Ministry of Education

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Nairiya Education Office

The reality of the practice of school principals in the eastern region of decision-making steps

Preparation

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Summary of the study

The study aimed to identify the reality of the practice of school principals in the eastern region of decision-making steps, and the researcher adopted the descriptive survey curriculum as an appropriate approach to the study. To achieve the objectives of the study, the questionnaire was used as a tool to collect data on the study sample, and the tool consisted of two main axes, namely: the first axis decision-making steps, and the second axis: obstacles to decision-making; where the current study sample consisted of (280) managers in the eastern province of the kingdom of Saudi Arabia, from the academic year 1444 Ah.

The study reached the following conclusions: there are no statistically significant differences at the level of (0.05) in the practice of principals and headmistresses of schools in the eastern region of decision-making steps; attributed to the variable nature of work, and there are no statistically significant differences at the level of (0.05) in the practice of principals and headmistresses of schools in the eastern region of decision-making steps; attributed to the variable training programs, as well as the absence of differences between males and females at the level of (0.05) in the practice of principals and headmistresses of schools in the eastern region of decision-making steps; attributed to sex.

Based on the results of the study: the study recommended the following recommendations: continuous guidance for effective communication between school administrations and their local communities, including parents of students, to reach rational decisions that serve common issues, the establishment of a unit on school decision support in each of the Departments of education, and education departments should hold periodic workshops with the participation of officials in administrative, financial, technical and other affairs, to exchange experiences and knowledge - among themselves - to reach the right decisions.

Keywords: school principals-decision-making steps.

Abstract

The current study aims to identify the reality of the practice of school principals in the eastern region of the decision-making steps, and the researcher adopted the descriptive survey method as an appropriate method for the study, To achieve the objectives of the study, the questionnaire was used as a tool for

collecting data on the study sample. The tool consisted of two main axes: the first axis, decision-making steps, and the second axis: decision-making obstacles, Where the sample of the current study consisted of (280) male and female managers in the eastern region of the Kingdom of Saudi Arabia, from the academic year 1444 AH.

The results of the study concluded: There are no statistically significant differences at the level (0.05) in the practice of school principals in the eastern region for decision-making steps due to the variable nature of work, There are no statistically significant differences at the level (0.05) in the reality of the decision-making steps of school principals in the eastern region due to the variable of training are program There no differences between males and females at the level (0.05) in the practice of school principals in the eastern region of decision-making steps due to the gender variable.

Based on the results of the study, the study recommended the following recommendations: Continuous guidance for effective communication between school administrations and their local communities, including parents of students, in order to reach rational decisions that serve common issues, Establishing a unit concerned with school decision support in each of the education directorates, Education directors should hold periodic workshops with the participation of their assistants in administrative, financial, technical and other affairs, in order to exchange experiences and knowledge among themselves in order to reach sound decisions.

Key words: School principals and principals - decision making steps.

Thanks and appreciation

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To facilitate the task and support.

Sincere thanks and appreciation to you,,

Dedication

* To the seeker of knowledge...

• To every decision-maker.

The first chapter

Introduction and theoretical background of the study

Here's the introduction.

The Study Problem and its questions.

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The first chapter

Introduction and theoretical background of the study

Introduction

The current era is witnessing a tremendous scientific and technological revolution, which has contributed to major radical changes in various fields of life and knowledge. The emergence of globalization also had wide-ranging and profound repercussions on political, economic, social and cultural systems, which imposed interactions and blocs on the world that did not exist in its current form. Today, it is witnessing an amazing development and steady growth - which requires countries to work to develop their capabilities to keep pace with these changes and take advantage of knowledge to develop their capabilities and raise the level of job performance, thereby raising the level of productivity and global competitiveness.

Education is a key requirement for the establishment of an advanced society based on the knowledge economy, and this imposes the need to provide human cadres ready to provide information. Despite the importance of education and its vital role in society, in the era of globalization and knowledge, it faces many problems and challenges that differ according to different societies and the historical stage they are going through (Al - Hamid, 2007).

Effectiveness in making managerial decisions indicates the ability of the organization to achieve positive results with a high degree of efficiency, and the ability of managers to choose goals, and the appropriate means to achieve them. There are basic factors that play an important role in determining the ability of an organization to achieve its goals, and researchers and specialists have differed in the presentation and identification of these main factors, and differed in the degree of their impact (al-Shamma and Khader 2001).

The decision-making process is one of the basic processes in the management of any organization, but it is the heart and essence of management; due to the place it occupies in the management of institutions, and the understanding of the administrative behavior of any organization is through the study of how decisions are made in that system, and it is the engine for the efforts and activities of the workforce as it penetrates into all the functions of management and its elements, whether setting goals, drawing up the necessary plans to achieve them, or defining work systems, rules and procedures, selecting and controlling employees and other well-known administrative tasks, they include all employees at different administrative levels (Abu Qadiri, 2003).

The amount of success achieved by any educational institution depends primarily on the ability and efficiency of its managers and their understanding of educational decisions, methods of making and practicing them, and their concepts that ensure follow-up and evaluation of their implementation (hammadat, 2006).

The decision-making process is one of the most important administrative burdens placed on the school principal, and when the principal exercises his role, he faces many problems and obstacles that may significantly affect his decision-making and decision-making, the decision-making process is a complex process in which multiple factors overlap: psychological, political, economic, and social (kate Walker, 2007).

The many intricate and complex processes have made the work of decision - makers extremely difficult,which can often limit the level of effectiveness of decisions and the possibility of their success (Ahmed, 2000).

There are several factors that affect the educational decision-making and make it an irrational decision, including: poor organization and coordination, poor ability to analyze the problem, poor ability to analyze and evaluate alternatives, and poor knowledge of the scientific methods used in decision-making (Al-Hilali, 2008).

In light of the above, the idea of the current research came, the reality of the practice of principals and headmistresses of schools in the eastern region of decision-making steps.

The Study Problem and its questions

There is a lot of talk in administrative thought about the steps of decision-making and decision-making because of their importance in administrative practice, where the decision enters into all management functions, and this applies to school administration, with the specificity and seriousness of the decision related to the nature of its dealings with the human element, represented by all parties affected by the decision: managers, teachers, students, parents; as well as being an important and determining element of the effectiveness of the school, as effectiveness depends on the effectiveness of its management decisions.

The current era faces many challenges facing school principals due to the high ceiling of increasing expectations from schools and education - in general - in an era characterized by technological innovation and globalization. For this reason, the roles of school principals are changing, as it is no longer accepted that they are just good managers, but they must be effective in raising the degree of effectiveness of their schools, as effective school leadership has come to be seen as the key to education reform and a tool to improve its outputs, and it is hoped to achieve this, and realizing this value, educational systems are interested in developing school leaders to increase their degree of effectiveness.

Several studies have pointed to a number of challenges and obstacles in decision-making steps such as a study (Suleiman et al., 2021) that aimed to identify the obstacles to educational decision-making in schools of the first cycle of basic education in the state of Kuwait, and a study (Al-Balushi et al., 2021) aimed to identify the obstacles to school decision-making and ways to overcome them, while a study (al bin Ali et al., 2021) aimed to identify the factors affecting the process of teachers ' participation in educational decision-making in the state of Kuwait, as well as (Ali et al., 2019) aimed to identify the obstacles to decision-making and decision-making among principals of basic education schools in the Arab Republic of Egypt, A study (Al-Hazani and Al-Arifi, 2015) aimed to identify the obstacles to decision-making among the vice-deans of humanitarian faculties at King Saud University.

As kornetno (2021) pointed out in the International Journal of social and Pedagogical Sciences after an intensive search of the main databases that identified 35,822 studies on balanced decision-making in a centralized and decentralized structure, areas that require further research, including the decision-making practices of school principals.

Based on the above, the decision-making process is exposed to obstacles that may prevent the effectiveness of decision-making in schools, which affects a number of aspects.this problem in our schools made us look for revealing the reality of the practice of school principals in the eastern region of decision-making steps.

Study questions

The study questions consist of the following questions:

1. What is the reality of the practice of school principals and Headmistresses in the eastern region of decision-making steps

2. What are the obstacles to decision-making among the principals and headmistresses of schools in the eastern region

3. What is the impact of the variables of type, qualification, experience and training courses on the reality of the practice of school principals in the eastern region of decision-making steps

The importance of study

The study is gaining importance because its topic is related to decision-making, which represents the core and essence of the administrative process, and the decision also affects the progress of the educational process within schools, and the results of the study and its recommendations will provide important information to decision makers and those interested in the field of Educational Management.

The importance of the study is also evident in the decision-making process in the management of the educational institution, especially when realizing the problems and the need for development in the decision, and the results of this study are expected to benefit those interested in developing the educational process and the most important:

- Ministry of Education.

- Administrative leaders in the Department of education in the eastern region.

- Researchers and academics in the field of Educational Management and planning.

- Managers and headmistresses of schools in the eastern region of the kingdom targeted by the current study.

Objectives of the study

The study is aimed at the following:

1-Identify the reality of the practice of school principals in the eastern region of decision-making steps.

2-identify the obstacles to decision - making among the principals and headmistresses of schools in the eastern region.

3-determining the impact of variables: type, qualification, experience, and training courses - on the reality of the practice of school principals in the eastern region of decision-making steps.

Curriculum of study

The study uses the method of descriptive survey methodology in order to describe the studied phenomenon in terms of its nature and degree of existence (al-Assaf, 2010) and to find out the reality of the practice of school principals in the eastern region of decision-making steps through:

Theoretical study: in research, studies and books.

Field study: through a survey of the reality of the practice of principals and headmistresses of schools in the eastern region of decision-making steps.

The study community

Directors and headmistresses of schools in the eastern province of the kingdom of Saudi Arabia during the academic year 1444 Ah .

Study limits

Time period: academic year 1444 Ah.

Location: eastern province of the kingdom of Saudi Arabia.

Objectivity: the reality of the practice of school principals in the eastern region of decision-making steps.

Terms of study

Decision making

It is a series of individual or collective responses that end with the choice of the most appropriate alternative in the face of a certain situation (Ahmed Ibrahim).

Decision making

It is the conscious choice between the available alternatives in a given situation, or it is the process of differentiation between alternative solutions to face a particular problem and choosing the optimal solution from among them (al-Azzawi, 2006).

Tawil (2001) and Al-Tikriti (2003) define it as a process of differentiation between alternatives, choosing the best alternative, and issuing a decision on it.

Dietrich 2010 defines it as the things that affect the choices people make, from previous experiences and cognitive biases, personal matters, and others that may affect the process of choosing alternatives, and therefore affect the results.

The researcher defines it procedurally: a comprehensive, thoughtful, planned and interrelated process between the experience gained and the knowledge, skills and tools that the manager possesses in the face of a challenge or problem in a specific situation and a specific time.

