

## Employees' Organizational Voice: Investigating the Antecedents and their Structural Relations Using the ISM and Fuzzy MICMAC Method

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### Abstract

*This study is aimed to explore the structural relationships among the factors affecting the employees' voice. In this regard, by reviewing the literature, a set of factors influencing the occurrence of organizational voice was identified. Then the opinions of 15 senior and middle managers and academic professors about the relationship between these factors were examined. Finally, data were analyzed by utilizing the Interpretive Structural Modeling (ISM) and Fuzzy MICMAC methods. According to results, organizational culture has an underlying role in organizational voice. In fact, it can be said that existence of an ideal organizational culture can be reflected in the improvement of employees' knowledge, understanding about the organization, awareness and their experiences. These factors also increase the psychological safety and eventually, their self-confidence. Moreover, employees' self-confidence also influences the willingness of organization for accepting and valuing their voice, their change commitment, job satisfaction and openness to experience. Finally, these factors in an interaction to each other, increase the employees' courage to express their ideas. As a general result, this research showed that the appearance of organizational voice is a sign of existence of an organization's desirable culture.*

**Keywords:** *Employees' voice, Organizational culture, Interpretive Structural Modeling (ISM), Fuzzy MICMAC*

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## Introduction

In management literature, it has been accepted as a principle that managers' perceptions of events are far more important than events themselves. Such an underlying principle necessitates paying more attention to the factors that form the managers' perceptions of events. Considering the crucial role of employees in undertaking the main burden of organizational tasks, they not only recognize the strengths and weaknesses within the organization, but also have achieved to an appropriate understanding about the environmental opportunities and threats. Therefore, it can be said that their opinion plays an important role in shaping the managers' perception. Naturally, the proper use of these opinions requires employees' voluntary behavior in expressing their voice. These behaviors, called as the employees' voice in organizational behavior literature, are defined as stating the opinions, suggestions, considerations and information by employees without any fear. According to this definition, the content of the voice can be varied, ranging from ideas on how things can do in a different way to the information about the severity of potential issues (Morrison, 2014).

At the organizational level, the necessity of this subject has rooted in the fact that employees in their daily interactions with customers and colleagues can feel the important issues such as the lack of efficiency, inappropriate actions, opportunities for improvement, strategic issues and etc. Nonetheless; they prefer to stay silent (Morrison, 2014). That's why, the key managers and decision makers are often unable to observe these issues; moreover, they are not aware of the employee's silence and its reasons. (Ashford et al, 2009). The result of such events would be that executives will be unaware of the organization's actual performance quality and employees' attitudes, and will have an incorrect judgment about these subjects (Tournai and Robson, 2006).

In addition, at the individual level, refusing the organizational voice can be led to decrease in employees' performance and morale (Millikan et al., 2003). However, significant improvement in employees' creative performance (Jun, Jianlin, & Jibao, 2017); perceived procedural justice (Avery & Quinones, 2002), performance appraisal (Whiting, Podsakoff, & Pierce, 2008) and also attitudes of managers towards employees (Stamper & Dyne, 2001) can be expected if managers try to provide appropriate conditions for hearing the employees' voice.

Considering the importance of this issue, so far, various studies have focused on the reasons/process of employees' voice emergence. Also, the various factors affecting the employees' voices have been identified. Nevertheless, the critique of these studies is that there is no systematic understanding of *how the voices emerge, hierarchical relationships among its' effective factors, and its' underlying cause*. While, having an appropriate understanding about these issues, will help the managers to facilitate the emergence of these behaviors and ensure their continuance. Given the importance of this issue, this research by reviewing the literature and studying the opinions of the academic experts and a firm's managers, has tried to clarify these ambiguities.

### **Literature review**

Historically, the concept of "employees' voice" has emerged from the schools of human resources management, industrial democracy, industrial relations, organizational behavior, school of human relations and their theoretical discussions (Wilkinson & Fay, 2011); however, Hirschman (1970) was the first researcher that introduced this term in management literature. According to Hirschman (1970), employees' reactions to their work problems can be stated in the term of two distinct type of behavior: leaving the organization or expressing the voice. Meanwhile, their voice will appear in the various forms such as complaint, suggestion or telling a problem about the working with superiors (Hirschman, 1970). In fact, the term of "voice" refers to the employees' ability to express their opinions about work activities and organizational decisions (Wilkinson & Fay, 2011). This definition aligns with the typology presented by McCabe and Levin (1992), in which this concept includes two types of behaviors such as complaints and participation in decision making (McCabe & Lewin, 1992). However, by glance the definitions and typologies presented about this behavior (such as: (Benson, 2000; Morrison, 2011; Tangirala & Ramanujam, 2012)), it can be found that the core concept in defining the organizational voice is employees' ability to state their opinions. Of course, it should be noted that the aim of these behaviors isn't merely criticizing the existing situation, but to improve the status quo (Van Dyne & LePine, 1998). Moreover, it is worthy to say that employees' voice is not opposite of

