# Leadership skills (human, intellectual, Interpersonal) and their reflections for managing the Corona virus crisis

**Sahraa Anwer Hussein**

Department of Health Administration, Institute of Medical Technology AL-Mansur, Middle Technical University, Baghdad.Iraq

**Abstract**

Intellectual literature evidence has demonstrated the need for organizations of all types to adopt a new vision that aims to have conscious leaders with a variety of skills and competencies capable of adapting and flexibly handling circumstances, emergency situations, and crisis situations, as well as realizing and analyzing situation variables and making the right decisions. Along with the administration's requirement for a high standard of exceptional performance, new ideas and philosophies must be adopted by leaders in order to move beyond the conventional approaches to managing and leading businesses, including those in the health sector. In order to effectively manage and lead crucial situations, such as the Corona Virus (Covid 19) crisis, a leader needs to possess the most powerful leadership skills. The study examines three varieties of these capabilities (intellectual, human, and Interpersonal). To determine their opinions on the most important abilities in handling the Corona virus crisis, the research was conducted on a sample of 332 healthcare professionals in the governorate of Baghdad, dispersed over five different health centers on both regions of Karkh and Rusafa. Participation was optional, and 67% of respondents were female compared to 43% of respondents who were men. The study resulted in a set of findings that offer a comprehensive framework and a broader concept of leadership skills that should be considered when selecting leaders for health organizations in particular.

**Keywords**: leadership skills, human skills, intellectual skills, Interpersonal skills, crisis management.

## Introduction

The corona virus pandemic (Covid 19) has forced extraordinary challenges and obligations on pioneers working within the health sector, in expansion to the human misfortunes caused by the infection and the state of panic that beset citizens and wellbeing segment laborers together and other parties. However, the wide spread of the virus and the increase in its risks and consequences for citizens, the economic, social and even political life of the country and the world at large, and the inability to predict its results, has become a great and difficult challenge for leaders and officials.

A challenge that the conventional strategies of arranging, considering and usage are not working. This challenge confronted a need of seriousness in tending to it by a few pioneers, directors and authorities due to their need of seriousness in their realization that there's an emergency, where authorities come out from time to time and highlights of controlling the infection in their discussions and as it were a few brief moves at a time when the world is confronting this virus with innovative, artistic and more humane mechanisms, methods and procedures.

These practices affirm the pioneers and officials' need of a set of mental, subjective and compassionate abilities to overcome the emergency with negligible human and financial misfortunes, particularly in a nation where there are copious human, material assets, restorative and scholarly competencies that have the abilities, thoughts and methods that empower them to overcome this emergency and control it more than some countries. This crisis was characterized by several characteristics, for example, complexity, ambiguity, uncertainty in the causes and results, volatility in the evolution of the virus and other characteristics. The ability to analyze data and seize opportunities and flexibility in dealing to reach the best performance and best results. Here comes the part of the leaders' effective reactions. The pioneer in these circumstances does not require pre-prepared plans, but or maybe to embrace behaviors and receive work components that avoid him from going overboard and help him look forward to a better healthy future. That is why this study comes to address these problems faced by health workers as a result of the skills and characteristics that senior administrative leaders possess, whether personal or acquired.

**The First Section**
**Research Methodology**
**<u>First: the research problem</u>**
Most of the pioneers of our organizations are mindful of the negative and perilous results that go with emergencies in common and organizational emergencies in specific, so that they center in these circumstances on issues related to information, data, common causes and communications, with a focus on relations with other parties as an intelligently methodology to overcome the emergency, as is the case with the Corona virus crisis hen which the whole world is going through and our nation is portion of this world.

Unfortunately, focusing on strategies that do not work and have not achieved results on the ground, such as the regional stone, part-time, relying on the citizen to adhere to preventive measures and other measures that may lead to the collapse of the health system in the country and things get out of control. Where leaders in the health field show skills and responsibilities that do not live up to the hoped-for situation or what this country possesses of leaders, executives and competencies capable of dealing with a high level of leadership skills, ignoring many of the necessary skills and other leadership responsibilities associated with these crises. This is what results of lacking experience, skills and abilities to deal with sudden, ambiguous and complex crises, especially human, intellectual and interpersonal skills.

The issue of the investigation came from the researcher's encounter of the reality of the health leaders' managing with this emergency and from the point of view of her being actually tainted with this infection (covid 19). The survey is taking of more than one health center and the researcher's examination of numerous cases contaminated with this infection and their suffering from conventional strategies and negative administration in managing with infected and unsafe cases absent from the compassionate message. Which prompted the researcher to address this issue by researching, analyzing and revealing the flaws and weaknesses in this performance. Thus, the research problem can be formulated as follows:

- What is the extent of the availability of human, intellectual, and Interpersonal leadership skills among the leaders of the health institutions surveyed?
- What is the effect of the researched leadership skills, human, intellectual, and Interpersonal in managing the crisis in its studied stages?

**Leadership skills (human, intellectual, subjective) and their reflections for managing the Corona virus crisis**

**Second: The importance of research**

The importance of the research comes from the importance and seriousness of the Corona virus crisis and its effects on the economic, social and political life of the country. It is vital to have effective leaders with significant abilities to oversee the emergency, as they play an imperative part within the victory or failure of any organization, additionally play an imperative part in attempting to dodge the impacts of that emergency or relieve its seriousness on the lives of citizens and society as a entirety, and on the financial and social life of society and the state as entire.

**Third: Research aims**

The main objective of this research is to identify the role played by leadership skills (human, intellectual, Interpersonal) in facing and managing the Corona crisis. The crisis that has caused the death of more than three million individuals from all over the world, and expelled the uncertainty of concepts related to abilities and near to them and of managing the crisis, which makes a difference to clarify the relationship between these two variables within the research organization, and to know the genuine reality of administration skills within the health field. The medical field is the one that has a prominent role in preserving the lives of members of society in terms of health, and controlling a global crisis that makes leaders face unfamiliar and poorly understood problems and may destroy or end an entire country if it gets out of control. The research also aims after that to identify the most important skills in each stage of the crisis management under study.

**Fourth: The hypothetical model by researching and building hypotheses**

Statistical treatment of the inquire about issue requires planning a fulfillment chart that shows the part of the inquired about administration aptitudes (Interpersonal skill, human ability, intellectual aptitudes) as an autonomous variable in emergency administration as a dependent variable, as follows:
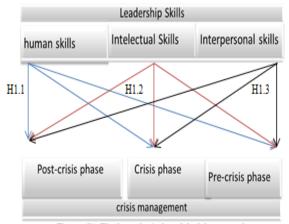


**Figure (1): The hypothetical model of the research**

**Fifth: Research hypotheses: The research starts from a main hypothesis that**

There is a statistically significant effect at the level of significance (a≤0.05) of leadership skills (human ,intellectual ,Interpersonal) at each stage of crisis management, and the following sub-hypotheses emerge from it:

1. The human intellectual skills of the leader in each stage of crisis management have a statistically significant effect at the level of significance (a 0.05).

• There is a statistically significant effect at the level of significance (a≤0.05) for the intellectual skills of the leader in the stages of crisis management separately.