School principal:

He is the person appointed by the Ministry of education at the school in order to organize all its facilities, supervise teachers from both technical and administrative points of view, and work to facilitate the school day effectively and efficiently (Taani, 2005)

The researcher defines him procedurally: as one of the incumbents of educational functions who is assigned by the Education Department to manage the school to achieve the vision, mission and values of the administration - whether he is an official Director, agent or teacher assigned to manage the school.

Factors influencing the decision:

1-personal factors, including: values, beliefs, orientations, degree of openness to others (Hart, Walter, 2018).

2-regulatory factors, such as: laws, public policies of the state, the ministry, regulatory and legislative bodies, (Caesar, 2016).

3-human factors: the ability to deal with different people, their habits and nature in order to make a rational decision (Abu Hamdi and butah, 2005).

4-environmental and social factors, (altoim, 2010).

Chapter II

Theoretical framework and previous studies

First, the theoretical framework.

Second: previous studies.

Chapter II

Theoretical framework and previous studies

First: the theoretical framework

First: decision-making

The decision-making process is the core of the administrative process; therefore, any management reform is mainly related to the accessibility of the best management decisions, and therefore the interest in improving and rationalizing the decision-making process becomes a reason for improving and developing management (Hassan, 2005).

Definition of resolution

It is a choice that is made by the members of the group, among a number of proposals or alternative solutions available to him (Al-miliji, 2000).

(Hassan, 1999) defines it as: a choice made by a decision maker among several alternatives, and therefore it represents an activity or a set of activities to choose from a number of possible alternatives.

According to Al-Ayyad,2019, a decision is to reach a result, solve a problem, face a possible situation, or achieve set goals.

Types of decisions:

(Hanan and Hedaya, 2021) decisions are classified, according to:

1-administrative level to:

- Operational decisions

It is concerned with the minimum levels of organization.

- Administrative decisions ;

They relate to the intermediate level of Administrative Organization.

- Strategic decisions

Related to the top management of the organization.

2. availability of information systems to:

- Programmed decisions: repetitive, routine, well-defined, the criteria for judging them are clear.

- Non-programmed decisions: non-repetitive, non-routine, non-specific and tainted by uncertainty.

- Semi-programmed decisions: overlapping between the previous two types.

3. the basis of the goal to:

- Effective decisions: have an immediate impact that is implemented and achieves high effectiveness.

- Ineffective decisions: partial concepts that do not pursue an effective and effective goal.

4. basic functions to:

The classification is based on the basic functions of the organization and is classified into decisions related to production, marketing and human resources.

Second: factors influencing the decision:

(Canaan, 1999) classified the factors influencing the practice of pedagogical decisions into four groups, namely:

1-humanitarian factors:

The personality of the manager determines the decision-maker and the influences on him during decision-making, such as: emotional and value influence, experiences, and psychological state when making a decision.

Such as assistants and consultants, where their way of thinking and the way they work affects the effectiveness of decision-making.

Employees (subordinates), as they have a role in the decision-making process and influence it.

2-administrative factors:

Administrative factors are represented by:

The management style of the organization.

Due to the lack of clarity and overlap of disciplines.

The problem of poor organization and administrative coordination.

3-environmental factors:

4-external factors:

The influence of emotions on decision-making:

The influence of emotions on the decision-making process of educational leaders is largely unexplored, but they have a significant role.

There is a common decision support process, involving a dynamic interaction between a person's will and preferences and the responses of supporters. This interaction is influenced by five factors: experiences, the qualities that the person and his supporter brought to the process, the quality of their relationship, the decision-making environment and the nature of the decision and its consequences (Browning, 2021).

The influence of feelings of educational leaders in decision-making is as follows:

1. Decisions are the results of interactions between emotions and perception.

2. At the moment of making a decision, emotions have a wide and predictable impact on the decision-making process.

3. Before making decisions, individual differences of leaders (eg, the influence of traits and strength) and organizational contexts (eg, organizational justice and emotional contagion) have an impact on leaders ' emotions and decision-making.

4. Post-decision behavioral responses elicit more emotions (eg, regret,guilt, shame) (Wang, 2021).

Third: the factors that contribute to the success of the decision

In order for the manager (Decision Maker) to ensure the success of his decision, a number of conditions must be met:

1-following the scientific method in solving and identifying problems, and analyzing them.

2-ensure participation and stay away from subjectivity.

3-studying the dimensions of the decision from all directions and its impact on individuals and on the organization.

4-follow the scientific methodology in communicating the decision and the procedures of reporting and implementation.

5-evaluation and follow-up of the decision and its appropriateness according to an organized and clear mechanism.

6-developing a systematic scientific scheme for the decision-making process.

7-distribution of roles between assistants and supervisors to follow up the implementation of the decision.

8-adopting the Shura method in the decision-making process and adopting the decision from everyone.

Fourth: decision-making steps

The science of decision-making goes through several steps, which are as follows:

1. Identify the problem.

2-analysis of the problem.

3-propose solutions and alternatives.

4-choosing the optimal solution.

5. decision-making.

Fifth: theories of decision-making

Many theories have emerged associated with the decision-making process, among which are:

- Classical: it relies on established scientific rules in solving problems by methods of analysis, experiment and measurement, but it has multiple disadvantages, including: excessive focus on activities and administrative organization, promising attention to other influencing factors for the decision maker.

- Behaviorism: the Association of the decision with human behavior, by means of the stimulus or motivation.

- Cognitive: decision-making behavior is a conscious, cognitive and rational process, in which emotions and motives perform complex but systematic roles.

- Rationality: being content with the decision that achieves satisfaction and conviction.

- Decision tree: a multi-stage process, so that the decision maker can clearly see a number of available alternatives, risks and expected results.

Sixth: the use of artificial intelligence in the decision-making process:

Artificial intelligence contributes to the preservation of accumulated human experiences by transferring them to intelligent machines, and trying to reduce dangers and psychological stresses; this makes a person focus on more important and more humane things, which will lead to making decisions far from error, bias, racism, previous judgments, or even external or personal interventions (Al-Musnad, 2021).

Artificial intelligence is extremely important in our current time, and it can be invested in the process of rational decision-making in educational institutions, through: design, methodology, and approach.

Decision-making can be conceptualized using artificial intelligence as the basis for educational leadership:

1-individual decision.

2-organizational decision.

The design and construction of simulations for learning and decision-making in educational leadership, in accordance with the approved standards,contributes to the expansion of knowledge exchange and making it universally available; as a complement to other training opportunities in the careers of school leaders (Volant, 2020).

The integrative role between humans and artificial intelligence also contributes to decision-making in educational institutions, moving away from prejudice and ensuring authenticity and value (Benning, 2021).

Artificial intelligence, in decision-making, has several criteria, as defined by (Al-Mutairi, 2019):

1-learning

It means the ability of artificial intelligence to learn based on the principle of trial and error from previous decisions.

2-problem solving

Artificial intelligence is based on a systematic basis based on a series of actions; it depends on the achievement of many previous goals and solutions, and is divided into general problems and special problems.

3-logical and deductive

Artificial intelligence analyzes the relationships between objects, whether simple or complex, to find perceptions in the end; because of the visual and sensory sensors available to the devices, and highlights the role of artificial intelligence in estimating situations and deducing decisions that fit the situation scientifically.

4-time management

Artificial intelligence contributes to providing the necessary time for decision-making; through timing for each task or functional goal in the system with continuity that is not affected by human conditions such as vacations or low moods and psychological states.

5. comparison

Artificial intelligence plays an important role in putting forward more than one alternative and option from the available decisions.

6. reliability

Providing a number of data and processing them in record time that the human mind is not able to process, which justifies the reliance on artificial intelligence in educational decision-making.

7. recruitment

Dispense with some traditional jobs and provide more intelligent jobs that need high skills.

8-accounting

Artificial intelligence identifies who is responsible for making the wrong decisions, this is because Intelligence provides input data, criteria and final results of the decision.

The role of artificial intelligence in supporting Decision Systems

Artificial intelligence contributes to decision making by:

1-the network system: helps the decision-maker in linking the characteristics of the problem and the problem itself, and helps him to identify the opportunities available through its ability to provide alternatives.

2-algorithms: help in reaching a good and semi-optimal solution with high efficiency, addressing problems and investing opportunities.

3-fuzzy logic: simulates the human way based on fuzzy, unclear data.

4-the technique of deducing the solution.

Second: previous studies

A study (Hagan,2000) aimed at identifying the reality of the decision-making process at the level of general education schools, where a questionnaire was applied to 40 managers and agents participating in the training courses program held at the Teachers College in Medina, and the results showed that there were no statistically significant differences from the point of view of the respondents towards the reality of the decision-making process depending on career variables, educational stage and years of experience, the study revealed the most prominent obstacles to decision-making, lack of cooperation of some school staff in the implementation of decisions, lack of sufficient information, poor self-confidence and difficulty evaluating alternatives.

A study (Al-Jahni, 2010) aimed to identify the reality of the practice of decision-making methods in school crisis management from the point of view of school principals in Yanbu governorate and to reveal the impact of some variables in the estimates of school principals of the method used in decision-making during school crises, and the researcher used the descriptive approach to achieve the objectives of the study, the questionnaire was used and applied to all the principals of general education schools in schools affiliated to Yanbu governorate, of which there are 97 principals, and the study found that school principals practice decision-making methods in crisis management to varying degrees, She pointed out that there are no statistically significant differences between managers in the level of their decision-making practice in the face of school crises due to (specialization-qualification-stage-number of courses)

Stevoria, 2011 conducted a study aimed at describing the role of strategic intelligence in decision-making in companies and to find out how senior management makes decisions in the company, and to produce proposals on the role of strategic intelligence to better support decision-making in the future.the study followed a descriptive approach and the study used interviews and questionnaire to achieve the objectives of the study, and one of its most important results was: strategic intelligence helps in forming a big picture of the business environment and the arrangement of the company's operations. strategic intelligence represents a ground and a base for decision-making, and Strategic Intelligence provides decision makers with the necessary internal and external information.

A study (Hart, Walter, 2018) that aimed to identify the factors and processes that affect the decisions made by school administrators when faced with professional dilemmas, and whether they are rational or intuitive, the researcher used the qualitative research method, and conducted interviews with 13 principals of schools in the United States, to find out the factors that influenced their decisions, and the extent of their use of it is influenced by their perceptions and expectations about society's acceptance of these decisions, and it is also influenced by the opinion of advisors they trust.

The results of the study showed that the influence of the teacher in the administrative and educational fields of decision-making in school and whether both are associated with job satisfaction and professional commitment, the results of the study showed that the influence of the teacher in the field of teaching has a statistically stronger correlation with the professional commitment of the teacher than job satisfaction, in contrast, the influence of the teacher in the administrative field of scientific decision-

making in school has a statistically stronger correlation with the job satisfaction of the teacher than professional commitment.

