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# Organizational Personality as a Moderating Variable of the Relationship between Organizational DNA and Innovative Performance

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**Abstract** This paper attempts to highlight the influence of types of organizational personality as a moderating variable of the relationship between organizational DNA and innovative performance.

**Keywords:** organizational DNA, innovative performance

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## 1. Introduction

Organizational DNA is one of the metaphors that have been recently considered in organization and management subjects that describe organizations with a genetic approach. Analysis, discovery, classification and description of inheritance facts and variations are considered as the important targets in genetics [1]. Similarity among living creatures and their relatives and ancestors refers to inheritance. But variations are regarded as the difference between any living creature and other creatures. Hence, the initiative paradigm of organizational DNA is based on the principle that each organization has exclusive genetic characteristics like any living organism and characteristics are shown by the constructing main and natural elements (DNA). Therefore, by combining the reality of biology and genetics with the management science, effective steps could be made in improving and developing the organizations [1]. The organizational DNA has an effective role in the identification of organizations and their leadership and management functions such as decisions, organizational structure, group work and communications [2]. Management, as a science, presents a new vision of organization based on the concept of organizational DNA. It also helps explain its performance. Booz Allen Company for administrative consultations, based in the USA, was the first to use this term upon its foundation in 2002, using an international questionnaire that encompassed 100 states, 23 sectors, and eight departments inside each company [3]. The aim was to recognize the unique characteristics of the organization that define its character. Each organization, it was revealed, enjoyed its own unique traits distinguishing it from other organizations, even those operating in the same

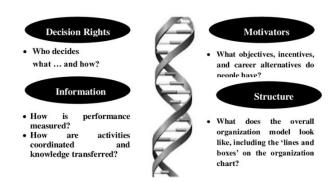
field. This urged many researchers to attempt to detect such traits which are regarded as the organizational DNA. There were four variables or chromosomes that define the organization gene (gene of performance). They are decision rights, information, motivators, and structure [3]. Success of any organization is based on the inculcating of suitable values among employees, along with correct information, financial and moral incentives and a suitable environment. Such success should match the personality of each individual in the organization and realize its common interest. This was why Booz Allen Hamilton Company for administrative consultations in the USA tried to find facts to recognize the unique genes of each organization that crystallize its character. This gave birth to the new term of organizational DNA, in 2002, defining organizational variables for each organization affecting motives of employees towards work. There are many views concerning with innovation concept. [4] considers innovation as the process by which new knowledge is embraced into practice by organizations. Innovation is also new things or ideas [5]. According to [6] innovation is the process of creating a commercial product from an invention. Innovative performance has been measured by many metrics. [6] shows three areas that are time to market, product quality, and creation of customer value. [7] determines flexibility, continually improvement in quality and speed as an innovation performance metrics. [8] has been illustrated three areas: new product, product quality, and faster distribution. In a recent study conducted by [9] innovation performance is a function to time to market, product quality, and development cost [10]. Finally, [10] determined three areas, depending on latest Hamilton experience working, that are speed of decision making about new opportunities, transparency-exchange of information between functions, and accountability. The industrial companies have the important economical roles

today in the growth and dynamism of the community. Thus, the models and researches that could help increase the effectiveness of organizations seem to be essential and vital. Therefore, identifying organizational DNA could provide great aids in improving innovative performance in local and international organizations in Egypt. Hence, this research aims at identifying organizational DNA influence on innovative performance in local and international organizations in Egypt.