employees' silence; i.e. the lack of voice. Because the lack of voice can occur for various reasons. For example, a person may not have anything to express (Morrison, 2014); but when talking about the concept of organizational silence, their semantic contradiction becomes apparent. Because silence in this concept, refers to a voluntary behavior from the employees, when they have valuable suggestions or opinions that are efficient to organizational progress (Milliken, Morrison, & Hewlin, 2003).

So far, many researchers have tried to identify the effective factor in the emergence of employees' voice. In early researches, in the late of 80s, the results showed the important role of job satisfaction in this context (Rasbelt et al., 1988). However, in the late of 90s, organizational behavior researchers found that organizational voice was not merely a response to dissatisfaction, but rather it is an important type of extra-role behaviors (Feng Din and Lapin, 1998). In explaining the employees' voice formation theoretical basis, the social exchange theory can be used. In this regard, social exchange theory implies that there is always a mutual interaction between the staff and the organization (managers and superiors), and in these interactions, both parties are always exchanging good things together. In such a way that, if managers provide appropriate utility to the employees, they obligate themselves to compensate this utility. Therefore, they try to show positive job behaviors and best performance from their own. According to this theory, continuance of this relationship depends on the ability of organization and employees to provide good utility for each other.

Based on this theory, it can be argued that the emergence of a voice by the employees is a type of appropriate response to the received utility from the organization. Naturally, if this theoretical basis be accepted, the claims of perceived organizational support and the leader-member exchange theories also can be accepted; since both these theories have their roots in the social exchange theory and have accepted its contents as a default. Given the above, it can be ensured that the theoretical basis of organizational voice is rational and clear; however, what remains ambiguous, is the various factors involved in it. In this regard, the motivating factors of organizational voice that have been extracted from previous researches are presented in Table (1).

**Table 1. Motivator factors of organizational voice**

Themes	Motivators	References
Individual dispositions	Extraversion	Crant et al. (2010), LePine and Van Dyne (2001) Tangirala et al. (2013), Edwards et al. (2009), Harvey et al. (2009), Detert and Burris (2007), Morrison (2014)
	Proactive personality	
	Courage	
	Conscientiousness	
	Task orientation	
	Customer orientation	
	Experience	
	Knowledge level	
	self-confidence	
	Personal financial situation	
	Nervousness	
	Psychological safety	
Job and organizational attitudes and perceptions	Organizational identification	Frazier and Fainshmidt (2012), Fuller et al. (2006), Liang et al. (2012), Liu et al. (2010), Luchak (2003), Olson- Buchanan (1997), Tangirala and Ramanujam (2012), Venkataramani and Tangirala (2010), Morrison (2014), Wang et al (2018), Holland et al (2018), Aryee et al (2017), Ilkhanizadeh & Karatepe (2017)
	Work-group identification	
	Felt obligation for change	
	Job satisfaction	
	Job enrichment	
	Control or influence	
	Organizational support	
	Acceptance of opinions	
	Organizational level	
	Organizational culture	
	Respecting the opinions	
	Group activities and team spirit	
Supervisor and leader behavior	Openness	Botero and Van Dyne (2009), Detert and Burris (2007), Detert and Trevino (2010), Edmondson (2003), Tangirala and Ramanujam (2012), Liang et al. (2012), Saunders et al. (1992), Takeuchi et al. (2012), Van Dyne et al. (2008), Morrison (2014), Qian et al (2018), Wang et al (2018), Lee et al (2017), Duan et al (2017), Liang et al (2017), Carnevale et al (2017)
	Consultation	
	Leader-member exchange	
	Transformational leadership	
	Ethical leadership	
	Effective Leadership	
Contextual factors	Group voice climate	Ashford et al. (1998), Frazier and Fainshmidt (2012), Morrison (2011), Wang and Hsieh (2013), Hsiung & Tsai (2017)
	Anxious climate	
	Formal voice mechanisms	
	Society's culture	