A study (Irene, 2020), which aimed to find out the impact of demographic variables of school principals on strategic decision - making, the final sample consisted of 105 secondary schools in Spain, and the results of the study showed a positive relationship between school principals aged 41, 50 years with school experience equal to or less than 10 years, and the implementation of a participatory and cooperative method of strategic decision-making, the study also showed the the decision-making process in schools.

Study (Al-Mutairi, 2019): the study aimed to identify the shortcomings and weaknesses in the application of artificial intelligence as an input to the development of educational decision-making in the Ministry of education in the state of Kuwait, and the sample of the study was represented by (56) educational leaders in the Ministry of education in the state of Kuwait. The study used a descriptive approach, and the study also used one of the methods of prospective studies - the Delphi method. The study reached the following results: the absence of leadership training in educational decision-making on artificial intelligence. The scarcity of intelligent technology used in educational decision-making. Weakening of the criteria for the selection of workers depending on traditional skills and methods. Dependence on traditional jobs and poor training of workers on artificial intelligence. The lack of provision of intelligent databases for use in educational decision-making. The lack of reliance on human input to feed smart devices with the data necessary for educational decision-making. The lack of awareness of employees about the importance of artificial intelligence in comparing decisions to choose the best alternative. Wasting time in educational decision-making by traditional methods and limiting its exploitation by relying on artificial intelligence. The scarcity of taking advantage and learning from previous experiences of similar decisions and exploiting them through artificial intelligence to develop the educational decision-making process. Weak dependence on artificial intelligence solved problems related to the analysis of simple and complex relationships around the decision.

Study (Al-Sharari, 2021): the current study aimed to analyze the impact of artificial intelligence on the quality of administrative decision from the point of view of secondary school leaders in Al-Jawf educational administration in the kingdom of Saudi Arabia. The researcher used the descriptive analytical method, and the study sample consisted of (60) leaders and leaders of secondary schools in Al-Jouf area for the academic year:2019-2020- The study found that there is a high statistically significant impact of the dimensions of artificial intelligence (management ability, user behavior, training and development, availability of experts) on the quality of administrative decision, and there are no statistically significant differences in the respondents 'assessment of artificial intelligence attributed to the gender variable and experience, and there are no statistically significant differences in the respondents' assessment of the quality of administrative decision attributed to the gender variable and experience, the study recommended that educational management offices should pay attention to the concept of artificial intelligence and the processes of user behavior, training and development, And taking policies and procedures that increase the level of employees ' awareness of the importance of artificial intelligence through holding training courses for employees. It recommended the need to update and develop the artificial intelligence programs used to enable various departments to make appropriate decisions in a timely manner.

Study (al-Tuwaijri and Al-Noah, 2022): the study aimed to identify the requirements for supporting administrative decision-making using artificial intelligence in the Ministry of education in the kingdom of Saudi Arabia, and provide recommendations to support administrative decision-making using artificial intelligence in the Ministry of education in the kingdom of Saudi Arabia. To achieve the objectives of the study, the descriptive-survey approach was followed. The interview was used as a study tool, and interviews were conducted with (17) experts from the leadership in the Ministry of Education, University Professors, specialists in Computer Science and artificial intelligence. The interview questions were organized to determine the requirements for the application of artificial intelligence in four dimensions related to the management decision-making process, namely: problem identification, information collection and analysis, identification and selection of alternatives, implementation and follow-up.

I came to a number of results: the highest requirements came after identifying the problem, respectively: (raising the quality level of data available at the Ministry of education and processing it- unifying the data and Information Center at the Ministry of Education-rebuilding the digital system and the data center in a way that ensures data quality in line with artificial intelligence technologies- employing specialized human expertise in building artificial intelligence systems), and the highest requirements after collecting and analyzing data, respectively: (linking the ministry's digital systems with each other (integration between systems)- activating machines and sensors and using them in data collection - linking data and sharing it with relevant (government and private sector) entities (government and private sector) - Professional development and keeping abreast of changes in the technical aspect), and the highest requirements after identifying and choosing alternatives: (reengineering processes to apply the decision-making process according to a methodology that artificial intelligence algorithms can handle - transferring human experience to knowledge bases - adhering to the principles of artificial intelligence ethics in the kingdom of Saudi Arabia), and the highest requirements after implementation and decision follow - up, respectively, are as follows: (providing mechanisms to measure and evaluate the level of implementation that artificial intelligence can work with - enabling intelligence programs to access data sources and the Information Center at the Ministry of Education-Monitoring Data Entry and follow-up).

The current study took advantage of previous studies in:

1-taking advantage of a study tool (Hassan 2020).

2-Choosing the study curriculum.

3-formulation of the title and problem of the study.

4-the theoretical framework of the study.

Chapter III

Methodological procedures of the study

Chapter III

Methodological procedures of the study

Introduction

The methodological procedures are considered as the governing framework for all the details associated with the research work, as the documentation of the methodological procedures followed during the research work contributes-based on scientific assets- Hence, the original research requires the researcher to show all the methodological procedures that he used in the research work in order to reach the achievement of the observed goals and show the strength of his results, which were based on reliable valid foundations associated with a clear scientific methodology, in terms of its origins and conditions that the researcher adhered to so that he could defend his research results and generalize them to the studied cases. The scientific methodology and its clear highlighting is an important element that indicates the scientific foundations on which the researcher relied in extracting his results.if this methodology is sound, the results are characterized by strength and appreciation by specialists, but if it is characterized by weakness or ambiguity, this may lead to poor reliance on the research results, and therefore the research output is characterized by weakness in general. therefore, this chapter of the study shows all the methodological methods and procedures that the researcher relied on, both in terms of the nature of the method used and the tools he relied on in collecting data or tests related to the usability and accuracy of these tools. This is in addition to the most important statistical methods and tests that have been applied in order to answer the research questions to reach the final goals represented by the research results and conclusions.

3.1 study curriculum

The researcher has relied on the use of the descriptive survey approach, which provides a wide range of options for researchers, and is characterized by flexibility that enables them to rely on a variety of reliable research tools and methods؛

In order to achieve the observed goals, this approach is also considered one of the widely used approaches in the humanities, as it enables researchers to deal with humanistic trends and tendencies through various tools that are relied on to describe the nature of the phenomenon, its causes and the

effects resulting from it, this approach is commensurate with the nature of the phenomenon under study, which is related to the humanities, as it seeks to identify the reality of the practice of principals and headmistresses of schools in the eastern region of the kingdom of Saudi Arabia, as this method enables the researcher to describe the phenomenon, Therefore, this approach with its various tools has formed an important course of current research work in all its parts, where the researcher relied on his methods and tools that he provides in order to reach the descriptive-survey analysis of the phenomenon and extract the nature of the relationships between variables and impact in order to reach the achievement of the study objectives relying on a set of specialized statistical programs.

(Al-Hamdani, 100:2006) defines the descriptive survey method as "the method that seeks to describe contemporary or current phenomena or events, it is one of the forms of analysis and systematic interpretation to describe a phenomenon or problem, and provides data on certain characteristics in reality, and requires knowledge of the participants in the study, the phenomena we are studying and the times we use to collect data".

This research is one of the mixed research that uses both quantitative and qualitative methods, where this approach was used due to the novelty of the topic, and in order to obtain scientific results and generalizations - answering the questions of the study and achieving its goals - the qualitative and quantitative approach was used to collect, interpret and analyze information and data in order to obtain accurate results. Quantitative research is defined as: "the type of scientific research that imposes the existence of objective social facts, isolated and isolated from the feelings and beliefs of individuals, and adopts - often - statistical methods, in data collection and analysis".

As for qualitative research, it is:"a type of scientific research that assumes the existence of social facts and phenomena that are constructed through the views of individuals and groups participating in the research". (Kandalakji and samarani, 2009).

3.2 the study community

The study community is defined as all the vocabulary of the phenomenon addressed by the research, and thus the study community is all the individuals or objects that are the subject of the Study Problem (Obeidat, 2006).

Based on the subject and problem of the study and its objectives, it represented the applied framework of the study community in the principals and headmistresses of schools in the eastern region of the kingdom of Saudi Arabia during the academic year 1444 Ah, In order to answer the main objective of the study, which relates to the reality of the practice of principals and headmistresses of schools in the eastern region of decision-making steps. The size of the study community reached (1029) male and female directors.

3.3 sample study

In order to verify the nature of the research problem under study and determine the initial validity of the tools used in the current study, the researcher relied on the distribution of a survey sample consisting of (30) individuals, in order to verify the availability of honesty and consistency criteria for the study tool, which is the main step before the start of the distribution of questionnaires to the actual study sample.

A research sample is defined as "a part of society where the characteristics of society itself are available in this part, and the wisdom of conducting a study on the sample is that it is often impossible to conduct a study on society, so the sample is chosen, with the aim of reaching results that can be generalized to society, and this becomes possible if the characteristics of the sample represent the characteristics of society, in terms of as many variables as possible" (Al-Rashidi, 2000). The sample size in the current study was (280) managers and managers according to Richard's statistical law used to determine the appropriate sample size.

3.4 content of the study tool

The questionnaire is the main tool that has been relied upon to collect data from its primary sources, and a study tool has been used (Hassan, 2020) and reconstructed this tool based on the scientific foundations of its structural conditions, in addition to the objective conditions related to the representation of dimensions and axes based on the scientific foundations and theories that dealt with the variables under study, where the researcher to this end reviewed the literature that dealt with the research topic and based on. In order to ensure the scientific strength of the tool, the researcher presented it to the competent academic staff , and checked it appropriately in order to produce it in its final form and present it to the arbitrators. Where the study tool (questionnaire) consisted of two main axes, namely: the first axis: the steps of decision-making and its dimensions, are: (1. Identify the problem, 2. Development of alternatives (solutions), 3. Evaluating alternatives and choosing the best ones, 4. Announcement of the decision, its implementation and evaluation), and the second axis: obstacles to decision-making among principals and headmistresses of schools in the eastern region.

* The test adopted in the study tool (questionnaire)

The researcher has relied on the use of the five-point Likert scale to correct the study tool, which is considered the most common in use associated with measuring trends related to human phenomena, and the main idea of this scale is based on identifying responses indicating the degree of approval or objection to a formula, and the scale used to determine the degree of approval and disagreement on an issue is by expressing an opinion with a value ranging between (1-5), hence the name the five-point Likert scale, and reactions are limited to a set of scores starting with the number (1), which indicates very high levels of disapproval about the paragraph in question, While the score (5) indicates a very high approval by the researcher on the paragraph in question, and to determine the level of approval for each of the paragraphs, each dimension and each axis within the study tool (questionnaire), reliance was made on the use of the arithmetic mean value and the relative weight value and Table (3.1) below shows the approval levels based on five levels (very few, few, medium, large, very large).