# 2. Literature Review

# 2.1. Organizational DNA

Organizational DNA is a technique or means used to pinpoint difficulties facing an organization and inhibiting its performance, along with ways to overcome such difficulties [11]. Organizational DNA is a metaphorical term denoting the fundamental factors that define the character of an organization and help explain its performance [12]. It is a system that attempts to discover the organization by pinpointing its strong and weak points, along with defining remedies [13]. It includes four principal factors that unify and distinguish the character of an organization; namely, decision rights, information, motivators, and structure [14]. Organizational DNA is a metaphor or a theory, involving elements that together describe the identity of the organization and helps in expressing the organizational activities. As the DNA in nature describes required aspects for creation of a unique living creature, organizational DNA could express the OP according to four definitions of structure, decisions rights, motives and information of organizational DNA [15]. Organizational DNA is the employment of simple rules to create fruitful relations and lay down. expectations of employees' behavior [16]. There are four main blocks constructing organizational DNA. They are regulations and manners of decisions, information, stimulants (motives), and structure [17]. It is a metaphor for the underlying factors that together define an organization's "personality" and help explain its performance. The organizational DNA framework was developed by Booz & Company to give organizations an easy, accessible way to identify and remedy the roadblocks that impede results and impact its success [3] and [18]. Organizational DNA expresses a method of analysis, ideology, elaboration and thinking about organizations, in which their models, management functions, leadership and other notions of organizations are considered. It uses quite diverse approaches for identification of organizations instead of organizations forms and models, by considering the affairs like team works, decision-making and development of human workforce, as separate or at least independent variables [19]. The DNA of living organizations consists of four building blocks, which combine and recombine to express distinct identities, or personalities. These organizational building blocks (structure, decision rights, motivators, and information) largely determine how a firm looks and behaves, internally and externally (as shown in Figure 1) (Source: [14]).



**Figure 1.** The four building blocks of organizational DNA (Source: Booz Allen Hamilton)

According to the above figure, the DNA of a living organization has four bases that, combined in myriad ways, define an organization's unique traits. These bases are [3] and [18].

## 2.1.1. Decision Rights

Who decides what? How many people are involved in a decision process? Where does one person's decisionmaking authority end and another's begin? It is the definition of the basic techniques of actual decision taking in the organization, besides efficiency of organization's work, speed of supplying products, good services, and time needed to get the outcome. Decision rights are the basic task that should be tackled by organizations that suffer functional imbalance as they are the cornerstone of efficient development. Decision rights mean the underlying mechanism of how decisions are truly made [9]. This means firstly, making decisions authorities and responsibilities as clear as possible and secondly, appoint "process owners" the business unit or functional managers who lead the revitalization of business processes and who will be accountable for its success- and empower them [10].

## 2.1.2. Motivators

What objectives, incentives, and career alternatives do people have? How are people rewarded, financially and nonfinancial, for what they achieve? What are they encouraged to care about, by whatever means, explicit or implicit? They are the means employed by an organization to stimulate and motivate its employees for better performance. They are not limited to finances but include material and moral means of motivation to urge employees to do their utmost for motivators. Motivators help employees match their own goals with those of the organization. Motivators take part in shaping behavior and in influencing OP. Motivators include more than money, they also include nonfinancial aspects like goals, preference, and accomplishment [20]. Balancing between positive (financial and nonfinancial) and negative (punishment) motivational considerations is one of the main issues that managers must attend [21]. Motivation is a powerful tool for furthering the organization's strategic goals. First, awards have a major impact on employee attitudes. Second, employee compensation is typically a significant organizational cost and thus requires close scrutiny [22].

#### 2.1.3. Information

What metrics are used to measure performance? How are activities coordinated, and how is knowledge transferred? How are expectations and progress communicated? Who knows what? Who needs to know what? How is information transferred from the people who have it to the people who require it? It is the basic means for the transfer and dissemination of knowledge inside an organization from holders of information to those in need of it. It is the mover of activities at the organization and may be employed to measure employees' performance as bad information affect the remaining components of DNA, especially decision rights and motivators. Without accurate information, decision makers cannot take decisive steps and seize available market opportunities, while employees do not gain the appreciation they deserve. Information can play two critical roles in today's organizations that are organizational response to business pressures [23] and enhance key business functions [8]. Information explains what metrics are used to measure performance? How are activities coordinated, and how is knowledge transferred? How are expectations & progress communicated? Who know what? Who need to know what? [15].

