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### **Cognitive intelligence and its relationship to managing financial crises**

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#### **ABSTRACT**

The aim of the current research is to identify the relationship of cognitive intelligence with managing financial crises among management personnel working in the Iraqi Ministry of Interior. Which includes (580) administrators, the researcher pulled from them (150) administrative individuals in a simple random way to be the sample of the current research, and he used my questionnaire to measure cognitive intelligence and crisis management in a research sample, and verify the validity of the two tools by verifying their validity and stability, and the results of the study reached, the administrative enjoyment of the Ministry The Iraqi Ministry of Interior has a high level of cognitive intelligence, as well as a high level of financial crisis management, and the results of the research showed the existence of a real relationship between cognitive intelligence and financial crisis management among the administrators of the Iraqi Ministry of Interior and in all dimensions of the variables.

#### **Research problem**

The researcher summarized his research problem in two main aspects:

**First:** The research problem was the intellectual that was identified in the light of the intellectual debate and the lack of conceptual agreement among researchers about the rooting of the interactive relationship between the variables. What is the level of cognitive intelligence among the administrators of the Iraqi Ministry of Interior? What is the nature of the relationship between cognitive intelligence and financial crisis management?

#### **Research importance**

The importance of the current research highlights the study of variables that are related

to relative modernity, and the scarcity of them addressed by researchers at the level of Iraq in general and the University of Karbala in particular, as the researcher found only one study at the university level, so according to the researcher's knowledge, his current research is an extension of the research series on the topics of his research, as well as This research also acquires great importance as it is applied in a security institution that is one of the most important institutions in Iraq, namely the Iraqi Ministry of Interior. Which may be afflicted by the fact that Iraq is always exposed to many terrorist attacks, and that addressing them requires strategic plans that cost the Ministry huge sums of money, so it may be exposed to many financial crises.

#### **Research aims:**

The current research aims to identify:

1. The level of cognitive intelligence among administrators working in the Iraqi Ministry of Interior.
2. The level of financial crisis management among administrators working in the Iraqi Ministry of Interior.
3. The nature of the relationship between cognitive intelligence and crisis management among administrators working in the Iraqi Ministry of Interior.

#### **Search limits:**

**The current search is determined by:**

1. **spatial boundaries:** A number of directorates of the Iraqi Ministry of Interior.
2. **time limits:** focused On Period that spent it researcher from Specify Address President Search and interpretation the frame theoretical for variables The research, as well as the period represented by the preparation and analysis of the questionnaire extending from (1/6/2021 – 1/7/2021).
3. **human limits:** The study targeted leaders in a number of directorates of the Iraqi Ministry of Interior, which numbered (150) individuals within (8) directorates.

#### **Theoretical framework:**

##### **First, cognitive intelligence**

Derive the term intelligence Linguistically, Intellegence comes from the Latin verb Intellegere, which means to understand or perceive, and intelligence, according to Webster's dictionary, means the ability to retain knowledge, use thinking to solve problems, or possess mental strength that is above average, while according to Webster's dictionary it means the ability to acquire and apply knowledge and skills, meaning that it refers to the ability to think, reason, acquire and apply knowledge (Srivastava, 2019: 56).

AndCognitive intelligence means obtaining knowledge through thought, experience and senses, and in that the word Consider of the Latin origin Deep thinking through knowledge or perception that involves understanding something (Bayne et al, 2019: 8). Here, Cognition is a set of mental processes that include attention, memory, language speaking and understanding, learning, thinking, problem solving and decision making. (Hayatbini et al, 2021: 3) AndThe biology of cognitive intelligence has been highlighted as the most complex characteristic of the human mind, which enables the individual to look at himself, and here intelligence depends on material tools and experience gained from life experiences. (2015: 4), and cognitive intelligence harnesses human mental induction experiences to model thinking through an intelligent system, that is, it uses system models to highlight intelligent brain

functions, and accordingly cognitive intelligence can be seen as the product of human self-awareness through active mental processes (Gadomski, 2007: 1).

Cognitive intelligence did not arise out of the blue, and it did not happen suddenly, but rather the result of passing through several stages that started with the stage of raw data and became information through linking and organizing with other data, and then the information turns into knowledge when it is analyzed and linked to other information and compared with what is already known and then graded until It has reached the stage of innovative knowledge through a long history of human societies as a result of human attempts to solve problems or improve the conditions that he faces in his daily life, and these stages are also characterized as a collective work that selects from reality some of its parts, organizes them and expresses them in his own way (Al-Dahan, 2015).