Table (3.1): the test adopted in the study

The approval level is too low, the average is too small, the average is too large

Arithmetic mean 1-less than 1.8 1.80 to less than 2.60 2.60 to less than 3.40 3.40 to less than 4.20 4.20 – 5.00

Relative weight 20 to less than 36% 36 to less than 52% 52 to less than 68% 68 to less than 84% 84 to 100%

3.5 the truthfulness of the study instrument (questionnaire)

3.5.1 truthfulness of the content (virtual honesty)

What is meant by the honesty of arbitrators "is that the researcher chooses a number of arbitrators specialized in the focus of the phenomenon or problem the subject of study" (Al-Gergawi, 2010: 107). Apparent honesty is related to the ability of the tool to express the phenomenon in a sound scientific manner expressing the real scientific content of the variables under research and reported by specialized scientific theories in its scientific framework, the researcher's mastery of representing scientific ideas and Trends reported by the scientific literature properly within the study tool indicates the ability of the tool to achieve this type of honesty, and for the purposes of verifying this form of honesty, the researcher has resorted to experts and specialists in the academic field as the most capable authority to judge related to the scientific content of the tool, and these experts and specialists are called arbitrators, Accordingly, the researcher designed the questionnaire as the main tool for the study in its initial form, where the questionnaire was presented to experts and specialists in the field and the questionnaire was arbitrated and the tool was adjusted according to their opinions and observations; in order to reach the final resolution (appendix No. 1).

3.5.2 believe internal consistency

The truthfulness of the questionnaire means that it represents the studied Community Well, that is, the answers we get from the questionnaire questions give us the information for which the questions were formulated (Al-Bahar and Al-Tanji, 2014: 14). The truthfulness of internal consistency is considered one of the most important criteria expressing the quality of the tool used.the higher the level of truthfulness of consistency is available - the more positive the assessment of the tool used. these criteria are represented depending on the correlation scale between the paragraphs adopted in the various dimensions of the tool with the same dimension or axis to which it belongs, where the availability of such type of consistency is judged by the result of the Pearson correlation test, as there must be statistically significant correlation coefficients at the level of 0.05 between them, to judge the availability of truthfulness of internal consistency or not.

3.5.2.1 believe the internal consistency of the first axis: decision-making steps:

1. Believe the internal consistency of the problem identification dimension

The internal consistency coefficients were extracted as an indicator of honesty, by calculating the correlation coefficient (Pearson) between the degree of each paragraph of the dimension (determining the problem) with the overall degree of the dimension to which it belongs, to reveal the consistency of the paragraphs in measuring the dimension contained in it. Table (3.2) shows the correlation coefficients between the score of each paragraph of the first dimension (problem identification) and the total score of the dimension contained in it. This correlation was statistically significant at the level of 0.05 and the significance level was (0.000 less than 0.05), and all the paragraphs on the first dimension (identification of the problem) were statistically significant at the level of (0.05).

Table (3.2): coefficients of internal consistency truthfulness using the Pearson correlation coefficient of the first dimension

(Identify the problem)

M. Paragraph correlation coefficient level

Semantics

The first dimension: identifying the problem

1. The school principal has the skill to identify the problem. 0.625 less than 0.05

2. The school principal has the skill of explaining the problem in clear terms. 0.714 less than 0.05

3. It uses procedural systems and manuals to provide the necessary information about the dimensions of the problem. 0.635 less than 0.05

4. Communicates with the parties involved in the problem to determine its dimensions. 0.772 less than 0.05

5. It serves to accumulate information related to the problem both quantitatively and qualitatively. 0.701 less than 0.05

6. Analyzes the available information about the problem to make sure it is correct. 0.667 less than 0.05

2. Believe the internal consistency of the dimension of the development of alternatives (solutions)

The internal consistency coefficients were extracted as an indicator of honesty, by calculating the correlation coefficient (Pearson) between the score of each paragraph of the dimension (setting alternatives (solutions)) with the overall score of the dimension to which it belongs, to reveal the consistency of the paragraphs in measuring the dimension contained in it. Table (3.3) shows the correlation coefficients between the score of each paragraph of the second dimension (setting alternatives (solutions)) and the overall score of the dimension contained in it. This correlation was statistically significant at the level of 0.05 and the significance level was (0.000 less than 0.05), and all the paragraphs on the second dimension (setting alternatives (solutions)) were statistically significant at the level of (0.05).

Table (3.3): internal consistency truthfulness coefficients using the Pearson correlation coefficient of the second dimension

(Development of alternatives (solutions))

M. Paragraph correlation coefficient level

Semantics

The second dimension: the development of alternatives (solutions)

1. He involves experienced and competent people in identifying optimal alternatives for solving the problem. 0.685 less than 0.05

2. Involves the parties to the problem in developing alternatives (solutions) to it. 0.654 less than 0.05

3. It puts all the alternatives for the participants to reach the solution of the problem. 0.678 less than 0.05

4. He objectively exchanges opinions to come up with the best possible alternatives for solving the problem. 0.702 less than 0.05

5. He discusses innovative alternatives for solving problems objectively in the light of the available possibilities. 0.663 less than 0.05

3. Believe in internal consistency after evaluating alternatives and choosing the best one

The internal consistency coefficients were extracted as an indicator of honesty, by calculating the correlation coefficient (Pearson) between the score of each paragraph after (evaluating alternatives and choosing the best ones) with the overall score of the dimension to which it belongs, to reveal the consistency of the paragraphs in measuring the dimension contained in it. Table (3.4) shows the correlation coefficients between the score of each of the paragraphs of the third dimension (evaluating alternatives and choosing the best one) and the overall score of the dimension contained in it. This correlation was statistically significant at the level of 0.05 and reached the level of significance (0.000 less than 0.05), and all the paragraphs on the third dimension (evaluating alternatives and choosing the best ones) were statistically significant at the level of (0.05).

Table (3.4): internal consistency truthfulness coefficients using the Pearson correlation coefficient of the third dimension

(Evaluation of alternatives and selection of the best ones)

M. Paragraph correlation coefficient level

Semantics

The third dimension: evaluating alternatives and choosing the best ones

1. Evaluates the alternatives put forward for the decision in the light of their minuses, pros and the ability to make a decision to separate the two sides of the problem. 0.578 less than 0.05

2. Ensures that the proposed alternatives meet the needs of the parties affected by the decision. 0.635 less than 0.05

3. Selects the appropriate alternative (solution) to ensure the quality of the workflow according to the established plan. 0.601 less than 0.05

4. He chooses the solution that corresponds to the internal and external conditions of the school. 0.589 less than 0.05

5. He chooses the appropriate variant of solving the problem in view of the available possibilities. 0.637 less than 0.05

6. He chooses the solution that prevents the recurrence of the problem in the future for a reasonable period of time. 0.667 less than 0.05

7. He agrees between the alternative taken to solve the problem with the powers vested in her system. 0.649 less than 0.05

4. Believe the internal consistency of the post-announcement, implementation and evaluation of the decision

The internal consistency coefficients were extracted as an indicator of honesty, by calculating the correlation coefficient (Pearson) between the score of each paragraph after the announcement of the decision, its implementation and evaluation with the total score of the dimension to which it belongs, to reveal the consistency of the paragraphs in measuring the dimension contained in it. Table (3.5) shows the correlation coefficients between the score of each paragraph of the fourth dimension (announcement, execution and evaluation of the decision) and the overall score of the dimension contained in it. This correlation was statistically significant at the level of 0.05 and reached the level of significance (0.000 less than 0.05), and all the paragraphs on the fourth dimension (announcement of the decision, its implementation and evaluation) were statistically significant at the level of (0.05).

Table (3.5): coefficients of internal consistency truthfulness using the Pearson correlation coefficient of the fourth dimension

(Announcement, implementation and evaluation of the decision)

M. Paragraph correlation coefficient level

Semantics

Fourth dimension: announcement, implementation and evaluation of the decision

1. The decision shall be formulated in precise, clear and concise terms. 0.674 less than 0.05

2. Prepares the necessary material and human resources for the implementation of the decision before its issuance. 0.632 less than 0.05

3. He draws up a plan for the implementation of the decision, which includes the procedures for its implementation in accordance with priorities. 0.668 less than 0.05

4. Defines the responsibilities and roles of participants in the implementation of the decision. 0.685 less than 0.05

5. Officially inform everyone involved in the implementation of the decision of their responsibilities and roles to comply with them. 0.647 less than 0.05

6. Strictly follows the decision implementation plan to correct errors and remove obstacles to implementation. 0.758 less than 0.05

7. Constantly evaluates the ability of the implemented decision to solve the problem if it is not effective for solving the problem and preventing its recurrence. 0.681 less than 0.05

8. Undo the decision by putting forward a better decision in solving the problem. 0.698 less than 0.05

3.5.2.2 the truthfulness of the internal consistency of the second axis: obstacles to decision-making

The internal consistency coefficients were extracted as an indicator of honesty, by calculating the correlation coefficient (Pearson) between the degree of each paragraph of the axis (decision-making obstacles) with the total degree of the axis to which it belongs, to reveal the consistency of the paragraphs in measuring the axis contained in it. Table (3.6) shows the correlation coefficients between

the score of each paragraph of the axis (decision-making obstacles) and the total score of the axis contained in it. This correlation was statistically significant at the level of 0.05 and reached the level of significance (0.000 less than 0.05), and all the paragraphs on the second axis (decision-making obstacles) were statistically significant at the level of (0.05).

Table (3. 6): internal consistency honesty coefficients using the Pearson correlation coefficient of the second axis (decision impedances)

M. Paragraph correlation coefficient level

Semantics

1. Lack of data and information about the problem. 0.635 less than 0.05

2. Lack of administrative support staff. 0.625 less than 0.05

3. The scarcity of training programs in the field of decision-making. 0.687 less than 0.05

4. Overlapping of powers and unclear tasks. 0.601 less than 0.05

5. Deficiencies in the activation of modern technology and artificial intelligence in the decision-making process. 0.725 less than 0.05

6. The lack of powers of the school principal in the decision-making process. 0.711 less than 0.05

7. Weak mutual trust between the school principal and the school staff. 0.754 less than 0.05

8. Subjectivity in decision - making by the school principal. 0.763 less than 0.05

9. Fear and anxiety about the consequences of making a decision. 0.654 less than 0.05

10. Deficiencies in the communication and Information Network. 0.687 less than 0.05

3.5.2.3 constructive honesty

Constructive honesty is considered one of the important criteria for assessing the quality of the tool used.to achieve this criterion, the researcher relied on the Pearson correlation coefficient test, which shows the degree of correlation between the dimension and the axis to which it belongs. to achieve this type of honesty, it is required to have statistically significant correlation coefficients at a significance level less than 0.05, as evidenced by table (3.7) the constructive honesty of the dimensions and axes of the study, and these values indicate the presence of constructive and statistically significant honesty at the level of 0.05.