#### 2.1.4. Structure

What does the organizational hierarchy look like? How are the lines and boxes in the organization chart connected? How many layers are in the hierarchy, and how many direct reports does each layer have? It is the organizational map including administrative levels, direct reports, professional career, transfers, and promotions inside an organization. Structure is the clearest of the four components of DNA as it is the launching pad of organizational change programs. Structure should not be the starting point, but the logical outcome of the options relating to the other three determinants; decision rights, information, and motivators. It is the climax not the basis of efforts of reorganization [24]. Structure is the sum total of the ways in which the organization divides its labor into distinct tasks to ensure effective communication, coordination, and integration of efforts across departments [25,26]. The structure, multiple organization layers and narrow span of control often result in excess bureaucracy and bottlenecked decision making. The only appropriate condition is that the four constructive blocks in the organization to operate with each other and solve the organization problems as regards the organizational goals

#### 2.2. Innovation Performance

Innovation performance has been measured by many metrics. [6] shows three areas that are time to market, product quality, and creation of customer value. [7] determines flexibility, continually improvement in quality, and speed as an innovation performance metrics. [8] has been illustrated three areas: new product, product quality, and faster distribution. In another study conducted by Hamilton innovation performance is a function to time to market, product quality, and development cost [10]. Although there are many definitions for innovative performance, the definition that will be used in the current research was the done by [10] that determined three

areas —depending on latest Hamilton. Experience working- that are speed of decision making about new opportunities, transparency-exchange of information between functions, and accountability as the following:

# 2.2.1. Speed of Decision Making About New Opportunities

Means innovate faster than other competitors. Speed in decision making enable organizations to mobilize against new opportunities to capture first-to-market advantages as well as to respond quickly to changes in customer environment or to the actions of competitors.

# 2.2.2. Transparency-Exchange of Information between Functions Transparency

Transparency-Exchange of Information Between Functions transparency is the properties that allow direction and action to be made visible through an organization. For effective innovation, transparency ensures that development priorities and efforts can aligned with strategic priorities.

#### 2.2.3. Accountability

Accountability is the mechanism that ensures crossfunctional commitments are taken seriously, and it establishes personal ownership for performance and outcomes.

# 2.3. Types of Organizational Personality

### **Seven Organization Stereotypes**

The Relation between organizational DNA and Based on Hamilton's experience working with organizations and how well or bad the four orgDNA building blocks are aligned in them, there are seven principal types of organizations- the first three are healthy and the latest four are unhealthy.

The listed below is an overview of organizational stereotypes [9,10].

## 2.3.1. Resilient Organizations

Resilient organizations are flexible enough to adapt quickly to external market shift, forward looking, fun, and they attract team players. The resilient organization is the healthiest of all the profiles because it always scans the horizon for the next competitive battle or market innovation.

## 2.3.2 The just in Time Organization (JIT)

This type of organization has demonstrated an ability to "turn on a dime" when necessary, without losing sight of big picture. JIT organization is inconsistently prepared for change by having attitudes that infuses the office and inspires creative outbursts.

#### 2.3.3. The Military Organization

In such organizations, everyone knows his or her role and implements it diligently. This organization often driven by a small, involved senior team because it is hierarchical and operate under a highly controlled management model that allows it to efficiently execute large volumes of similar transactions.

#### 2.3.4. The Outgrown Organization

This organization is too large and complex to be effectively controlled by a small team, but yet it has to democratize decision –making authority. Because power is closely held at the top, this organization tends to react slowly to market developments and often it cannot get out of its own way.

## 2.3.5. The Over Managed Organization

Burdened with multiple layers of management, this organization is a case study in" analysis paralysis". Managers in this organization spend their time checking subordinates work rather than scanning environment.

#### 2.3.6. The Fit and Starts Organizatio

Organizations contain scores of smart, motivated and talented people, who rarely pull in the same direction at the same time.

#### 2.3.7. The Passive Aggressive Organization

This is the seething, smiley-face organization. Making change isn't problem in this organization, but implementing these changes is next to impossible. Management in passive aggressive organization struggles to implement agreed-upon plans.

## 3. Research Model

There is one independent variable for the study of organizational DNA. There is one dependent variable innovative performance. There are two moderating variables namely type of the organizations (local or international) and types of organizational personality (seven organizational personality stereotypes). It shows the rational link between the two types of observed variables i.e. independent, moderating and dependent variables. From the above discussion.

