

Structural equation modeling of consequences of organizational anomie

Mohammad Reza Rahimi Zarchi^a, Malike Beheshtifar^{a,*}, Hossein Kazemi^b

^aDepartment of Management, Rafsanjan Branch, Islamic Azad University, Rafsanjan, Iran

^bDepartment of Management, Faculty of Economics and Administrative Sciences, Vali-e-Asr University of Rafsanjan, Rafsanjan, Iran

(Communicated by Mohammad Bagher Ghaemi)

Abstract

Anomie can be called the phenomenon of the modern era because modernization causes damage to the previous value structure, and as a result, the modern man is somehow in confusion and identity crisis. This study has been conducted with the aim of modeling the explanatory structural equations of factors affecting the consequences of organizational anomie. About 12 experts' opinions have been used to model the explanatory structural equations of factors affecting the consequences of organizational anomie. In this research, to identify the criteria and express the relationships between the criteria, after studying the related research literature and interviewing the experts under study, the Interpretive Structural Modeling (ISM) technique and MICMAC analysis were used. After the data analysis, the variables were classified into four different levels and according to the ISM, graph relationships were drawn. After MICMAC analysis, the variables were placed in three groups of independent or key variables, autonomous and dependent. The variables of "nepotism and discrimination" and "technological turbulence" are more influenced by other factors and from a systemic point of view, they are considered among the effective and dependent elements (the second group) that have a weak influence, but despite this, they have a higher dependence force than It has other factors. Also, the variables "managers' lack of commitment to the organization's values" and "lack of a suitable evaluation system" are among the key variables, which are included in the category of independent variables (fourth group) and have a great impact on the realization and meta-analysis of the factors affecting the consequences of organizational anomie. , which has a high influence and low dependency. Determining the relationships between factors can lead to a better understanding of the issue and making appropriate decisions in identifying the factors affecting the consequences of organizational anomie.

Keywords: Anomie, organizational anomie, interpretive structural equations
2020 MSC: 68V30, 90B50

1 Introduction

The organization is a Social Phenomenon to achieve collective and common goals that are consciously coordinated and has specific limits. The term social phenomenon shows the concept that the organization consists of individuals

*Corresponding author

Email addresses: mrrahimizarchi@yahoo.com (Mohammad Reza Rahimi Zarchi), m.beheshtifar@yahoo.com (Malike Beheshtifar), h.kazemi@vru.ac.ir (Hossein Kazemi)

and groups interacting with each other. Since the organization is a social phenomenon, the patterns and norms that the organizations follow must be balanced and coordinated to minimize ambiguity and confusion and ensure that the organization does not experience normlessness and chaos [15]. Organizations as social entities can suffer from abnormality, chaos, disorder, and chaos, which is theoretically called Organizational Anomie [20]. Alport believes that such organizations lack social vitality and cohesion, especially moral leadership, and they are considered organizations that promote Collapse. Hudson believes that anomic organizations lack common norms; It means that even though some organizations may have the features of an anomic organization, there are people who are segregated from others and even from themselves in the organization, and they provide the necessary space for an organization without norm [5]; In other words, observance these organizational norms and patterns cause leads to balance and order in the organization, because organizations are governed based on order and through their norms, and organizational norms and patterns determine the behavior in the interaction between employees [9]. Organizational norms are developed to stabilize the present situation. Therefore, the norms and their observance in the group and organization cause conformity, order, integration, unified precedent, and organizational cohesion, and in return, their non-observance causes collapse and chaos [13, 19].

Currently, Iran has the most critical situation in terms of abnormality. Many thinkers and experts in social problems believe that the current situation in Iran is anomic. The weakening of social order and the disintegration of social cohesion are mentioned as destructive social consequences and gaps and contradictions resulting from the implementation of economic policies in Iran [1]. Some researchers consider these anomic conditions to be strong and intensifying [16] and mentioned the terms double anomie [11] and economic anomie and normative disruptions and the deterioration of the social conditions and its relationship with malfunction [14]. The situation and the above perceptions of social conditions in the new Iranian society have caused researchers to emphasize research on anomie. But anomie is not an unambiguous term. Different interpretations and perceptions were presented from the concept of anomie. Unfortunately, the concept of anomie has developed too much so that it includes a wide range of social conditions and psychological states. Personal disorganization, cultural dissonance, and mutual distrust are among these cases. In this regard, Mizrokhi believes that there is more than one type of anomie and the differential distribution of anomie between different classes indicates the types of anomie [16]. Anomic workplaces are usually stagnant and do not have the appropriate technology, and have a downward trend with reduced performance. In these workplaces, there is a proverbial swamp that employees sink into over time. They don't have enough dynamism and vitality, and they repeatedly flounder in their workplace like a person who is drowning in a swamp, lose their inner power and become a tired and hopeless person in the long term. Failure to meet expectations over time, lack of space for growth and participation, type of job, organizational structure, and environmental factors are the problems that are effective in the prevalence of mental and emotional distresses in government organizations. These factors plunge employees into the swamp of doing repetitive tasks and lack motivation over time, and in this way, their talent is wasted [20]. In other words, in these conditions, disorder, conflict, instability of norms, and some fields, anomies are visible. In other words, it can be said that observance of the norms creates a balance and order in the organization because the organization is managed based on order and through its norms, and organizational norms and patterns determine the behavior in the interaction between employees. The organization is in an anomic condition if organizational norms and values are not respected, which is called organizational anomie in the literature on organization and management [17]. The feeling of anomie among students should be seriously investigated to solve it. In the meantime, considering that behaviors such as despair, meaninglessness, and mistrust of others and officials are among the complications of anomie and the consequences that can occur after the society suffers from anomie in the society, therefore, in the problem statement, it should be emphasized that how will people with such characteristics interact with others when they live in society, and how will they influence other people and how will they educate some people to society in the future [8].