Table (3.7) constructive honesty of the dimensions and axes of the study

Axes dimensional correlation coefficient semantic level

The first axis: decision-making steps identify the problem 0.785 less than 0.05

Setting alternatives (solutions) 0.729 less than 0.05

Evaluating alternatives and choosing the best one 0.701 less than 0.05

Announcement, implementation and evaluation of the decision 0.772 less than 0.05

The second axis: decision-making obstacles 0.788 less than 0.05

** Significant statistical significance at a significance level of 0.01.

3.6 stability of the study instrument

The stability of the study tool is one of the most important conditions to be met in order for the researcher to rely on the use of the research tool in the framework of his field study, as it is considered an important criterion for determining the suitability of the tool for Applied use, and the concept of stability of the tool used indicates the possibility of relying on the same tool to obtain similar results if the same tool is used under similar conditions by others who wish to use and apply it.

The researcher verified the stability of the study resolution by the method of cronbach's Alpha coefficient. Where the value of the alpha coefficient less than 0.60 reflects a weak stability, and the value between (0.60-0.70) is acceptable stability, while the value equal to 0.70 and more reflects a good stability of the scale (Boone & Boone, 2012). It is clear from table (3.8) that the stability coefficients of the study instrument are all high, and these coefficients are considered appropriate and acceptable, indicating an appropriate stability of the instrument.

Table (3.8): results of stability tests for the dimensions and axes of the study

Dimensional axes the kronbach Alpha constancy coefficient

The first axis: decision - making steps identifying the problem 0.739

Placement of alternatives (solutions) 0.777

Evaluating and choosing the best alternatives 0.792

Announcement, implementation and evaluation of the decision 0.719

The second axis: decision-making obstacles 0.788

Statistical methods used in the study

Table (3.9): statistical tests used in the study

The Test number used for testing components

The researcher relied on the SPSS V program in the study.25)

1. Tests to measure the truthfulness of the study variables • truthfulness of internal consistency through (Pearson correlation coefficient).

* Believe the constructor by (Pearson correlation coefficient)

2. Test for measuring the constancy of study variables * cronbach's Alpha method

3. Tests for measuring descriptive analysis of the dimensions and axes of the study • frequency tables and percentages

* Arithmetic mean

* Standard deviation

• A single sample t-test (One Sample T-test) to test the averages of the answers to the dimensions and axes of the resolution around the value (3) expressing the average score

* Graphic formats

4. Tests of study hypotheses • test "T" of two independent samples Independent Sample t-test

* Single contrast analysis test One Way Anova

Chapter IV

Data analysis

Chapter IV

Data analysis

Introduction

This chapter includes a presentation of data analysis and discussion, by answering the questions of the study and reviewing the most prominent results of the questionnaire, which were reached through the analysis of its paragraphs, so statistical processing of the data collected from the study questionnaire was carried out, as the statistical packages program for social studies (SPSS) was used to obtain the results of the study that was presented and analyzed in this chapter.

4.1 statistical description of the study sample according to personal data

* Distribution of the study sample by gender

Table (4.1) statistical description of the study sample by gender

Sex frequency (K) percentage (%)

Male 156 55.7

Female 124 44.3

* Distribution of the study sample according to the scientific qualification

Table (4.2) statistical description of the study sample by scientific qualification

Academic qualification frequency (K) percentage (%)

Diploma 9 3.2

Bachelor 250 89.3

Master 21 7.5

* Distribution of the study sample by experience

Table (4.3) statistical description of the study sample by experience

Repetition experience (K) percentage (%)

Less than 5 years 31 11.1

From 5 to 10 years 30 10.7

From 10 to 15 years 42 15.0

From 15 years and over 177 63.2

* Distribution of the study sample according to the nature of the work

Table (4.4) statistical description of the study sample by nature of work

Nature of work redundancy (K) percentage (%)

Agent 15 5.4

Expensive teacher 23 8.2

Manager 242 86.4

* Distribution of the study sample by on-the-job training programs in the field of school administration:

Table (4.5) statistical description of the study sample by on-the-job training programs

In the field of school administration

On-the-job training programs in the field of school administration frequency (K) percentage (%)

I didn't get training programs 20 7.2

From 1 to 3 training programs 67 23.9

More than 3 training programs 193 68.9

4.2 results of study questions and discussion

The first question: What is the reality of the practice of school principals in the eastern region of decision-making steps

To identify the reality of the practice of school principals in the eastern region of decision-making steps, the arithmetic mean, standard deviations, and the degree of approval for each paragraph of the axis (decision-making steps) were extracted.

1. Analysis of the paragraphs of the first dimension: identification of the problem

The arithmetic averages, standard deviations, and the degree of approval for each of the paragraphs were extracted after (problem identification). The results were as shown in Table (4.6). As the total arithmetic mean reached 4.41 with a standard deviation of 0.49, and with a very high approval score, the researcher attributes this to the fact that problem identification is the basis in ensuring the success

of any organization or institution, where the skill of identifying and solving problems can be classified as strengths, which in turn distinguishes organizations from each other and guarantees them success in overcoming obstacles. This result is consistent with the study of Hart, Walter (2018), which showed the statement of the importance of identifying dilemmas and problems in any work of the organization in order to confront them.

It is clear from table no. (4.6) that the arithmetic averages for the dimension (identification of the problem) ranged between (4.25-4.55), and reviewing the order of paragraphs, it turned out that paragraph No. (4), which states "communicates with the parties concerned with the problem to determine its dimensions", came in first place, with an arithmetic average (4.55), followed by paragraph No. (3), which states "uses systems and procedural manuals to provide the necessary information about the dimensions of the problem", which came in second place, with an arithmetic average (4.51), then paragraph number (6) which states "analyzes the available information about the problem to make sure it is correct", came in third, with an arithmetic average (4.43). While paragraph No. (5), which states "works to compile information related to the problem quantitatively and qualitatively", got the fourth place, with an arithmetic average of (4.38), followed by paragraph No. (1), which states "the school principal has the skill to identify the problem", which came in fifth place, with an arithmetic average of (4.33), then paragraph No. (2), which states "the school principal has the skill to explain the problem in clear terms", came in last place, with an arithmetic average of (4.25). By analyzing the results of the previous table, we find that the degree of approval of paragraphs after (identifying the problem) came with a very high degree.

Table (4.9): arithmetic averages and standard deviations for paragraphs after table (4.6): arithmetic averages and standard deviations for paragraphs after (problem identification)

M paragraph arithmetic mean standard deviation order approval level

1. The school principal has the skill to identify the problem. 4.33 0.61 5 is too high

2. The school principal has the skill of explaining the problem in clear terms. 4.25 0.71 6 is too high

3. It uses procedural systems and manuals to provide the necessary information about the dimensions of the problem. 4.51 0.58 2 is too high

4. Communicates with the parties involved in the problem to determine its dimensions. 4.55 0.58 1 is too high

5. It serves to accumulate information related to the problem both quantitatively and qualitatively. 4.38 0.67 4 is too high

6. Analyzes the available information about the problem to make sure it is correct. 4.43 0.59 3 is too high

Total score (problem identification) 4.41 0.49-very high

Figure (4.1): shows the arithmetic averages of the following paragraphs (problem identification)

2. Analysis of the paragraphs of the second dimension: development of alternatives (solutions)

The arithmetic averages, standard deviations, and the degree of approval for each of the paragraphs were extracted after (setting alternatives (solutions)). The results were as shown in Table (4.7). As the total arithmetic mean reached 4.40 with a standard deviation of 0.50, and with a very high approval score, the researcher attributes this to being one of the most important pillars of the decision-making process (searching for alternatives), which are the various ways to reach the desired goal or to solve a problem, based on current, cumulative and practical information and ideas to solve problems; which helps to reach the most appropriate and optimal steps. This result differs with the Al-Mutairi study (2019), which showed the shortcomings and weaknesses in the application of artificial intelligence, as an input to the development of educational decision-making.

It is clear from table no. (4.7) that the arithmetic averages of the dimension (setting alternatives (solutions)) ranged between (4.28-4.49). Reviewing the order of paragraphs, it turned out that paragraph number (4), which states "objectively exchanges opinions to come up with the best possible alternatives to solve the problem", came in first place, with an average calculation (4.49), followed by paragraph number (1), which states "involves experts and specialists in identifying the optimal alternatives to solve the problem", which came in second place, with an average calculation (4.45), then paragraph number (5), which states "discusses innovative alternatives to solve problems objectively in light of the available possibilities", she came in third place, with an arithmetic average (4.39). While paragraph No. (3), which states "puts all alternatives for participants to reach the solution of the problem", ranked fourth, with an average calculation (4.36), followed by paragraph No. (2), which states "involves the parties to the problem in developing alternatives (solutions) to it," which came in last place, with an average calculation (4.28). By analyzing the results of the previous table, we find that the degree of approval of paragraphs after the (development of alternatives (solutions) came with a very high degree.

Table (4.7): arithmetic averages and standard deviations of the following paragraphs (placement of alternatives (solutions))

M paragraph arithmetic mean standard deviation order approval level

1. He involves experienced and competent people in identifying optimal alternatives for solving the problem. 4.45 0.61 2 is too high

2. Involves the parties to the problem in developing alternatives (solutions) to it. 4.28 0.76 5 is too high

3. He puts all the alternatives for the participants to get to the solution of the problem. 4.36 0.64 4 is too high

4. Exchange opinions objectively to come up with the best possible alternatives to solve the problem. 4.49 0.59 1 is too high

5. He discusses innovative alternatives for solving problems objectively in the light of the available possibilities. 4.39 0.61 3 is too high

Total score (placement of alternatives (solutions) 4.40-0.50-very high

Figure (4.2): shows the arithmetic averages of paragraphs after (setting alternatives (solutions))

3. Analysis of the paragraphs of the third dimension: evaluation of alternatives and selection of the best

The arithmetic averages, standard deviations, and the degree of approval for each of the following paragraphs were extracted (evaluation of alternatives and selection of the best ones). The results were as shown in Table (4.8). As the total arithmetic mean reached 4.44 with a standard deviation of 0.51, and with a very high approval score, the researcher attributes this to the fact that the step of evaluating alternatives and choosing between alternatives is the most important step after the step of identifying alternatives, because choosing a good alternative means the success of the decision and solving the problem and vice versa for choosing a bad alternative, so we should not leave this step to whims and moods and to control it with sound scientific rules that guarantee us the greatest chances of Decision success. This result differs with a study (Irene,2020) that indicated the recognition of the influence of demographic variables of school principals on strategic decision-making.

It is clear from table no. (4.8) that the arithmetic averages of the dimension (evaluation of alternatives and selection of the best ones) ranged between (4.30-4.53). Reviewing the order of paragraphs, it turned out that paragraph number (5), which states "selects the appropriate alternative to solve the problem in light of the available possibilities", came in first place, with an average calculation (4.53), followed by paragraph number (5), which states "selects the solution that corresponds to the internal and external conditions of the school", which came in second place, with an average calculation (4.52), then paragraph number (3), which states "selects the appropriate alternative (solution) to ensure the quality of workflow according to the plan", came in third place, with an average My Account (4.49). While paragraph No. (6), which states "chooses a solution that prevents the recurrence of the problem in the future for a reasonable period of time", ranked fourth, with an arithmetic average of (4.44), followed by paragraph No. (7), which states "agrees between the alternative taken to solve the problem with the powers vested in IT system" ranked fifth, with an arithmetic average of (4.43). Paragraph number (1), which states that "evaluates the alternatives put forward for the decision in light of their negatives and positives and the ability to make a decision to separate the two sides of the problem," also ranked last, with an arithmetic average (4.30). By analyzing the results of the previous table, we find that the degree of approval of the following paragraphs (evaluating alternatives and choosing the best ones) came with a very high degree.