• There is a lot of statistical significance at the level of significance (a≤0.05) for the Interpersonal skills of the leader in the stages of crisis management separately.

• There is a lot of statistical significance at the level of significance (a≤0.05) for the Interpersonal skills of the leader in the stages of crisis management separately.

Sixth-The study sample: The researcher's sampling strategy was random. Employees at five different health clinics in Baghdad, including both sides of Karkh and Rusafa, were given 400 questionnaires to complete on a voluntary basis. The number of valid/analyzable questionnaires was 332, and the percentage of female respondents was 67%, compared to 43% of male respondents.

**Seventh-The statistical tools used:**
The research used the following statistical tools:

- Descriptive statistics methods are represented by measures of central tendency (arithmetic mean) and measures of dispersion (standard deviation and coefficient of variation (dispersion), followed by their relative importance.
- Normal distribution tests to check the suitability of the data to the test models.
-  Pearson's correlation coefficient to ensure that there is no linearity problem.
- Sobel test to test the significance role of the median.
- Multiple regression models were used to test the research hypotheses using two programs (AMOS 24 and SPSS 24) to investigate the direct impact of the leadership skills variable as an independent variable in crisis management as a dependent variable, as well as the indirect effect of the independent variable on the dependent variable.

**The second Section**
**Theoretical framework for research**
<u>**First: The leadership skills**</u>

- (Katz, 1955:34) defines skill as "developable capabilities that are manifested in performance and capabilities and are not necessarily theoretical," whereas Arvy et al., 2007, 701 defines it as "the ability to do something." It is effectively determined by either heredity or learning, which means that skills and others can be developed through training and experience. As is the case in the different approaches that researchers follow in the study of leadership, there is a difference in the classifications of leadership skills, each of these classifications deals with different aspects of health work, including the human aspect, the intellectual aspect, the technical or the subjective aspect of the leader in the health field, and each of these skills. To interact with emergency situations and health crises, such as the Corona crisis, the leader must be an effective or successful leader who is capable of making decisive, rational, and humane decisions. Because the nature of the leadership job necessitates the availability of special skills that enable him to master the performance of intellectual, artistic, human, and subjective leadership work. In accordance with the nature of work in health institutions and dealing with the Corona crisis, the researcher chose the three skills of the current research (intellectual, humanitarian, and Interpersonal) for the following reasons:

- The role of crisis leader necessitates a high level of intellectual ability to quickly analyze the situation, link events, and logically conclude the reasons for making sound and effective decisions (Bennett & Hess, 2001:33), which is exactly what is required to deal with the Corona virus crisis.
- From the perspective of work in health organizations in general, and the crisis of the Corona virus (Covid 19) in particular, the researcher believes that this work requires leaders to be physically prepared and physically active on a continuous basis. Calmly in the face of the stressful circumstances brought on by this crisis and dealing with citizens'

lives and health. Furthermore, effective crisis leadership revolves around the leader's personal and personal capabilities, which are represented in self-awareness that leads to confidence, which leads to courage, initiative, and responsibility, and then foresight that makes the work strategy possible, (Saadeh, 2011: 330).

- Working in health institutions deals with a large group of employees, auditors, and injured people, in very large numbers, and of different and varied ages. And this is what requires human and Interpersonal
- skills, as well as the ability to deal with these people and understand their motives, attitudes, perceptions, and feelings in order to create a collaborative effort that can deal with them, influence them, and work as a team rather than as individuals.

As a result, the leadership sector, effective performance, and the necessary abilities are complex phenomena that cannot be well characterized by a single model or classification (Bass, 1990:65). the crisis environment is marked by complexity, change, and ongoing volatility, as in the case of the Corona crisis, which created anxiety and annoyance not only among individuals but even among governments and leaders. The Corona crisis is causing a state of psychological and media instability among the leaders in charge of handling it in the various facilities and agencies of the Iraqi state because the capacities of individuals and governments in most Arab societies, especially in our Iraqi society, are constrained. In order to handle the Corona crisis (as much as possible), control some of its factors, attain relative stability, and so create psychological immunity in the person and society from the social and economic repercussions of that crisis, the leader must

exhibit certain leadership abilities. Especially since this crisis has reduced the existing contradiction between the developed and developing worlds in most of the facilities of economic and social life, and therefore it is a rare opportunity for administrative leaders to formulate a new world order that is more just in economic terms. The competition in this crisis will be between the victor and the vanquished, and as it is said in "adversity makes men". Leaders in this crisis are faced with two challenges: first, they must select the best plan for combating the epidemic, which is challenging. On the other hand, they are accountable for assuring their citizens that they will abide by their governments' decisions. Any misstep in resolving these two issues will undermine public trust in those leaders and spark rumors and disturbances that will heighten the risks already associated with the crisis. Because of this, there is a need for leaders who can adapt to the situation and handle the crisis appropriately. These leaders must have abilities that are superior to those of leaders at other administrative levels, and these skills include:

A- **Conceptual Skills**: These relate to the leader's visionary, intellectual, and cognitive abilities and capabilities, as well as his or her ability to analyze a critical situation and examine the relationship between its variables (Merbah, 2015: 66). It also includes the abilities to gather and process information, think critically, and apply logic to assess the strengths and weaknesses of a crisis situation (Mumford et.al., 2007:156).

(Ermasova et.al., 2017:4) defines it as the skill that gives the leader the ability to analyze a situation and distinguish between cause and effect, and it is often acquired through formal education, reflection and experience. It is an idea-

handling skill capable of creating a vision and a strategic plan for a health organization. A manager of a governmental health organization, for example, may need intellectual skills to develop a strategic plan to successfully deal with the crisis in light of limited resources. (Galandari, 2012:478).

B- **Human skills**: the abilities that leaders employ when interacting with their employees. Managers with these skills recognize their importance in the overall success of the organization, and these skills include the ability to communicate, understand, change, lead, control, influence employee behaviors, and motivate them to higher levels of productivity (Jones & George, 2009:17). These abilities also aid in the development of employee trust and cohesion, as well as the attainment of fairness, empathy, and good faith. Based on the foregoing, we conclude that the leaders' awareness of their employees' tendencies and trends, understanding and trusting them, and creating a sense of reassurance and stability for them must all be part of the leaders' daily behavior when dealing with his employees. Human relations constitute an important aspect of work in every administrative system, especially in health organizations, because they deal with the feelings and trends of auditors and workers, and with their problems, desires, and their various cultural and social tendencies, which require the leader to have a high ability to understand, communicate and communicate to influence the behavior of employees towards achieving effectiveness. High levels of production, achievement, and response in the face of crises, particularly the Corona crisis (covid 19). Human skills are valued at all organizational levels, not just at the level of senior management (Pernick, 2001:433).

C- **Interpersonal Skills**: These are the skills that relate to the sufficient attributes of the organization leader, the organizational level in health institutions, and they represent the physical and emotional qualities (Agha, 2008:68), and Agha 2008 defines them as the qualities represented by the mental, cognitive, and psychological aspects that comprise the leader's personality. These skills are classified as follows:

1. Physical skills, which mean that the leader enjoys good health, strength, activity and stamina so that he can spread vitality and activity in the souls of those around him.