Many researchers and writers have dealt with the concept of cognitive intelligence, each according to what it deems appropriate, so there were many definitions and no comprehensive definition was reached, and in order to limit the clarification of this, the researcher made the table (1)Which includes some of the definitions of cognitive intelligence according to their historical sequence, and this can be clarified as follows:

Table (1) Definitions of Cognitive Intelligence

NS	The researcher, the year, and the page	concept
1	(Kaplan & Sadock, 1991: 175)	The ability to learn new things, to recall and retrieve information when needed, to think rationally, and to apply knowledge to the formation and solution of problems.
2	(Sparrowe et al, 2001: 20)	Intellectual abilities such as writing, reading, reasoning, analysis, reasoning, and setting priorities.” As for the tests conducted to measure cognitive ability, which are used in performance analysis.
3	(Akgun et al. 2007: 273)	A concept that involves the interaction between the cognitive, behavioral and emotional capacities of organizations to shape, change and adapt to the environment.

According to the table (1)The researcher believes that the definitions of cognitive intelligence varied according to the researchers' views and the perspective from which they look at cognitive intelligence, as he sees (Kaplan & Sadock) as the individual's ability to learn new things, while (Sparrowe) describes it as the intellectual abilities of individuals such as writing and reading, and (Akgun) sees it as a concept that involves the interaction between cognitive and behavioral abilities, either (Madhi) describes it as the ability to devise practical methods Effective, and both (Lamber) and

(Kartika et al) describe a mental process that is accomplished through the mind or through the mental processes and images that wander in it, and the researcher believes that cognitive intelligence is the process of acquiring and developing skills through thinking resulting from an interaction process between The individual's behavior and level of mental awareness of things, as well as the ability to retrieve those acquired skills when needed.

Cognitive intelligence and its relationship to other types of intelligence

argue Cote & Miners notes that Cognitive Intelligence and Emotional Intelligence are often approached as separate broad sets of abilities classified under general intelligence in the hierarchical model, where cognitive intelligence represents the specialization of general intelligence in the field of cognition in ways that reflect experience and learning about cognitive processes such as memory (Schaie, 2001; Brody, 2004). Whereas emotional intelligence represents the specialization of general intelligence in the realm of emotions in ways that reflect experience and learning about emotions. Here, this conception is consistent with what (Carroll, 1993) found, for example, that general intelligence includes a psychological capacity that is defined as “the ability to judge correctly the feelings, moods, and motives of individuals” (Wedek, 1947: 133). Here emotional intelligence and cognitive intelligence should be positively related because they fall under general intelligence. The research reviewed above also reveals that people with high cognitive intelligence tend to have high emotional intelligence and people with low cognitive intelligence tend to have low emotional intelligence. However, emotional intelligence and cognitive intelligence are separate constructs (Cote & Miners, 2006: 5).

also eat Boyatzis relationship cognitive intelligence in terms of abilities when linked with emotional intelligence and social intelligence based on the work of (Spencer and Spencer, 1993; Goleman, 1998; Goleman, Boyatzis, and McKee, 2002; Boyatzis, 2008; Hopkins and Bilimoria, 2008; Koman and Wolff , 2008; Dreyfus, 2008; Williams, 2008) which (Boyatzis, 2011: 93):

1. Cognitive competencies, such as systems thinking and pattern recognition;
2. Emotional intelligence competencies, including self-awareness and self-management competencies, such as emotional self-awareness and emotional self-control.
3. Social intelligence competencies, including social awareness and relationship management competencies such as empathy and teamwork.

Types of cognitive intelligence

Differentiation of the book from researchers and specialists between them In showing the types of cognitive intelligence and cognitive abilities very different, for example did Bufordrated Cognitive intelligence is divided into three types: : (Buford,2014:1-2)

1. general intelligence Represents a person's ability to learn information, make decisions, and these abilities are used to improve an individual's ability to perform any task when other factors remain constant.
2. broad intelligence Represents the knowledge that an individual acquires through education and culture.
3. specific intelligence Which is the ability to memorize, pay attention, and respond patterns to face change. It is used to measure broad abilities and forms the basis for intelligence testing.

Cognitive intelligence characteristics

Cognitive intelligence has a number of characteristics or features that are unique to it,

the most important of which are the following: (Strauss & Ziv, 2012: 187), (Brody, 2011: 1), (Lepine et al, 2000:567)

1. It is a well-established latent trait that is evaluated through a number of psychometric tests, and there is a wide range of research that provides a basis for studying the characteristics of the latent trait in cognitive ability and that allows to ascertain the empirical relationships between the latent trait and psychological tests.
2. That cognitive intelligence is a type of thinking that consists of the cognitive unit that develops in the individual as a result of his contact and interaction with the environment, or the social conditions that result from it.
3. It is specific mental processes that we intentionally practice and use in processing information and data; To achieve various educational goals.
4. Cognitive ability refers to individual differences in information, processing ability, and learning ability. Individuals with high levels of cognitive abilities are able to represent more information in the cognitive space, process data that guides behavior (working memory), and learn from their past experiences. and develop their efficiency more quickly.
5. It is related to some standard preferences (behavioral outcomes), as well as its close association with cognitive science. In many cases, individuals with great cognitive skills are more efficient in judgment, decision-making, cost reduction and loss framing.