Table (4.8): arithmetic averages and standard deviations of the following paragraphs (evaluation of alternatives and selection of the best ones)

M paragraph arithmetic mean standard deviation order approval level

1. Evaluates the alternatives put forward for the decision in the light of their minuses, pros and the ability to make a decision to separate the two sides of the problem. 4.30 0.66 7 is too high

2. Ensures that the proposed alternatives meet the needs of the parties affected by the decision. 4.35 0.67 6 is too high

3. Selects the appropriate alternative (solution) to ensure the quality of the workflow according to the established plan. 4.49 0.62 3 is too high

4. He chooses the solution that corresponds to the internal and external conditions of the school. 4.52 0.56 2 is too high

5. He chooses the appropriate variant of solving the problem in view of the available possibilities. 4.53 0.61 1 is too high

6. He chooses the solution that prevents the recurrence of the problem in the future for a reasonable period of time. 4.44 0.59 4 is too high

7. He agrees between the alternative taken to solve the problem with the powers vested in her system. 4.43 0.65 5 is too high

Overall score (evaluation of alternatives and selection of the best ones) 4.44 0.51-very high

Figure (4.3): shows the arithmetic averages of the following paragraphs (evaluation of alternatives and selection of the best ones)

4. Analysis of the paragraphs of the fourth dimension: announcement, implementation and evaluation of the decision

The arithmetic averages, standard deviations, and the degree of approval for each of the paragraphs were extracted after the decision was announced, implemented, and evaluated. The results were as shown in the table (4.9). As the total arithmetic mean reached 4.29 with a standard deviation of 0.54, and with a very high approval score, the researcher attributes this to the fact that making administrative decisions is one of the essential tasks and basic functions of the manager, and that the amount of success achieved by any organization depends primarily on the ability and efficiency of capable administrators and their understanding of administrative decisions and methods of making them, and with their concepts that ensure the rationality of decisions and their effectiveness, and realize the importance of clarity and time, and works to follow up on their implementation and evaluation, this result is consistent with the study of (Al - Jahni, 2010) which aimed to get acquainted with the reality of the practice of decision - making methods in school crisis management from the point of view of school principals.

It is clear from Table No. (4.9) that the arithmetic averages for the dimension of (the announcement of the decision, its implementation and evaluation) ranged between (3.91-4.48), and reviewing the order of paragraphs, it turned out that paragraph No. (5), which states "officially informs everyone involved in the implementation of the decision of their responsibilities and roles to comply with them", came in first place, with an arithmetic average (4.48), followed by paragraph No. (6), which states "strictly follows the plan of implementation of the decision to correct errors and remove obstacles to implementation", which came in second place, with an average account (4.41), then paragraph number (4), which states "defines the responsibilities and roles of participants in the implementation of the decision", and came in third place, with an average account (4.37). While paragraph No. (3), which states "develops a plan for

the implementation of the decision, including the procedures for its implementation according to priorities", was ranked fourth, with an arithmetic average of (4.34), followed by paragraph No. (1), which states "formulates the decision in precise, clear and concise terms", ranked fifth, with an arithmetic average of (4.33), followed by paragraph No. (2), which states "prepares the necessary material and human resources for the implementation of the decision before its issuance", ranked sixth, with an arithmetic average of (4.26), followed by paragraph No. (7), which it states that "it constantly evaluates the ability of the implemented decision to solve the problem if it is not effective to solve the problem and prevent its recurrence" on the seventh place, with an arithmetic average (4.25), Also, paragraph number (8), which states "undoing the decision to put forward a better decision in solving the problem", came in last place, with an arithmetic average of (3.91). By analyzing the results of the previous table, we find that the degree of approval of paragraphs

Table (4.9): arithmetic averages and standard deviations for paragraphs after table (4.6): arithmetic averages and standard deviations for paragraphs after (problem identification)

M paragraph arithmetic mean standard deviation order approval level

1. The school principal has the skill to identify the problem. 4.33 0.61 5 is too high

2. The school principal has the skill of explaining the problem in clear terms. 4.25 0.71 6 is too high

3. It uses procedural systems and manuals to provide the necessary information about the dimensions of the problem. 4.51 0.58 2 is too high

4. Communicates with the parties involved in the problem to determine its dimensions. 4.55 0.58 1 is too high

5. It serves to accumulate information related to the problem both quantitatively and qualitatively. 4.38 0.67 4 is too high

6. Analyzes the available information about the problem to make sure it is correct. 4.43 0.59 3 is too high

Total score (problem identification) 4.41 0.49-very high

Figure (4.1): shows the arithmetic averages of the following paragraphs (problem identification)

2. Analysis of the paragraphs of the second dimension: development of alternatives (solutions)

The arithmetic averages, standard deviations, and the degree of approval for each of the paragraphs were extracted after (setting alternatives (solutions)). The results were as shown in Table (4.7). As the total arithmetic mean reached 4.40 with a standard deviation of 0.50, and with a very high approval score, the researcher attributes this to being one of the most important pillars of the decision-making process (searching for alternatives), which are the various ways to reach the desired goal or to solve a problem, based on current, cumulative and practical information and ideas to solve problems; which helps to reach the most appropriate and optimal steps. This result differs with the Al-Mutairi study

(2019), which showed the shortcomings and weaknesses in the application of artificial intelligence, as an input to the development of educational decision-making.

It is clear from table no. (4.7) that the arithmetic averages of the dimension (setting alternatives (solutions)) ranged between (4.28-4.49). Reviewing the order of paragraphs, it turned out that paragraph number (4), which states "objectively exchanges opinions to come up with the best possible alternatives to solve the problem", came in first place, with an average calculation (4.49), followed by paragraph number (1), which states "involves experts and specialists in identifying the optimal alternatives to solve the problem", which came in second place, with an average calculation (4.45), then paragraph number (5), which states "discusses innovative alternatives to solve problems objectively in light of the available possibilities", she came in third place, with an arithmetic average (4.39). While paragraph No. (3), which states "puts all alternatives for participants to reach the solution of the problem", ranked fourth, with an average calculation (4.36), followed by paragraph No. (2), which states "involves the parties to the problem in developing alternatives (solutions) to it," which came in last place, with an average calculation (4.28). By analyzing the results of the previous table, we find that the degree of approval of paragraphs after the (development of alternatives (solutions) came with a very high degree.

Table (4.7): arithmetic averages and standard deviations of the following paragraphs (placement of alternatives (solutions))

M paragraph arithmetic mean standard deviation order approval level

1. He involves experienced and competent people in identifying optimal alternatives for solving the problem. 4.45 0.61 2 is too high

2. Involves the parties to the problem in developing alternatives (solutions) to it. 4.28 0.76 5 is too high

3. He puts all the alternatives for the participants to get to the solution of the problem. 4.36 0.64 4 is too high

4. Exchange opinions objectively to come up with the best possible alternatives to solve the problem. 4.49 0.59 1 is too high

5. He discusses innovative alternatives for solving problems objectively in the light of the available possibilities. 4.39 0.61 3 is too high

Total score (placement of alternatives (solutions) 4.40-0.50-very high

Figure (4.2): shows the arithmetic averages of paragraphs after (setting alternatives (solutions))

3. Analysis of the paragraphs of the third dimension: evaluation of alternatives and selection of the best

The arithmetic averages, standard deviations, and the degree of approval for each of the following paragraphs were extracted (evaluation of alternatives and selection of the best ones). The results were as shown in Table (4.8). As the total arithmetic mean reached 4.44 with a standard deviation of 0.51,

and with a very high approval score, the researcher attributes this to the fact that the step of evaluating alternatives and choosing between alternatives is the most important step after the step of identifying alternatives, because choosing a good alternative means the success of the decision and solving the problem and vice versa for choosing a bad alternative, so we should not leave this step to whims and moods and to control it with sound scientific rules that guarantee us the greatest chances of Decision success. This result differs with a study (Irene,2020) that indicated the recognition of the influence of demographic variables of school principals on strategic decision-making.

It is clear from table no. (4.8) that the arithmetic averages of the dimension (evaluation of alternatives and selection of the best ones) ranged between (4.30-4.53). Reviewing the order of paragraphs, it turned out that paragraph number (5), which states "selects the appropriate alternative to solve the problem in light of the available possibilities", came in first place, with an average calculation (4.53), followed by paragraph number (5), which states "selects the solution that corresponds to the internal and external conditions of the school", which came in second place, with an average calculation (4.52), then paragraph number (3), which states "selects the appropriate alternative (solution) to ensure the quality of workflow according to the plan", came in third place, with an average My Account (4.49). While paragraph No. (6), which states "chooses a solution that prevents the recurrence of the problem in the future for a reasonable period of time", ranked fourth, with an arithmetic average of (4.44), followed by paragraph No. (7), which states "agrees between the alternative taken to solve the problem with the powers vested in IT system" ranked fifth, with an arithmetic average of (4.43). Paragraph number (1), which states that "evaluates the alternatives put forward for the decision in light of their negatives and positives and the ability to make a decision to separate the two sides of the problem," also ranked last, with an arithmetic average (4.30). By analyzing the results of the previous table, we find that the degree of approval of the following paragraphs (evaluating alternatives and choosing the best ones) came with a very high degree.

Table (4.8): arithmetic averages and standard deviations of the following paragraphs (evaluation of alternatives and selection of the best ones)

M paragraph arithmetic mean standard deviation order approval level

1. Evaluates the alternatives put forward for the decision in the light of their minuses, pros and the ability to make a decision to separate the two sides of the problem. 4.30 0.66 7 is too high

2. Ensures that the proposed alternatives meet the needs of the parties affected by the decision. 4.35 0.67 6 is too high

3. Selects the appropriate alternative (solution) to ensure the quality of the workflow according to the established plan. 4.49 0.62 3 is too high

4. He chooses the solution that corresponds to the internal and external conditions of the school. 4.52 0.56 2 is too high

5. He chooses the appropriate variant of solving the problem in view of the available possibilities. 4.53 0.61 1 is too high

6. He chooses the solution that prevents the recurrence of the problem in the future for a reasonable period of time. 4.44 0.59 4 is too high

7. He agrees between the alternative taken to solve the problem with the powers vested in her system. 4.43 0.65 5 is too high

Overall score (evaluation of alternatives and selection of the best ones) 4.44 0.51-very high

Figure (4.3): shows the arithmetic averages of the following paragraphs (evaluation of alternatives and selection of the best ones)

4. Analysis of the paragraphs of the fourth dimension: announcement, implementation and evaluation of the decision

The arithmetic averages, standard deviations, and the degree of approval for each of the paragraphs were extracted after the decision was announced, implemented, and evaluated. The results were as shown in the table (4.9). As the total arithmetic mean reached 4.29 with a standard deviation of 0.54, and with a very high approval score, the researcher attributes this to the fact that making administrative decisions is one of the essential tasks and basic functions of the manager, and that the amount of success achieved by any organization depends primarily on the ability and efficiency of capable administrators and their understanding of administrative decisions and methods of making them, and with their concepts that ensure the rationality of decisions and their effectiveness, and realize the importance of clarity and time, and works to follow up on their implementation and evaluation, this result is consistent with the study of (Al - Jahni, 2010) which aimed to get acquainted with the reality of the practice of decision - making methods in school crisis management from the point of view of school principals.

