

Organizational immunity and its relationship to organizational culture (field study)

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Abstract:

This research aims to study the relationship between aspects of organizational immunity (learning, memory, and organizational genes) and organizational culture among employees at the Ain El Melh municipality headquarters in M'Sila. A descriptive and analytical methodology was employed on a sample of 144 employees, representing the entire workforce at the headquarters through a comprehensive survey. Specialized questionnaires were used to measure organizational immunity and organizational culture, following verification of their validity and reliability.

Keywords: organizational immunity, organizational culture, municipal headquarters, employees.

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1- INTRODUCTION:

Organizations, whether in the public or private sector, constantly strive to survive, evolve, and achieve their goals. They seek to protect themselves from internal and external threats, akin to how the human body defends itself through its immune system. This concept, referred to as organizational immunity, mirrors a set of defense mechanisms within the organization, including organizational learning, memory, and genes. These elements contribute to a collective mindset that defines the organization's culture, which helps safeguard its interests and ensures its continuity. This study aims to explore the relationship between the components of organizational immunity—organizational learning, memory, and genes—and the development of organizational culture within a public institution.

2- General Framework of the Study:

2.1. Main Research Question:

- Is there a relationship between organizational immunity and organizational culture at the headquarters of the municipality of Ain El Melh in the state of M'Sila?

This main question gives rise to several sub-questions:

2.2. Sub-questions:

From the main question, we derive the following sub-questions:



- Does a correlation exist between organizational learning and organizational culture at the headquarters of the municipality of Ain El Melh in the state of M'Sila?
- Is there a connection between organizational memory and organizational culture at the same location?
- What is the relationship between organizational genes and organizational culture at the headquarters of the municipality of Ain El Melh?

2. 3. Main Hypothesis:

There is a correlation between organizational immunity and organizational culture at the headquarters of the municipality of Ain El Melh in the state of M'Sila.

2. 4. Sub-hypotheses:

- A correlation exists between organizational learning and organizational culture at the headquarters of Ain El Melh.
- There is a connection between organizational memory and organizational culture at headquarters of Ain El Melh.
- A relationship exists between organizational genes and organizational culture at the headquarters of Ain El Melh.

2. 5. Objectives of the Study:

The study aims to:

- Explore the relationship between organizational learning and organizational culture, and how this aspect of organizational immunity influences the development of

organizational culture, playing a crucial role in the organization's defense mechanisms and success.

- Examine the link between organizational memory and organizational culture, and the extent to which past experiences shape the prevailing organizational culture, aiding in identifying and responding to external threats.
- Investigate how organizational genes affect the organizational culture, highlighting the unique characteristics that set the organization apart and motivate employees to excel.

Additionally, the research seeks to:

- Define both organizational immunity and organizational culture.
- Assess the strength of the relationship between these two concepts.

2. 6. Importance of the Study:

The significance of this study lies in identifying the dimensions of organizational immunity and the factors influencing it, positioning it as a modern concept in organizational psychology. Understanding this concept helps guide decisions that enhance organizational protection, boost employee satisfaction and performance, and foster an organizational culture rooted in shared customs and values, ultimately aiding in resolving both internal and external challenges.

2. 7. Operational Definitions of Study Concepts:

2. 7.1. Organizational Immunity:

Procedurally: The organization's ability, represented by the headquarters of the municipality of Ain El Melh, in the state of M'Sila, to deal with crises by preventing their causes from occurring if they are within the internal environment of the residence, and to resist external crises by building a defensive wall that avoids or reduces the organization's incurring damages, which is the degree it obtains. The employee at the headquarters of the municipality of Ain El Melh, in the state of M'Sila, in the organizational immunity questionnaire.

2. 7.2. Organizational Culture:

Defined as a set of prevailing organizational beliefs, values, principles, and behaviors embraced, practiced, and defended by employees at Ain El Melh Municipality, as reflected in their scores on the organizational culture scale.

3. The Theoretical Framework of the Study:

3 .1. The Concept of Organizational Immunity:

Organizational immunity refers to a set of core components and functions within the organization that work together to form a strong defense against environmental threats, as well as internal and external organizational risks that might affect its structure ¹

3 .2. The Concept of Organizational Culture:

Taylor defines culture as a comprehensive entity that encompasses a range of knowledge, beliefs, art, law, morals,

customs, and other capabilities that individuals acquire through their membership in society ²

. In an organizational context, culture reflects employees' perceptions, which shape a pattern of shared beliefs, values, and expectations ³

Furthermore, organizational culture embodies the values of key individuals within the organization, influencing both tangible aspects of the organization and the behavior of its members, while guiding how decisions are made and how management is conducted ⁴

4. The Methodological Framework of the Study:

4.1. Research Approach:

To examine the relationship between organizational immunity and organizational culture among employees at the municipality of Ain El Melh in the state of M'Sila, the researcher employed a descriptive and analytical approach. This method allows for an accurate depiction of the phenomenon as it exists, along with analysis and interpretation to draw meaningful conclusions.