2. Mental skills represented by intelligence, initiative and innovation, good behavior, courage, self-control, emotional balance, not getting angry quickly and studying things carefully (Al-Ajami, 2010: 173). Leadership in health organizations, particularly in light of the Corona crisis, is difficult work that necessitates concentrated and continuous effort, as well as an organized use of nervous and physical energy, as it relates to the lives of community members and the souls of the health organization's affiliates. Leaders in these organizations must also have a diverse knowledge base and the ability to innovate, accept criticism, anticipate possibilities in the face of health crises, and devise strategies for dealing with them.

**Second: Crisis Management**

A crisis according to (Olsson & Verbeek, 2018) means that it is a sudden event that represents a direct and explicit threat to the objectives of the organization's strategic dimension, its priorities and reputation, and its results are often undesirable (Olsson & Verbeek, 2018: 277). Concerning crisis management, it is a concept that is closely

related to public administration institutions. Among these institutions are health institutions, which are currently among the most significant state agencies because they are tasked with maintaining the safety, security, and health of its citizens. Nobody anticipated the Corona crisis to be as dangerous and quickly spread throughout the globe, along with the accompanying weakness in ability or limited resources to confront it, as well as the difficulty in finding solutions and a vaccine for this virus in its first year of emergence in the People's Republic of China (Wuhan city). Concerning the field of interest of this research in the crisis, urgent messages were sent to researchers, thinkers, and economists to pay attention to it and write about it in a way that serves decision-makers and those who are interested in order to find solutions or, at the very least, to provide scientific and knowledge contributions to our knowledge libraries to contain or reduce their effects through academic work mechanisms and knowledge to protect individual security and thus national security against any external and internal threats to the state and its institutions. The writers and researchers have presented a number of definitions of crisis management that differed from one researcher to another according to their intellectual backgrounds, the time period and the circumstances of each period. However, in accordance with the directions and objectives of this research, the researcher has adopted the definition adopted by the International Federation of Railways, which includes six continents (Africa, Latin America, Europe, the Middle East, North America, Asia and the Pacific). Within the Global Security Program's recommendations for crisis management issued in 2017, which defines crisis management as "the organization's response in a coordinated and comprehensive manner, as well as in an effective and timely manner, a coordinated and comprehensive response to the organization in an effective and timely manner with the goal of reducing or avoiding damage to the organization, its reputation, its ability to operate, its market share, and its material possessions, and assisting it in recovering and resuming its activities as soon as possible by developing plans and making the necessary decisions in collaboration with other organizations" (UIC, 2017:3). This definition makes it abundantly clear that crisis management is an administrative process and an integrated strategy that aims to examine events in order to explore crises, work to confront them or lessen their effects, and deal with their variables effectively and efficiently within decisions that primarily depend on the abilities and skills of leaders before and after the occurrence of crises. According to (Saeed, 2012:74), crisis management is built on two approaches: a proactive approach (mechanisms for sensing the crisis) and a reaction approach (handling the crisis as it arises).

From the foregoing, it can be concluded that crisis management entails deliberate and innovative analysis of a number of quick decisions and scientific methods to confront the health risk and extrapolation of potential threat sources as a proactive measure, searching for and analyzing the causes and developing solutions, alternatives, and appropriate procedures to solve the crisis in innovative ways. To lessen harm to medical equipment, their accessories, and society as a whole, these procedures reach outside of the organization through community members, the media, and stakeholders.

**Third: Challenges and failures faced by health organization executives in handling the crisis**

Regardless of the type of crisis—normal, urgent, or sudden—multiple parties must work together in concert to address it. The leader is one of these crucial

stakeholders that plays a significant part in all phases of health crisis management (Al-Mutairi, 2005: 30). Since the health crisis, and we are talking here about the Corona virus crisis, which is a sudden circumstance or crisis with dimensions related to the life, security and economy of society and the state as a whole, it requires unique leaders with unique characteristics and characteristics that bear these fateful burdens. The researcher also interacted personally and regularly with the directors of health centers near her place of employment and where she lived because she was one of those afflicted with this virus and the infection persisted for a whole month. The researcher decided to put this paragraph in the research and put her point of view in terms of the reality that she lived with these leaders, a reality that most members of the community, including the injured or those accompanying them, experienced, and to show the pressures on these leaders at work as a result of work pressure and the resulting psychological and nervous tension. Despite the medical preventive precautions for the health staff, dealing with the infected on a daily basis, the limited resources and lengthy routine in treating the injured, and the risk of infection at any time as a result of direct patient contact, did not stop the field or administrative medical staff from contracting the virus.

This is what makes the process of crisis management in these circumstances a difficult process that requires exceptional skills in health leaders to deal with it. In times of crisis, as the crisis caused by the Corona virus, it is uncommon for most executives in healthcare institutions to be recognized for their contributions. Particularly if the general public expects them to succeed in light of these challenging circumstances, but external interventions, internal, and external pressures at work, the gravity and complexity of the crisis, as well as its effects on society's health and economy as a whole, make crisis management a challenging and important process that has an impact on how well leaders of health institutions handle and manage the crisis. These challenges are included among them:

1. The severity and significance of the Corona virus crisis for some health leaders due to their position, which is frequently viewed as being out of proportion to the current situation.

2. Due to their ideal functioning and the fact that they are remote from such emergencies, some medical equipment ignore the warning signals that arrive too late. One of the key elements in averting a disaster is the requirement for early warning signals (Fildes & Rose, 2004: 119).

3. The greatness that may affect some leaders working in health institutions, as they believe (incorrectly) that they are strong enough to be protected from the crisis and decide not to take any action or precautions, which causes a decline in their performance and spreads the unhappiness and discontent of those dealing with them.

4. Fear of responsibility among the leaders of most of our health institutions due to a lack of leadership skills required to manage the crisis, and thus a reluctance to take the appropriate decision or make a mistake in it, which may result in the deaths of many injured people waiting for the appropriate decision to save them. and this is what the researcher observed during her virus infection and reviewed further From five health centers located throughout Baghdad.

5. Lack of coordination between the relevant authorities due to duplication of decision and the lack of clarity of leadership subordination to most health agencies.

6. The stress and anxiousness that health officials feel while handling the crisis, especially if they are exposed to outside influences or a central structural chain that slows down their response to the problem, causes society's citizens to lose the assurance they have come to anticipate.

7. Because of their fear of failing in front of these institutions and their lack of faith in these authorities' capacity to assume responsibility and participate in health crises as a result of the lack of clarity in the concept of social partnership, health institutions are hesitant to involve organizations from civil society and volunteer teams from members of society in managing the crisis. Some benefits you can receive from these events. Although reality indicates the need for health institutions to integrate with civil society organizations in the face of emergency crises, based on the concept that the citizen will be an effective partner in maintaining the security of society (Al-Jabri, 2009:10).