In Iran, universities have challenges and problems in respecting the ethics of science and internalizing academic and professional norms among students and the scientific environment [12]. Findings and statistics reported in academic research show that the commitment and following the counter-norms of science to the norms of science, the failure to realize the minimum necessary elements and factors for the formation of the scientific community and scientific norms, the lack of formation of supervisory and supportive institutions in the scientific community and to as a result, lack of full observance scientific standards and norms are not fully respected in the scientific community, low tendency towards scientism and commitment to, weakness of scientific-research culture and disregard for scientific ethics norms, rejection of scientific hierarchy by students and young graduates and individualism, non-observance of moral norms and lack of teaching spirit in students and pride in professors and students, inefficiency of university culture in academic education, crisis of quantity and lack of qualified teachers and The priority of education over research in universities, problems in human agency and scientific development structures, low job satisfaction among the university professors, low knowledge of scientific productivity and weakness in science production, and finally, the

low capacity of Iran's academic space for promoting academic norms are the basic challenges of the university system and higher education to scientific development and the formation of the scientific community and the cultivation and promotion and internalization of academic norms in Iran. Investigating the status quo shows that in Iran, universities are disordered and prone to anomie due to challenges such as lack of strategy and competition, outdated teaching methods, and old scientific texts without considering the needs of the business environment, credentials, and ignoring the empowerment of graduates, process-oriented approach instead of result-oriented approach and lack of organizational entrepreneurship. Considering the role of universities in the progress and prosperity of the country, creating anomic conditions in such organizations can lead to irreparable losses. Observance of the norms and regular organizational patterns by the experts of the organization will play an important role in improving it and helping the development across the country. Therefore, in this research, the modeling of the explanatory structural equation of the factors affecting the consequences of organizational anomie (the case study of Islamic Azad University) is investigated, considering the important role of preventing the occurrence of organizational anomie (irregularity and non-observance of norms).

2 Methodology

Interpretive structural modeling has been used to perform this research. Interpretive structural modeling (introduced by Warfield in [22]) is a systematic and structured method to develop and understand the relationships between the elements of a complex system [2]. This method is an interactive learning process in which a set of different and interrelated elements are structured in a comprehensive systematic model. This methodology helps to develop and direct complex relationships between the elements of a system. Interpretive structural modeling is perfumed by preparing a list of variables that are related to the problem or topic. These variables were obtained through literature reviews, interviews with experts, or questionnaire design. The research method is Interpretative because the group judgment of people determines whether there are relationships between these variables. In addition, the research method is Structural because it is the basis of relationships of a general structure and is obtained from a complex set of variables [18].

The main idea of interpretive structural modeling is to decompose a complex system into several subsystems (variables) using scientific experience and expert knowledge to build a multi-level structural model [2].

Therefore, in each mentioned method, in addition to collecting the opinions of experts and studying previous research, the opinions of experts on the subject for discussion are used in determining the interactive relationships and prioritizing the factors concerning the important role of identifying factors in the effective development of strategic thinking of human resource managers, which shows the achievement of more effective and reliable results. The interpretive structural method (ISM) is used because the investigated problem is compatible with the interpretive structural modeling method, and its goal is to present a structural model for the development of strategic thinking of human resource managers. The different stages of ISM are as follows:

The First step: criteria or variables are listed.

The Second step: A content relationship between criteria or variables is defined according to each pair of criteria or variables identified in the first step. Content relationship means that the conceptual relationship between the components of the system is compatible with the goals of the system in terms of meaning and content.

Other samples that can show this relationship are "priority over", "supports from", "prevents from", "reports to", and "the effects on". Content relationships between two components are classified in several ways, including Definitive relationship, Comparative relationship, Influence relationship, Temporal relationship, Spatial relationship, and Mathematical relationship. In this research, we have used the Influence relationship.

The Third Step: A Structural Self-Interaction Matrix (SSIM) is developed for the barriers, which shows pairwise relationships.