It is clear from Table No. (4.9) that the arithmetic averages for the dimension of (the announcement of the decision, its implementation and evaluation) ranged between (3.91-4.48), and reviewing the order of paragraphs, it turned out that paragraph No. (5), which states "officially informs everyone involved in the implementation of the decision of their responsibilities and roles to comply with them", came in first place, with an arithmetic average (4.48), followed by paragraph No. (6), which states "strictly follows the plan of implementation of the decision to correct errors and remove obstacles to implementation", which came in second place, with an average account (4.41), then paragraph number (4), which states "defines the responsibilities and roles of participants in the implementation of the decision", and came in third place, with an average account (4.37). While paragraph No. (3), which states "develops a plan for the implementation of the decision, including the procedures for its implementation according to priorities", was ranked fourth, with an arithmetic average of (4.34), followed by paragraph No. (1), which states "formulates the decision in precise, clear and concise terms", ranked fifth, with an arithmetic average of (4.33), followed by paragraph No. (2), which states "prepares the necessary material and human resources for the implementation of the decision before its issuance", ranked sixth, with an arithmetic average of (4.26), followed by paragraph No. (7), which it states that "it constantly evaluates the ability of the implemented decision to solve the problem if it is not effective to solve the problem and prevent its recurrence" on the seventh place, with an arithmetic average (4.25), Also, paragraph number (8), which states "undoing the decision to put forward a better decision in solving the problem", came in last place, with an arithmetic average of (3.91). By analyzing the results of the

previous table, we find that the degree of approval of the paragraphs after (the announcement of the decision, its implementation and evaluation) came with a very high degree.

(Announcement, implementation and evaluation of the decision)

M paragraph arithmetic mean standard deviation order approval level

1. The decision shall be formulated in precise, clear and concise terms. 4.33 0.69 5 is too high

2. Prepares the necessary material and human resources for the implementation of the decision before its issuance. 4.26 0.71 6 is too high

3. He draws up a plan for the implementation of the decision, which includes the procedures for its implementation in accordance with priorities. 4.34 0.65 4 is too high

4. Defines the responsibilities and roles of participants in the implementation of the decision. 4.37 0.66 3 is too high

5. Officially inform everyone involved in the implementation of the decision of their responsibilities and roles to comply with them. 4.48 0.64 1 is too high

6. Strictly follows the decision implementation plan to correct errors and remove obstacles to implementation. 4.41 0.64 2 is too high

7. Constantly assesses the ability of the implemented decision to solve the problem if it is not effective for solving the problem and preventing its recurrence. 4.25 0.75 7 is too high

8. Undo the decision by putting forward a better decision in solving the problem. 3.91 0.87 8 high

Total score (announcement, execution and evaluation of the decision) 4.29 0.54-very high

Figure (4.4): shows the arithmetic averages of the paragraphs after (announcement of the decision, its implementation and evaluation)

The second question: What are the obstacles to decision-making among the principals and headmistresses of schools in the eastern region

To identify the decision-making obstacles of school principals in the eastern region, the arithmetic averages, standard deviations, and the degree of approval for each paragraph of the axis (decision-making obstacles) were extracted. The results were as shown in the table (4.10). Where the total arithmetic mean reached 2.94 with a standard deviation of 0.77, and to an average degree, the researcher attributes this to the fact that identifying decision-making obstacles helps in accessing insufficient information about academic tracks and any career path, and this result is consistent with the study of Hagan (2000), which aimed to identify the reality of the decision-making process at the level of general education schools. It is clear from table no. (4.10) that the arithmetic averages of the axis (decision-making obstacles) ranged between (2.04-3.55), and reviewing the order of paragraphs, it turned out that paragraph No. (2), which states "lack of administrative support staff", came in first place, with an arithmetic average (3.55), followed by paragraph No. (3), which states "scarcity of training programs in the field of decision-making", which came in second place, with an arithmetic average

(3.41), followed by paragraph No. (1), which states "insufficient data and information about the problem," which came in third place, with an arithmetic average (3.20), as well as paragraph No. (6), which states "lack of powers of the school principal in the process of Decision-making" ranked fourth with an arithmetic average (3.15), followed by paragraph number (5), which states "deficiencies in the activation of modern technology and artificial intelligence in the decision-making process" in the fifth place with an arithmetic average (3.13), followed by paragraph number (10), which states "deficiencies in the communications and information network" in the sixth place with an arithmetic average (2.98), followed by paragraph number (4), which states "overlapping of powers and unclear tasks" in the seventh place with an arithmetic average (3.13), it is followed by paragraph number (8), which states "subjectivity in decision-making by the school principal" in eighth place, with an arithmetic average (2.49), followed by paragraph number (9), which states "fear Concern about the consequences of decision-making" ranked ninth, with an average calculation (2.45), while paragraph No. 7, which states "poor mutual trust between the school principal and school staff," came in last place, with an average calculation (2.04).

By analyzing the results of the previous table, we find that the degree of approval of the paragraphs of the axis (decision-making obstacles) came to an average degree.

Table (4.10): arithmetic averages and standard deviations of Axis paragraphs (decision obstacles)

M paragraph arithmetic mean standard deviation order approval level

1. Lack of data and information about the problem. 3.20 1.01 3 average

2. Lack of administrative support staff. 3.55 1.16 1 High

3. The scarcity of training programs in the field of decision-making. 3.41 1.09 2 high

4. Overlapping of powers and unclear tasks. 2.96 1.22 7 average

5. Deficiencies in the activation of modern technology and artificial intelligence in the decision-making process.3.13 1.09 5 average

6. The lack of powers of the school principal in the decision-making process. 3.15 1.23 4 average

7. Weak mutual trust between the school principal and the school staff. 2.04 1.06 10 low

8. Subjectivity in decision - making by the school principal. 2.49 1.15 8 low

9. Fear and anxiety about the consequences of making a decision. 2.45 1.17 9 low

10. Deficiencies in the communication and Information Network. 2.98 1.28 6 average

Total score (decision-making obstacles) 2.94 0.77-average

Figure (4.5): shows the arithmetic averages of the axis paragraphs (decision obstacles)

The third question: What is the impact of gender variables, qualification, experience and training courses on the reality of the practice of school principals in the eastern region of decision-making steps

1. The impact of gender change on the reality of the practice of school principals and Headmistresses in the eastern region

Decision making

To identify the impact of gender change on the reality of the practice of school principals in the eastern region for decision-making steps, the "T" test was used for two independent Sample t-test and the results were as shown in Table (4.11).

Table (4.11): arithmetic averages, standard deviations and the results of the "T" test to indicate the differences in the reality of the practice of principals and headmistresses of schools in the eastern region of decision-making steps attributed to the gender variable

Sex arithmetic mean standard deviation value "t" semantic level

The reality of the practice of principals and headmistresses of schools in the eastern region of decision - making steps mentioned 4.34 0.472 1.408 0.160

Female 4.42 0.422

From the results shown in Table (4.11) and using the (Independent Sample t-test) test, it turned out that there are no differences between males and females about the reality of the practice of principals and headmistresses of schools in the eastern region of decision-making steps (V=1.408, α=0.160), which means that the gender variable does not affect the reality of the practice of principals and headmistresses of schools in the eastern region of decision-making steps, the researcher attributes this to the fact that the decision-making process depends on the use of a successful and organized method in the decision-making process, as well as the ability to make the appropriate choice in decisions that help to rationalize the decision-making process. This result differs from previous studies, which did not show that the gender variant does not affect the reality of the practice of principals and headmistresses of schools in the eastern region of decision-making steps.

The impact of the educational qualification variable on the reality of the practice of school principals and Headmistresses in the eastern region of the steps of

Decision making

To identify the impact of the educational qualification variable on the reality of the practice of school principals in the eastern region of decision-making steps, a single variance analysis test was used (One Way Anova) and the results were as shown in Table (4.12).\

Table (4.12): differences on the reality of the practice of school principals in the eastern region

The decision-making steps are attributed to the scientific qualification variable

Source of variance sum of squares degrees of freedom mean squares value F level of significance

The reality of the practice of school principals in the eastern region of decision-making steps between groups 0.543 2 0.271 1.332 0.266

Within groups 56.412 277 0.204

Total 56,955,279

Table no. (4.12) and using the (One Way Anova test) showed that there are no statistically significant differences at the level of (0.05) in the reality of the practice of principals and headmistresses of schools in the eastern region of decision - making steps attributed to the scientific qualification variable (F=1.332, α=0.266), and analyzing the results of the previous table, we find that there is no effect of the scientific qualification variable on the reality of the practice of principals and headmistresses of schools in the eastern region of decision-making steps, the researcher attributes this to the fact that the decision-making process depends-to a large extent the first- This result differs from previous studies that did not show that the scientific qualification variable does not affect the reality of the practice of school principals in the eastern region of decision-making steps.

2. The impact of changing experience on the reality of the practice of principals and headmistresses of schools in the eastern region of the steps of

Decision making

To identify the impact of the experience variable on the reality of the practice of school principals in the eastern region of decision-making steps, a single variance analysis test was used (One Way Anova) and the results were as shown in Table (4.13).

Table (4.13): differences in the practice of school principals in the eastern region

The decision-making steps are attributed to the experience variable

Source of variance sum of squares degrees of freedom mean squares value F level of significance

The reality of the practice of school principals in the eastern region of decision-making steps between groups 2.485 3 0.828 4.197 0.006

Within groups 54.470 276 0.197

Total 56,955,279

Table no. (4.13) and using the (One Way Anova test) showed that there are statistically significant differences at the level of (0.05) in the reality of the practice of principals and headmistresses of schools in the eastern region of decision-making steps attributed to the experience variable (F=4.197, α=0.006), and by analyzing the results of the previous table we find that there is an impact of the experience variable on the reality of the practice of principals and headmistresses of schools in the eastern region of decision-making steps, the researcher attributes this to the fact that having sufficient experience helps in reaching rational decisions, its absence is one of the most important reasons hindering the decision-making process. This result is consistent with the study (Irene, 2020), which aimed to find out the influence of demographic variables of school principals on strategic decision-making.