As shown in Table (1), the motivating factors affecting organizational voice can be examined in terms of individual dispositions, job and organizational attitudes and perceptions, supervisor and leader behavior and contextual factors. In fact, it is clear that the main focus of existing researches is toward the leadership related factors and organizational level factors (for instance: Morrison (2014), Qian et al (2018), Wang et al (2018), Lee et al (2017), Duan et al (2017), Liang et al (2017), Carnevale et al (2017)). Also, there are a few researches that have focused on the employees' personality attributes (such as: Crant et al. (2010), LePine and Van Dyne (2001), Tangirala et al. (2013), Edwards et al. (2009), Harvey et al. (2009), Detert and Burris (2007), Morrison (2014)). Indeed, it can be inferred that prior researchers are in this belief that in comparing the personality attributes and organizational or leadership related factors, the last two factors have more important role in shaping the employees' voice. However, what is important is the structural and hierarchical relationships between these factors which is investigated according to the below methodology.

## Methodology

This research is a descriptive-analytical study utilizing a mixed-method approach in two phases. In the first phase we performed a literature review to identify and extract the factors affecting organizational voices. In the next phase, to examine the structural and hierarchical relationships among the significant factors using the content validity ratio and panel opinions, the unimportant factors will be identified and eliminated. At the quantitative phase of the study we applied ISM technique in order to determine direct and indirect relationships between motivators of organizational voice. The researches' population is composed of 10 top and middle managers of a public firm and 5 academic professors in the field of human resources management and organizational behavior. To conduct content validity, after reviewing the literature, a checklist of related factors was designed. Then, the firm's experts were asked to complete the checklist to rate the appropriateness of each factor by stating whether each factor is "essential," "useful but not essential," or "not necessary". After receiving the ratings, the content validity ratio (CVR) calculated by following formula, in which

the  $N$  is total number of experts and the  $n_e$  is number of experts that have responded "necessary".

$$CVR = \frac{n_e - \frac{N}{2}}{\frac{N}{2}}$$

Calculated CVRs then compared to the levels required for statistical significance. According to Table (2). based on the number of experts, the minimum acceptable value is 0.49. (Hassanzadeh rangi et al., 2012).

**Table 2. Lawsche scale (Hassanzadeh rangi et al., 2012)**

minimum CVR	Number of experts
0.99	5
0.99	6
0.99	7
0.75	8
0.78	9
0.62	10
0.59	11
0.56	12
0.54	13
0.51	14
0.49	15
0.42	20
0.37	25

Also, Interpretive Structural Modeling (ISM) was used to analyze the data. Interpretative structural modeling is a method that makes it possible to examine the complexity of the system and make it easily understandable (Agrawal et al., 2007). According to Warfield, founder of interpretive structural modeling, ISM is an interactive learning process that constructs a set of different and related factors in a comprehensive, integrated framework (Warfield, 1974). To implement the ISM method, the process must be as follows: (Pfohl et al., 2011)

The first step, is identifying the model's variables that in current research, were identified using the content analysis and content validity procedure. The second step, is establishing contextual relations that may be of several types like as comparative, influence, neutral or temporal relations. At the third step, Structural Self-Interaction Matrix (SSIM) must be constructed by pairwise comparison of variables. The fourth step includes developing a reachability matrix from the SSIM and checking for transitivity. In fact, transitivity is a basic assumption in ISM that leads to the final reachability matrix. It states that if element A is related to B and B is related to C, it may be inferred that A is related to C. Also, indirect relationships can be found by raising the initial reachability matrix to successive powers until no new entries are obtained. The final reachability matrix depicts the *driving* and *dependence power* of each variable. Driving power of each variable is the total number of variable (including themselves) which it affects, i.e. the sum of interactions in the rows. Conversely, dependence power of each variable is the total number of variable (including themselves) by which it is affected, i.e. the sum of interactions in the columns. Depending on their driving and dependence power, the variables will later be classified into different categories. At the fifth step, level partitioning of reachability matrix must be done. The purpose of this phase is to facilitate the construction of the digraph from the reachability matrix. Then, in sixth step, structural model develops from the final reachability matrix.

