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BUILDING AN ORGANIZATIONAL IMMUNE SYSTEM SCALE SYSTEM COMPONENTS AND FUNCTIONS

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ABSTRACT:

The current paper aims to establish a preliminary intellectual vision of the organizational immune system in preparation for devising a scale for measuring the organizational immune system that is supposed to enable the immune forms and immune function to detect organizational immune functions, which include five repetitive behaviors (immune perception, immune defense, immune memory, immune balance and immune control). Building the scale aims to detect the components, functions and characteristics of the system in order to derive the main and sub dimensions on which the building of the scale is based. The significance of the work lies in enabling organizations to overcome randomness in building, directing its organizational efforts taken against the behaviors of external and internal intruders that undermine the balance of the organization's systems, as well as directing the efforts of departments to recognize the importance of the existence of the organizational immune system in maintaining the balance of the organization through resisting abnormal operational and performing behaviors. Also, avoiding the ingestion of such abnormalities in the system and their effects as well as equipping the organization with the ability to act adaptively to face the internal or external dangers. The study has found that the intellectual contributions of the philosophy of the system have been built on a corrupt editing scale of (64) Phrases covered all its main and subsidiary dimensions.

INTRODUCTION:

The company's immune system is similar to that of the human body, in showing the efficiency of the body's physical ability in maintaining it. This is a vital topic in today's business environment and it is rarely tackled on a theoretical level, although its beginnings and early literature began in the mid-1990s of the 20th century.

First of all, it is necessary to distinguish between the immunity of the organization and its immune system. The immunity of the organization exists all the time and may be represented in the organization by its individuals,

systems, culture, procedures, policies and programs spontaneously showing its effect in emergency incidents in a reaction form, and the immunity of the organization may be present there, this happens a lot in developing countries, which do not consider management as a field of study with a due importance, and vice versa when the administrations recognize the importance of the immune system and seek to build it according to scientific rather than random contexts.

The random action of the presence of the immune system makes the functioning of its immune system the system of action and reaction, which is the worst logic in administrative science today, so it is necessary to distinguish between the characteristics of the immune system and then the hollowness in the characteristics of the immune system organizational in order to integrate the image to come up with a measure that is concerned with measuring the availability of components the system on the one hand and the nature of the functioning of the system on the other.

FIRST: THE INTELLECTUAL AND PHILOSOPHICAL FRAMEWORK FOR ORGANIZATIONAL IMMUNITY

1. Components of the organizational immune system

The organization's organizational immune system is a synthetic scheme of the organizational immune system and may sometimes be called (layers of the structure of the company's immune system) which is complex and capable of self-development. It consists of a number of circles, sites, systems, culture, techniques and human resources ... Etc. Three secondary systems of the organizational immune system arise from the process of division and cooperation, one of which promotes the other in the process of mutual cooperation. (Wang, Cao, Wu, Guo & Lv, 2010); (Xu bo, 2005).

A: Central immune system: This is sometimes called (the board of directors of oversight) or (the board of directors) which consists of the leaders of the immune system (e.g. board members, senior managers, etc.). The central immune system affects the design, investment and direction of the immune system. It also determines the state and legitimacy of the immune system. This task is always handled by the Risk Management Committee, the Supervisory Committee of the Board of Directors or senior officials of the company. For most small businesses, this task is focused on senior officials, because they are the brain and heart of the company.

Accordingly, most public companies have at least three committees: the Audit Committee, the Rewards and Compensation Committee, and the Governing Committee, which are made up of independent directors. However, the mere existence of these structural features alone does not reflect an adequate response to corporate governance issues that influence complex contemporary companies. (Omari, 2009: 316).

B: The specialized full immune system: It is called "Commitment and Risk Management Systems", a secondary system of immune system that comprises of the Board of Supervisors, Financial Audit Department, Quality Control Department, Strategic Warning Department, Technical Information

Department, Market Research Department, the Public Relations Department, the Performance Assessment Department and Unions Department. Commercial,... etc. The extent of its distribution and the effects of its driving power enables it to channel its influence on the organization's immunity, so this specialized immune system seeks to establish the elements that specialize in immune function as embodied in its responsibility and rights in distinguishing Western elements abroad and at home and in strengthening the company's ability to prevent risks, adaptation of the external environment and treatment of crisis and error. It should be noted that these organizational structures include the accounting department, the quality management department, the communications department, the company's control department, etc. (Xu bo,2005) includes the following:

(First): Commitment: The Company's legal obligation is an integral part of the day-to-day operations of large companies (Simmons& Dinnage, 2008:118). It often involves thousands of decisions made by different employees of the company who come from different parts of the world during the fiscal year. The compliance systems are intended to draw the attention of the department for important information (Donald, 2006:949-958).