The Fourth Step: The Accessibility matrix is developed using the self-interactive structural matrix, and this matrix is analyzed for transitivity. The transitivity of the content relationship is a basic hypothesis in interpretive structural modeling. It means that if variable "A" is related to variable "B", then variable "B" is also related to variable "C".

The Fifth step: The Accessibility matrix was divided into different levels in the fourth step.

The Sixth step: A directed graph is drawn based on the relations determined in the accessibility matrix, and the transitivity relations are removed.

The Seventh step: The final diagram is transformed into interpretive structural modeling by replacing variables' names or criteria instead of nodes.

The Eighth step: The structural modeling developed in the seventh step is revised so that it does not have inconsistent content. If there are inconsistent contents, the necessary corrections will be performed.

3 Findings

3.1 Structural Self-Interaction Matrix (SSIM)

Interpretive structural modeling recommends that the experts' opinions based on various management techniques such as Brain Storming and Nominal Group are used in the development of content relationships between variables. As a result, the opinion of 12 experts has been used in this research for the meta-analysis of factors affecting the consequences of organizational anomie. For each pair of criteria, experts were asked to comment on the relationship between both criteria. In total, four signs are used to show the relationship between two criteria, i and j:

- V: If criterion i affects only j.
- A: If only criterion j affects criterion i.
- X: If criteria i and j and criterion j affect criterion i.
- O: If there is no effective relationship between two criteria, i and j.

According to the instructions of Warfield [22], the experts' opinions method has been used to meta-analyze the factors affecting the consequences of organizational anomie.

3.2 Initial Reachability Matrix

When the structural self-interaction matrix is transformed into a matrix of zeros and ones called the initial reachability matrix. This matrix only has the numbers zero and one. The rule of placing the numbers zero and one instead of the four primary numbers (2, 1, -1, and 0) is as follows:

In the access matrix, cell (i, j) will be equal to 1, and cell (i, j) will be equal to 0 if the intersection of criteria (i, j) in SSIM is equal to V.

In the access matrix, both cell (i, j) and cell (i, j) will be equal to 1, and cell (i, j) will be equal to 0 if the intersection of criteria (i, j) in SSIM is equal to A.

In the access matrix, both cell (i, j) and cell (i, j) will be equal to 0, and cell (i, j) will be equal to 0 if the intersection of criteria (i, j) in SSIM is equal to X.

In the access matrix, cell (i, j) and cell (i, j) will be equal to 0 and 1, respectively, if the intersection of criteria (i, j) in SSIM is equal to O.

$$D = \begin{bmatrix} 0 & c_1 & c_2 & \cdots & \cdots & c_n \\ c_1 & 0 & d_{12} & \cdots & \cdots & d_{1n} \\ c_2 & d_{21} & 0 & \cdots & \cdots & d_{2n} \\ \cdots & \cdots & \cdots & 0 & \cdots & \cdots \\ \cdots & \cdots & \cdots & \cdots & 0 & \cdots \\ c_n & d_{m1} & d_{m2} & \cdots & \cdots & 0 \end{bmatrix} \tag{3.1}$$

In matrix *D* as the initial reachability matrix, each sign of d_{ij} is replaced by the numbers zero, and one and C_j indicate the development of strategic thinking of human resource managers.

3.3 Final Reachability Matrix

To develop the final reachability matrix, the initial reachability matrix was checked for transitivity. For this purpose, the initial matrix must be an exponent $K + 1$; so that a steady state is established ($MK = MK + 1$). Therefore, some zero elements will also become 1, which is shown as (*1). The final reachability matrix should be obtained using the following equations (I is the identity matrix) after creating the relations matrix or the initial reachability matrix:

$$\begin{aligned} M &= D + I \\ M^* &= M^K = M^{K+1} \end{aligned} \quad (3.2)$$

Lets that in large and complex systems, each component can be derived from itself. Therefore, all the principal diameter elements of the system's final matrix are always 1. For this purpose, we add the identity matrix with the initial reachability matrix to get the final reachability matrix. The properties of the final reachability matrix are as follows:

$$M^2 = M \quad (3.3)$$

In this regard, we expand the obtained final matrix to the exponent until the above condition occurs, and the obtained matrix will be the final reachability matrix. Of course, the operation of the matrix exponential must be according to the Boolean Algebra. According to this rule, we have:

$$1 \times 1 = 1 \text{ and } 1 + 1 = 1 \quad (3.4)$$

3.4 Set of Antecedent and Succedent

Each element of the system (criteria) has two different sets of Antecedent (A) and Succedent or Reachability (R), which play a fundamental role in the final matrix structure and system design. The antecedent set of each criterion includes the criteria that end with that criterion or that affect that criterion. For example, if criteria 2, 3, and 4 affect criterion 1, then these criteria form the pr antecedent set of criterion 1. In contrast, the succedent set represents the criteria that are influenced by a criterion or system component. For example, if criterion 1 affects criteria 2, 3, 4, and 5, then criteria 2, 3, 4, and 5 are the antecedent set of criterion 1. The antecedent set is also called the Reachability set.