Moreover, fuzzy MICMAC analysis was used to identify and analyze the elements according to their driving power. In fact, MICMAC is an indirect classification method to critically analyze the scope of each element. All elements are divided into four groups:



Group I: Autonomous elements that have weak driver power and weak dependence

Group II: Dependent elements that have weak driver power and strong dependence

Group III: Linkage elements that have strong driving power and strong dependence

Group IV: Independent elements that have strong driving power, but poor dependence

Furthermore, the aim of fuzzy MICMAC method is to analyze the indirect and hidden relationships between structural elements. The process of analyzing the fuzzy MICMAC is as follows (Goran & Kant, 2012):

**Step 1: Calculating the Direct Relationship Matrix (DRM)**

This matrix is obtained by direct relationship between the criteria in the ISM. Transformability is not considered in this matrix, and elements on the main diameter are considered zero; on the other hand, the Direct Relationship Matrix (DRM) is constructed by converting the diameter of the initial reachability matrix to zero.

**Step 2: Calculating the Fuzzy Direct Relationship Matrix (FDRM)**

At this point, using the views of experts, the factors that are associated with the DRM matrix are extracted as Possibility of numerical value of the reachability in accordance with Table (3).

**Table 3. Possibility of numerical value of the reachability**

Possibility of Reachability	No	Very Low	Low	Medium	High	Very High	Complete
Value	0	0.1	0.3	0.5	0.7	0.9	1

**Step 3: Calculating the Fuzzy MICMAC Stabilized Matrix (FMSM)**

To stabilize the fuzzy direct-relation matrix, this matrix is multiplied repeatedly in itself until the amount of driving power and the dependency

power be fixed. The process of multiplying follows the principles of fuzzy multiplication (Kandasumi et al., 2007). Given the fuzzy theory set, when two fuzzy matrices are multiplied in one another, the resulting matrix is also a fuzzy matrix. If  $A = [a_{ij}]$  and  $B = [b_{ij}]$  are two fuzzy matrices, then their product is defined as:

$$AB = \max\{\min(a_{ij}, b_{ij})\}$$

## Findings

According to experts' point of view, there are 13 factors that can motivate employees' voice. These factors and their content validity are showed in Table (4).

**Table 4. Final Motivators**

<i>N</i>	<b>Motivators</b>	<b>CVR</b>
1	Courage	0.77
2	Awareness	1
3	Experience	0.77
4	Knowledge level	0.77
5	self-confidence	1
6	Psychological safety	0.77
7	Organizational identification	0/77
8	Felt obligation for change	0.77
9	Job satisfaction	0.77
10	of opinions Acceptance	0.77
11	Organizational culture	0.77
12	Respecting the opinions	0.77
13	Managers' Openness	1

Moreover, pairwise relationship between the factors, after aggregating the experts' opinions, has been depicted in Table (5). Also, Table (6). Shows the initial reachability matrix. After incorporating the transitivity, the final reachability matrix is achieved which is presented in Table (7). Also, to achieve the final reachability matrix, it should raise the initial reachability matrix to successive powers for five times based on Boolean rules. In other words, the matrix was raised five times to reach the steady state. In this research, the motivators along with their reachability, antecedents and intersection set, as well as resulting levels are shown in Table (8). It is worth mentioning that the process of level partitioning is completed in six interactions.

**Table 5. Structural Self-Interaction Matrix between motivators of organizational voice**

	13	12	11	10	9	8	7	6	5	4	3	2	1
1	A	A	A	A	O	O	O	A	A	O	A	A	
2	O	O	A	O	O	V	A	O	V	X	X		
3	V	V	A	V	O	V	V	V	V	X			
4	V	V	A	V	O	O	V	O	V				
5	V	O	A	V	O	V	O	A					
6	O	O	A	O	V	V	O						
7	V	O	A	V	V	V							
8	A	A	A	V	A								
9	A	A	A	A									
10	A	X	A										
11	V	V											
12	V												
13													

**Table 6. Initial reachability matrix of organizational voice motivators**

Motivator	1	2	3	4	5	6	7	8	9	10	11	12	13
1	1	0	0	0	0	0	0	0	0	0	0	0	0
2	1	1	1	1	1	0	0	1	0	0	0	0	0
3	1	1	1	1	1	1	1	1	0	1	0	1	1
4	0	1	1	1	1	0	1	0	0	1	0	1	1
5	1	0	0	0	1	0	0	1	0	1	0	0	1
6	1	0	0	0	1	1	0	1	1	0	0	0	0
7	0	1	0	0	0	0	1	1	1	1	0	0	1
8	0	0	0	0	0	0	0	1	0	1	0	0	0
9	0	0	0	0	0	0	0	1	1	0	0	0	0
10	1	0	0	0	0	0	0	0	1	1	0	1	0
11	1	1	1	1	1	1	1	1	1	1	1	1	1
12	1	0	0	0	0	0	0	1	1	1	0	1	1
13	1	0	0	0	0	0	0	1	1	1	0	0	1