# 4. Research Questions and Hypotheses

The research will be trying to answer the following questions:

- Q1: To what extent the types of organizational personality affect the level of innovative performance and compare this effect in local versus the international organizations in Egypt.
- Q2: Why most of the international organizations in Egypt have many competitive advantages over local (Egyptian) organizations which lead to more market share and profits for the international organizations versus local organizations?
- Q3: To what extent the types of organizations (local international) affect the level of innovative performance.
- Q4: Why some organizations cross the finish line before others have even started their engines?
- Q5: How well or bad the four orgDNA building blocks are aligned in different organizational industries then how to take corrective strategic action in bad alignment in both local and international organizations?

Q6: To which extent the alignment of orgDNA building blocks can influence innovation performance in local and international organizations in Egypt.

The following hypotheses were developed to decide if there is a significant correlation between organizational DNA and innovative performance in comparing this effect in local and international organizations in Egypt.

- H1: There is a statistically significant relationship between the total components of the organizational DNA (as an independent variable) and the total innovative performance (as a dependent variable) in local organizations.
- H2: There is a statistically significant relationship between total DNA components (as an independent variable) and total innovative performance (as a dependent variable) in international organizations.
- H3: There is a statistically significant correlation between the types of organizational personality (as a moderate variable) and the total innovative performance (as a dependent variable) in local organizations.
- H4: There is a statistically significant relationship between the types of organizational personality (as a moderate variable) and the total innovative performance (as a dependent variable) in international organizations.

# 5. Research Strategy

# 5.1. Population and Sample

The population of the study included employees from local and international organizations in Egypt. The study includes 100 employees from local organizations and 100 employees from international organization in Egypt.

Table 1. Characteristics of The Sample

Table 1. Characteristics of The Sample								
Variable		Frequency	Percentage					
	From 27 to 30 years	74	37.00%					
A	From 30 to 45 years	104	52.00%					
Age	above 45 years	22	11.00%					
	Total	200	100.00%					
	Male	148	74.00%					
Gender	Female	52	26.00%					
	Total	200	100.00%					
Educational level	Bachelor.	114	57.00%					
	Post graduate (Master, PHD or DBA)	86	43.00%					
	Total	200	100.00%					
	From 2 to 5 years	42	21.00%					
Eumanianaa	From 5 to 10 years	144	72.00%					
Experience	More than 10 Years	14	7.00%					
	Total	200	100.00%					
	Employee	96	48.00%					
Managerial level	First line manager / Middle Manager	104	52.00%					
	Total	200	100.00%					
	Local	100	50.00%					
Types of the organization	International	100	50.00%					
	Total	200	100.00%					

#### 5.2. Procedure

The aim of this study was to compare the significant role of organizational DNA in improving innovative performance with comparing this role in local versus international organizations in Egypt. It was necessary to explore the four building blocks of organizational DNA (decision rights, information, motivators, and structure) and innovative performance dimensions (Speed of decision making, transparency and accountability) at local and international organizations in Egypt. A survey research method was used to collect data. The questionnaire included 12 questions, relating to the four building blocks of organizational DNA, 21 questions related to the seven organizational personality types, 9 questions related to the three dimensions of innovative performance and biographical information of employees also mentioned. Data collection took approximately two months. Survey responses were 89%, 200 completed surveys out of the 225 distributed.

# 5.3. Research Variables and Methods of Measuring

The study of data collected through questionnaires has three sources: the four organizational DNA building blocks, innovative performance dimensions, seven types of organizational personality, types of the organization (local or international organization) and basic respondent demographic data. The 16-item scale of organizational DNA section is based on [1,3,14,15,16,17,18,27,28,29]. There were 3 items measuring decision rights, 3 items measuring information, 3 items measuring motivators, 3 items measuring structure. The 21- items scale of types of organizational personality section. There were nine items measuring innovative performance (3 items for speed of decision making, 3 items for accountability and 3 items for transparency). Responses to all item's scales were anchored on a five (5) point Likert scale for each statement which ranges from (5) "full agreement," (4) for "agree," (3) for "neutral," (2) for "disagree," and (1) for "full disagreement."