3.5 Prioritizing of criteria

The Prioritizing of criteria was done after determining the reachability set and the antecedent set for each of the criteria and determining the common set. The common set is obtained by obtaining the joint of two reachability and antecedent sets. Criteria whose common set is the same as their reachability set have the first level of priority. The levels of other criteria are also determined by deleting these criteria and repeating this process for other criteria. Then the ISM diagram is mapped based on the determined levels and the final matrix. Each level is determined by repeating the following rule (C is the criteria set):

$$R(c_j) \cap A(c_j) = R(c_j), \forall c_j \in C \quad (3.5)$$

3.6 Clustering of criteria

In the final access matrix, the Influence power (Driving power) and Dependence power must be calculated for each of the elements to categorize the criteria. The influence of an element or criterion is the number of criteria that are affected by the corresponding criterion (such as that criterion). The Influence power of an element or criterion is the number of criteria that are affected by the corresponding criterion (such as that criterion). The Dependence power is the number of criteria that influence the corresponding criterion and lead to the achievement of that criterion. Influence and dependence powers are used in Impact Matrix Cross-Reference Multiplication Applied to a Classification (MICMAC) analysis, in which criteria are divided into four groups: Autonomous, Dependent, Linkage, and Independent (Driving criterion). The aim of matrix analysis is to multiply the effect of functional cross-reference to analyze variables of the influence power and the dependence power.

- The first category is Autonomous variables that have weak penetrating power and dependence. These variables are somewhat disconnected from the system and have weak relationships with the system.
- The second category includes Dependent variables that have weak penetrating power, although they have a higher dependence power than other barriers.

- The third category is called Linkage variables which have strong penetrating power and strong dependence power. These variables are actually unstable factors. It means that any operation on these factors, in addition to directly affecting other factors, can also have an effect on other factors in the feedback form from other factors.
- The fourth category is Independent variables that have strong penetrating power, but their dependence power is weak. As can be seen, a criterion with a strong penetrating power is called a Key criterion and is considered an independent or linkage variable.

Driving power ↓					
1		Zone 4		Zone 3	
2					
...					
n-1					
n		Zone 1		Zone 2	
Dependence power →	1	2		n-1	n

Figure 1: Criteria division diagram

3.7 The steps of the ISM method

3.7.1 Creating a structural self-interaction matrix (SSIM)

The following symbols are used to determine the type of equation:

- V: Factor i leads to the realization of j column factor.
- A: Factor j leads to the realization of i column factor.
- X: Both row and column factors make realize each other.
- O: There is no relationship between the row and column factor.

3.7.2 Initial Reachability Matrix

The conversion of ssim matrix symbols into zero and one is obtained based on the initial reachability matrix. There are only zero and one in this matrix. The rule of placing the numbers zero and one is as follows:

- If the square symbol is V, the number one is placed in that square, and the number zero is placed in the corresponding square.
- If the square symbol is A, the number zero is placed in that square, and the number one is placed in the corresponding square.
- If the square symbol is x, the number one is placed in that square, and the number one is placed in the corresponding square.
- If the square symbol is o, the number zero is placed in that square, and the number zero is placed in the corresponding square.

3.7.3 Final Reachability Matrix

The final reachability Matrix is created after the initial access matrix is formed to adapt the initial reachability matrix. Internal consistency is established according to the following equation:

$$SSIM = BOOLEAN(A^n + A^{n-1} + \dots + A^0) \tag{3.6}$$

In this matrix, the influence power and dependence power of each variable are shown. The influence power of each variable is the final number of variables (for example, itself) that can be involved in their creation. Dependence power is the final number of variables that make the desired variable. The results show that the highest influence power is related to the negative attitude of employees towards their jobs (with an influencing power of about 15), and the lowest influence power is related to technological turbulence (with an influencing power of about 3).

Table 1: structural self-interaction matrix

i \ j	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15
C1 Nepotism and discrimination	-	X	O	A	A	A	O	A	A	O	O	X	O	A	A
C2 Technological turbulence		-	O	O	O	O	O	O	O	O	O	A	O	A	O
C3 lack of commitment of executive management to the organization's values			-	O	O	V	V	O	O	O	O	O	A	O	O
C4 Poor implementation of the employee socialization process and poor relationships				-	V	O	O	X	X	A	A	X	A	V	X
C5 Unethical work environment					-	A	O	A	X	V	A	A	O	O	V
C6 Effectiveness of strategic attack						-	X	V	X	X	O	V	O	A	A
C7 Lack of Meritocracy and Clientelistic in the organization							-	O	A	A	O	A	X	X	O
C8 Social capital								-	A	X	O	O	A	X	A
C9 Competitor orientation and Competitive intensity									-	X	V	O	O	X	V
C10 The inability of the organization to reflect its true values										-	O	V	O	X	X
C11 Lack of proper evaluation system											-	V	O	O	O
C12 Organizational Culture												-	O	A	A
C13 Lack of common norms in the workplace													-	A	A
C14 The negative attitude of employees toward their jobs														-	A
C15 Poor leadership and management															-