**Table 7. Final reachability matrix of organizational voice motivators**

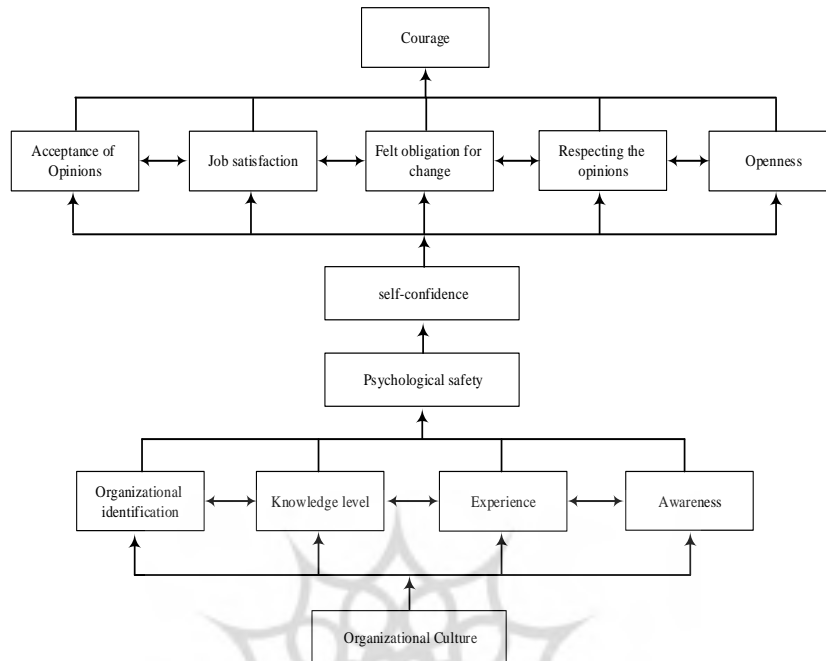
Motivator	1	2	3	4	5	6	7	8	9	10	11	12	13	Driving power
1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2	1	1	1	1	1	*1	*1	1	*1	*1	0	*1	*1	12
3	1	1	1	1	1	1	1	1	*1	1	0	1	1	12
4	*1	1	1	1	1	*1	1	*1	*1	1	0	1	1	12
5	1	0	0	0	1	0	0	1	*1	1	0	*1	1	7
6	1	0	0	0	1	1	0	1	1	*1	0	*1	*1	8
7	*1	1	*1	*1	*1	*1	1	1	1	1	0	*1	1	12
8	*1	0	0	0	0	0	0	1	*1	1	0	*1	*1	6
9	*1	0	0	0	0	0	0	1	1	*1	0	*1	*1	6
10	1	0	0	0	0	0	0	*1	1	1	0	1	*1	6
11	1	1	1	1	1	1	1	1	1	1	1	1	1	13
12	1	0	0	0	0	0	0	1	1	1	0	1	1	6
13	1	0	0	0	0	0	0	1	1	1	0	*1	1	6
<b>Dependency</b>	13	5	5	5	7	6	5	12	12	12	1	12	12	