### **Second, crisis management**

The concept and definition of the crisis

The linguistic origin of the term “crisis” in the Arabic language goes back to hardship and hardship, and in it it is mentioned that I insist on something, meaning to hold back and refrain from it. As for the crisis, it is hardship, hardship and distress (Al-Razi, 1979: 15). and in the Islamic heritage tells that age Ibn Al-Khattab May God be pleased with him, Al-Harith bin Kalada asked the medicine, Answer "crisis" And means fever Yeh And the crisis is the strait and every narrow path between two mountains It is said to him predicament, as he claims Also the site of the war Palcrisis, And from it, the place between the Mash’ar and Beit Arf was named in Makkah Al Mukarramah crises (Skarna, 2009: 6) The linguistic origin of the term crisis Crisis In the English language, it means change and sudden transformation for the worse or for the better (Baalbaki, 1980: 105). The crisis was defined as:

Table (2) Definitions of the crisis

NS	researcher and year	concept
1	(Schumann, 2003: 117)	landstand with memay be Andsimilarlark containsn turnjih high In NSto drinkandn Andget togetherLord inclusionn hthisNS NSwhy?andstop totalandgroup In NSfor elementsr NSto treatNSsting wato contract lookandsee high, AndTzdad turnjih NSto sterilized wato reuniteLord with my voiceCounting NSforgmatter , Andinteraction sonnyp NSfindrar with her Andwith their interactions Andwith NSits repercussions NSfor the future.
2	(Millar & Heath, 2004 : 3)	A sudden incident that requires a quick response, brings risk and stress, can undermine the reputation of the organization and can fundamentally change its condition.
3	(Coombs, 2007: 163)	A sudden and unexpected event that threatens to disrupt the operations of the organization and constitutes a financial threat and a threat for reputation.
4	(Al-Hedmi and Muhammad, 2013: 18)	A reflection of a situation, situation, process and issue faced by the decision-maker in one of the administrative entities, where events follow, overlap and intertwine causes and results, and things get mixed up and complicated..
5	(Bahloul, 2014: 17)	A sudden event that threatens a national interest and is confronted in a circumstance of limited time and lack of capabilities, and its exacerbation has serious consequences.

### Managing the financial crisis in the organization

(Makid and Khalifa) consider that crisis management in the organization is an absolute necessity that aims to address the effects or imbalances that occur, each of which affects the main components of the organization and the threat it entails, in order to ensure the organization's survival in the sector in which it operates and competes, knowing that successive crises if it is left without management, it will likely lead to a mixture of causes and results, which causes the decision makers and decision makers in the organization to lose their ability to control matters (Makid and Khalifa, 2016: 11).

Hariz referred to the management of the crisis in the organization as the art of control and control by raising the efficiency and capacity of the system of industry and decision-making at the organizational level and overcoming the elements of the bureaucratic mechanism that may be unable to face the successive events and sudden changes (Hariz, 2007: 16).

It is also seen as a package of means, procedures and activities implemented by the organization at a continuous pace in the pre-crisis stages, during and after its occurrence with the aim of absorbing and neutralizing its negative effects efficiently and effectively (Salem, 2005: 11).

AndHere (Al-Hafni) argued that the term crisis management Crisis Management It is closely associated with the public administration Public Administration, that is Purposeful activity based on find out and get information and data necessary that Allows to manage the organization prediction places the trends of the expected crisis, and creating the appropriate climate to deal with it by taking the necessary measures to control and eliminate the expected crisis or change its course for the benefit of the organization There is no doubt that crisis management is a science and an art, but in practice it is more of an art than a science because it is related to the leadership talent that cannot be acquired with knowledge, and the purpose of crisis management is to change the status quo while avoiding fighting. If the crisis develops into a fight, the management is considered a failure. (Al-Hafni, 2017: 5) On the same level, Crisis management is the process by which an organization deals with any major and unpredictable event that threatens to harm the organization, its stakeholders or the general public. or she The process that companies or organizations use to respond to short-term and immediate shocks For example, the financial crises and Its process includes defining crisis planning as a response to the crisis, and responding to and resolving the crisis by selecting Priorities, And actions that jwe want Taken first, how to return to normal processes (Oparanma, 2014: ).

AndOn the other hand, it has Several studies have presented argumentsNS Strong trying to determine the ideal approach NSManagement unlesszamat, Lost claimKauffman that organizations facing a crisis should at least do the following (Kauffman, 1999: 422):

1. response quick.
  2. Publication of relevant facts.
  3. Provide a continuous flow of information, especially for relevant stakeholders.
- as Added his research Fine Advanced Planning and Training Component (Fines, 1985: 53), when he made it clear that the organization, which is in the midst of the financial crisis, should take the following measures: :
1. strategizing Comprehensive and proactive.
  2. response to the financial crisis quickly.
  3. Training of spokespersons provided To ensure that they are able to maintain as much of the organization's reputation as possible.
  4. Seek third party support or third parties.
  5. Forge spokesperson job On behalf of the organisation.

also lost did Coombs NSuncles Effective crisis response strategy Finance in two main components (Coombs, 1999: 126-127) They:

1. sympathy.
2. the information.