(Second): Risk Management: The significant developments in corporate governance go with efforts to integrate the legal obligation under the broader strategy known as project risk management (Matteo et al., 2007). In general, risk management is an attempt to ensure that companies address risks at work (Del, 2009). They usually include risk identification and analysis, as well as management of these risks through internal control (Carolyn et al., 2006:10). However, legal risks are just a secondary set of risks that should be incorporated into business decisions (Carolyn et al., 2006:11). Other risks comprise financial risks, reputational risks, human resources risks, operational risks, and brand value risks.

(Third): Rewards (compensation): operational compensation and rewards through the organization are operational decisions aimed at stimulating and encouraging the conduct of managers, senior officials, middle management managers and low-level employees to be consistent and in a harmony with the company's objectives (Franklin et al., 2000:661-665). Most of the current legal studies focus on balancing the CEO's salary and the company's objectives in order to reduce the costs of the governing body (Michael et al., 1979: 305). The company's performance objectives can be divided into two main categories: financial and operational (Omari, 2009: 311). Financial objectives cover net income, earnings before interest, tax, depreciation and amortization, earnings (income) per share, and share price.

Operational performance standards include citizen service, product development, and good environmental management. As part of the internal rewards system, compensation can instill a company culture, and even if it fails to do so, it can balance and regulate its interests within the company, thereby reducing the costs of the governing body. However, CEO compensation is often viewed in two directions: Payingfor Performance, Stakeholder Wealth Maximization, and broader public accounting, which considers equity for non-contributory ingredients (Omari, 2009: 313).

The first point of view is the most appropriate for the corporate immune system, and the second is a political structure that largely addresses external interests (Omari, 2009: 314). Compensation (rewards) is a fundamental and profound issue that is related to the company's operations, customs and internal rules. It is better to leave decisions on executive rewards with boards of directors who theoretically hold a view is broader than that which is held by external stakeholders.

C: The immune system of the parties: sometimes called (strengthening the role of chief legal officer or the surrounding immune system) which consists of sectors such as production development and procurement, marketing services, information systems and human resources...Etc. It achieves self-control, mutual supervision and positive feedback. This surrounding immune system deals with the divisions and positions that are found in the different layers of the company that perform the immune function while they are tasked with performing its basic functions, and on the other hand this system plays the role of immunity at the same time, for example, the marketing department, the department of procurement and presentation and the department of human resource management and so on (Xu bo, 2005).

The advisory roles of these divisions within the organization play a vital role in the corporate immune system as they provide organizational and strategic guidance to the company's directors, enabling the company to reduce transaction costs and enhance its creation of value. Recent regulations and instructions have indicated that consultants within the company have prominent role in the company's governance. The most common criticism of consultants within the company is their lack of independence, which makes them less effective. This claim is exaggerated and inappropriately diminishes the usefulness and advantages of having a consultant within the company that outweighs the issue of independence in a range of circumstances. (Wang et al., 2010).

2: The Basic functions of the organizational immune system

If the company's immune system is similar to the immune system in the human body that indicates the efficiency of the body's physical ability to maintain it. The organizational immune system represents the ability of immune forms and the immune function of organizational immune function to be achieved by three repeated behaviors (Perception, defense, memory. (Wang et al., 2010) and (Song, 2006), but these functions are associated with three other functions from our point of view that cannot be ignored as there is a function (immunological analysis) that has been ignored in previous literature, which is inherent to the function of immunological perception. It is necessary to analyze the perceptions that you sense. The different sensors of any organization as the perception is pre-analytical and the immunological analysis is necessary to distinguish between events in terms of frequency or modernity or to indicate the possibility of confronting them and what stipulates the mobilization of efforts themselves in the organization, and the results of immunological analysis promote the role of the function (immune memory). This function comprises the stock of accidents, threats and means of

confronting them to the role of the function (immune defense) which in turn restores the system to its correct contexts to create balance and natural balance through the function (immune balance) and finally the function (immune control) on this basis covers the structural hierarchy. The functions of the organizational immune system are (immune perception, immunological analysis, immune memory, immune defense, immune balance, immune control), are to be clarified in detail below.

A: Organizational immune perception function

Organizational immune perception is the function of regular and dynamic identification of negative external factors, harmful internal factors and internal hierarchical factors. It is a process of (monitoring, finding and judging) the risks to the organizational entity with the most appropriate response of the immune system that must be detected the mechanisms prevalent in the organizational structure. In terms of time, immunological cognition focuses not only on current intruders but also on future intruders (Song, 2006). In nature, it focuses not only on known intruders (e.g. illegal acts motivated by greed) but also on outsiders (such as the lack of money spurred by the crisis of a second-class loan in the financial system (Matteo et al., 2007). "External" intruders per se, but also intruders in the immune system itself. Immune perception is also a repeat process of the cycle of monitoring of recurrent risks. (Wang et al., 2010).