**Table 8. Levels of organizational voice motivators**

Motivator	Reachability set	Antecedent set	Intersection	Level
1	1	1,2,3,4,5,6,7,8,9,10,11,12,13	1	<b>I</b>
2	1,2,3,4,5,6,7,8,9,10,12,13	2,3,4,7,11	2,3,4,7	<b>V</b>
3	1,2,3,4,5,6,7,8,9,10,12,13	2,3,4,7,11	2,3,4,7	<b>V</b>
4	1,2,3,4,5,6,7,8,9,10,12,13	2,3,4,7,11	2,3,4,7	<b>V</b>
5	1,5,8,9,10,12,13	2,3,4,5,6,7,11	5	<b>III</b>
6	1,5,6,8,9,10,12,13	2,3,4,6,7,11	5	<b>IV</b>
7	1,2,3,4,5,6,7,8,9,10,12,13	2,3,4,7,11	2,3,4,7	<b>V</b>
8	1,8,9,10,12,13	2,3,4,5,6,7,8,9,10,11,12,13	8,9,10,12,13	<b>II</b>
9	1,8,9,10,12,13	2,3,4,5,6,7,8,9,10,11,12,13	8,9,10,12,13	<b>II</b>
10	1,8,9,10,12,13	2,3,4,5,6,7,8,9,10,11,12,13	8,9,10,12,13	<b>II</b>
11	1,2,3,4,5,6,7,8,9,10,11,12,13	11	11	<b>VI</b>
12	1,8,9,10,12,13	2,3,4,5,6,7,8,9,10,11,12,13	8,9,10,12,13	<b>II</b>
13	1,8,9,10,12,13	2,3,4,5,6,7,8,9,10,11,12,13	8,9,10,12,13	<b>II</b>

Considering the above findings, final ISM model can be depicted as Figure (1).

As shown in Figure (1), organizational culture is an underlying motivator in formation of employees' voices and has an increasing impact on the four factors including knowledge, experience, knowledge level and organizational identification. In this regard, it can be said that, a favorable organizational culture, flourish the knowledge, awareness, experience and improves the identification of employees from the organization. For example, in a learning or innovative culture there is better opportunities to improve the knowledge, experience, and awareness of staffs. Also, as an incentive policy, employees who want to improve their knowledge, awareness or experience, are under the intensive support of managers. Moreover, in such favorable cultural atmosphere, organizational values and goals are clear, acceptable and desirable for employees; therefore, they try to align their personal aims with organizational goals. Naturally, due to the motivational effect of alignment between employees and organizational aims for employees, they try to increase their knowledge, awareness and subsequently their experience. Beside, improvement of the individual's



**Figure 1. ISM Model**

experience can also enhance their knowledge and awareness; because employees with appropriate experience can acquire their required knowledge better than unexperienced employees; in turn, comparing to others, they can identify their required knowledge in a better way. In addition, as mentioned in Figure (1), the above four factors in an interaction with each other can increase the employee's psychological security and subsequently, their self-confidence. In turn, it can be stated that what employees have gained from the working in organization (those four factors), psychologically, turns the organization's environment to a place like as their comfort zone. So, they feel secure to say what is in their mind and thereby, it's expected that feels more confident in their own.

Furthermore, according to the findings, employees' self-confidence has several positive consequences for them. Indeed, it is logical that self-confident employees, due to their ability in demonstrating their capabilities to the managers and other colleagues, can create a positive mental image of themselves to the managers. In addition, based on this fact that managers'

behaviors towards the employees, to a great extent, is based on their images about them, it can be said that their positive image about an employee can influence their openness toward them, and also willingness to accept and respect the employees' point of views. Considering these behaviors from the managers, employees' job satisfaction can also increase. Moreover, self-confident employees believe that their job and work processes, are in the full control of them and they are able to show their best performance in their job, although they aren't fully satisfied. Also, their opinion is that they are able to create the positive changes in works and processes; so obligates themselves to change the current situation in a way that both organization and employees, benefits. Finally according to findings, considering the employees' positive job attitudes, and managers' positive and supportive behaviors on the other hand, it can be expected that interaction of these factors, leads to employees' courage in stating their voice.

According to research methodology, in order to conduct Fuzzy MICMAC and creating Direct Relationship Matrix (DRM), at first, the diameter of the initial reachability matrix converted to zero. Table 9. Shows the DRM.

**Table 9. Direct Relationship Matrix (DRM)**

Motivator	1	2	3	4	5	6	7	8	9	10	11	12	13
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1	0	1	1	1	0	0	1	0	0	0	0	0
3	1	1	0	1	1	1	1	1	0	1	0	1	1
4	0	1	1	0	1	0	1	0	0	1	0	1	1
5	1	0	0	0	0	0	0	1	0	1	0	0	1
6	1	0	0	0	1	0	0	1	1	0	0	0	0
7	0	1	0	0	0	0	0	1	1	1	0	0	1
8	0	0	0	0	0	0	0	0	0	1	0	0	0
9	0	0	0	0	0	0	0	1	0	0	0	0	0
10	1	0	0	0	0	0	0	0	1	0	0	1	0
11	1	1	1	1	1	1	1	1	1	1	0	1	1
12	1	0	0	0	0	0	0	1	1	1	0	0	1
13	1	0	0	0	0	0	0	1	1	1	0	0	0

Table 10 depicts the Fuzzy Direct Relationship Matrix (FDRM) which has been extracted based on experts' opinions with numerical value expressed in Table (3). The Fuzzy MICMAC Stabilized Matrix (FMSM) was raised six times to reach the steady state. Table 11 shows the FMSM results.

