is lower than the significance level adopted in the study (0.05). This finding leads to the rejection of the null hypothesis, which **posits the absence of a relationship between the two variables, and the acceptance of the alternative hypothesis, which states the following:**

There exists a strong, positive correlation with statistical significance at the 0.05 level between compensation and development, encompassing salary, incentives, promotion, training, and Tangible dimension, according to the perceptions of administrative staff in the studied hospitals.

This relationship can be explained by the fact that tangible dimensions, such as providing suitable working conditions and adequate material resources, contribute to enhanced job performance.

2.2.3) Testing the Third Sub-Hypothesis:

The third sub-hypothesis states the following:

There is a correlation with statistical significance at the 0.05 level between compensation and development, Through (Salary, Incentives, Promotion, Training) and reliability.

The following table gives us the test results:

Table 09: Correlation Coefficient between the Variables

Variable	Pearson Correlation Coefficient (R)	Significance Level (SIG)
Correlation Between Compensation and Development: Through (Salary, Incentives, Promotion, Training) and Reliability	0.186	0.012

Source: Prepared by the researcher using the SPSS statistical program

From the aforementioned table, we observe that the correlation coefficient between compensation and development, encompassing salary, incentives, promotions, training, and subsequent reliability, is estimated at 0.186. This value is statistically significant as its associated p-value (0.012) falls below the pre-defined significance level (0.05) for this study. Consequently, we are compelled to reject the null hypothesis, which posits **the absence of a relationship between the variables**. Conversely, we accept the alternative hypothesis, which states:

There exists a weak, positive correlation with statistical significance at a 0.05 significance level between compensation and development, encompassing salary, incentives, promotions, training, and subsequent reliability, according to the perceptions of administrative staff in the hospitals under investigation

2.2.4) Testing the Fourth Sub-Hypothesis

The fourth Sub-Hypothesis states the following:

There is a statistically significant correlation at the significance level of 0.05 for compensation and development (Salary, Incentives, Promotion, Training) and the assurance dimension.

The following table gives us the test results:

Table 10: Correlation Coefficient between the Variables

Variable	Pearson Correlation Coefficient (R)	Significance Level (SIG)
Correlation Between Compensation and Development: Through (Salary, Incentives, Promotion, Training) and assurance dimension.	0.689	0.000

Source: Prepared by the researcher using the SPSS statistical program

The analysis of the table reveals the correlation coefficient between compensation and development development Through (Salary, Incentives, Promotion, and Training) and the assurance dimension. is 0.689. This value is statistically significant, as its p-value is 0.000, which is less than the study's significance level of 0.05. Consequently, the analysis leads us to reject the null hypothesis of **no relationship between the variables** and accept the alternative hypothesis. This alternative hypothesis states **that there is a statistically significant positive correlation at a significance level of 0.05 between compensation and development Through (Salary, Incentives, Promotion, and Training) and the assurance dimension**, according to the opinions of administrative workers in the studied hospitals. This relationship can be explained by the fact that job security, which signifies the administrative staff's ability to gain trust and credit, is linked to compensation and comfortable and suitable working conditions. The more convincing and adequate these are, the more positive the impact will be, as manifested in various aspects, such as gaining trust, to name but a few.

2.2.5) Testing the Fifth Sub-Hypothesis

The fifth Sub-Hypothesis states the following:

There is a statistically significant correlation at a significance level of 0.05 between compensation and development Through (Salary, Incentives, Promotion, and Training) and after empathy.

The following table gives us the test results:

Table 11: Correlation Coefficient between the Variables

Variable	Pearson Correlation Coefficient (R)	Significance Level (SIG)
Correlation Between Compensation and Development: Through (Salary, Incentives, Promotion, Training), and empathy	-0.136	0.067

Source: Prepared by the researcher using the SPSS statistical program

As per the table above, the correlation coefficient between compensation and development: Through (Salary, Incentives, Promotion, Training), and empathy was found to be -0.136. This value is statistically insignificant, as its p-value of 0.067 exceeds the significance level of 0.05 adopted in the study. Consequently, the null hypothesis, which posits **the absence of a correlation between compensation and development, including the aforementioned aspects, and empathy** among administrative staff at the studied hospitals, is accepted.

This lack of correlation can be attributed to the inherent nature of empathy, which primarily revolves around patient care and compassion. As such, it is not plausible to establish a direct link between compensation and development and our emotional responses towards patients.