He also indicated Svoboda until it The procedure that makes it possible to predict and treat a crisis can be divided into three phases she (Svoboda, 2013: 2823- 2824):

1. Hazard Analysis.
2. Formulating a crisis strategy that determines the degree of risk or the possibility of eliminating it.
3. Implementation of the crisis strategy AndNSdisassembled Causes of the crisis or

their removal

Taking into consideration that degree analysis The danger of the crisis stems of the strategic decision-making process, ie from Environmental Analysis Methods organization on the basis of which. has been formulated crisis factors, Including the possibility of their occurrence in the environment oforganisation Interior and exterior. AndBy arranging the above factors according to their probability of occurrence from highest to lowest and at the same time expressing the effects of the crisis, it The so-called crisis matrix can be compiled. And here is going Designing a crisis strategy by analyzing the crisis matrix, that is, it is necessary to identify measures and actions that reduce or end the crisis. He also indicatedSkipper Until the financial crisis management bratio fororganizations require thinkingNS strategicNS, And it In fact, exercises in risk management, noting that success organization is associated EngagementNS closeNS The role risk plays in its culture and the importance it occupies in the priorities of this culture (Skipper, 2009: 62).

**Research Methodology and Practical Procedures**

**Research Methodology**

The approach followed is a reflection of the researcher's ideas as a result of his awareness of the problem and his attempt to find solutions to it, It is a design through which plans can be made to collect information that makes the research appear in a simplified and coherent manner, In order to meet the requirements of the current research and achieve the desired goals, the descriptive method was adoptedassociative To identify the problem and frame its dimensions through a questionnaire that included the research variables.

**Research community and sample:**

The total number of community members reached (580) individuals, and the sample amounted to (150) individuals, an intentional sample of those with high and middle positions in the directorates of the research community. Table (3) shows the characteristics of the research sample as follows:

**search tools :**

Prepare the resolution It is one of the most important tools used in the process of data collection, as it represents the main tool that the researcher used to measure the research variables.NS Some important and necessary modifications from before The arbitrators were presented to them in order to suit the reality of the research environment. Questionnaires were distributed (150) resolution Valid for statistical analysis a random sample According to the five-point Likert scale (Likert), The response level will be confined to (1-5), And on five levels according to the categories to measure the degree of response, as shown in Table (1), while Table (3) shows the approved search criteria and the paragraphs of the questionnaire, as follows:

Table (1) Likert pentatonic scale

<b>Totally agree</b>	<b>Agreed</b>	<b>Not sure</b>	<b>I do not agree</b>	<b>I don't totally agree</b>
5	4	3	2	1

**Table (3) The composition of the questionnaire according to the main and sub-variables of the research and the number of its paragraphs**

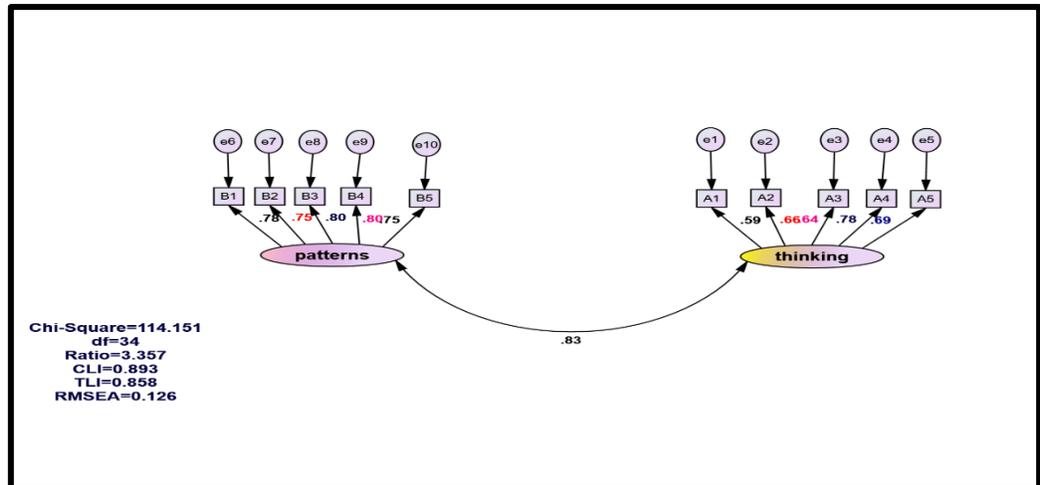
NS	Variables	Dimensions	number of paragraphs	Paragraph Sources	Dimension Scale
1	Cognitive intelligence	systems thinking	5	(Ali, 2012)	(Boyatzis & Cavanagh, 2018)
		Pattern recognition	5	building paragraphs	
2	financial crisis management	Communication and information flow	5	(Muzaffar, 2016)	(Fides & Rose, 2004)
		Make a response decision	5	(Muzaffar, 2016)	
		Mobilizing and mobilizing resources	5	(Muzaffar, 2016)	