**Table 10. Fuzzy Direct Relationship Matrix (FDRM)**

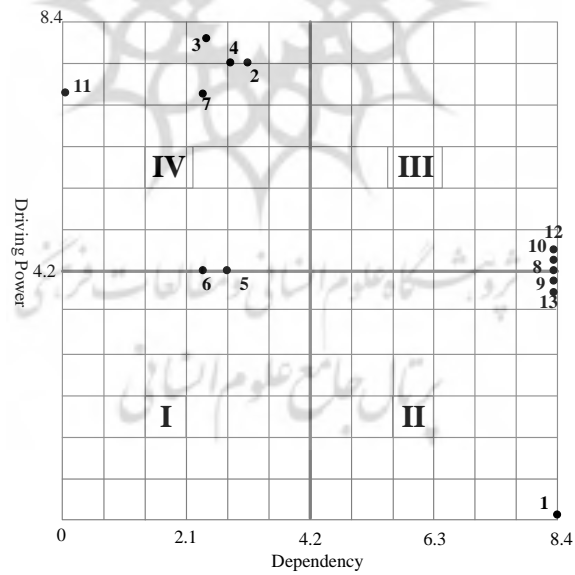
Motivator	1	2	3	4	5	6	7	8	9	10	11	12	13
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0.9	0	0.5	0.7	0.7	0	0	0.7	0	0	0	0	0
3	0.9	0.7	0	0.9	0.9	0.7	0.9	0.7	0	0.7	0	0.7	0.9
4	0	0.7	0.5	0	0.7	0	0.7	0	0	0.9	0	0.9	0.9
5	0.9	0	0	0	0	0	0	0.7	0	0.7	0	0	0.9
6	0.9	0	0	0	0.9	0	0	0.7	0.7	0	0	0	0
7	0	0.5	0	0	0	0	0	0.7	0.5	0.7	0	0	0.7
8	0	0	0	0	0	0	0	0	0	0.9	0	0	0
9	0	0	0	0	0	0	0	0.9	0	0	0	0	0
10	0.9	0	0	0	0	0	0	0	0.7	0	0	0.7	0
11	0.5	0.3	0.3	0.5	0.7	0.7	0.5	0.7	0.7	0.5	0	0.7	0.7
12	0.7	0	0	0	0	0	0	0.7	0.7	0.9	0	0	0.7
13	0.9	0	0	0	0	0	0	0.9	0.7	0.7	0	0	0

To achieve a better understanding, above matrix has been depicted in the Figure (2). According to the Figure (2), the first quarter is the status of autonomous motivators, which are both low driving power and low dependency. Almost none of the factors are in this group. It means that none of these factors can exclude from the examination of the organizational voice motivators. However, self-confidence and psychological safety are on the boundary between the first and fourth quarters. It means that they are normal in driving power and partly normal in dependency. Moreover, in the second quarter, there are motivators that are highly dependent on other factors. The courage factor that is at the highest level of a hierarchical model is in this quarter. In other words, the change in any of the factors could reduce or increase it.



**Table 11. Fuzzy MICMAC Stabilized Matrix (FMSM)**

Motivator	1	2	3	4	5	6	7	8	9	10	11	12	13	Driving Power
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0.7	0.7	0.5	0.5	0.7	0.5	0.7	0.7	0.7	0.7	0	0.7	0.7	7.8
3	0.7	0.7	0.5	0.7	0.7	0.5	0.7	0.7	0.7	0.7	0	0.7	0.7	8
4	0.7	0.7	0.5	0.7	0.7	0.5	0.5	0.7	0.7	0.7	0	0.7	0.7	7.8
5	0.7	0	0	0	0	0	0	0.7	0.7	0.7	0	0.7	0.7	4.2
6	0.7	0	0	0	0	0	0	0.7	0.7	0.7	0	0.7	0.7	4.2
7	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0	0.7	0.7	7.2
8	0.7	0	0	0	0	0	0	0.7	0.7	0.7	0	0.7	0.7	4.2
9	0.7	0	0	0	0	0	0	0.7	0.7	0.7	0	0.7	0.7	4.2
10	0.7	0	0	0	0	0	0	0.7	0.7	0.7	0	0.7	0.7	4.2
11	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0	0.7	0.7	7.2
12	0.7	0	0	0	0	0	0	0.7	0.7	0.7	0	0.7	0.7	4.2
13	0.7	0	0	0	0	0	0	0.7	0.7	0.7	0	0.7	0.7	4.2
<b>Dependency</b>	8.4	3.1	2.5	2.9	3.1	2.5	2.9	8.4	8.4	8.4	0	8.4	8.4	