## **5.4.** Data Analysis and Testing Hypotheses

The researcher has employed the following methods: (1) Cronbach's alpha, (2) Simple and multiple linear regression models, (3) Pearson's correlation coefficient and (4) T-test. All these tests are found in SPSS.

# 6. Hypotheses Testing

## 6.1. Evaluating Reliability

Cronbach's Alpha was used to assess the reliability of the scales. Item analysis indicated that dropping any items from the scales would not significantly raise the alphas. Table 2 the results of the reliability test for each variable of organizational DNA and innovative performance.

To assess the reliability of the data, Cronbach's alpha test was conducted. Table 2 shows the reliability results. All items (total of each variable) had alphas above 0.70 and were therefore excellent.

The 3 items of decision rights scales are reliable since the Cronbach's Alpha is 0.907. The information, which consists of 3 items, is reliable since the Cronbach's Alpha is 0.925. The 3 items related to organizational structure are reliable as Cronbach's Alpha is 0.947. Furthermore, the Motivators, which consists of 3 items, is reliable since the Cronbach's Alpha is 0.943. The 12 items related to organizational DNA components are reliable since Cronbach's Alpha is 0.931. Thus, the reliability of organizational DNA components can be acceptable. The 21 items of types of organizational personality scales are reliable since the Cronbach's Alpha is 0.812. Thus, the reliability of types of organizational personality scales can be acceptable. The 9 items of innovative performance scales are reliable because the Cronbach's Alpha is 0.931. The speed, which consists of 3 items, is reliable since the Cronbach's Alpha is 0.928. The three items related to transparency are reliable as Cronbach's Alpha is 0.946. Furthermore, the accountability, which consists of three items, is reliable since the Cronbach's Alpha is 0.919.

Table 2. Reliability and Intrinsic Validity of The Questionnaire								
Organizational DNA	Correlation	Number of Statements	Cronbach's Alpha	Intrinsic Validity				
Decision Rights	0.823(**)	3	0.907	0.952				
Information	0.856(**)	3	0.925	0.962				
Organizational Structure	0.896(**)	3	0.947	0.973				
Motivators	0.889(**)	3	0.943	0.971				
Organizational DNA	0.866(**)	12	0.931	0.965				
Types of Organizational Personality.	Correlation	Number of Statements	Cronbach's Alpha	intrinsic Validity				
a)-Passive Aggressive	0.475(**)	3	0.689	0.830				
b)-The Fits and Starts Organization	0.497(**)	3	0.705	0.840				
c)- Outgrown Organization	0.458(**)	3	0.677	0.823				
d)- Over Managed Organization	0.518(**)	3	0.720	0.848				
e)- Just in time Organization	0.190(**)	3	0.436	0.660				
f)-Military Organization	0.277(**)	3	0.526	0.725				
g)- Resilient Organization	0.176(*)	3	0.420	0.648				
Types of Organizational Personality.	0.660(**)	21	0.812	0.901				
Innovative performance	Correlation	Number of statements	Cronbach's Alpha	intrinsic validity				
1)-Speed	.861(**)	3	0.928	0.963				
2)-Transparency	.894(**)	3	0.946	0.972				
3)- Accountability	.844(**)	3	0.919	0.958				
Innovative performance	0.866(**)	9	0.931	0.965				

# 6.2. Organizational DNA (Decision Rights) and Innovative Performance

The relationship between organizational DNA (Decision Rights) and OP is determined. The first hypothesis to be tested is:

H1: There is a statistically significant relationship between the total components of the organizational DNA (as an independent variable) and the total innovative performance (as a dependent variable) in local organizations.

According to Table 3, there is statistically significant positive correlation between total components of organizational DNA (independent variable) and total components of innovative performance (dependent variable) in local organizations, meaning that the higher the level of the organizational DNA components, the higher the level of the innovative performance.