**Fourth: the crisis management model**
The authors and researchers presented a variety of models that depict crisis management and its stages, and each of these models adopted the scientific method while incorporating the leader's cognitive and affective abilities. Some of these models in crisis management also identified the path and stages of each model, including (Mitroff, 1994) and a model (Pearson & Mitroff, 1993) which divided the crisis into five stages, as for the model (Albrecht, 1996), which divided the crisis into four stages. The (Jhnston & Stepenavich, 2001), (Fildes & Rose, 2004), (Evans & Elphich, 2005), (Coombas, 2019) models, all of these models divided the crisis into three stages, while the Alain model, (2002), and Spillane, et.al. model. (2011) divided the crisis into two phases or two ways. The Coombas (2019) model, which divides crisis management into three stages and is depicted in Figure (2), will be used in accordance with the directions and objectives of the research because it is more precise and more specific to the role of the leader and the skills he needs in each stage of crisis management and the crisis stage, and the post-crisis stage, and each of these stages includes other sub-stages, and the researcher believes that (Coombas, 2019) these three stages were extracted by twinning the Mitroff,1994,1993 models and the Fink,1980 model.
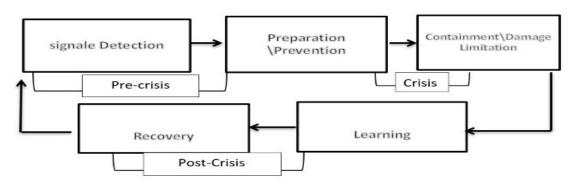


**Figure (2): The approved model for research**

Source: Prepared by the researcher based on my model following the following two models of

• Pearson,C.M.,& Mitroff,I.,1993,"From crisis prone to crisis pre pared: A frame work for crisis management, Academy of

management Executive,Vol.7,No.1,p:48-59,

• Coombas, W.T., 2007. Ongoing Crisis Communication: Planning, Managing, Responding, second ed. Sage Publications, Thousand Oaks.

Figure (2) depicts the main and sub-temporal stages that are part of the approved crisis management model. These stages, which range from warning signals to prevention to damage containment and activity restoration to organizational learning, correspond to the stages that almost all crises go through. Where organizations can increase their ability to seize opportunities and avoid risks in each of these stages properly through the capabilities and skills of their organizations leaders.(Pearson & Mitroff, 1993:52). Each of the phases adopted in this research will be explained as follows:

1. **Pre-crisis phase:** This phase starts when organizational and functional performance issues emerge, highlighting some early indicators of a crisis' potential, (Misk, 2011: 20). Three separate steps make up this phase:
i) Detecting warning signals for a future necessity.
ii) Prevention and preparation.
iii) Prepare for the emergency, (Drennan et al., 2015:31).
   Numerous studies show that organizations with high reliability are better equipped to avoid crises, and organizational culture and structure are both characteristics that can promote reliability while also having the potential to raise the risk of crises (Bundy et al. (2016): 1681). According to (Coombas 2006:243), businesses are better equipped to handle crises when they have the following:
   -A crisis management plan that is updated at least yearly.
   - An enthusiastic and committed crisis management staff.

   - Simulations and behavioral exercises to put the team's strategy to the test.
   -Pre-environmental survey of some prior disasters, as well as on a regular basis.

As planning and preparing for the crisis and preparing for it allow for rapid interaction with the crisis at the time of its occurrence and for making decisions that are more effective at that time. It also instills confidence in workers during times of crisis (Haddon et.al., 2015:614). However, (Pearson & Mitroff, 1993:52) discovered that most organizations not only ignore early warning signs of a crisis, but instead make a concerted effort to prevent it, despite the fact that recognizing the crisis is one of the strategies that most affect the reactions of stakeholders and the public provided that it is used in a timely manner and reinforced with a strategy of clarification or assuming responsibility, which would reduce people's anger. According to (Al- Qarawi, 2021: 66), after carefully examining what has been said, we draw the conclusion that, even under the best of conditions, all organizations must deal with a significant amount of information prior to a crisis. The majority of our firms overlook these signals as a result of their regular operations, even trying to prevent them before they reach a point where it is difficult for them to change their direction.

2. Crisis phase: This phase includes recognition of the crisis, response to it, measures taken to deal with the target event, the time period during which the crisis is dealt with effectively, and an attempt to contain or limit the damage (Coombas, 2018:24). Identification of the crisis and handling it are the two phases or sub-stations of this stage. The crisis management team, which we discussed previously in the pre-crisis phase, is the main emphasis of this phase and it serves as a gauge of how well the company will handle the crisis. During this stage, the

crisis management team works on the following:

i. Preventing the crisis from spreading to unaffected areas.

ii. Determine the processing period (Mitroff, 1994:46). Since crisis management, as it is known, is a process of collective decision-making, communication at this stage represents one of the biggest challenges facing the crisis management team. It must gather and process information in order to make decisions internally, and it also has the responsibility to communicate information related to the crisis for stakeholders externally. In fact, human factors, team processes, internal and external communications, and information analysis play a key role in improving the response speed, efficiency of team members, and stakeholder perception of the organization in times of crisis (Tokakis et.al., 2019:38). Strategic managers and planners must work with the crisis management team because the crisis is currently characterized by the rapid pace of events and the catastrophic and obvious consequences of failure, (Al-Ghamdi and Al-Shammasi, 2021:60).

3. 3- Post-crisis stage: This stage is represented by the recovery of activity in several aspects, such as the recovery of the tangible and intangible assets that were lost. (Al-Safi 2011:206). At this point, the organization must consider what needs to be done, as post-crisis measures help the organization improve its preparedness for future crises, ensure that the crisis management team in the organization leaves a positive impression on stakeholders, and finally ensure that the crisis is actually over, and these include The stage is divided into two sub-stages: recovery / recovery and learning. It is recommended (Coombas, 2006:255) at this point that every plan and step taken

in crisis management be analyzed as a post-learning experience and an opportunity for the organization to look for ways to improve prevention, preparedness, and/or response. According to (Bundy et al., 2016:1688), learning from the crisis is possible, but it is dependent on the circumstances, which may influence the types of lessons learned and the degree of absorption of the lessons. Learning from crisis management is vital because it directly affects the long-term future of the social system of the organization, and it also has a strategic role during future crises and disasters, (Rosenthal et.al.,2001:122).

**Fifth: The relationship between leadership skills and crisis management.**

In all of the aforementioned stages of the crisis management process, the organization's leader is seen as the primary accountable party because these phases call for the presence of specific traits, requirements, and abilities that the leader must have because they are crucial to the success or failure of the organization in conquering the issues it is facing at the time Critical and emergency situation, and exit with the least amount of losses in time, material, and human effort. In order to prevent a crisis from occurring or minimize its effects on the organization and its members in the event that it does, the first stage of crisis management calls on leaders to recognize risk and early warning signs that could indicate a crisis, according to LaPorte (2007:61). Leaders need to be able to predict, foresee, and feel impending danger by analysis of the situation and existing data, gathering and processing information, and applying logical and analytical thinking, (Mumford et.al.,2007:156). Leaders also need soft skills, such as the confidence in their own talents to transform the crisis situation for the better and the willingness to take chances

with seriousness and feet. Eric Schmidt, the former CEO of Google, believes that having a leader with a certain degree of arrogance is one of the basic requirements for leadership, because leaders of creative companies have to believe that they can change the world, otherwise they will not bother trying, (Grouat and Fisher, 2013:215). They must also act calmly, with restraint and emotional balance, because when the leader appears in this mode, he provides reassurance to those around him and stakeholders that there is someone who takes control of matters in times of despair, especially if the crisis exceeds the capacity of the crisis management team and the available options, as it should. To be able to anticipate and visualize the crisis's path and movement, to be knowledgeable about the rules and conditions for leadership, and to be sane and reasonable in their decision-making and any potential responses, (Rajab, 2008: 158).