**First: the authenticity of the tools****1. Apparent validity of the tool:**

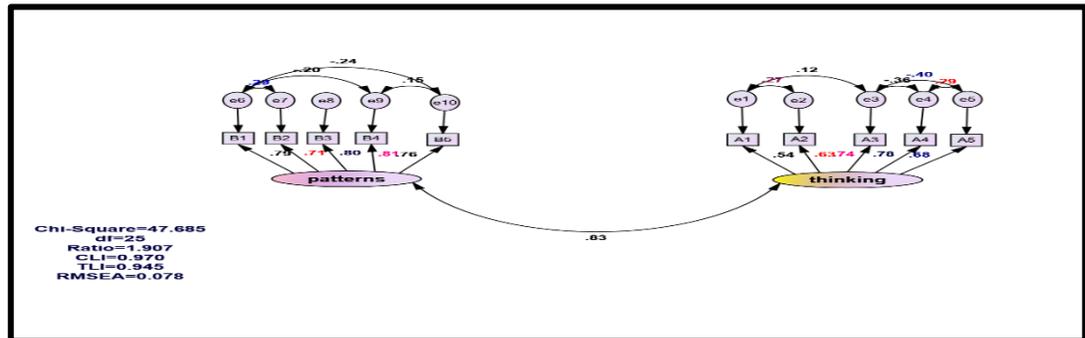
The researcher presented the search tool in its initial form to a number of arbitrators specialized in the field of management and psychology their number (15th) tightAs in Appendix (1),In order to ensure the apparent honesty of the measurement tool, which builds the ability of the paragraphs to cover the field to which it belongs, the researcher has prepared a special form to survey the opinions of the arbitrators about the extent of clarity of each statement in terms of intellectual content and wording and to correct what should be corrected from the statements with the addition or deletion of what the arbitrator sees from Phrases in any of the axes. In light of the opinions expressed by the arbitrators, the researcher made the amendments that were agreed upon by the arbitrators, and amended and formulated some of the phrases with a percentage of (80%) that sawy Arbitrators need to reformulate it to be more clear..

**2. The instrument's factorial validity**

Figure shows (2The confirmatory factor analysis of the cognitive intelligence model, which consists of after basic, consisting of10Povertyat As shown in the figure (2) and by noting the quality of conformity indicators extracted for model It is shown in Fig.2It turns out that most of these indicators do not match, and to improve these indicators, we will amend them according to indicators recommendations (Modification Indices), so yPut the researcher as a model based on the literature or research theory yTry to test the match TheA model for experimental data. If the matching is not sufficient, the common procedure is to modify the model by deleting the non-functional paragraphs or paths and adding the paragraphs that improve the matching.Te And that this procedure includes either deleting the paragraphs with the highest common variance AndThe superscript within the form or modified By making the correlation between errors with high covariance After this procedure, the final model will be after modification as shown in the figure (3).



The shape (2) The confirmatory construct validity of the cognitive intelligence variable



the shape (3) The confirmatory construct validity of the cognitive intelligence variable After modification

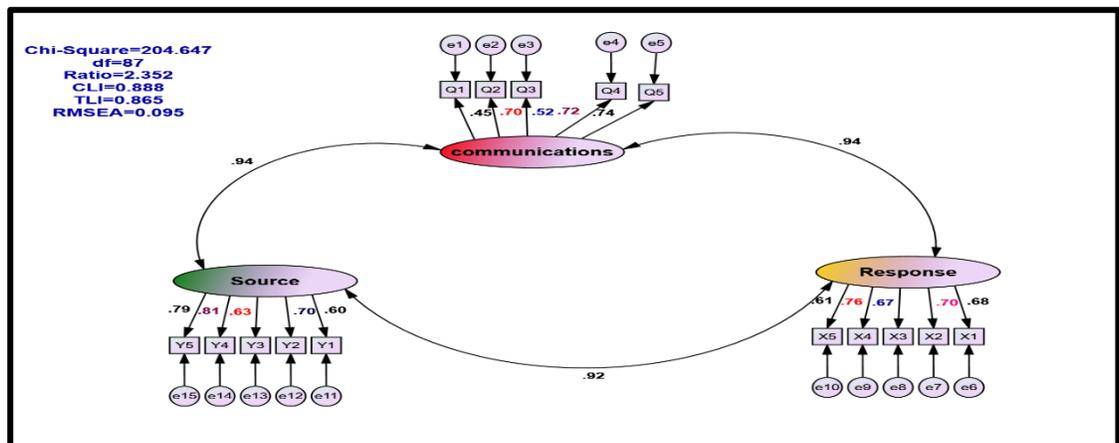
schedule (10), that all vertebrae she Larger from the value normative critical (CR) adult (1.96) so Indicates that to me morale paragraphs, and this is signify On sincerity ferries and surely Indications Quality matching extracted she Matching for indicators Quality matching normative (Goodness Of Fit), so It is worth Signal Here to me that it It was completed Modification of the model by making a correlation between the random errors with high covariance.

