The Investigation of Relationship Between Resistance of Employees to Change and the Dimensions of Organizational Structure in Governmental Organizations

Abbas Pakdel [*1], Habib Allah Danae, Hossein Motafaker

Department of Management, Payame Noor University of Garmsar, Garmsar Branch, Iran

A B S T R A C T

This study aims at investigating the relationship between the amount of employee resistance to change and organizational structure in governmental agencies in Khorasan Razavi. In order to verify the validity of the questionnaire kmo tests, Bartlett and factor analysis were used which was determined that kmo values were greater than 7.0 (kmo = 762.0), Bartlett's test was at a significance level of less than 05.0 (s<05.0) and factor loadings of all the questions were above 3 and therefore its validity was confirmed. Cronbach alpha value of the questionnaire was greater than 7.0 (756.0 = α); The findings show that there is no significant relationship between the amount of employees' resistance to change and the extent of formality of organizational structure (s= 0.143); Also there is no significant relationship between the amount of employees' resistance to change and the extent of centralization of organizational structure (s= 0.774), but there is a positive relationship between the amount of employee resistance to change and the complexity of organizational structure (s= 0.000 and p= 0.182).

Keywords: Organizational Structure, Formality, Centralization, Complexity, Organizational Change.

INTRODUCTION

Today, much of our needs will be met by organizations. And organizations whether public or private, as a social phenomenon, have influential presence in the society; they are social phenomena, since on the one side they are comprised of human resources and on the other side, they impact on the environment of the society and are affected by that. Existence of the organization in a dynamic setting which is characterized by continuous changes made to its environment has caused the organizations to be influenced by the changes and the path of achieving goals to be difficult. Current structures of the organizations lack the required flexibility and dynamicity to face the evolutions and environmental changes that have made environmental changes binding. The necessity for accepting environmental changes by the organizations is not only for the sake of their own excellence but

also it is essential for guaranteeing the life and survival of organizations. One of the problems that occur during the action, implementation and acceptance of change and relative movements with the change, is resistance to organizational change. Applying these changes, because they want to exit the current situation and reach a new condition and different from the present one, will not be accepted by the organization's employees and will lead to resistance. Governmental organizations as organizations that are scattered around the community are no exceptions to the rule and must have plan to deal with the changes, focus their attention to the factors affecting the resistance of the employees.

Considering the accelerating pace of change and scientific developments, technological, social and cultural organizations are regarded as successful and efficient that in addition to coordinating the developments of modern society, they are able to predict the course of future changes and evolutions and are capable of leading these changes for creating favorable changes to make a better future[1]. Regarding the researches in previous years, it has been interpreted that there should be a relationship between the dimensions of the organizational structure and the resistance to change because by applying participatory management or namely decreasing centralization and formality of organizational structure, the level of employee resistance to change has increased.

Organizations are part of the society and exist in a dynamic environment in which 'continuous change' becomes an important characteristic. The need for continued existence and socio-economic survival of the organizations is to face and accept the conditions of the environment. Hence, one of the key issues facing the organizations today, both governmental and private that has a great impact on the effectiveness and efficiency of them, is how to understand and deal with facing the growing environmental changes in a proper manner. Government organizations are responsive to the present and future of the society thus the need for change and evolution is intensely felt in the society. In this context, the identification of barriers that impede the development of organizations seems necessary, by removing these barriers to further accelerate creation of their change plans. Since steadiness and monotonousness has greatly reduced the efficiency of our private and governmental organizations, the need is felt to identify the barriers to change and evolution in these organizations and to present ways to overcome them. Presence??? of structures with different dimensions in governmental organizations as existing administrations in which individuals' responsibilities have been defined and presence of human factor everywhere in these structures which has the greatest impact both in terms of development and in terms of obstacles to organizational change on the one hand, and the necessity to be accompanied by a wave of environmental changes in order to ensure the survival of organizations, on the other hand, is one of the requirements of the current study and the significance of this research lies where the identification of existing structures in governmental organizations, measuring the amount of employee resistance to

change and examining the relationship between these two variables can help the managers and designers of the structure of governmental organizations to allocate the required degree of each dimension of organizational structure and through this aid them to apply organizational changes with the least time costs, economic and human resources and in an effective way.

METHODOLOGY

The present study, based on the data collection method, is a descriptive one and on the basis of the research goal, which is studying the relationships between the variables, is a correlational research. Considering its goal, this research is an applied one and due to the geographical range and large number of the population, data collection method has been a field study.