Testing the Second Main Hypothesis

The second main hypothesis states that: There is a statistically significant correlation at the significance level of 0.05 for compensation and development: through (salary, incentives, promotion, and training) on improving the quality of health services provided in Algerian public health institutions.

The following table gives us the test results:

Table 12: Correlation Coefficient between the Variables

Variable	Pearson Correlation Coefficient (R)	Significance Level (SIG)
Correlation Between Compensation and Development: Through (Salary, Incentives, Promotion, Training) and the Improvement of Healthcare Services in Algerian Public Health Institutions	0.428	0.000

Source: Prepared by the researcher using the SPSS statistical program

As observed from the table above, the correlation coefficient between Compensation and Development: Through (Salary, Incentives, Promotion, Training), and the improvement of healthcare services delivered in Algerian public health institutions, was found to be 0.428. It is important to note that this value is statistically significant. This significance is due to its p-value of 0.00, which is lower than the significance level of 0.05 adopted in this study. As a result, we reject the null hypothesis, which proposes **no relationship between the variables**. Conversely, we accept the alternative hypothesis, which states that **there exists a positive correlation of moderate strength between compensation and development and the improvement of healthcare service quality**, according to the perceptions of administrative staff at the studied hospitals.

Several factors can be summarized as follows:

1. **Employee Dissatisfaction:** This refers to the general sense of dissatisfaction among employees regarding their compensation for their core duties, coupled with a lack of incentives, opportunities for promotion, and on-the-job training and skill development.
2. **Inadequate Training Opportunities:** Healthcare institutions under examination offer insufficient training opportunities that fail to meet the actual needs of employees and produce the desired outcomes.

3. General Hypothesis of the Study

The content of the general hypothesis of the study is as follows:

There exists a statistically significant correlation at a significance level of 0.05 between competency management and the improvement of healthcare service quality in Algerian public health institutions.

The following table gives us the test results:

Table 13: Correlation Coefficient between the Variables

Variable	Pearson Correlation Coefficient (R)	Significance Level (SIG)
Correlation between Competency Management and the Improvement of Healthcare Service Quality in Algerian Public Health Institutions	0.467	0.000

Source: Prepared by the researcher using the SPSS statistical program

From the table above, we observe that the correlation coefficient between competency management and the improvement of healthcare service quality provided in Algerian public health institutions was found to be 0. 467. This correlation is statistically significant as the significance level was 0. 00, which is less than the significance level adopted in the study (0.05). Therefore, we reject the null hypothesis, which states that there is no relationship between the two variables, and accept the alternative hypothesis, which states that:

There is a positive correlation of moderate strength statistically significant at the 0.05 level between competency management and the improvement of healthcare service quality provided in Algerian public health institutions, according to the opinions of administrative staff in the studied hospitals.

Several factors can explain this result, which can be summarized as follows:

- **Administrative Nature of Institutions:** Strict adherence to regulations limits managerial autonomy, hindering innovative competency management practices.
- **Lack of Clear Recruitment Policies:** The absence of policies to attract and retain competent personnel leads to a shortage of skilled staff.
- **Ineffective Incentive System:** Weak or inflexible incentive systems fail to motivate employees, compromising service quality.
- **Limited Training and Development:** Insufficient investment in training hinders employee skill improvement, limiting their ability to deliver high-quality care.
- **Lack of Necessary Resources:** Limited access to essential medical equipment, medications, and diagnostic tools restricts the ability to provide optimal care.
- **Shortage of Medical Specialties:** Lack of necessary medical specialties restricts the range of services offered and compromises patient care.
- **Brain Drain of Skilled Personnel:** The ongoing migration of skilled healthcare professionals further exacerbates the shortage of qualified personnel, negatively impacting service quality.

4. Field Study Findings:

- ✓ The laws and regulations in place at public health institutions are rigid and inflexible.
- ✓ Recruitment criteria are not directly linked to quality standards.
- ✓ Working conditions are inadequate due to a lack of material resources and medical equipment.
- ✓ Training opportunities at the studied health institutions are insufficient, do not meet the needs of employees, and do not yield the desired results. Additionally, employee skills are not evaluated after each training session.