Table 2: Initial Reachability Matrix

i \ j	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15
C1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0
C2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
C3	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
C4	1	0	0	1	1	0	0	1	1	0	0	1	0	1	1
C5	1	0	0	0	1	0	0	0	1	1	0	0	0	0	1
C6	1	0	0	0	1	1	1	1	1	1	0	0	0	0	0
C7	0	0	0	0	0	1	1	0	0	0	0	0	1	1	0
C8	1	0	0	1	1	0	0	1	0	1	0	0	0	1	0
C9	1	0	0	1	1	1	1	1	1	1	1	0	0	1	1
C10	0	0	0	1	0	1	1	1	1	1	0	1	0	1	1
C11	0	0	0	1	1	0	0	0	0	0	1	1	0	0	0
C12	1	1	0	1	1	1	1	0	0	0	0	1	0	0	0
C13	0	0	1	1	0	0	1	1	0	0	0	0	1	0	0
C14	1	1	0	0	0	1	1	1	1	1	0	1	1	1	0
C15	1	0	0	1	0	1	1	1	1	1	0	1	1	1	1

3.8 Determining the level of variables

The set of antecedent access and subscription is determined in order to determine the level of factors in the final model for each of them. The access set includes the set of factors that the target factor ends to these. The antecedent set includes the set of factors that the ends to target factor. The common set includes the sharing of two sets of access and antecedent. Table 4 shows the determination of the first level.

A factor is placed at the highest level if the access and subscription sets for that factor are the same. Then this

Table 3: Influence Power Matrix

i \ j	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	Influence Power
C1	1	1	0	1	1	1	0	1	1	0	0	1	0	0	0	8
C2	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	3
C3	1	0	1	0	1	1	1	1	1	1	0	0	1	1	0	10
C4	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	14
C5	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	14
C6	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	14
C7	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	12
C8	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	13
C9	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	13
C10	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	14
C11	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	12
C12	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	13
C13	1	0	0	1	1	1	1	1	1	1	0	1	1	1	1	12
C14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	15
C15	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	14
Dependence power	15	13	4	13	14	14	12	14	14	13	7	14	11	12	11	

Table 4: First level determination table

No	Access	Antecedent	Subscription	Level
1	1, 2, 4, 5, 6, 8, 9, 12	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	1, 2, 4, 5, 6, 8, 9, 12	1
2	1, 2, 12	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15	1, 2, 12	1
3	1, 3, 5, 6, 7, 8, 9, 10, 13, 14	3, 7, 14, 15	3, 7, 14	
4	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	
5	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	
6	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	1, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	
7	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13	3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15	3, 4, 5, 6, 7, 8, 9, 10, 12, 13	
8	1, 2, 4, 5, 6, 7, 8, 9, 12, 13, 14, 15	1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	1, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15	
9	1, 2, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15	1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	1, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15	
10	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	
11	1, 2, 4, 5, 6, 8, 9, 10, 11, 12, 14, 15	4, 6, 6, 10, 11, 12, 14	4, 5, 6, 10, 11, 12, 14	
12	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15	1
13	1, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15	3, 4, 5, 6, 7, 8, 9, 10, 13, 14, 15	4, 5, 6, 7, 8, 9, 10, 13, 14, 15	
14	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15	3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15	
15	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15	4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15	4, 5, 6, 8, 9, 10, 12, 13, 14, 15	

leveled factor is discarded, and leveling for other factors continues in the same way until all factors are leveled. The result is the definition level three.

3.9 Draw a model for the interactions of the factors

First, we sort the criteria according to the priority obtained based on the level from top to bottom. The structural model is drawn by nodes and lines using the matrix obtained from the matrix sorted based on levels. The relationship from i to j is indicated by an arrow from i to j. The final diagram drawn by removing the extreme nodes and also by using levels prioritization is shown in the diagram 2.

The first level is chosen as the most affected level, and the last level is the most influential level. As shown in Figure 2, the third-level factors (weak leadership and management, negative attitude of employees towards their jobs, lack of proper evaluation system, and lack of commitment of managers to the organization’s values) behave like the basis of the model. As a result, the meta-analysis of factors affecting the consequences of organizational anomie should

Table 5: table of variables level

No	Factors	Level
1	Nepotism and discrimination	1
2	Technological turbulence	1
3	lack of commitment of executive management to the organization's values	3
4	Poor implementation of the employee socialization process and poor relationships	2
5	Unethical work environment	2
6	Effectiveness of strategic attack	2
7	Lack of Meritocracy and Clientelistic in the organization	2
8	Social capital	2
9	Competitor orientation and Competitive intensity	2
10	The inability of the organization to reflect its true values	2
11	Lack of proper evaluation system	3
12	Organizational Culture	1
13	Lack of common norms in the workplace	2
14	The negative attitude of employees toward their jobs	3
15	Poor leadership and management	3