4.2. Study Population and Sample:

The study population consists of the employees at the headquarters of the municipality of Ain El Melh in the state of M'Sila. A comprehensive survey was conducted to include all employees, totaling 144 individuals.

4.3. Study Limitations:

4.3.1. Human Limitations:

The study targeted the employees working at the headquarters of Ain El Melh municipality in M’Sila, encompassing 144 employees.

4.3.2. Time Limitations:

The field study was conducted in June 2024.

4.3.3. Spatial Boundaries:

The research was carried out at the headquarters of the municipality of Ain El Melh in the state of M’Sila.

4.4. Study Population and Sample:

The research population included all employees at the headquarters of the municipality of Ain El Melh in M’Sila, with the survey encompassing 144 employees through a comprehensive approach.

5. Psychometric Properties of the Tools:

5.1. Scale Reliability:

5.1.1. Reliability Measured by Cronbach's Alpha:

- Organizational Immunity:

Table 01: presents the Cronbach’s alpha results for the Organizational Immunity Questionnaire.

Significance level	N	Cronbach's alpha
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0.05	30	0.791
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Source: Student preparation based on SPSS outputs .2024

Using SPSS, the Cronbach's alpha coefficient for the organizational immunity scale was calculated at 0.791, which is significant at the 0.05 level. This indicates that the questionnaire has a high level of reliability, with a confidence level of 95%.

- **Organizational Culture:**

Table 02: shows the Cronbach's alpha results for the Organizational Culture Scale.

Significance level	N	Cronbach's alpha
0.05	30	0.801

Source: Student preparation based on SPSS outputs .2024

For the Organizational Culture Questionnaire, the Cronbach's alpha coefficient was 0.82, which is also significant at the 0.05 level. This implies that the scale has a high reliability level, providing a 95% confidence interval

V.1.2. Scale Validity:

- Expert Validation:

The initial versions of both questionnaires were submitted to a panel of four professors to assess their validity. The professors provided feedback on the clarity of the statements, their relevance to measuring organizational immunity and culture, and the appropriateness of each statement to its respective dimension. Based on their suggestions, necessary corrections and adjustments were made, and some statements were revised or

removed. The names and positions of the reviewing professors, along with the original and final versions of the scales, are provided in the appendix

6. Method of Statistical Analysis and Processing:

After completing the data collection phase, the study tool was entered into the computer for analysis using the Statistical Package for the Social Sciences (SPSS Model 23). Several statistical measures were employed, with the most important being:

- Cronbach's Alpha Coefficient to assess the reliability of both study tools.
- Pearson's Simple Correlation Coefficient to evaluate the relationship between the independent and dependent variables.

7 . Presentation and Analysis of the Study Results:

7.1. Testing Correlations Between Study Variables:

The Pearson correlation coefficient was used to determine the correlations between the primary and sub-study variables, aiming to measure the relationship between independent and dependent variables.

7.1.1. Testing the First Partial Hypothesis:

The first partial hypothesis proposed a correlation between organizational learning and organizational culture among

employees at the headquarters of the municipality of Ain El Melh, M'Sila.

To test this, the Pearson correlation coefficient was employed to assess the strength and direction of the relationship. The results are as follows:

Table 03: Results of the simple correlation coefficient to test the correlation between organizational learning and organizational culture

Presence of effet	Significance level(sig)	Correlation(R)	The independent variable
Presence of effect	0.022	0.74	Organizational learning

Source: Student preparation based on SPSS outputs .2024

The table indicates a statistically significant relationship between the organizational learning dimension and organizational culture among employees at Ain El Melh, as the significance level (Sig = 0.022) is below 0.05. The correlation value (R = 0.74) demonstrates a strong, direct relationship between organizational learning and organizational culture.

Based on these findings, the first partial hypothesis, which asserts a positive, statistically significant relationship at the 0.05 significance level between organizational learning and organizational culture, is accepted.

7.1.2. Testing the Second Partial Hypothesis:

The second partial hypothesis suggested a correlation between organizational memory and organizational culture at the municipality of Ain El Melh.

The Pearson correlation coefficient was used to evaluate the strength and direction of this relationship. The results are as follows:

Table 04: Results of the simple correlation coefficient to test the correlation between organizational memory and organizational culture.

Presence of effet	Significance level(sig)	Correlation(R)	The independent variable
Presence of effect	0.009	0.71	Organizational learning

Source: Student preparation based on SPSS outputs .2024

The table indicates a statistically significant relationship between organizational memory and organizational culture, with a significance level (Sig = 0.009) below 0.05 and a correlation value of R = 0.71, showing a strong, positive relationship.