B: Organizational Immune Analysis Function:

This function is concerned with viewing and assessing the data and information that is obtained through the sensors possessed by the organization to monitor environmental changes externally and internally, and then provide decision sources as useful information that determines the nature of the threat faced by the organization due to the attempts of external or internal actors. Thompson viewed the analysis process as a process by which the organization's understanding of its internal and external environment is intended to determine how best to respond to rapid variables and exploit them to achieve better performance (Thompson, 1994:30). Here comes the role of a function Analysis in matching the sources of threats and their severity, their frequency and scrutiny whether they are repeated permanently or periodically or perhaps the threat occurs for the first time then the data and information are retrieved from the immune memory to configure the nature of the treatments and the best ways used to counter such threats. As well as determining the type and nature of resources and any components of the immune system that will address such a threat.

C: Organizational Immune Protection Function

Organizational immunity Protection is the function of organizations to resist or eliminate harmful external factors, harmful internal factors or internal pyramid factors. It is a process of (reincarnation, change, selection, coordination, and removal) that is based on the awareness of organizational immunity....etc. associated with the organizational immune system.

Change refers to appropriate transformation and innovation (e.g. improved personal capacity, restructuring of human resources). (Song, 2006).

The so-called choice refers to the ability to quickly and accurately select the best component of organizational systems and response programs. (Omari, 2009: 314).

Coordination indicates the ability to coordinate action steps and the strength of behavior to avoid bottlenecks and imbalances. By the nature of immune defense, it targets not only known intruders but also unknown individuals, both inside and outside the immune system. If the immune system itself is compromised, the immune system will be seriously compromised. (Wang et al., 2010).

D: Organizational Immune Memory function

It is the function of recording, collecting, preserving and distributing, works and effects of organizational immune control and immune defense (Del, 2009). Generally, not only does it record the success of the experiment but also its failure the failure of the experiment. In terms of range and scope, it recalls actions and effects not only within the immune system but also outside the immune system. In terms of means, they are retrieved in public (e.g. modifying and improving the organizational structure, rules and regulations) and in secret (e.g. raising awareness of the risks to which people are exposed and improving Ways of thinking and emotions,... etc.). Organizational immune memory loss will affect future immune efficiency (Song, 2006). The organizational immune memory system works during the process of contrasting the factors of "others" at home and abroad to the immune system of the organization, as the contrast between the next threat and the natural state occupies the function of memory and gradually enhances the immune capacity of the organization. (Xu bo,2005).

The function of the memory of the immune system is based on the distinction between others and self, as it can be said that during the process of discrimination or knowledge of modern things or external matters by the organization, the memory of the organization has played a most positive role by distinguishing the self-reality of the organization by comparing the memory system immunity between oneself and other things is constantly stacked in the data bank to see what is coming from outside (Song, 2006). Thus, the study of the immune system comprises the immune system record, the function of self-recollection of the immune system makes the organization experience the same event and respond quickly where the treatment plan progresses quickly, The Song study, 2006, adds other functions of the immune system (balance and control) to the organization when operating normally.

E: Organizational immune balance function

In the immune system, a highly complex and effective control network achieves the relative balance of the institution. The function of self-balance can be stated as the organization immune system's ability to distinguish and eliminate backward, false and unaccountable factors within the organization in order to preserve activity, coordination and balance within the organization

(Omari, 2009: 314). In other words, the function of balance is about internally controlling the institution through coordinating internal contradictions on the one hand, and addressing the factors of incoherence within the organization on the other hand. For example, most employees work overtime at a much-established organization. There are those who try to get out of the tournament early, these two cases represent a lack of harmony, but the first can be coordinated and the second must be fought, (Song, 2006), that the occurrence of abnormal actions from the contexts and vision of the organization leads to in balance and inspection, which makes the work of the organization smooth. In another example within the organization, many departments have new ideas of improvement and modern inventions. Normally, the organization does not interfere directly with small improvement actions, so when these small repairs are piled up to be stacked in a way that changes the working pattern, workers are considered normal, but the immune system takes it as a threat to the profiling situation that the organization's systems are accustomed to. (Omari, 2009: 314).

F: Organizational immune control function

Due to the or rapid change in conditions inside and outside the organization, this change may usually have significant impacts on the organization and produces destructive and fruitful effects, so the organization needs to be monitored and this is the function of monitoring the immune system. The losses are very large and the organization needs to conduct close monitoring on these actions, so the immune system tries to protect the emergency before change, responds immediately, discourages the process of change, mitigates its harm and avoids loss (Matteo et al., 2007).