From Table 3, there is 91.2% of the variation in innovative performance (as a dependent variable) in local organizations is explained by total organizational DNA (as an independent variable). The remaining 8.8% is due to other factors, which are not included in the study. This confirms the validity of the first hypothesis.

Table 4, shows that there is a statistically significant positive correlation between the components of the organizational DNA (as an independent variable) and the total innovative performance (as a dependent variable) for local organizations, meaning that the higher the degree of

(decision rights, information, organizational structure and motivators) the greater the innovative performance of the local organization.

There is 90.8% of the variations in innovative performance in international organizations is explained by four components of the organizational DNA components (decision rights, information, organizational structure and motivators). Each of the four components of organizational DNA affect the increase of the innovative performance of the local organization by 90.8% and the remaining 9.2% is due to other factors which are not included in this study. This confirms the validity of the first hypothesis.

H2: There is a statistically significant relationship between total DNA components (as an independent variable) and total innovative performance (as a dependent variable) in international organizations.

Table 5, shows a statistically significant positive correlation between total organizational DNA components (as an independent variable) and total innovative performance (as a dependent variable) for international organizations, meaning that the higher the level of the organizational DNA components, the higher the level of the innovative performance.

The total organizational DNA variable affects by 83.7% in increasing the level of innovative performance in international organizations. The remaining 16.3% is due to other factors which are not included in the study.

This confirms the validity of the hypothesis.

Table 3. Simple Regression Analysis for The Relation Between Total Components of Organizational DNA (Independent Variable) and Total Components of Innovative Performance (Dependent variable) in Local Organizations

Variable	В	T	Sig.	R	R Square	F
(Constant)	1.861	2.281	0.025	0.955	0.912	1010**
Organizational DNA	0.682	31.793	0.000	0.933	0.912	1010**

P < 0.001\*\*, P < 0.01\*\*, P < 0.05\*, n = 100. Note: \*\* Correlation is significant at 0.01 level.

Table 4. Results of Multiple Regression Analysis for The Relation Between Organizational DNA (Independent Variable) And Innovative Performance (Dependent Variable) in Local Organizations

Variable	В	T	Sig.	R	R Square	Adjusted R Square	F
(Constant)	1.931	2.073	0.041				
Organizational DNA	0.729	5.945	0.000				
Decision Rights	0.617	5.294	0.000	0.955	0.912	0.908	246.4**
Information	0.724	6.555	0.000	0.933	0.912	0.908	240.4***
Organizational structure	0.729	5.945	0.000				
Motivators	0.657	6.386	0.000				

P < 0.001\*\*, P < 0.01\*\*, P < 0.05\*, n = 100. Note: \*\* Correlation is significant at 0.01 level.

Table 5. Simple Regression Analysis of The Relationship Between Total Organizational DNA Components (as an Independent Variable) and Total Components of Innovative Performance (as a Dependent Variable) for International Organizations.

Variable	В	T	Sig.	R	R Square	F
(Constant)	5.066	4.165	0.000	0.015	0.837	504.5**
Organizational DNA	0.617	22.462	0.000	0.913	0.837	304.3***

P < 0.001\*\*, P < 0.01\*\*, P < 0.05\*, n = 100. Note: \*\* Correlation is significant at 0.01 level.

Table 6. Results of Stepwise Regression Analysis of The Relationship Between the Components of The Organizational DNA (As an Independent Variable) and the Total Components of The Innovative Performance (As a Dependent Variable) in International Organizations.

Variable	В	T	Sig.	R	R Square	Adjusted R Square	F
(Constant)	5.030	3.81**	0.000				
1)-Decision Rights	0.777	5.27**	0.000				
2)-Information	0.428	3.02**	0.003	0.917	0.842	0.835	126.3**
3)-Organizational structure	0.700	4.07**	0.000				
4)-Motivators	0.572	4.88**	0.000				

P < 0.001\*\*, P < 0.01\*\*, P < 0.05\*, n = 100, Note: \*\* Correlation is significant at 0.01 level.