**Table (4): Regression weights, standard error, critical ratio, and level of significance for the dimensions of a variable Cognitive intelligence**

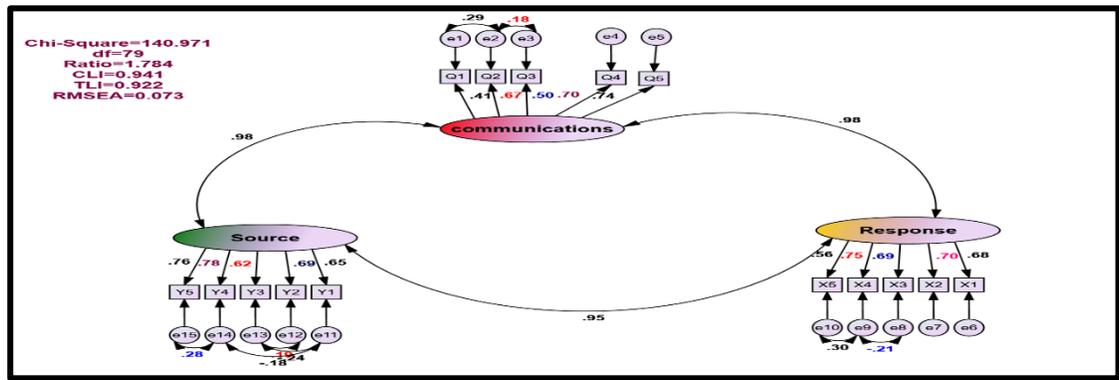
indication	P	critical ratio CR	standard error SE	Downhill weights	Standard gliding weights	Dimensions	path	vertebrae
morale				1.000	.536	systems thinking	<---	A1
morale	***	6.299	.180	1.137	.631		<---	A2
morale	***	5.955	.219	1.303	.745		<---	A3
morale	***	5.683	.267	1.516	.777		<---	A4
morale	***	5.273	.276	1.454	.677		<---	A5
morale				1.000	.793	Pattern recognition	<---	B1
morale	***	10,328	.098	1.016	.713		<---	B2
morale	***	9.562	.111	1.063	.798		<---	B3
morale	***	9.267	.115	1.066	.811		<---	B4
morale	***	8.403	.110	.923	.760		<---	B5

**2. Affirmative factor analysis of the financial crisis management variable**

Figure shows (4A confirmatory factor analysis of the financial crisis management variable, which consists of: three dimensions Secondary composed of (15th Paragraph, as is clear from the shape (4 To improve these indicators, we will modify them According NS indicators recommendations modification (Modification Indices After doing this procedure, the final model will be after modification as shown in Figure (5).



**Shape (4) The confirmatory construct validity of a variable financial crisis management**



Shape (5) The assertive structural validity of the financial crisis management variable After modification

It turns out From Table (11) after making the adjustments and making the correlation between the errors with the greatest common discrepancy We note that all vertebrae she Larger from the value normative critical adult (1.96) so Indicates that to me morale paragraphs, and this is signifying on sincerity ferries in addition to Indications Quality matching extracted she Matching for indicators Quality matching normative (Modification Indices).

Table (5) Regression weights, standard error, critical ratio, and level of significance for the dimensions of the financial crisis management variable

indication	P	critical ratio CR	standard error SE	Downhill weights	Standard gliding weights	Dimensions	path	vertebrae
morale				1.000	.406	Communication and information flow	<---	Q1
morale	***	5.306	.401	2.127	.669		<---	Q2
morale	***	4.117	.380	1.565	.501		<---	Q3
morale	***	4.734	.534	2.530	.703		<---	Q4
morale	***	4.814	.600	2.887	.742		<---	Q5
morale				1.000	.676	Make a response decision	<---	X1
morale	***	7.716	.144	1.112	.702		<---	X2
morale	***	7.560	.147	1.112	.693		<---	X3
morale	***	8.134	.136	1.107	.753		<---	X4
morale	***	6.280	.102	.639	.565		<---	X5
morale				1.000	.654	Mobilizing and mobilizing resources	<---	Y1
morale	***	7.260	.115	.836	.687		<---	Y2
morale	***	5.987	.108	.644	.620		<---	Y3
morale	***	7.505	.147	1.101	.783		<---	Y4
morale	***	7.875	.153	1.207	.761		<---	Y5

**Stability of tools with the alpha-Cronbach equation**

The consistency between the components of the scale at the dimensional level and all the variables with it was confirmed, as the values of the correlation coefficients were confirmed (Cronbach Alpha) Exceeding the minimum acceptable (0.70), which confirms consistency between the components of the scale and then the stability required if the test is repeated.