The immune system resembles the internal control section of the organization in terms of monitoring the organization's operation at all times. Although error can occur even if the work is carried out with high accuracy, there are contradictions between the immune system and changes in the sections, therefore early warning devices and sections must be linked to the organizational immune system to indicate the risk before it occurs (DeI, 2009). Hence, the organization should maintain the function of monitoring the immune system of the organization in normal operation However sometimes or someday organization faces malicious tumors that are difficult to get rid of. (Wang et al., 2010).

SECOND: THE DESIGN OF RESEARCH

The problem of research

Researchers or those who are interested in the organization's health systems may have difficulty settling on conceptual and intellectual points because this topic is still a moving subject within the framework of philosophy and has not resulted in theories or principles or laws that have the characteristics of balance and imbalance, for the scarcity of studies on the subject of the immune system. The organizational situation is called for to introduce its concepts, functions, components of the system and its working methods, if these were available, another obstacle is relevant scholars who intend to investigate it if

their trends comply with studying the subject of the organizational immune system along with various behavioral variables that need to be measured according to a survey, as the test list may not succeed in measuring the tangible variables. Knowing things through sensing them is not the same as observing them superficially is a finding that has been reached by the researcher through investigating the measurement methods adopted in two previous studies (Xu Bo, 2005); (Song, 2006) and (Wang, Cao, Wu, Guo & Lv, 2010) that carved quantitative grants, Parametric, using a test or study was an attempt to build a scale that identified five functions of the organizational immune system except for immunological analysis function, so the problem of research is the development of this five function scale into a more comprehensive scale that reflects the reality of the system's function by incorporating immune analysis function As the sixth function.

2: The Aims of the research

The research aims to tackle:

- a. the theoretical and intellectual coverage of the components and functions of the organizational immune system.
- b. Developing a five-function organizational immune system scale by incorporating immune analysis function.

3: Research methodology

The research has adopted a new methodological technique that has emerged in 2003 called "Curriculum- Based Research & Meta- Analysis", which is a modern technique that allows researchers to mix the results of research in which different branches and sciences are intertwined (here, for example, biological sciences and business management), as the pioneers of this technique (Bratton & Gold, 2003) It is a method or design through which plans can be developed to collect information that makes research reflect its purposes in a simplified, coherent and orderly manner, and it is a comprehensive approach that is at the same time based on many other approaches to access to the objectives (Al- Saidi et al., 2020).

For example, the exploratory approach (the opinions of the control sample to build the scale) are reflected in the fact that it achieves data and information about people's opinions and orientations, whether it is a written survey or ally based on the empirical method as it provides evidence that takes into account cause and effect. It also depends on covering the events and variables studied on the descriptive approach (Al-Saidi, 2006: 35).

4: Statistical analysis and processing tools

The controlled sample that has been designed to test the scale is drawn from a society that does not follow normal distribution as much as free distribution is since the data is non parametric, so the research needs to be a statistic for teachers, that is why statistics, are used such use does not comply with the conditions that the researcher adheres to when using the parameter statistics, especially with regard to the size of the sample and the form of the frequency distribution that is often used in small samples and in free distributions not restricted by natural distribution, and the non-teacher statistics assume that the observations of the sample are independent and Variables are continuing (Al-

Quraishi, 2007: 120) consequently, it is used along with several statistical tools, including:

- a. Median: One of the measures of centrality that is used in conducting studies. It is derived through ordering values upwarding or descending, where the values are divided into two equal groups of numbers, where the median occupies the middle position technically so that the number of answers is similar to above and below the average answer, but the average answer is within a large group and therefore the number of values smaller is equal to the number of values larger than it (Al-Saidi et al., 2020).
- b. Range: This means the difference between the largest value and the smallest value in the group (Al-Saidi & Saleh, 2020)
- c. Alpha-Cronbach coefficient: The Alpha-Cronbach equation is used to extract alpha-Cronbach coefficients to measure the consistency of the questionnaire of the study, when the Alpha-Cronbach coefficient is more than (60%); percent. This indicates acceptance and reflects an agreement and correlation between the phrases of the questionnaires based on (Sekaran) (Al-Saidi & Ala'a, 2020).

5: Variables of research

The research has a single variable (organizational immune system) represented by its main components (central immune system, specialized immune system (adherence and risk management systems), branch immune system or (comprehensive immune system) and subsidiary (company board of directors, compliance systems, risk management systems, rewards and compensation, enhanced role of senior consultants and jurists), and its functions (immune perception function, immune analysis function, immune defense function, organizational immune memory functionality, balance, and oversight function). Wang's identification has been based on previous studies of (Wang, Cao, Wu, Guo, Lv, 2010); (Xu Bo, 2005) and (Song, 2006), as well as updated by the researcher.