According to Table 6, there is a statistically significant positive correlation between the components of the organizational DNA (as an independent variable) and the total innovative performance (as a dependent variable) for the international organizations, meaning that the higher the degree of (decision rights, information, organizational structure and motivators) the greater the innovative performance of the international organization. Each of the four components of organizational DNA together affect the increase of the innovative performance of the local organization by 83.5% and the remaining 16.5% is due to other factors which are not included in this study. This confirms the validity of the hypothesis. H3: There is a statistically significant correlation between the types of organizational personality (as a moderate variable) and the total innovative performance (as a dependent variable) in local organizations.

Table 7 shows that: The passive aggressive, over managed and just in time a type of organizational personality (as an independent variable) did not show significant correlations with the total innovative performance (as a dependent variable) in local organizations.

There is a statistical significant negative relationship between some types of organizational personality (as an independent variable) and the total innovative performance (as a dependent variable) for local organizations, meaning an inverse relationship, that the higher the level of the degree of the fits and starts organization and outgrown organization, the lower the degree of innovative performance of the local organizations.

There is a statistically significant positive correlation between some types of organizational personality (as an independent variable) and total innovative performance (as a dependent variable) for local organizations. In other words, the higher the degree of the military and the resilient organizations, the higher the degree of innovative performance in the local organizations. It was found that the previous significant four types of organizations affect the level of innovative performance of local organizations by 66.9%, while the remaining 33.1% is due to other factors not included in this study. This confirms the validity of the hypothesis.

H4: There is a statistically significant relationship between the types of organizational personality (as a moderate variable) and the total innovative performance (as a dependent variable) in international organizations

The passive aggressive, over managed and just in time a type of organizational personality (as an independent variable) did not show significant correlations with the total innovative performance (as a dependent variable) in international organizations.

There is a statistical significant negative relationship between some types of organizational personality (as an independent variable) and the total innovative performance (as a dependent variable) for international organizations, meaning an inverse relationship, that the higher the level of the degree of the fits and starts organization and outgrown organization, the lower the degree of innovative performance of the international organizations.

There is a statistically significant positive correlation between some types of organizational personality (as an independent variable) and total innovative performance (as a dependent variable) for international organizations. In other words, the higher the degree of the military and the resilient organizations, the higher the degree of innovative performance of the international organizations.

It was found that the previous significant four types of organizations affect the level of innovative performance of international organizations by 63.5%, while the remaining 36.5% is due to other factors not included in this study. This confirms the validity of the hypothesis.

Table 7. Multiple Stepwise Regression Analysis of The Relationship Between Types of Organizational Personality (As an Independent Variable) And Total Innovative Performance (As a Dependent Variable) For Local Organizations

	В	T	Sig.	R	R Square	Adjusted R Square	F
(Constant)	22.408	7.422	0.000				
b)-The fits and starts organization	-0.713	-4.0 62	0.000				
c)- Outgrown organization	-0.458	-2.724	0.008	0.826	0.683	0.669	51.09**
f)-Military organization	0.877	4.318	0.000				
g)- Resilient organization	1.024	4.937	0.000				

P < 0.001\*\*, P < 0.01\*\*, P < 0.05\*, n = 100. Note: \*\* Correlation is significant at 0.01 level.

Table 8. The Multiple Stepwise Regression Analysis of The Relationship Between the Personality Types of the Organizations (As an Independent Variable) And the Total Innovative Performance (as a Dependent Variable) For International Organizations

	В	T	Sig.	R	R Square	Adjusted R Square	F
(Constant)	14.525	4.32**	0.000				
b)-The fits and starts organization	-0.348	-2.74**	0.007				
c)- Outgrown organization	-0.398	-3.09**	0.003	0.806	0.650	0.635	44.06**
f)-Military organization	0.821	4.80**	0.000				
g)- Resilient organization	1.499	6.51**	0.000				

P < 0.001\*\*, P < 0.01\*\*, P < 0.05\*, n = 100. Note: \*\* Correlation is significant at 0.01 level.