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**The Third Section**
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**Practical Framework for Research**

**Preamble:**

This topic's main goal is to present the findings of descriptive analysis and test hypotheses. The first paragraph of this topic is devoted to outlining the conclusions reached and then analyzing them using statistical descriptive methods represented by measures of central tendency (arithmetic mean) and measures of dispersion (standard deviation, coefficient of variation or dispersion). In addition, the results of the normal distribution tests were shown to determine how well the data fit the test models and the nature of the relationship between the research variables using a matrix of correlation coefficients. The results of the test of the research hypotheses using the multiple regression model are shown in the second paragraph.

**First- Descriptive statistics:**

According to the five-point Likert scale, which divides the answer categories into five categories, the statistical tools of this study were used to express the statistical description of the variables, which were embodied in both the arithmetic mean of the variable dimensions' paragraphs, the standard deviation, and the coefficient of special variation. The following paragraphs explain the results of descriptive statistics for the independent variable (Leadership skills) in its three dimensions, and then the dependent variable (**crisis management**) with its three dimensions as well, respectively:

1. **Leadership skills: This variable includes three dimensions, the results of which were described as follows:**
a) Human skills: Table (1) shows the results of the statistical description of this dimension, in which the seventh paragraph (advising is used instead of threatening penalties for workers) obtained the first relative importance with an arithmetic mean that is the highest among the rest of the dimension's paragraphs (3.0429), a standard deviation (0.78261) and a coefficient of difference It is the lowest (0.2571), as this result indicates a high agreement between the answers of the sample members about this paragraph. Due to the first paragraph's tenth relative importance in this dimension and the decline in the average of this paragraph to, "The leader creates positive working connections between employees" (2.3143). Additionally, the coefficient of variation increased to (0.3712) due to an increase in the standard deviation's value of (0.85921), which was spread between these two limits throughout the remaining paragraphs of this dimension.

**Leadership skills (human, intellectual, subjective) and their reflections for managing the Corona virus crisis**

**Table (1) results of descriptive statistics for the dimension of human skills**

| No. | items | RI | CV | SD | Mean |
|-----|-------|-----|------|------|------|
| 1 | The leader encourages the development of positive working relationships among the team members. | 9 | 0.3712 | 0.85921 | 2.3143 |
| 2 | Builds good relationships with/between others | 2 | 0.2908 | 0.77287 | 2.6571 |
| 3 | He shows respect for others in his behavior | 6 | 0.3426 | 0.82235 | 2.4000 |
| 4 | He encourages employees to share their ideas with him | 7 | 0.3576 | 0.78687 | 2.2000 |
| 5 | He should lead a team of workers in achieving integration | 5 | 0.3342 | 0.91190 | 2.7286 |
| 6 | He has the capacity to recognize others' assets and limitations. | 3 | 0.2978 | 0.90206 | 3.0286 |
| 7 | Advice is used as a substitute for the threat of sanctions to employees | 1 | 0.2571 | 0.78261 | 3.0429 |
| 8 | He has the ability to communicate with others | 8 | 0.3603 | 0.85971 | 2.3857 |
| 9 | sympathize with employees over their social issues | 4 | 0.2987 | 0.72417 | 2.4320 |
| | The overall mean of the dimension | | 0.1188 | 0.30629 | 2.5765 |

b) **Intellectual skills:** Table (2) displays the results of the statistical analysis of this dimension, which confirms that the second paragraph (creates an organizational environment that encourages employees to adopt that vision) has the highest arithmetic mean (3.1714) and the lowest standard deviation (0.76283) among the other paragraphs of this dimension. These results were reflected in the decrease in the value of the coefficient of variation to (0.2405), with relative importance being the first in its rank. It is also clear by looking at the rest of the results, that the first paragraph (creates a long-term vision of the organization) obtained the arithmetic mean among the rest of the paragraphs (2.3143) and with a relatively high deviation (1.06283), this led to an increase in the value of the coefficient of variation for this paragraph to (0.4196) and importantly relative is the eighth and last among the rest of the paragraphs, and the rest of the paragraphs for this dimension are distributed between these two levels of relative importance

**Table (2) Results of descriptive statistics for the intellectual skills dimension**

| No. | items | RI | CV | SD | Mean |
|-----|-------|-----|------|------|------|
| 1 | Creates a long-term vision for the organization | 8 | 0.4196 | 0.97122 | 2.3143 |
| 2 | Creates an organizational environment that makes employees embrace that vision | 1 | 0.2405 | 0.76283 | 3.1714 |
| 3 | Has the ability to plan for the long term | 5 | 0.3597 | 0.87360 | 2.4286 |
| 4 | He has the ability to make decisions | 6 | 0.3702 | 0.97855 | 2.6429 |
| 5 | Generates new ideas for business development | 2 | 0.3308 | 0.85542 | 2.5857 |
| 6 | Supports and encourages constructive organizational change | 7 | 0.3762 | 0.91388 | 2.4286 |
| 7 | He roams among the workers to identify their mistakes and help them correct them | 4 | 0.3560 | 0.92048 | 2.5854 |
| 8 | He has the ability to sense problems before they happen | 3 | 0.3457 | 0.77229 | 2.2336 |
| | The overall mean of the dimension | | 0.1131 | 0.28845 | 2.5488 |

c) **Interpersonal skills:** Table 3 shows the descriptive statistics results for the subjective skills dimension. It reveals that the arithmetic mean of the first paragraph (accepts new ideas) reached (3.2286) and that, with a standard deviation of (1.11864), these results led to the highest agreement in terms of the value of the minimum coefficient of variation (0.3464) of relative importance is the first. Contrarily, the seventh paragraph (avoids superficial decisions) had an arithmetic

mean of (2.7429) and a significantly large standard deviation (1.17567) compared to the other paragraphs in this dimension, which increased the value of the coefficient of variation (0.4286).

Therefore the last rank is the relative importance, and the rest of the paragraphs of this dimension between these two levels and according to the relative importance.