6: Limits of research

Studies and research must be characterized by a specific horizontal scope and vertical depth, and if the vertical depth is taken care of by the intellectual and philosophical aspect of the research, the horizontal scope remains the task of the limits of the research, as its orientations must be defined within clear and known limits that the effort is limited to the framework of a point itself and not in a number of points, no matter how strong its links to the basis point. The limits of the work:

- a. Spatial boundaries: The control sample has been tested in Iraqi Airways in Baghdad Province, Iraq.
- b. Time limits: Search has been edited from 4/2/2020 to 21/5/2020.
- c. Academic limits: The study is academically defined by its aims.

THIRD: THE STRUCTURAL ASPECT OF THE SCALE

In the context of the comprehensive vision of theoretical and field research contributions that have addressed the subject of the organizational immune system, the current research seeks to crystallize the logical relationships between the functions of the system and its model with a scale that links the

intellectual frameworks of the organizational immune system that supporting the authorization of the planned measure of the necessity of application that stems from the hierarchy of the functions of the structural system. Then, the intellectual aspect of the organizational immune system is presented in terms of its components and functions, it is necessary to rely on the ideas which actualize the academic assumptions as real assumptions to build the scale of the organizational immune system, and here It should be stressed that the measure will focuses on:

First: Testing the existence of the system or its non-existence in the organization, with the presentation that the system exists in its random form that may not attracts any interest by the administration and employees alike, but the measure will separate the parts and components of the system on the basis of the description of the structural structure of the system. The organization will therefore benefit from knowing the strength or weakness of the system and any parts more in defense of the threats to the organization and which ones are less impact.

Second: the measure tests the functions of the system, the role of workers and parts of the system in supporting jobs, and diagnoses strong jobs from the weak, and the requirements for job advancement together in support of the organization.

On this basis, the constructing Phrases will be based on what is said, so that the constructing of the components of the system should be unique to the Phrases of its functions.

1. Structural steps for the components of the organizational immune system:

A: Central immune system: This system is made up of the board of directors, which is a one-dimensional variable, for which 11 phrases has been allotted to examine the composition, functions and terms of reference of the Board of Directors as well as a course in monitoring and supervising the work of the organization and determining its orientations and a course in the follow-up of the implementation of its strategy and investments along with give it flexibility Adaptive to face the dangerous environmental changes through its group that includes the heads of sections in the organization and the stakeholders and representatives of trade unions and the environment... Etc. and according to the nature of the industry of each organization. As shown in table (2).

Table 2. Board scale Phrases

Squ.	The main variable	Sub-variable	The content of the Phrase	Virtual honesty		Honesty content		Reviews
			The company's board of directors	Valid	It's not valid	Valid	It's not valid	
1.	Central Immune System	Board of Director	includes representatives of stakeholders (the final					

			consumer. Etc.).					
2.			meets regularly to discuss the variables facing the company's business.					
3.			holds emergency meetings to address the sudden threats or changes that occur.					
4.			contributes to correcting the trends in the implementation of the company's strategy by replanning strategically according to the changes they face.					
5.			represents a compass for the proper management behavior of all managers and prevents the wrong decisions from being made.					
6.			contributes to giving the company the flexibility to adapt in advance to what they may face.					
7.			Is from external and internal actors					

			to the company.					
8.			Is Senior managers in the company, who contribute to the diagnosis of the risks they are at.					
9.			plays an active role in guiding the company's investments and evaluating all its activities.					
10.			exercises a supervision and supervisory role in the company's operational and performance activities.					
11.			has a role in formulating the policies of rewards and compensation and assigning a competent committee to audit its legitimacy.					

B. Specialized immune system (compliance and risk management systems): a three-dimensional variable and 16 Phrases have been designed to be examined:

(First): Compliance systems: Six Phrases have been designed to measure its contents in order to meet the authenticity of the content, as all activities that fall under the compliance systems that have been derived from the intellectual frameworks of the organizational immune system, namely, the relevant sections, compliance systems, codes of conduct, control systems, Training programs, feedback system (reports).

(Second): Risk Management Systems: Six Phrases have also been devised to measure its contents in order to meet the authenticity of the content, as all

activities that fall under the risk management systems must be covered. For example the role of management, the role of the legal affairs department, company systems, inspection committees and inspection systems.