# 7. Research Findings

The present study on analyzing the relationship between organizational DNA and innovative performance and with types of organizational personality as a moderating variable has revealed the following results:

- 1) There is a statistically significant relationship between the total components of the organizational DNA (as an independent variable) and the total innovative performance (as a dependent variable) in local organizations.
- 2) There is a statistically significant relationship between the total components of the organizational DNA (as an independent variable) and the total innovative performance (as a dependent variable) in international organizations.
- 3) There is a statistically significant correlation between the types of organizational personality (as a moderate variable) and the total innovative performance (as a dependent variable) in local organizations.
- 4) There is a statistically significant relationship between the types of organizational personality (as a moderate variable) and the total innovative performance (as a dependent variable) in international organizations.

### 8. Recommendations

1-Establish a reliable and honest information system by establish a weekly or monthly online newsletter which contain all data, information and news of the organizations to all employees of the company by mail on the same time. In order to enhance the innovative performance either in the local or international organizations.

2-Establish a modern electronic communication network and intranet in local organizations which is a private network accessible only to an organization's staff, which is considered as an important focal point of internal communication and collaboration between an organizational employee. In order to enhance the innovative performance either in the local or international organizations.

3-Divide complex and large organizations into small business units in order to decreasing the span of control and get rid of unhealthy organizational type as outgrown organizational personality type in local organizations.

4- Conduct an annual or semi-annual questionnaire to determine the personality of the organization in the local organizations and consult some of the consultants from the international companies located in Egypt or the consulting offices in order to reach the best personality of the local organizations (Just in time, military or resilient organization).

5-Improving the innovative performance within the Egyptian companies begins to deepen the attention to personal responsibility of each employee within the company and equally with transparency in the transfer of organizational goals to the staff and in addition, the need to interact with the employee's feedback positively.

# 9. Conclusion

1-The higher the level of the total organizational DNA, the higher the level of the innovative performance, there is 91.2% of the variation in innovative performance (as a dependent variable) in local organizations is explained by total organizational DNA (as an independent variable).

2-The higher the degree of (decision rights, information, organizational structure and motivators) the greater the innovative performance in the local organization. There is 90.8% of the variations in innovative performance in local organizations is explained by four components of the organizational DNA components. Each of the four components of organizational DNA affect the increase of the innovative performance of the local organization by 90.8% and the remaining 9.2% is due to other factors which are not included in this study.

3-The higher the level of the organizational DNA components, the higher the level of the innovative performance. The total organizational DNA variable affects by 83.7% in increasing the level of innovative performance in international organizations. The remaining 16.3% is due to other factors which are not included in the study. That the higher the degree of (decision rights, information, organizational structure and motivators) the greater the innovative performance of the international organization. Each of the four components of organizational DNA together affect the increase of the innovative performance of the local organization by 83.5% and the remaining 16.5% is due to other factors which are not included in this study.

4. There is a statistical significant negative relationship between some types of organizational personality (as an independent variable) and the total innovative perfor-mance (as a dependent variable) for local organizations, meaning an inverse relationship, that the higher the level of the degree of the fits and starts organization and outgrown organization, the lower the degree of innovative performance in the local organizations. There is a statistically significant positive correlation between some types of organizational personality (as an independent variable) and total innovative performance (as a dependent variable) for local organizations. In other words, the higher the degree of the military and the resilient organizations, the higher the degree of innovative performance in the local organizations. It was found that the previous significant four types of organizations affect the level of innovative performance of local organizations by 66.9%, while the remaining 33.1% is due to other factors not included in this study.

5. There is a statistical significant negative relationship between some types of organizational personality (as an innovative independent variable) and the total performance (as a dependent variable) for international organizations, meaning an inverse relationship, that the higher the level of the degree of the fits and starts organization and outgrown organization, the lower the degree of innovative performance of the international organizations. There is a statistically significant positive correlation between some types of organizational personality (as an independent variable) and total innovative performance (as a dependent variable) in international organizations. In other words, the higher the degree of the military and the resilient organizations, the higher the degree of innovative performance of the international organizations.

It was found that the previous significant four types of or-ganizations affect the level of innovative performance of international organizations by 63.5%, while the remaining 36.5% is due to other factors not included in this study.

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