**Table (3) Results of descriptive statistics for the Interpersonal skills dimension**

| No. | items | RI | CV | SD | Mean |
|---|---|---|---|---|---|
| 1 | He accepts new ideas | 1 | 0.3464 | 1.11864 | 3.2286 |
| 2 | He is very active and energetic | 4 | 0.3691 | 1.19705 | 3.2429 |
| 3 | He faces crises calmly | 2 | 0.3498 | 1.04950 | 3.0000 |
| 4 | He makes decisions with no doubts | 5 | 0.3709 | 1.07059 | 2.8857 |
| 5 | He takes criticism from workers | 3 | 0.3539 | 0.92537 | 2.6143 |
| 6 | He analyzes data accurately | 7 | 0.3961 | 1.16576 | 2.9429 |
| 7 | He Avoids superficial decisions | 8 | 0.4286 | 1.17567 | 2.7429 |
| 8 | He has the capacity to maintain self-control under pressure. | 6 | 0.3913 | 1.14615 | 2.9286 |
| | The overall mean of the dimension | | 0.2655 | 0.76635 | 2.8857 |

1. Crisis management: This variable includes three dimensions, the results of which were described as follows:
a) **Pre-crisis stage:** the second paragraph (the administration organizes training programs in the area of crisis management) achieved the first relative importance with an arithmetic mean that is the highest among the other paragraphs of the dimension, as shown in Table (4), which presents the results of the statistical description of this dimension (3.1286) and a relatively low standard deviation (1.08910) and a coefficient of variation is

the lowest (0.3481). This result indicated that there was less dispersion among the answers of the sample members about this paragraph. Regarding the sixth paragraph, which states that our organization's organizational structure is adaptable enough to handle potential crises, it received the eighth relative importance in this dimension due to a drop in this paragraph's average value to (2.4143) and a standard deviation of (1.09667). These results led to an increase in the coefficient of variation to (0.4542), as for the rest of the paragraphs of the dimension, they ranged between these two limits

**Table (4): Results of descriptive statistics for the pre-crisis**

| No. | Items | RI | CV | SD. | Mean |
|---|---|---|---|---|---|
| 1 | When a crisis occurs, the organization has a specialized team to handle it. | 3 | 0.3689 | 1.14895 | 3.1143 |
| 2 | The administration organizes training programs in the field of crisis management | 1 | 0.3481 | 1.08910 | 3.1286 |
| 3 | Senior management is concerned with crisis planning in advance. | 5 | 0.3875 | 1.14063 | 2.9429 |
| 4 | To resolve the crisis, senior management collaborates with other relevant organizations. | 7 | 0.4081 | 1.15434 | 2.8286 |
| 5 | The organization has clear administrative instructions that specify how to deal with the crisis when it occurs | 2 | 0.3501 | 1.03519 | 2.9565 |
| 6 | The organizational structure is sufficiently adaptable to deal with potential crises. | 8 | 0.4542 | 1.09667 | 2.4143 |
| 7 | The crisis management team has the capabilities and skills to deal with obstacles during the crisis | 4 | 0.3838 | 1.10232 | 2.8714 |
| 8 | Senior management delegates full authority to the crisis management team in the event of a crisis. | 6 | 0.3937 | 1.13626 | 2.8857 |
| | The overall mean of the dimension | | 0.2100 | 0.60714 | 2.8911 |

b) **Crisis stage:** the statistical results for this dimension are shown in Table (5). The fourth paragraph, which describes how the crisis management team is attempting to stop the crisis from spreading to unaffected areas, is shown to have the first relative importance with an arithmetic mean of (2.9) and the lowest standard deviation (0.78297), as shown on the decrease in the value of the coefficient of variation to (0.2699). Additionally, it is evident from the remaining data that the second paragraph (There are effective communication channels in the crisis situation) had the lowest arithmetic mean (2.7571) and deviation of any of the other paragraphs (0.98445). This caused the coefficient of variation for this paragraph to increase in value (0.357). It is the seventh and last paragraph in terms of relative importance, with the other paragraphs in this dimension falling somewhere between these two levels.

**Table (5): results of descriptive statistics for the post-crisis stage**

| No. | items | RI | CV | SD. | Mean |
|---|---|---|---|---|---|
| 1 | Emergency measures are effectively employed to lessen the harm caused by the circumstances. | 6 | 0.3342 | 0.97420 | 2.9143 |
| 2 | There are effective communication channels in crisis situations | 7 | 0.3570 | 0.98445 | 2.7571 |
| 3 | The crisis management team is capable of making the right choice to end the issue. | 3 | 0.3025 | 0.91638 | 3.0286 |
| 4 | To keep the problem from spreading to unaffected areas, the crisis management team is actively engaged. | 1 | 0.2699 | 0.78297 | 2.9000 |
| 5 | The causes of the crisis are brought under control in a short period of time | 4 | 0.3086 | 0.93925 | 3.0429 |
| 6 | Senior management has the capability and speed to mobilize the necessary human and material resources to contain the crisis. | 2 | 0.2827 | 0.83207 | 2.9429 |
| 7 | Senior management prefers to deal with crises as they occur rather than before they occur. | 5 | 0.3259 | 1.01500 | 3.1143 |
| | The overall mean of the dimension | | 0.2138 | 0.63253 | 2.9571 |

c) **The post-crisis phase:** Table (6) shows the results of descriptive statistics for the post-crisis phase**.** The arithmetic mean of the fifth paragraph (the administration provides the sites affected by the crisis with the necessary needs to treat its effects and restore their activity) is clearly the highest, with a value of (3.3143) and a standard deviation of (0.87713). These findings led to a decrease in the value of the minimum coefficient of variation (0.2646), which is the first in importance. In contrast, the arithmetic mean reached (3.2286) in the second paragraph (the administration collaborates with the crisis management team, a media campaign to inform the general public about the organization's damage caused by the crisis) with a relatively high standard deviation compared to the rest of the paragraphs in this dimension (1.13152). It is reflected on a rise in the value of the coefficient of variation (0.3504) and thus the last order in relative importance, and the rest of the paragraphs of this dimension graded between these two levels and according to the relative importance.

**Table (6): Results of descriptive statistics for the post-crisis dimension**

| No. | items | RI | CV | SD | Mean |
|---|---|---|---|---|---|
| 1 | Senior management is capable of identifying the causes of the crisis. | 3 | 0.2896 | 0.93925 | 3.2429 |
| 2 | The department collaborates with the crisis management team on a media campaign to inform the public about the organization's damage caused by the crisis. | 6 | 0.3504 | 1.13152 | 3.2286 |
| 3 | The administration learns from the crises it experiences and applies those lessons. | 4 | 0.3067 | 0.92459 | 3.0143 |
| 4 | It assesses earlier crisis management programs and strategies with the aim of improving or changing them. | 5 | 0.3162 | 0.98024 | 3.1000 |
| 5 | The administration supplies the crisis-affected areas with what they need to deal with its repercussions and resume normal operations. | 1 | 0.2646 | 0.87713 | 3.3143 |
| 6 | The administration works to take advantage of other organizations' experiences from previous crises. | 2 | 0.2754 | 0.85381 | 3.1000 |
| | The overall mean of the dimension | | 0.2131 | 0.67507 | 3.1667 |

The inter-dimensional correlation matrix was created to guarantee the strength of the correlation between the six dimensions and their trends in order to ensure the integrity of the representation of the six dimensions, which were analyzed using descriptive statistics tools for the variables of this research, and to pave the way for testing the hypotheses, as shown in Table (7). It demonstrates the potency and importance of this positive linear association at extremely high statistical levels. The findings also demonstrated that the relationship is not affected by the linear coupling problem.