(Third): Rewards and compensation: Four Phrases are devised to measure its contents in order to meet the requirements of content honesty and these Phrases have tested the criteria of entitlement, the role of persons, the roles of managers, the reason and rationale for compensation policy. Table (3) displays these facts.

Table 3. Specialized Immune System Scale Phrases (Compliance and Risk Management Systems)

Sqn.	The main variable	Sub-variable	The content of the Phrase	Virtual honesty		Honesty content		Reviews
				Valid	It's not valid	Valid	It's not valid	
12.	Specialized immune system (compliance and risk management systems)	Compliance systems	The competent departments play the role of early warning in attracting the attention of the senior management for important information.					
13.			Compliance systems exercise a duty of verifying the integrity of decisions made by employees.					
14.			Codes of good organizational conduct are being introduced.					
15.			Control systems play an active role in alerting employees to perform properly.					
16.			Training programs are concerned with developing career and professional behavior and creating a spirit of organizational citizenship.					
17.			A system of reports acts as a feedback feed to verify the operational process relationship and personal performance of employees.					
18.			management systems	There is a perception by management of the risks of the company that it is working to address while working.				
19.			The risks facing employees and the company are being studied and analyzed.					

20.		The Legal Affairs Department plays a role in detecting legal errors that threaten the company.					
21.		The company's systems are concerned with factors that threaten its fame and brand.					
22.		Inspection committees sort out qualified staff members for hiring purposes and exclude those who are unqualified .					
23.		The company's inspection systems play an important role in preventing operational risks.					
24.	Rewards and compensation	Reward and compensation are awarded according to the benefit of the persons and according to certain criteria.					
25.		The company takes into account the role of the person in achieving its objectives when determining the amount of salary he receives.					
26.		Senior managers receive their salaries according to their roles in achieving the company's objectives.					
27.		The compensation system is more rational because it reduces the cost of the company.					

C. The immune system of the parties or (the surrounding immune system): a variable that comprises of one dimension representing (strengthening the role of senior legal advisers) and (7) Phrases have been devised to measure this dimension that have addressed the role of research and development as an auxiliary activity that serves the organizational immune system indirectly Departments, people and teams with direct risk response, human resources systems, sales department and legal advisers. As shown in Table 4.

Table 4. Phrases of the immune system scale of the limbs or (surrounding immune system).

Squ.	The main variable	Sub - variable	The content of the Phrase	Virtual honesty		Honesty content		Reviews
				Valid	It's not valid	Valid	It's not valid	

28.	The immune system of the parties or (the surrounding immune system	enhances the role of senior legal advisers	Research and Development plays a role in the market study to provide the company with useful information about its weaknesses, strengths, opportunities and threats.					
29.			HR Systems plays a role in shaping the human resources portfolio of multi-talented staffsto ensure the accuracy and integrity of the work.					
30.			The marketing department monitors the needs of the market and enhances the company's brand and reputation.					
31.			The Sales Department (Exhibitions) plays a role in publicizing the company's policies and status.					
32.			Advisers play an independent role without the influence or interference of others.					
33.			The roles of the company's consultants are strategic rather than tactical.					
34.			Legal officials are concerned with complying with government laws and regulations to ensure balance and environmental compliance.					

SECOND: THE STRUCTURAL STEPS OF THE FUNCTIONS OF THE ORGANIZATIONAL IMMUNE SYSTEM:

Based on the intellectual frameworks of the immune system's organizational functions, the system is to realize six functions (immune perception function, immune analysis function, immune defense function, immune memory function, immune balance function, and control function), and its construction is detailed as follows:

1. Organizational immune perception function has consisted of (5) Phrases.
2. Organizational immune analysis function hasconsisted of (7) Phrases.
3. Organizational immune defense function has consisted of (5) Phrases.
4. Organizationalimmune memory function has consisted of (4) Phrases.
5. Organizational immunebalance function has consisted of (4) Phrases.
- 6.Organizational immunecontrol function has consisted of (5) Phrases.

Thus, the functions of the system have been covered by (30) Phrases to meet the content sincerity requirements for this variable. As shown in Table (5).