The impact of the changing nature of work on the reality of the practice of school managers and Headmistresses in the eastern region of the steps of

Decision making

To identify the impact of the variable nature of work on the reality of the practice of school principals in the eastern region of decision-making steps, a single variance analysis test was used (One Way Anova) and the results were as shown in Table (4.14).

Table (4.14): differences on the reality of the practice of school principals in the eastern region

The decision-making steps are due to the variable nature of the work

Source of variance sum of squares degrees of freedom mean squares value F level of significance

The reality of the practice of school principals in the eastern region of decision-making steps between groups 0.593 2 0.296 1.456 0.235

Within groups 56.362 277 0.203

Total 56,955,279

Table no. (4.14) and using the (One Way Anova) test showed that there are no statistically significant differences at the level of (0.05) in the practice of school principals in the eastern region of decision-making steps attributed to the variable nature of work (F=1.456, α=0.235). Analyzing the results of the previous table, we find that there is no effect of the variable nature of work on the reality of the practice of school principals in the eastern region of decision-making steps, the researcher attributes this to the fact that the variable nature of work directly affects the morale of employees, and on the level of their job performance, and this result differs with previous studies that did not show that the variable nature of work does not affect the reality of the practice of school principals in the eastern region of decision-making steps.

3. The impact of the variable training programs on the reality of the practice of managers and headmistresses of schools in the eastern region of decision-making steps

To identify the impact of the variable training programs on the reality of the practice of school principals in the eastern region of decision-making steps, a single variance analysis test was used (One Way Anova) and the results were as shown in Table (4.15).

Table (4.15): differences on the reality of the practice of school principals in the eastern region

The decision-making steps are attributed to the variable of the training programs

Source of variance sum of squares degrees of freedom mean squares value F level of significance

The reality of the practice of school principals in the eastern region of decision-making steps between groups 0.253 2 0.126 0.617 0.540

Within groups 56.702 277 0.205

Total 56,955,279

Table no. (4.15) using the (One Way Anova test) showed that there are no statistically significant differences at the level of (0.05) in the reality of the practice of principals and headmistresses of schools

in the eastern region of decision-making steps attributed to the training programs variable (F=1.456, α=0.235), and analyzing the results of the previous table we find that there is no effect of the training programs variable on the reality of the practice of principals and headmistresses of schools in the eastern region of decision-making steps, the researcher attributes this to the fact that the training programs working individuals gain knowledge, skills and trends directly related to work, which develops their roles, skills at work, and increases their productivity, Thus, the productivity of the organization as a whole, and helps employees improve their decision-making abilities, solve the problems facing them, and improve their career level. This result differs from previous studies, which did not show that the variable of training programs does not affect the reality of the practice of principals of schools in the eastern region of decision-making steps.

Chapter V

Findings and recommendations

Chapter V

Findings and recommendations

First: the results of the study

The study has reached several results, the most important of which are:

* The total score of the problem identification axis was (4.41) with a very high approval score, with arithmetic averages ranging between (4.25-4.55).

* The total score of the axis of identifying alternatives reached (4.40) with a very high approval score, with arithmetic averages ranging between (4.28-4.49).

* The overall score of the axis of evaluating alternatives and choosing the best ones was (4.44) with a very high approval score, and with arithmetic averages ranging between (4.30-4.53).

* The total score of the decision announcement, implementation and evaluation axis was (4.29) with a very high approval score, with arithmetic averages ranging between (3.91-4.48).

* The total score of the axis of decision-making obstacles was (2.94) with an average approval score, and with arithmetic averages ranging between (2.04-3.55).

* There are no differences between males and females at the level of (0.05) in the fact that the principals and headmistresses of schools in the Eastern Region practice decision-making steps due to the gender variable.

* There are no statistically significant differences at the level of (0.05) in the practice of school principals in the eastern region of decision-making steps due to the academic qualification variable.

* There are statistically significant differences at the level of (0.05) in the practice of school principals in the eastern region of decision-making steps due to the variable of experience.

* There are no statistically significant differences at the level of (0.05)in the practice of school principals in the eastern region of decision-making steps due to the variable nature of work.

* There are no statistically significant differences at the level of (0.05) in the practice of school principals in the eastern region of decision-making steps due to the variable of training programs.

Second: study recommendations

The study recommended the following recommendations:

* Continuous guidance for effective communication between school administrations and their local communities - including parents of students - to reach rational decisions that serve common issues.

* Establishment of a school Decision Support Unit in each department of Education.

* Holding periodic workshops for directors of Education offices with the participation of school directors and their assistants in administrative, financial, technical and other matters; to exchange experiences and knowledge among themselves to reach the right decisions.

* Identify areas of cooperation and partnership between the school administration and its local community.

* Follow-up and evaluation of the results of the educational process, school performance and the development of areas that need to be developed in order to reach the right steps in decision-making.

* Training school principals on the decision-making mechanism and organizational references for decision-making in the educational process in terms of knowledge and practice.

* Raising the criteria for selecting and assigning agents and principals of schools and linking them to professional growth.

* Investing modern technology in providing data and information to the decision-maker in an automated manner that ensures organization and speed in obtaining information for the decision-maker.

* Developing an organizational guide for the smart decision-making process in schools, which contributes to the governance of decisions issued by the school administration and is considered a reliable organizational reference

* Creating simulation programs and using them in the field of school administration and decision-making.

* Investing artificial intelligence in the decision-making process because of its strength and high ability to provide data, process it automatically, identify and choose between several alternatives, saving time, effort and cost.

* Granting school principals full powers in the decision-making process to reach full management.

* The need to activate modern technology and artificial intelligence in the decision-making process within the school.

* Provision of modern technology, as well as technologies and programs that will improve the processes related to the telecommunications and Information Network.

* Clarifying the tasks of the staff within the school in order to avoid overlapping powers and unclear tasks assigned to its staff.

* Providing support and support to managers within the school to reduce fear and anxiety about the consequences of making a decision issued by the principal within the school.

Third: the proposed topics

In light of the previous conclusions, the study suggested the following:

* Adopting the training of school principals on the means and methods of teachers ' participation in administrative and technical decision-making in general education schools.

* Conducting other studies similar to this one in other educational areas.

* Application of the current study tool to other schools of general education to diagnose the strengths and weaknesses of the degree of participation of managers in school decision-making.

* Study the relationship of teachers ' participation in school decision-making with other administrative variables such as leadership styles, administrative creativity, job satisfaction and achievement motivation.

Study supplements

Appendix No. 1

Study tool

Kingdom of Saudi Arabia

Ministry of Education

General Administration of education in the East

Nairiya Education Office

An educational study entitled: "The reality of the practice of school principals in the eastern region of decision-making steps".

Honored / school principal

Peace be upon you, God's mercy and blessings,,

The researcher is conducting a study on the knowledge of the reality of the practice of school principals in Al-nuairiya governorate in the eastern region of decision-making steps from their point of view.

Therefore, we thank you for your cooperation in answering the attached questionnaire, which is used for scientific research purposes only.

Your brother

Surur ibn Muhammad Al-Harbi

2022-1444 Ah

Part I: general statements

Gender:

Male [] female []

Academic qualification:

Diploma [] bachelor [] master [] doctorate [ ]

Experience:

Less than 5 years [ ]

From 5 to 10 years [ ]

From 10 to 15 years [ ]

From 15 years and over [ ]

Nature of work:

[Agent]

[Manager]

[Expensive teacher]

On-the-job training programs in the field of school administration:

From 1 to 3 training programs [ ]

More than 3 training programs [ ]

I didn't get training programs [ ]

Part II: the axes of resolution

Put an e-sign in front of each phrase in the place where your opinion agrees

First: decision-making steps

Degree of practice practice m

Very low low medium high very high

Step: identify the problem

The school principal has the skill of identifying problem 1

The school principal has the skill of explaining the problem in clear terms 2

Uses systems and procedural manuals to provide the necessary information about the dimensions of problem 3

Communicates with the parties involved in the problem to determine its dimensions. 4

It works to compile information related to the problem quantitatively and qualitatively 5

Analyzes the available information about the problem to make sure it is correct 6

Step two: develop alternatives (solutions)

Engages experienced and competent people in identifying optimal alternatives to Solve Problem 7

Involves the parties to the problem in developing alternatives (solutions) for it 8

Puts all the alternatives for the participants to reach the solution of problem 9

Exchanges opinions objectively to come up with the best possible alternatives for solving problem 10

Discusses innovative alternatives to solving problems objectively in the light of available potentials 11

Degree of practice practice m

Very low low medium high very high

Step three: evaluate the alternatives and choose the best one

Evaluates the alternatives put forward for the decision in the light of their negatives and positives and the ability to make a decision to separate the two sides of the problem 12

Ensures that the proposed alternatives meet the needs of the parties affected by Resolution 13

Selects the appropriate alternative (solution) to ensure the quality of workflow in accordance with the established plan 14

Selects the solution that corresponds to the internal and external conditions of the school 15

Selects the appropriate alternative to solve the problem in view of the available potentials 16

Selects a solution that prevents the problem from recurring in the future for a reasonable period of time 17

Approves the alternative taken to solve the problem with the powers vested in it by system 18

Step four: announcement, implementation and evaluation of the decision

The resolution shall be formulated in precise, clear and concise terms 19

Prepare the necessary material and human resources for the implementation of the resolution before its issuance 20

Draws up a plan for the implementation of the decision, which includes procedures for its implementation in accordance with priorities 21

Defines the responsibilities and roles of participants in the implementation of resolution 22

Officially inform everyone involved in the implementation of the decision of their responsibilities and roles to comply with them 23

Strictly follows the decision implementation plan to correct errors and remove implementation obstacles 24

Constantly assesses the ability of the implemented decision to solve the problem

If it is not effective to solve the problem and prevent its recurrence 25

Undo the decision by putting forward a better decision in solving Problem 26

Second: obstacles to decision-making among the principals and headmistresses of schools in the eastern region

Response phrase m

Very low low medium high very high

The number of actions performed by the manager

Lack of data and information on Problem 1

Lack of Administrative Support Staff 2

The scarcity of training programs in the field of decision-making 3

Overlapping of powers and unclear tasks 4

Failure to activate modern technology and artificial intelligence in the decision-making process 5

Lack of powers of the school principal in the science of decision - making 6

Low mutual trust between the school principal and school staff 7

Subjectivity in decision-making by the school principal 8

Fear and anxiety about the consequences of decision-making 9

Appendix No. 2

Letter facilitating the researcher's task

Appendix No. 3

Thank the arbitrator

- A./ Saleh bin Mohammed Al-Alyani

Director of the training and scholarship Department of Oriental Education.

- Dr./ Atiq Ali Al-Zahrani

Head of the school administration department in eastern education.

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