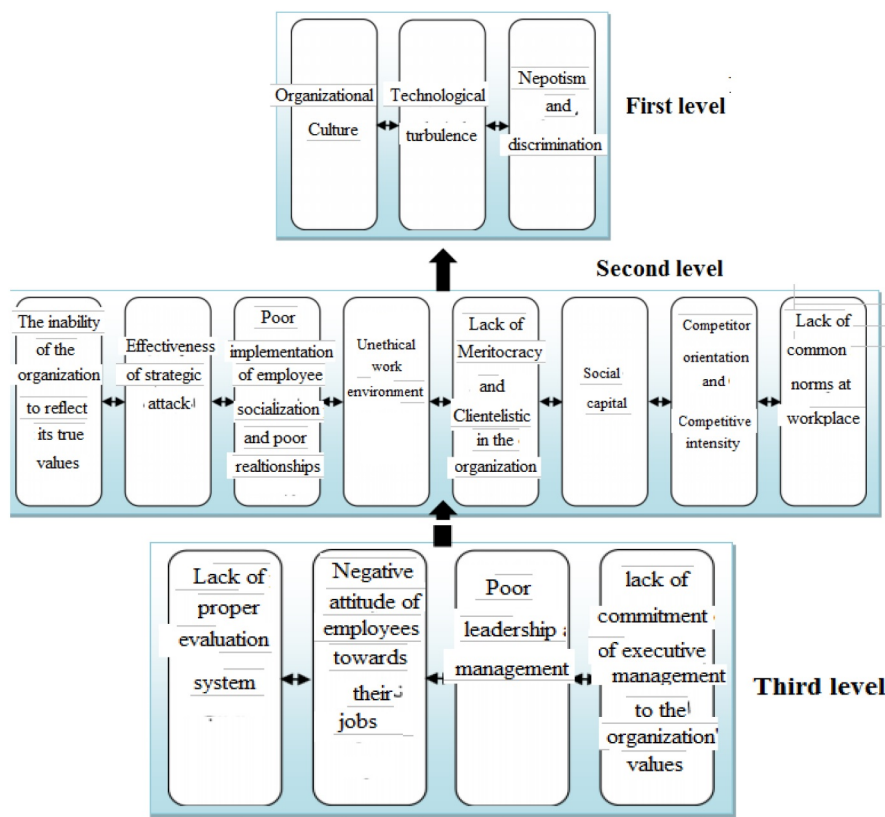


Figure 2: Model of the interactions of factors

start from these variables and generalize to other variables. Factors include weak implementation of the employee socialization process and weak communication, the unethical atmosphere in the work environment, effectiveness of the strategic attack, lack of meritocracy in the organization, social capital, orientation, and Competitive intensity, the inability of the organization to reflex its true values, lack of common norms at work are on the second level that affects the first level factors. First-level factors include nepotism and discrimination, technological turbulence, and organizational culture do not affect other factors.

4 MICMAC analysis

The purpose of the analysis is to identify the power of influence and dependence of the variables. All the factors can be placed in the four clusters of the Cross-Impact Matrix Multiplication Applied to Classification after determining

the influence power and dependence power. In the Cross-Impact Matrix Multiplication Applied to the Classification method, the boundary points are usually one unit larger than the average number of factors. For example, in this research, considering that the number of factors is equal to 15, the number of border points on this matrix is considered 8. However, different border points can be considered according to the research conditions. The border points should be placed in such a way as to separate the different factors in the desired clusters.

Table 6: Influence power and dependence power

	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15
Influence power	8	3	10	14	14	14	12	13	13	14	12	13	12	15	14
dependence power	15	13	4	13	14	14	12	14	14	13	7	14	11	12	11

MICMAC analysis shows that there are no variables in the autonomous category (first group). This indicates strong connections between the variables in the obtained model. The variables of nepotism and discrimination, and technological turbulence are more influenced by other factors and are among the most effective and dependent elements (second group) from the perspective of a system that has weak influence power but a higher dependence power than other factors. In other words, this factor is the output of interactions between other factors. In fact, there are more important factors for the meta-analysis of factors affecting the consequences of organizational anomie that lead to this factor.