**schedule (6) consequences consistency between Ingredients the scale**

the scale	Cronbach's alpha dimensional coefficient	the scale	Cronbach's alpha dimensional coefficient
systems thinking	0.804	Communication and information flow	0.771
Pattern recognition	0.882	Make a response decision	0.812
Cognitive intelligence	0.900	Mobilizing and mobilizing resources	0.820

**research results :****The first goal: to identify the level of cognitive intelligence among administrators working in the Iraqi Ministry of Interior:**

In order to achieve the first objective of the current research The researcher used the t-test for one sample by comparing the arithmetic mean of the sample (38.47) with a standard deviation (9.83) with the hypothetical average of the natural community in the level of cognitive intelligence of (30), and the arithmetic mean of the systemic thinking dimension reached (22.19) and the dimension of distinguishing patterns (16.28). With the hypothetical average of the community for each dimension of (15), and the test results showed the existence of a real significant difference between the arithmetic averages and the hypothetical averages, as the calculated T-value for the dimensions and the total degree reached (13.202, 3.468, 10.55), which is greater than the tabular T-value of (1.96) at the level of significance ( 0.05) and a degree of freedom (149), which means that the administrators of the Ministry of Interior enjoy cognitive intelligence and its rate is (77%), which is an almost high level, and as shown in Table (7):

Table (7) The results of the T-test for one sample to identify the level of cognitive intelligence

Dimensions	the sample	SMA	standard deviation	hypothetical mean	Values t calculated	Significance level (0.05)
systems thinking	150	22.19	6.67	15th	13.202	function
Pattern recognition		16.28	4.52	15th	3.468	function
Total marks		38.47	9.83	30	10.553	function

**The second objective: to identify the level of financial crisis management of the administrators of the Iraqi Ministry of Interior**

In order to achieve the second objective of the current research, the researcher used the t-test for one sample by comparing the arithmetic mean of the sample which is (64.94) with a standard deviation of (11.58) with the hypothetical average of the natural community at the level of financial crises management of (45), and the arithmetic averages of the dimensions of crisis management reached (21.73, 19.81, 23.40), respectively, and the hypothetical mean of the average dimensions was (15), and the test results showed a difference Real between the arithmetic averages of the sample and the hypothetical average of the community for the dimensions and the total score, as the calculated T-values for the dimensions and the total score were (8.368, 10.408, 10.340), respectively, which is greater than the tabular t-value of (1.96) at the

level of significance (0.05) and the degree of freedom (149) This means that the administrators of the Ministry of Interior enjoy a high level of financial crisis management, at a level of approximately 86%, and as shown in Table (8):

Table (8) results of the T-test for one sample to identify the level of crisis management

Dimensions	the sample	SMA	standard deviation	hypothetical mean	Values t calculated	Significance level (0.05)
Communication and information checking	150	21.73	9.85	15th	8.368	function
Deciding to answer		19.81	5.66	15th	10.408	function
Mobilizing and mobilizing resources		23.40	9.95	15th	10.340	function
Total marks		64.94	11.58	45	21,089	function

**The third objective: To know the relationship between cognitive intelligence and financial crisis management among administrators working in the Iraqi Ministry of Interior:**

Testing the correlation between the independent variable of cognitive intelligence by removing it (systems thinking, distinguish patterns) and the dependent variable represented by **financial crisis management**, so use Labs link (Pearson (*Pearson* to discover The strength and direction of the relationship between the variables, AndThe value of the correlation coefficient betweenCognitive intelligence and financial crisis management (0.813) at the significance level (000.), which is less than the significance level (0.05), which indicates the existence of a significant correlation relationship for cognitive intelligence. With financial crisis management According to the foregoing, the first main hypothesis is accepted which states Presence A significant correlation between cognitive intelligence and financial crisis management In terms of dimensions in the ministry investigated.