Table 5.Phrases of the Organizational Immune System Function Scale

Squ.	The main variable	Sub-variable	The content of the Phrase	Virtual honesty		Honesty content		Reviews
				Valid	It's not valid	Valid	It's not valid	
35.	Organizational immune system functions	Organizational immune perception function	The company is aware of the adverse external negative effects that may be negatively impacted on its situation such as (financial crises, brand threat fame, declining market share, entry of new products or competitors... Etc.).					
36.			The company senses harmful internal factors during the implementation of its operations (productivity, marketing, organizational,... Etc.					
37.			The company is clearly aware of the factors and symptoms of the organizational pyramid.					
38.			The Public Relations Department plays a role in recognizing the company's interests and defining its roles.					
39.			Market research plays an important role in marketing monitoring, customer pulse recognition and the nature of the challenges facing the marketing of the company's products.					
40.		Organizational immune analysis function	The components of the immune system distinguish between the company's specificity and behaviors and the behaviors of outsiders.					
41.			The Board of Directors carefully examines and analyzes foreign threats and attempts before making decisions to address them.					
42.			Senior advisors and specialists play a role in interpreting events and analyzing their factors and causes in order to help create an appropriate defensive response.					
4			The company is automatically					

3.		vigilant against repeated threats as it is routinely interpreted.					
4.		The company matches external and internal threats with previous events before taking processing actions.					
4.		The company separates repeated and emergency threats in terms of their seriousness and treatment methods.					
4.		The company arranges the threats after they are scrutinized according to their seriousness and the primacy of their treatment.					
4.	Organizational immune defense function	The company can resist and eliminate the threats of harmful external and internal factors.					
4.		The means of defense are transmitted between people, working methods, databases and company culture to prepare personnel for voluntary defense during the need for defense.					
4.		Sections, teams and people play a self-protective role against deviations during production processes or performing functional tasks.					
5.		There is a self-inflicted protective reaction to the harmful factors that threaten the company through the departments, units or employees as much as it does.					
5.		There is preventive coordination between the organization's divisions and units in the face of common threats.					
5.		Organizational immune memory function	There is documentation of the controls on operations that threatened or threatened the company to benefit from them in the future in the face of similar successes or failures.				
5.	The availability of the organization's memory of the nature of the resources and system sections that are used to deal with new and similar recurring cases.						
5.	The company benefits from previous events in the face of						

			emergency or potential threats.					
5	5.		The immune system's memory provides an effort to treat repeated or similar conditions.					
5	6.	Organizational immune balance function	The company's immune system eliminates harmful and inappropriate factors that do not comply with the company's regulations in order to ensure its balance.					
5	7.		There is internal control in the company that coordinates the contradictions between its policies, procedures and programs to create a state of harmony.					
5	8.		Employees and teams respond to harmful activities to prevent business confusion and smooth flow.					
5	9.		The legal consultation exercises the scrutiny of the company's activities in order to create a state of balance and harmony with the instructions, regulations and government laws.					
6	0.		Organizational Immune control function	Departments and administrations monitor the results of changes made by the company in its operations and systems.				
6	1.	There are systems to monitor operations to prevent deviations.						
6	2.	The company's control systems contribute to the normal operation of the company's systems and employee behaviors.						
6	3.	The company adopts the philosophy of overall quality management to ensure the quality of business performance every time and in the same way, whether by the same people or others.						
6	4.	The company adopts statistical methods of quality control that is related to inputs and outputs by adopting inspection plans (preliminary inspection of the materials purchased and final products) and agreeing on the level of quality acceptable with the supplier.						

65.		There are sampling plans that are based on the efficiency of the workers in statistical control and the reliability of the other party (the equipment processor).					
66.		Statistical control panels rely on the control of industrial processes and their evaluation to ensure that there is no deviation from the pre-defined specifications.					
67.		The Internal Control Authority (Financial Audit Department) exercises the legality of transactions and detects errors.					
68.		The internal control system monitors the operational performance and personal performance of the employees.					
69.		The internal control body follows up on the implementation of the company's policies.					
70.		IOS matches performance with standards for diagnosis of distractions					
71.		The Human Resources Department plays an important supervisory role in the selection of employees, employment policies and evaluation of their performance.					

After this detail, (71) Phrases have been realized to represent all variables in their sub-dimensions to form the organizational immune system scale.

THIRD: SCALE TEST

Various tests have been conducted to verify the authenticity, balance and consistency of the scale as follows:

1. Testing the scale has been conducted on a sample of a female officer consisting of (25) persons who have represented (boards of directors, heads of departments, legal advisers, human resources experts, salesmen, computer software technicians, research and development, quality management department) where the scale items are distributed to see how clear the Phrases are in terms measure in relation to the smooth wording and the ability to understand the content of the Phrases as well as the possibility that some members of the sample would agree on vague points that need to be clarified. After the collection of the survey forms of the opinions of the control sample, some Phrases were rephrased in terms of language.
2. Honesty tests: Several tests have been conducted to verify the correctness of the measure, including:

A:Virtual honesty: One of the types of sincerity of the arbitrators, which shows the extent to which poverty belongs to the area to which it belongs.

B.Content honesty: one of the types of sincerity of the arbitrators and it shows the ability of the Phrases to cover the area to which they belong.