Thus, the second partial hypothesis, which posits a strong positive relationship between organizational memory and organizational culture, is accepted

7.1.3. Testing the Third Partial Hypothesis:

The third partial hypothesis proposed a correlation between organizational genes and organizational culture at the municipality of Ain El Melh.

To test this, the Pearson correlation coefficient was used. The results are as follows:

Table 05: Results of the simple correlation coefficient to test the correlation between regulatory genes and organizational culture.

Presence of effet	Significance level(sig)	Correlation(R)	The independent variable
Presence of effect	0.005	760.	Organizational learning

Source: Student preparation based on SPSS outputs .2024

The table shows a statistically significant relationship between organizational genes and organizational culture, with a significance level (Sig = 0.005) lower than 0.05 and a correlation value of $R = 0.76$, indicating a strong, direct relationship.

Thus, the third partial hypothesis, which posits a strong positive relationship between organizational genes and organizational culture, is accepted.

7.2. Discussion of the Results of Correlation Tests:

From examining the relationship between the dimensions of organizational immunity and organizational culture, the following was found:

* A strong, positive, statistically significant correlation at the 0.05 significance level exists between organizational immunity

and the prevailing organizational culture among employees at Ain El Melh municipality.

- ✓ The correlation between organizational learning and organizational culture: ($R = 0.74$).
- ✓ The correlation between organizational memory and organizational culture: ($R = 0.71$).
- ✓ The correlation between organizational genes and organizational culture: ($R = 0.76$).

7.3. Interpretation and Discussion of Results:

The study's hypotheses indicated a relationship between organizational learning, memory, and genes as dimensions of organizational immunity and the organizational culture within the organization. The statistical analysis results, presented in Tables (03), (04), and (05), based on significance levels of Sig = 0.022, 0.009, and 0.005 (all less than the significance threshold of 0.05), confirm the effect of these three dimensions on organizational culture, validating the hypotheses. The correlation coefficients were all strong: $R_1 = 0.74$, $R_2 = 0.71$, and $R_3 = 0.76$.

The confidence that employees gain from learning and the knowledge they accumulate helps them distinguish themselves through unique characteristics in their workplace. By applying what they've learned, employees adopt organizational customs and traditions, which reinforce their commitment to the organization's future and defense of its interests, resulting in a sense of security and job stability.

One of the key factors contributing to employees' sense of belonging is mutual respect, appreciation, and trust among colleagues and supervisors. This sense of belonging encourages employees to adopt and internalize organizational values, driven by their loyalty to the organization and desire to protect it. These findings are consistent with the study by Imam and Abdul-Rahman (2023), which demonstrated a strong correlation between organizational reputation and organizational immunity. It also aligns with the BRIC study (2020), which confirmed the impact of organizational immunity on citizenship behavior within the organization, and researcher Sherzad Taha Miro (2022)⁵ .ho found that organizational immunity helps reduce deviant work behavior.

8. Study Proposals:

Based on the findings of this study, we recommend the following:

- Organizations should prioritize fostering a positive organizational culture, characterized by shared values, customs, and traditions. Efforts should be made to encourage, strengthen, and develop these elements among employees.
- Mechanisms and programs should be designed to enhance organizational immunity and turn these efforts into practical, actionable strategies within the organization.
- Organizations should focus on developing the dimensions of organizational immunity, as it plays a crucial role in achieving organizational goals and protecting against external threats.

- Building robust organizational immunity requires:

- ✓ Enhancing organizational learning by encouraging information sharing, fostering teamwork, and ensuring mutual trust among employees as if they are part of one large family.
- ✓ Preserving organizational memory by exchanging knowledge through direct advice or internal training forums and courses, ensuring the legacy of the organization is maintained.
- ✓ Strengthening organizational genes, which are the unique traits and characteristics that set the organization apart. This includes aspects like organizational structure, decision-making processes, and employee motivation strategies, all of which help the organization adapt to changes and achieve its goals.

Organizations should tap into the professional experience of each employee, regardless of their academic qualifications, while cultivating a spirit of consultation and cooperation. Employees should also be made aware of their individual responsibilities and how they contribute to the organization's success

9. CONCLUSION:

In addressing the study's problem and research questions, we explored organizational immunity by breaking it into three dimensions and connecting them with organizational culture. Through statistical analysis, we tested the research hypotheses. The results show that the dimensions of organizational immunity have a considerable impact on shaping organizational culture.

The principles and values tied to organizational immunity are embraced by members, encouraging behaviors that protect the organization's security, goals, and stability. These values also equip the organization to handle external challenges and sudden risks. Just as the immune system protects the human body, maintaining a strong organizational immune system is vital for defending the organization from threats.

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