**Table (7): Correlations between Dimensions**

| Dimensions | | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|
| human skills | Pearson's correlation | 1 | .555** | .584** | .574** | .622** | .520** |
| | parameter significance | | 0 | 0 | 0 | 0 | 0 |
| intellectual skills | Pearson's correlation | .555** | 1 | .640** | .615** | .634** | .726** |
| | parameter significance | 0 | | 0 | 0 | 0 | 0 |
| Interpersonal skills | Pearson's correlation | .584** | .640** | 1 | .402** | .582** | .515** |
| | parameter significance | 0 | 0 | | 0.001 | 0 | 0 |
| pre-crisis phase | Pearson's correlation | .574** | .615** | .402** | 1 | .651** | .569** |
| | parameter significance | 0 | 0 | 0.001 | | 0 | 0 |
| crisis phase | Pearson's correlation | .622** | .634** | .582** | .651** | 1 | .642** |
| | parameter significance | 0 | 0 | 0 | 0 | | 0 |
| Post-crisis phase | Pearson's correlation | .520** | .726** | .515** | .569** | .642** | 1 |
| | parameter significance | 0 | 0 | 0 | 0 | 0 | |

Before beginning the process of testing the research's hypotheses, it is also necessary to ensure that the data are appropriate for the test models employed in the study. For example, by understanding that the use of multiple linear regression models necessitates the possibility of a normal distribution of dimensional data. and as indicated in Table (8), which displays the findings of a test of what is known (Kolmogorov-Smirnov) for this kind of test in relation to the normal distribution of the dimensions of the study variables, as follows.

$(H_O: P=0($      $(H_1: P≠0($

**Leadership skills (human, intellectual, subjective) and their reflections for managing the Corona virus crisis**

**Table (8): Results of the normal distribution test for the dimensions of the research variables**

| Test type and parameters | Kolmogorov-Smirnov | | |
|---|---|---|---|
| | Test Sig. | Value of sig. | Test statistic |
| Variables and their dimensions | Leadership Skills | | |
| human skills | Not sig. | .200* | 0.084 |
| intellectual skills | Not sig. | .200* | 0.089 |
| Interpersonal skills | Not sig. | .200* | 0.074 |
| | Crisis Management | | |
| Post-crisis phase | Not sig. | .200* | 0.075 |
| crisis phase | Not sig. | .200* | 0.080 |
| pre-crisis phase | Not sig. | 0.096 | 0.098 |

As a result of the test's insignificance, or the fact that the data are distributed naturally, the test results for the data of these study dimensions, which are shown in Table (8), validated the acceptance of the hypothesis that the data are distributed normally. These outcomes attest to the data's suitability for regression modeling.

**Second: Hypothesis Testing**

Multiple regression models were employed to test the research hypotheses and in light of the findings from the two statistical programs (SPSS24 and AMOS24), in order to confirm the strength of the direct influence of the leadership skills variable as an independent variable in crisis management as a dependent variable and in accordance with the following hypotheses.

**The main hypothesis of the research: the primary hypothesis contends that leadership skills have a significant and statistically significant impact on the dimensions of the crisis management variable (pre-crisis stage, crisis stage, and post-crisis stage), according to its three dimensions (human skills, intellectual skills, and Interpersonal skills). Based on that, the following sub-hypotheses are given:**

**The first sub-hypothesis:** the leadership skills in their dimensions (human skills, intellectual skills, Interpersonal -skills) have a significant and statistically significant effect in the dimension of the pre-crisis stage.

**The second sub-hypothesis**: it holds that the dimensions of leadership skills (human, intellectual, and Interpersonal skills) have a significant and statistically significant impact on the dimension of crisis stage.

**The third sub-hypothesis:** the leadership skills in their dimensions (human skills, intellectual skills, Interpersonal skills) have a significant and statistically significant effect in the post-crisis dimension. The following is a presentation of the hypothesis test results:

**The first sub-hypothesis:** the results of the test for this hypothesis shown in Table (9) showed a significant effect of two dimensions of leadership skills, which are the dimensions of human skills ($\beta$=.38, P = 0.002) and intellectual skills with the strongest effect ($\beta$=.49, P = 0.000). = $\beta$) in the first dimension of the dependent variable, which is the dimension of the pre-crisis phase. From a statistical perspective, the test findings had no impact on the Interpersonal skills dimension ($\beta$ = - .13, P>0.05) at the pre-crisis phase. According to the value of the coefficient of determination, this model's explanatory capacity attained ($R^2$ =.47) with statistical significance high (P=0.000). In the sense that (47%) of the variance following the pre-crisis stage, which served as the first dimension of crisis management, was explained by the dimensions of human skills

and intellectual skills without the dimension of Interpersonal skills, and as for the remaining variance ratio of (53%) of the non-interpretation coefficient, it is due to the effect of other factors that are outside the scope of the current study.

With regard to the responses of the research sample under study, Figure (3) shows a graphic illustration of the studied relationship in accordance with the first sub-hypothesis, where the regression paths and their beta coefficient values appear. This indicates the significance of the two regression paths in the dimensions of human, and intellectual skills in the pre-crisis phase, and thus partially accepts the hypothesis

**Table (9): Results of testing the first sub-hypothesis of the main hypothesis**

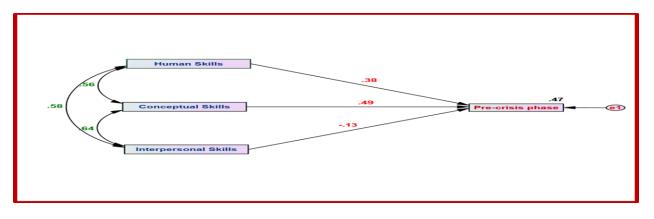| St. indicators / Regression paths | β | T | Sig. | R2 | F | Sig.P |
|---|---|---|---|---|---|---|
| Human skills → pre-crises phase | 0.38 | 3.28 | 0.002 | | | |
| Intellectual skills → pre-crisis phase | 0.49 | 4.002 | 0 | 0.47 | 19.166 | 0 |
| Interpersonal skills → pre-crisis phase | -.13 | -1.069 | 0.289 | | | |



**Figure 3: The regression paths showing the association between the pre-crisis phase dimensions of leadership skills.**

**Second sub-hypothesis:** The test results for this hypothesis shown in Table (10) showed the significant effect of all dimensions of the leadership skills variable represented by the dimension of human skills (β = .33, P = 0.003) and the dimension of intellectual skills with the strongest effect in terms of beta coefficient (β=.34, P=0.005) and after the Interpersonal skills (β=.17, P=0.046.) in the post-crisis phase. As for the explanatory power of the model, it reached ($R^2$ = .52) with complete statistical significance (P = 0.000), meaning that (52%) of the variance of the crisis phase as the second dimension of the dimensions of the dependent variable is explained by the dimensions of the independent variable. The remaining (47%) of the variance ratio, represented by the coefficient of indeterminacy, is due to factors outside the scope of the current study

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**Table (10): Results of the test of the second sub-hypothesis of the main hypothesis**

| St. indicators / Regression paths | Sig. | F | $R^2$ | Sig. | T | β |
|---|---|---|---|---|---|---|
| Human skills → post crises phase | | | | .035 | 2.013 | .16 |
| Intellectual skills ---> post crisis phase | .000 | 26.539 | .55 | .000 | 5.509 | .62 |
| Interpersonal skills ---> post crisis phase | | | | .841 | .201 | .02 |



**Figure (4): the regression paths of the relationship between the dimensions of leadership skills in the dimension of the crisis stage**

**The third sub-hypothesis:** The significance of the effect of two dimensions of leadership skills was confirmed by the test results for this hypothesis, specifically the dimensions of human skills (β=.16, P=0.035) and intellectual skills with the strongest effect (β =.62, P = 0.000) in the third dimension of the dependent variable, which is the dimension of the post-crisis phase. The test results had no effect on the subjective skills dimension (β = -.02, P > 0.05) in the post-crisis phase from a statistical point of view.