As for the relationship between cognitive intelligence and the dimensions of financial crisis management, we note from the table below that there is a significant correlation between the independent variable cognitive intelligence and the dimensions of the dependent variable combined (Communication and information flow, Make a response decision, Mobilizing and mobilizing resourcesThe value of the correlation coefficient was (0.778, 0.727, 0.732), respectively, which indicates the acceptance of the hypothesis that states "there is a significant correlation between cognitive intelligence and the dimensions of financial crisis management"

**schedule (9) The results of the correlation between cognitive intelligence and financial crisis management**

independent variable dependent variable	Communication and information flow	Make a response decision	Mobilizing and mobilizing resources	financial crisis management
NSNSCognitive intelligence	0.778	0.727	0.732	0.813
systems thinking	0.696	0.640	0.626	0.713
Pattern recognition	0.735	0.695	0.716	0.780

As for the results of the correlation relations pNSat the micro level (dimensions) with men The variables of the study have indicated the following:

**1. The relationship between systemic thinking and the dimensions of financial crisis management**

achieved the relationship between systems thinking And Communication and information flow higher Labs Engagement reached (0.696), which is statistically significant at the level of significance (0.05), while the relationship between systemic thinking and response decision-making achieved a coefficient Engagement which is (0.640), which is significant at the level of significance (0.05), the coefficient reached link Between systems thinking and resource mobilization (0.626), which is significant at the level of significance (0.05), and in general, the relationship between systemic thinking and the dimensions of crisis management achieved a coefficient Engagement reached (0.713), which is significant at the level of significance (0.05) Thus, relationships appeared Engagement Significant directness at the level (0.05) between systemic thinking and the dimensions of financial crisis management. As for the type of relationship, it is a positive direct relationship, and this indicates a strong justification for accepting the second sub-hypothesis within the main hypothesis. first. With this result, all the emerging sub-hypotheses have been proven, as the acceptance of the sub-hypotheses leads us to accept the main hypothesis.first This result reflects the importance of systems thinking In explaining crisis management, which indicates a relationship systems thinking in a financial crisis management Thus, the research ministry adopted this dimension, which indicates the acceptance of the first sub-hypothesis.

**2. The relationship between pattern recognition and financial crisis management**

The relationship between pattern discrimination, communication and information flow achieved the highest coefficient Engagement which is (0.735), which is statistically significant at the level of significance (0.05), This means that Interest Ministry in distinguishing patterns It will contribute to improving the capabilities of dealing with crises, especially in the field of communications and information flow, while achieving the relationship between distinguishing patterns AndMake a decision response coefficient Engagement reached (0.695), which is significant at the level of significance (0.05), while the relationship between pattern recognition and resource mobilization and mobilization coefficient Engagement reached (0.716), which is significant at the level of significance (0.05), In general, the relationship between distinguishing patterns and dimensions of crisis management has achieved a coefficient Engagement reached (0.780), which is significant at the level of significance (0.05), Thus, relationships appeared Engagement It is positively

significant at the level (0.05) between distinguishing patterns and each of take resolution response and communication The flow of information and the mobilization and mobilization of resources, which is a positive, positive, significant relationship. Than explainn Pattern recognition leadershipMKn Ministry NSCreativity and innovation in leadership work, and this result confirms the need for the researched ministry to adopt this dimension as a tool for distinguishing the ministry's outputs and thus There is a strong justification for accepting the second sub-hypothesis within the first main hypothesis.

### **Conclusions:**

1. It became clear to the researcher through the results that were reached on the practical side The sample answers were oriented towards agreement and complete agreement Any availability of the Ministry's personnel with cognitive intelligence According to the sample answers.
2. The results of the research and the researcher's findings indicate that a systemic thinking dimension is available in the Iraqi Ministry of Interior, the research community.
3. Based on the results of the practical side, it becomes clear to the researcher that there is a discrepancy between the dimensions of cognitive intelligence, as systemic thinking came in the first place and the pattern discrimination came in the second place.
4. It became clear through the results reached by the researcher, and based on the analysis of the answers of the research sample, that the ministry has a good management of financial crises.
5. There is a direct relationship between cognitive intelligence and crisis management by removing them.

### **Recommendations:**

1. The necessity of the ministry's attention to transparency and disclosure of information when needed, as the lack of necessary information when crises occur may increase the burdens of managers and increase the risks of failure to take the right decisions
2. The Ministry must increase the effectiveness of its preparedness by transferring resources with high flexibility, This is because the resources enhance the ministry's resilience to face challenges in the future
3. The researcher recommends that the Ministry The leader should be autocratic to ensure streamline Work proceeds quietly, and in other situations.
4. The researcher considers it necessary to The leader shall be democratic to prevent corruption and achieve flexibility in workIn addition to the need for leaders to be closer to subordinates, and they are Interact with employees and auditors in the Ministry, It should Giving their opinion to get to agreements Unified in terms of technical, administrative and financial opinion to implement it correctly.
5. The necessity for the ministry to make an electronic archive of the decisions that were previously taken to confront the past financial crises to ensure that they are easily referenced and benefited from as it is a previous experience.
6. The researcher recommends the need for the ministry to mobilize more resources, whether financial or human, in order to avoid crises that may afflict the ministry in the future, by owning staffHe has previous experience in dealing with financial crises.

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