5. Study Recommendations:

Based on the aforementioned findings, improving healthcare service quality from an efficiency management perspective requires a set of measures that can be summarized as follows:

1. **Prioritize the recruitment and selection process:** Seek out individuals with skills that align with job requirements.
2. **Establish clear and explicit regulations:** Define the mechanisms for recruiting qualified personnel in healthcare institutions.

3. **Empower managers and introduce flexibility:** Allow managers the freedom to innovate and take initiative.
4. **Revise the incentive system:** Restructure the incentive system to fulfill its intended purpose.
5. **Review and adapt training programs:** Tailor training programs, particularly in management and communication techniques, to enable administrative staff to take control and achieve effective management.
6. **Clearly define career paths:** Establish clear career paths linked to motivational factors.
7. **Foster commitment, creativity, and initiative:** Create an environment that encourages commitment, creativity, and initiative.
8. **Regularly evaluate human resource performance:** Regularly and continuously assess the performance of human resources.
9. **Link performance to effort:** Establish a clear connection between performance and the effort exerted by employees to motivate them to deliver their best.
10. **Focus on strategic planning:** Emphasize strategic planning in healthcare institutions and identify future trends.
11. **Integrate administrative staff:** Implement healthcare policies that promote the integration of administrative staff with all doctors, nurses, support staff, and other assistants.
12. **Address employee concerns:** The Ministry of Health should listen to complaints from public health institution employees and work towards finding satisfactory solutions.

---

[1] Pitte and Reynders (2004) discuss managing the skills of a temporary workforce in "Management of rental workforce skills".

[2]Wassila Waaer and Amal Ben Salem, "Comparative Analysis of Competency Management and Talent Management, " International Conference on Management: Knowledge as the New Foundation for Organizational and Economic Competitiveness, University of Mohamed Khider Biskra, November 12-13, 2005, p . 2.

[3]Abdelrazek Ben Habib and Zahra Moussaoui, "Knowledge Management and Competency Development, " Journal of Economics and Management, Faculty of Economic Sciences, Commercial Sciences and Management Sciences, University of Aboubakr Belkaid, Tlemcen, No. 3, March 3, 2004, p. 220.

[4]Jean Brilman, Best Management Practices, Organization Edition, Paris 1998, p386

[5]Daniel Held, Skills Management, Economic and Social Review, September 1995, p2-7

[6]Mohamed Mehdi Ben Issa, "The Human Element: From Labor to Strategic Capital - International Conference on Human Development and Opportunities for Integration into the Knowledge Economy and Human Competencies, Faculty of Law and Economic Sciences, University of Ouargla, March 10, 2004, p.72.

[7]Salah El Din Abdel Baki and Abdel Ghaffar Hanfy, "Human Resource Management and Human Relations, " p. 109.

[8]Souhaila Mohamed Abbas, "Human Resource Management: A Strategic Approach, " Dar Wael for Publishing and Distribution, Amman, Jordan, 2nd edition, 2006, p. 110.

[9]Abdul Aziz Bader Al-Ndawi, "Globalization of Human Resource Management: A Strategic Perspective, " Dar Al Masira, 1st edition, 2009, Amman, Jordan, p. 108.

[10]Bruno Henriet, Francois Boneu HR Director, this is already tomorrow, new organization and HR policy, the edition of organization, Paris 1998, p105

[11]Fouad Tawfik Nassarat, "Hospital Administration, " Athraa Publishing and Distribution, Amman, Jordan, 1st edition, 2004, p. 116.

[12]Ayman Mohamed Kamal Khosrof, "Marketing of Health Services, " United Kingdom, Diploma Research in Hospital Management, International Consulting Center for Administrative Development, 2008, p. 30.

[13]Philip Kotler; and Gory Armestrong, Marketing management analysis, planning, implementation, and control; (New Jersey; Hall Engle WOOD Chiffs, 1994, P640.

[14]Raad Hassan Al-Sarraf, "Total Quality Management: Functions and Principles in the Competitive World, " Dar Al-Rida, Damascus, Syria, 1st edition, 2009, pp. 498-500.

[15]Qasim Nassif Alwan Al-Mahyawi, "Quality Management in Services: Concepts, Processes, and Applications, " Dar Al-Shorouk, Amman, Jordan, 1st Arabic edition, 2006, p. 52.

[16] Krejcie & Morgan in their 1970 article “Determining Sample Size for Research Activities” (Educational and Psychological Measurement, 30, pp. 607-610).