Regarding the model's explanatory power to explain data given the coefficient of determination, it achieved ($R^2$ =.55) with a high level of statistical significance (P = 0.000). In the sense that, following the post-crisis stage, the dimensions of human skills and intellectual skills alone, without the dimension of Interpersonal skills, explained (55%) of the variance. The influence of other factors outside the scope of the current study is responsible for the remaining (45%) of the variance

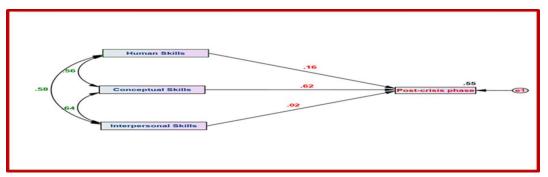| St. indicators / Regression paths | Sig. | F | $R^2$ | Sig. | T | β |
|---|---|---|---|---|---|---|
| Human skills → crises phase | | | | .003 | 3.055 | .33 |
| Intellectual skills → crisis phase | .000 | 24.009 | .52 | .005 | 2.935 | .34 |
| Interpersonal skills → crisis phase | | | | .046 | 2.121 | .17 |

**Figure (5): Regression paths of the relationship between the dimensions of leadership skills in the post-crisis dimension**

**The Fourth Section**
**Conclusions and Recommendations**
<u>First: Conclusions:</u>
The research reached the following conclusions

1. Although this drop differs between the paragraphs of this skill, the health leaders in the surveyed organizations have low levels of human skills. As a result, there is a gap between leaders in health organizations and both workers and patients due to the fact that the majority of the organizations surveyed's executives lack the human ability of engaging with workers. The management of the crisis and its successful containment are impacted by the leaders of health institutions' comprehension of the thoughts, feelings, and needs of employees and patients alike, as well as by their ability to build positive relationships with them and boost their morale. Because a leader can influence the workers and create ready, efficient, and prepared work teams through these habits. Hence the success of the crisis management process and overcoming it due to the humane handling of the working leaders.

2. The research focuses on the leaders of the health institutions and their poor level of intellectual capacity, which has an impact on how well they respond to crises, emergencies, and other urgent situations. Due to the intricacy, emotional interference, and sometimes confusion caused by conflict and a lack of knowledge, handling crises demands quick thinking and an intellectual effort to make a choice and resolve the problem. This has been demonstrated by the results of the leaders' inability to come up with novel solutions and their lack of awareness of problems before they arise. As a result, they were unable to make plans to manage the crisis before, during, and after it occurred as well as to deal with its effects or lessen them. Therefore, when handling crises and making judgments to cope with them, leaders must strike a balance between precision and caution.

3. The outcomes of the descriptive statistical analysis demonstrated that the orientation of the approved research variable was reflected in crisis management with a modest response level in each of the three aspects of this variable (pre-crisis phase, crisis phase, and post-crisis phase). Due to what was said in paragraphs (1, 2) of the preceding conclusions, this implies that the

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health leaders haven't been all that interested in managing the issue throughout its many stages. This shows a failure on the part of those leaders to take the necessary precautions in terms of forming, organizing, and training crisis management teams within these organizations. It also shows a failure to take the necessary precautions and learn from past crises as well as the experiences of other organizations.

4. The crisis management process is affected in all of its stages by the behavioral abilities and skills that leaders in health organizations possess in their comprehension and awareness of the needs and feelings of employees, building rapport with them and boosting their motivation. These behaviors encourage employees to overcome performance issues and thereby create a team culture in controlling the crisis before it happens. The results also show the willingness of workers to form a specialized crisis management team that conducts behavioral exercises (simulation for example) to test crisis management plans and thus increase the organization's ability to deal with crises with high reliability due to instilling confidence in the workers as a result of these behaviors, the most important of which is human skills.

5. The ability of the leaders of the surveyed organizations to collect and analyze data in order to draw logical conclusions about the variables surrounding the crisis in all of its aspects and stages. It develops leaders' creative abilities through the process of anticipating crises, maximizing opportunities and minimizing losses, and then developing solutions to manage the crisis in its various stages. This is what we conclude from the role of cognitive abilities in crisis management and treatment.

6. The study showed the limited impact of the leaders' Interpersonal skills in the surveyed organizations, in managing the crisis in all its stages. This outcome could be attributed to the way leaders are formed personally in the Iraqi environment, where members are not open to criticism in any form. In addition, most decisions are made superficially due to a lack of experience and training, and people lack composure and restraint in the face of crises under the most trying conditions. Thus, the answers of the research sample came with the limited impact of those skills in managing the crisis. This does not negate the existence of an effect (albeit limited) for these skills in the phase of crisis management under study. Finally, it is not possible to examine the skills that comprise the entirety of the administrative leader's personality separately; rather, they must be examined in terms of the leader's dealing with his subordinates using his human, personal, and intellectual skills in an integrated manner combined with each other, since the leadership personality ultimately consists of the leader's skills as a person, including self-knowledge, discipline, honesty, and self-control, in addition to his human skills in his relationships with his subordinates and his leadership skills as a process.

**Second: Recommendations**

According to the findings of this study, there is a disparity between the standards that a leader should meet in

terms of his skills - as addressed in the theoretical side - and what they should be in reality. This necessitates the development of a proposed model for selecting leaders working in government institutions in general, and health institutions in particular, taking into account the requirements of the actual role of health leaders as well as the specificity of the Iraqi environment, and preparing all organizational and material requirements to put this model into practice, follow-up on, and test its effectiveness in practice. Because the researcher works as a member of the teaching staff in technical universities, specifically in institutes and colleges of health and medicine, and because the outputs of these institutes and colleges are considered inputs to government health and medical institutions, and in order to facilitate the development of the terms of this model, the researcher proposes the establishment of a technical academy or a higher technical institute for the preparation of leaders at the level of government institutions, including health institutions, as one of the reliable institutions in preparing and developing leaders and qualifying them administratively and technically. Providing this academy or institute with teaching and training staff who have experience and credentials and who work at the four technical universities (Middle Technical, Al-Furat Al-Awsat , Southern, and Northern) will allow them to set up advanced training courses in a way that is consistent with their activity and goals. And work together on this with the corresponding institutes and academies at the regional and international levels for planning, implementation, and follow-up in order to become the first technical center in Iraq for training leaders at the level of technical universities, preparing leadership cadres capable of managing governmental and healthcare institutions in an effective, efficient, and admirable way to raise the performance levels of these institutions and elevate them to the ranks of the elite.

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