**Figure 2. Fuzzy MICMAC of organizational voice motivators**

In the third quarter, there are factors that have normal driving power and high dependency. Five factors of this research are in this group including the Felt obligation for change, job satisfaction, acceptance of opinions, respecting the opinions, and managers' openness. Although some of these factors are on the boundary between the second and third quarters. Finally, in the fourth quarter, awareness, experience, knowledge level, organizational identification and organizational culture affect the entire factors. These motivators were the most important causative elements of employees' voice, so management should pay special attention to them.

### **Conclusion**

This research aimed to explore the structural and hierarchical relationships among the factors influencing employees' organizational voice. As stated, emergence of employees' voice depends on several factors that are in a structural and hierarchical relationships with each other. As it was shown, a part of research findings was about the role of organizational culture in reinforcement of organizational identification and other factors that were knowledge, experience and awareness of employees. In this respect, these findings are in line with the Read's (2001) researches about the positive role of organizational culture in shaping the employees' organizational identification. Moreover, the positive effect of organizational culture on other factors also are nearly in line with the prior researches such as Ajmal and Koskinen (2008), Ismail Al-Alawi, Yousif Al-Marzooqi, and Fraidoon Mohammed (2007), McDermott and O'dell (2001)). Moreover, in alignment with the Kessel, Kratzer and Schultz (2012) research, it was found that the above mentioned factors (knowledge related factors) are effective in employees' psychological safety. However, about the role of employees' psychological safety in increasing the employees' self-confidence and consequences of this factor, researchers have not found any similar researches to compare their findings. But, there are several researches that have investigated the other similar factors such as self-esteem and self-efficacy. If these concepts could be considered as the very similar concepts; in consistence with the Moe, Pazzaglia, and Ronconi (2010) and Yakın and Erdil (2012), this research also showed the positive effect of employees' self-confidence on their job satisfaction. Also,

regardless of the role of mediating factors, in line with the Janssen and Gao (2013) and Wang, Gan, Wu, and Wang (2015) researches, this study showed that employees' self-confidence can lead to their positive voice. About the other findings also, to a great extent this research is in line with the Liang, Farh, and Farh (2012) studies about the role of employees' self-esteem, felt obligation for change and psychological safety in the emergence of their voice. As a general conclusion, it was showed that organizational culture, has a key role, in a way that it can be said existence of an appropriate culture in the organization would ultimately reflected to employees' courage in stating their voice. However, it should be noted that formation of culture, is rooted in the leadership style and organization management. Hence, some practical suggestions of this research will focus on leadership in the organization. In this regard, providing monthly meetings in organization to hear the views of employees or their representatives, using the open door policy, strengthening the criticisms and suggestion systems in organization, and internal festivals such as the best Ideas festival, can be effective in changing the current organizational culture to desirable culture.

Moreover, to maintain the continuance of these actions, it is necessary to identify and appreciate the managers who are active in facilitating the emergence of employees' voice. According to findings, these facilitating measures include the openness to employees, respecting their opinions, and accepting their voice if reasonable. Therefore, these actions or behaviors are as the indexes to identify the best managers in this context.

Beside, as it was shown in Figure (2), the level of employees' knowledge, awareness and experience have the most driving power in emergence of the employees' voice. Therefore, in addition to the above suggestion, investing on employees' education and facilitating organizational knowledge sharing is another solution that is suggested in this context. Also, it should be effective that top and middle managers share their working experiences with their related employees.

Finally, in order to obtain more precise results in this context, it is recommended that other researchers take their studies on validating and testing the presented model in this study. Furthermore, using qualitative research design and conducting interviews with employees in order to identify the factors influencing the formation of organizational voices among them can also be effective in understanding the effective factors.

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