C. Statistical honesty: it means the result of the square root of the coefficient of balance of the questionnaire and according to the following law:

$$\text{Statistical honesty} = \sqrt{\text{balance factor}}$$

$$\text{Statistical honesty} = \sqrt{82.5} = 90.082$$

3. Balance of the scale: Balance means that the same results are reached if a particular scale is reapplied to the same sample again and by a time difference, and different methods can be used, including Test-Retest and Split-half, and the test method. The retesting method is uneconomical and costly in terms of effort and time, so a successful and widely adopted statistical method will be used, namely, the half-fragmentation method to find the coefficient of correlation between the scores of individual questions and marital questions and correct this coefficient with a link equation (Spearman-Brown). Based on (Abu al-Nil,1985: 188).

The measure's balance factor is (82.5%). It is an encouraging factor for the balance of the scale if it is re-baptized on another sample at another time.

4. Consistency of the scale: The (Alpha-Cronbach) coefficient has been used to measure the extent of the consistency and coherence of the scale Phrases, which should exceed (60%). The measure achieved a consistency factor of (88%) This indicates a high acceptance and reflects an agreement and a correlation between the terms of the Phrases of the scale based on(Cronbach, 1984: 120)

Fourth: The final version of the distribution of the Phrases of the scale based on its main and sub-dimensions.

Below is the formula on which the Phrases of the scale are based, broken down by the main and sub-dimensions of its variables.

Table 6. Final version of the scale

Suq.	Main variables dimensions		sub dimensions	the number of Phrases	sequence of Phrases	
					From	To
1.	Central immune system	Organizational immune system components	Board of Directors of the company	11	1	11
2.	Specialized immune system (compliance and risk management systems)		Compliance systems	6	12	17
			Risk management systems	6	18	23
			Relationships and compensation	4	24	27
3.	The immune system of the limbs or the surrounding immune system		Strengthening the role of senior legal advisers	7	28	34

4.	Organizational immune system functions	Organizational immune system functions	Immune perception function	5	35	39
			Immune analysis function	7	40	46
			Immune defense function	5	47	51
			Functional organizational immune memory	4	52	55
			Functional balance	4	56	59
			Censorship function	12	60	71

CONCLUSIONS AND RECOMMENDATIONS

First: Conclusions

In the light of the finding and results that are reached in the current research the following conclusions are presented:

1. The scale mechanism that is reached consists of (34) Phrases to measure the existence of the components of the system, its departments and its ability to work on sound logical scientific bases away from randomness, and (37) Phrases that can verify the nature of the functions of the system according to its six functions referred to.
2. This study is characterized by its attempt to build a measure that includes the components of the system and its functions (physical and sensory) unlike what was done in a preliminary attempt in China to reach its measurement through the check list, as the list of examinations if it can measure the components of the physical system will fail to measure external sensory behaviors the harmful interior as well as many descriptive indicators have been covered in the scale.

Second: Recommendations

Based on the findings and the conclusions that have been arrived at in this work, it can be recommended that:

1. Research centers, academies and universities should direct graduate students to enrich the intellectual and applied frameworks of the organizational immune system, philosophy and application of the great scarcity in the theory of this subject.
2. The system must be consolidated in the culture of the organization and attention to it must be drawn transforming its work from random voluntary formulas to a systematic and logical work that is a guarantee for the protection of the organization.
3. The work in business organizations should be completed and the departments, people and units are to be connected to the database of the organization because it is an important part of the ability of the immune defense.
4. Building the memory of the organization on the formation of immune memory is an important part of it to avoid similar situations and distinguish between the dangers that are alien to the organization.
5. The work of the immune system is based on the institutional aspect of the organization, so it is necessary to establish a cumulative institutional

organization with a building culture, not a demolition. The more the institutional structure of the organization is established, the greater the system's ability to effectively, rapidly and possibly early self-defense.

6. Those who are interested in the organization's vigilance should pay attention to early warning systems, crisis management and change management to conduct in-depth studies on the organizational immune system with these variables because of their close interdependence.

7. Emphasizing the need to build positive organizational social capital networks that support its role in the vitality of the immediate and self-response because organizational immunity is widespread and benefits from networks of relationships.

8. The tendency to reduce vertical construction and work with the logic of network organizations should be supported because bureaucracy slows down the work of the organization's immunity and determines its movement.

9. The researcher does not claim perfection in the construction of this measure as much as it constitutes his initial contribution to establish the concept and components of the organizational immune system and the meter must be subjected to many tests to verify its sincerity and balance and in the relevant areas, for example change management, crisis management and alarm systems. Early quality systems, self-production theory, social portals of organizational learning and other topics related to the effectiveness of the organizational immune system.

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