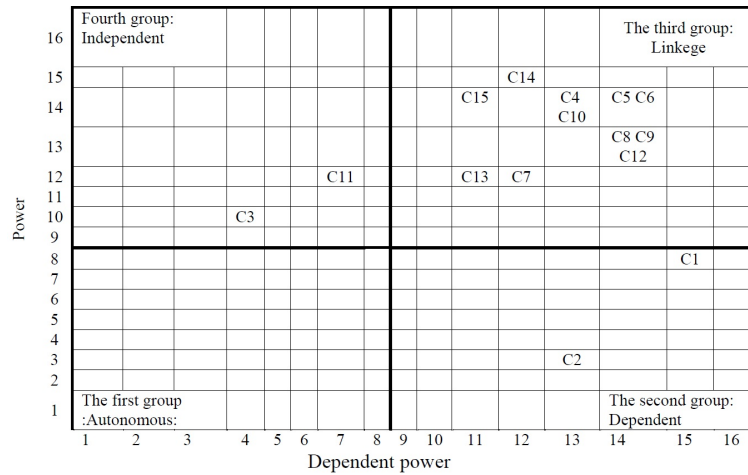


Figure 3: Model of the interactions of factors

The variables managers' lack of commitment to the organization's values and lack of appropriate evaluation system are key variables, which are in the category of independent variables (fourth group) and have a great impact on the realization and meta-analysis of the factors affecting the consequences of organizational anomie that has a high influence power and low dependence power. In general, variables with high influence power are called key variables. These variables are in one of two groups of independent or linkage variables. Any operation on these variables causes other variables to change. Other variables are linkage variables (third group) in terms of influence and effect; that is, they have a high influence power and a strong dependence power. These variables are non-static because their change affects the entire system, and finally, system feedback can change these variables again.

5 Discussion

This study aims to identify the consequences of organizational anomie based on explanatory structural equation modeling. Interpretive structural modeling started with the most important variables, which led to the creation of a comprehensive network of criteria with all the relationships between them, while before the beginning of the research, there was no acceptable understanding of this subject and its variables and the relationships between them in the organization. Then the ISM graph was drawn to get a comprehensive network and show the priority (leveling) of the variables graphically and to gain a complete insight into this correlation. The type of variables was determined according to the affective and effect on other variables using MICMAC analysis. It seems that this research model

can be useful for researchers with a large number of variables whose nature and relationship and even their type are unclear because the complexities can be reduced by using technical expert opinions. It is possible to reach an acceptable understanding of the subject under investigation, which will ultimately lead to better decisions.

The variables of nepotism and discrimination, and technological turbulence are more influenced by other factors. They are among the effective and dependent variables (the second group) from a systemic perspective that has a weak influence power but a higher dependence power than other factors. In other words, this factor is the output of interactions between other factors. In fact, there are more important factors for the meta-analysis of factors affecting the consequences of organizational anomie, which lead to the emergence of this factor. The variables of nepotism and discrimination in the studies of Emraei et al. [3] and Javadi et al. [8] have also been confirmed and mentioned as an effective factor in organizational anomie. In an organization where there is discrimination, and the employees and personnel are hired using nepotism, the organization faces problems in performing its duties, and the employees also fail to comply with the rules and regulations. With discrimination and nepotism, they avoid doing their jobs, and as a result, disorder and anomie will spread in the organization. The variable of technological turbulence has also been confirmed by Jabejdar and Bejani [7] and Vilca et al. [21] and has been introduced as an effective factor in organizational anomie. Technological changes and structural changes in the organization will cause many employees who are not familiar with these technologies to face problems in doing their jobs. It creates turbulence and confusion and, as a result, anomie and disorder in the organization.

The variable lack of management commitment to the organization's values and lack of a proper evaluation system are also key variables, which are in the category of independent variables (fourth group). This group has a great impact on the realization and meta-analysis of factors affecting the consequences of organizational anomie with high influence power and low dependence power. Variables that have a high influence power are called key variables. These variables are in one of two groups of independent or linkage variables. Any change in these variables leads to changes in other variables. The variable of lack of commitment of executive management to the organization's values is one of the factors affecting organizational anomie, which has been confirmed in the studies of Hatam et al. [6] and Karami and Edrisi [10] and introduced as an effective factor on organizational anomie. Managers who are not loyal to the organization and its goals don't make efforts to realize organizational values and ignore the goals of the organization and follow their individual goals, creating the ground for organizational anomie, and as a result, the organization faces anomie. The variable of lack of an appropriate evaluation system has been repeated three times in the studies of Amrai et al. [3], Mousavi et al. [15], and Eskandari et al. [4] and has been identified as an effective factor in behavioral abnormality. Employees consider the organization as a place for negligence and procrastination, especially if their performance is not evaluated correctly and they are not encouraged and punished according to their performance; as a result, anomie and abnormality will spread in the organization.

6 Conclusion

In general, it can be acknowledged that identifying factors affecting organizational anomie is not a mere executive decision based on research findings; Rather, its requirements must also be calculated and observed to achieve such a model. Identifying factors affecting organizational anomie at Islamic Azad University requires comprehensive planning of Azad University, and this is the responsibility of the Head of the Department. In the ISM graph, the mutual and effective relationships between the variables and the different levels are clearly visible, which leads to a better understanding of the decision-making environment. MICMAC analysis shows the variables of nepotism and discrimination, and technological turbulence is more influenced by other factors and are among the most effective and dependent elements (second group) from the perspective of a system that has weak influence power but has a higher dependence power than other factors. In other words, this factor is the output of interactions between other factors. The variable's lack of commitment of executive management to the organization's values and lack of an appropriate evaluation system are independent variables in terms of effectiveness and effectiveness. In this sense, these variables have the least effectiveness and effectiveness.