The Population and Sample Size

The population and sample size of this study have been governmental organizations in Khorasan Razavi Province. The employees of these organizations are the members of our statistical population. For a better and more detailed study and because formal employees are more effectively related to their respective organizations and in the course of the processes and the procedures of organizational issues, only government employees were regarded as the statistical population. So the sample size of our population is consisted of 90974 people. Also using Cochran formula and calculating according to this formula, our statistical sample size was estimated 384. Sampling method of this research has been a simple two-stage clustering.

Data Collection Instrument and Tests of Validity and Reliability

The instrument for data collection has been an improvised questionnaire that has been designed after studying the scientific and theoretical bases and it was finalized after some stages of revision and distribution. The instrument that has been used for collecting the data in the first stage level should have validity (credibility) and in the second stage should have reliability. Validity means that the method or instrument used to what extent is able to measure the desired characteristics. There are statistics that researchers are able to determine the suitability of data for factor analysis. One of these methods is kmo coefficient value which constantly fluctuates between zero and one. Small kmo values indicate that the correlation between pairs of variables cannot be explained by other variables. If kmo value is less than 0.5, data will not be suitable for factor analysis and if the value is from 5.0 to 9.6, factor analysis can be done more cautiously. But if the value is more than 7.0, correlations in the data would be suitable for factor analysis[2]. Kmo value or the questionnaire of this study equals 0.762.

To ensure the suitability of the data for factor analysis, in addition to the analysis of the correlation matrix that is analyzed; the population is not zero, hence the Bartlett test should be used. The chi-square statistics is with a distribution of $0.5p (p-1)$ degree of freedom, analyses the values of data in [R] and studies the relationship between the number of observations and evaluates the number of variables, and examines the probability of error to reject the null hypothesis and

existence of no difference in the identity matrix[3]. Chi-square value is equal to 063.2361 for the questionnaire with 406 degrees of freedom and significance level is less than 05.0.

Factor analysis has been conducted to identify the questions with highest impact and also the questions with the least effect. Loadings represent correlations between factors or variables. Positive charges give implications on the nature of the desired latent factors and negative factorial charges by stating that that is not the factor for anything helps the analysis; the higher its value, in its analysis more weight should be given to it. Loading factor is a value between zero and one. If the loading factor is less than 3.0, the relationship is considered a weak correlation and it is disregarded. Loading from 3.0 to 6.0 is acceptable, and if it is more than 0.6, it is highly desirable[4]. In this questionnaire all the questions have loading of more than .3??? and they can explain their structure.

Reliability??? is one of the technical characteristics of measuring instruments. Reliability coefficients range from zero to one[2]. If most test constructors and researchers obtain the validity coefficient of .9??? or above, feel satisfied but the coefficient of .7 or less than .7??? Makes them unsatisfied[5]. For the questions of this research the obtained Cronbach alpha's coefficient equaled .756, and it was more than 0.7 and it was at a completely good level, so the reliability of this questionnaire is fully confirmed and accepted.

RESULTS

According to the extracted data, males with 3.59% form the highest percentage of the population. Also, people with a bachelor's degree with 2.42% formed the highest percentage in the sample group and individuals of the sample group were of 20-54 range with the average of 37 years old.

According to data obtained formality of organizational structure with an average of 4 is the highest among the studied variables. Also the average for organizational structure complexity is 53.3, the average for resistance to change is 16.3 and centralization of organizational structure is equal to 99.2 (Table 1).

Table 1. Descriptive Analysis of Research Variables

Variable title	Answered	Unanswered	Average	Mean	Standard deviation	Lowest value	Highest value
Structural formality amount	410	5	4.0049	4.00	0.553	1.50	5.00
Structural complexity amount	408	7	3.5319	3.50	0.615	2.00	5.00
Structural centralization amount	404	11	2.9934	3.00	0.728	1.00	4.67
Resistance change amount	396	19	3.1636	3.15	0.502	1.92	5.00

Analytical Method

In order to analyze the data and test the hypotheses, analytical methods are used. The tests of this method are parametric and non-parametric tests. To use parametric tests, first the normal or non-normal distribution should be examined using Kolmogorov-Smirnov test and then the distribution of variables should be checked. If the data have a normal distribution test of Pearson is used, otherwise Spearman test is used for examining the research hypotheses.