References

- [1] Y. Abazari, *Bazar society, in the report of the social situation of the country, book of abstracts*, Supreme Council of the Cultural Revolution, Iran, 2014.
- [2] A. Ali Akbari and M. Akbari, *Structural-interpretive modeling of factors affecting the livability of the metropolis of Tehran*, J. Spat. Plan. (Humanities) **21** (2017), no. 443, 1–31.

- [3] F. Emrai, S.N. Mousavi, R. Sepahvand and A.H. Nazarpuri, *Sociological analysis of the antecedents and consequences of organizational anomie (case study: Lorestan province workers' Welfare bank)*, Soc. Capital Manag. **9** (2022), no. 1, 49–76.
- [4] M. Eskandari, A. Eslami Farsani, A. Kargar and M.R. Hadi Lo, *Investigating and identifying factors affecting the behavioral abnormalities of human resources in the ethical dimension*, Res. Human Resour. Manag. **10** (2017), no. 3.
- [5] M. Golparvar and M. Nadi, *Organizational abnormality in relation to faculty members' attitudes*, J. Soc. Sci. **7** (2010), no. 1, 141–159.
- [6] N. Hatam, V. Keshtkaran and P. Nabiei, *The relationship between social capital and feelings of anomie in women working in hospitals*, Hakim Health Syst. Res. (Hakim) **15** (2012), no. 3, 258–267.
- [7] A. Jabehdar and H. Bejani, *The role of motivation reduction factors on the behavioral abnormalities of NAJA employees and providing optimal solutions*, Supervis. Inspec. J. **2018** (2018), no. 43.
- [8] H. Javadi, M. Elmi and S. Sabbagh, *Investigating effective social factors in the feeling of social anomie among students of Tabriz Azad university*, Sociol. Stud. **5** (2014), no. 14, 29–45.
- [9] P. Johnson and J. Duberley, *Anomie and culture management: Reappraising Durkheim*, Organization **18** (2011), no. 4, 563–584.
- [10] M. Karami and A. Edrisi, *Social components affecting the occurrence of moral gap*, Int. J. Ethics Soc. **3** (2022), no. 4.
- [11] M. Kosari, *Theories of social anomie*, Tehran, Salman publications, 2017.
- [12] S.H. Marjaei, *Students' compliance with professional norms in academic research: A review of the findings of a national survey*, Quart. J. Res. Plan. Higher Educ. **22** (2016), no. 2, 25–48.
- [13] N. Mazloumi and S. Sefidchian, *Investigation the role of change capacity in the formation of organizational anomie with qualitative approach (Case study: A publishing institution)*, Organ. Behav. Stud. Quart. **4** (2015), no. 13, 1–26.
- [14] F. Momeni, *The intertwining of economic and social crises in contemporary Iran (the risk of intensifying economic anomie)*, In the report of the country's social situation (book of abstracts), Social Council of the country, 2014.
- [15] S.N. Mousavi, A. Shariatnejad and M. Arefnejad, *Identifying and prioritizing factors causing organizational anomie using fuzzy Delphi technique*, J. Public Organ. Manag. **4** (2016), no. 4, 115–130.
- [16] H. Nayebi, S. Moayed Far, S.H. Serajzadeh and I. Faizi, *Durkheim and Merten's theory of anomie; Similarities, differences, and methods of measurement*, Soc. Welfare Quart. **17** (2017), no. 66.
- [17] F. Ramezani, D. Modi and M. Keshtidar, *The relationship between anomie, organizational trauma, and professional commitment in the physical education faculty members of Farhangian university*, Sports Sci. Quart. **11** (2019), no. 35, 59–72.
- [18] M.R. Ramezani, M. Moradi and F. Soltani, *Analysis of obstacles to cultural interactivity in the supply chain of the automotive industry using the structural-interpretive modeling (ISM) approach*, J. Organ. Culture Manag. **13** (2015), no. 2, 391–396.
- [19] N. Sefidchian, H. Mazloumi and J. Salehi Sadaghiani, *A model of organizational anomie and its factors, organizational behavior studies*, Organ. Behav. Stud. Quart. **6** (2016), no. 4 (series 24), 107–130.
- [20] R. Sepahvand, M. Arefnejad, F. Zare and M. Sepahvand, *The effect of organizational spirituality on organizational anomie with an emphasis on the mediating role of work ethics (case study: Lorestan university)*, Manag. Islamic Azad Univer. **8** (2019), no. 18, 387–406.
- [21] L. Vilca, R. Gonzales, V. Pariona-Millán, T. Caycho-Rodríguez and M. White, *Development and validation of the social anomie brief scale (SAS-10) against the new standards implemented during the COVID-19 pandemic*, Electr. J. General Med. **19** (2022), no. 3, em375.
- [22] J.N. Warfield, *An Interim Look at Uses of Interpretive Structural Modeling*, Research Futures. Columbus: Battelle Memorial Institute, Third Quarter, 1974.