Verifying the normality of research variables. In order to examine normality of variables, Kolmogorov-Smirnov test is used which is a non-parametric test. The statistics for this test is possible by means of SPSS software. In case the calculated value of this test is more than 5%, H_0 hypothesis is confirmed with 95% meaning that the variable distribution is normal. Otherwise H_1 assumption that the distribution of the variable is normal will be confirmed. The significance level of Kolmogorov-Smirnov test for all variables, with the exception of the amount of organizational structure complexity, is less than .05, thus the test results for all the variables is significant. But because their normal distribution is not normal, non-parametric tests should be used to test the hypotheses of the study (Table 2).

Table 2. Kolmogorov-Smirnov Test to Check the Normality of the Data Distribution

Main variables	Number	Statistics	Significance level
Structural formality	410	2.031	**0.001**
Structural complexity	408	1.357	**0.05**
Structural centralization	404	1.492	**0.023**
Resistance to change	396	0.753	**0.022**

Table 3. A One-Way T-Test

Variables	Size	Average	Standard Deviation	t-test statistics	Level of Significance	Confidence range 95%	
						Lower limit	Upper limit
Formality	410	4.0049	0.55355	36.758	0.000	0.9711	1.0586
Complexity	408	5.5319	0.61563	17.451	0.000	0.4719	0.5918
Centralization 1	404	2.9934	0.72821	-0.182	0.856	-0.0778	0.0646
Resistance To Change	396	3.1636	0.50287	6.473	0.000	0.1139	0.2133

Determining the correlation between the structural variables and resistance to change. In order to determine the correlation, the coefficient of Pearson (non-parametric) is used. These values are significant at 0.05 level; in case the significance level is less than 0.05 (significance level < 0.05), there is a significant relationship between the variables.

Definition of the first hypothesis. There is a positive relationship between the amount of employee resistance and the extent of structure formality. The coefficient value between employee resistance to change and the extent of

formality of organizational structure is not significant at 0.05 level (significance level = 0.143 > 0.05), thus there is not a significant correlation between employees' resistance to change and the extent of organizational structure formality.

Definition of the second hypothesis. There is a negative relationship between the amount of employees' resistance to change and the extent of complexity of organization structure. The coefficient value between the amount of employees' resistance to change and the extent of complexity of organization's structure is at a significant level of 0.05 (significance level = 0.000< 0.05), thus there is a significant correlation between the employees' resistance to change and the extent of complexity of organizational structure and because the coefficient is above zero, this relationship is positive.

Definition of the third hypothesis. There is a positive relationship between the amount of employees' resistance to organizational change and the extent of centralization of organization's structure. The coefficient value between the amount of employees' resistance to organizational change and the extent of structure's centralization at 0.05 level is not significant (significance level = 0.774 > 0.05), thus there is not a significant correlation between the amount of employees' resistance to change and the extent of centralization of organization's structure (Table 4).

Table 4. Correlations between Research Variables

Title		Amount of Structural Formality	Amount of Structural Complexity	Amount of Structural Centralization
Amount of Resistance to Change	Coefficient	0.074	**0.182	-0.0158
	Level of Significance	0.143	0.000	0.774
	Number	391	389	385

Ranking of variables. In this part we rank the research variables. In this study, the Friedman test was used to prioritize research variables. The priority of components is shown in the Table below (Table 5).

Table 5. Ranking of Research Variables

Variables	Average of Ranks	Prioritizing
Structural formality amount	3.61	First priority
Structural complexity amount	2.64	Second priority
Resistance change amount	1.96	Third priority
Structural centralization amount	1.78	Fourth priority

CONCLUSION

After testing the research hypotheses it was specified that there is not any significant relationship between the two variables of the amount of structural formality and the amount of structural centralization, thus the relevant hypotheses

are rejected and not confirmed. But there is a relationship between the amount of structural complexity and the variable of amount of employees' resistance to change, which is positive and direct, thus since in the hypothesis the assumption is based on its being negative, this hypothesis is rejected and not confirmed. Regarding the fact that the obtained results from each of the tests conducted in the research, show that each of the mentioned variables under study is average or above average, managers of governmental and non-governmental organizations should take the importance of lack of structural centralization and necessity for decreasing structural formality to achieve organizational goals into consideration, and design the organizational structure in way to decrease the amount of these dimensions in the structure's composition will be reduced. On the other hand, considering the necessity for reducing employees' resistance to organizational change and its impact on the organization's programs, researchers and managers of the organization should deal with and study the other influencing factors on increase against the change plans. Also considering the high amount of resistance to change and the positive relationship between these two variables, decrease in structural complexity in governmental and private organizations is obvious.

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