Studying the Effects of Organizational Culture on Effectiveness of Crisis Management

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Abstract

Because of different crises which every organization may deal with, managers and decision makers should think about solutions that can help the organizations in dealing with crises. Crisis management includes all actions which are required for fast and effective dealing with possible crisis and controlling their destructive effects. It is true that the ten roles of managers for doing an effective crisis management are necessary, but these conditions are not sufficient to manage crises. Therefore, a strong organizational culture should scrutinize anti-crisis strategies, as an organizational structure should. So, the entire collection requires a systematic approach. This research studies Denison organizational culture model and general model of crisis management and seeks to explore the impact of organizational culture on the effectiveness of crisis management. For this purpose, after studying the literature of subject and with the acquisition of 385 experts and rescuers in Iran through the questionnaire, the validity and reliability of the components of the models were evaluated. In this regard, culture of manpower who had experience of crisis, and effectiveness of crisis management have measured and positive correlation between them was discovered.

Keywords: Organizational Culture; Effectiveness; Crisis Management.
1. Introduction
From among the reasons because of which crisis should be planned, one may point out the following items (Intervention with crisis, 2013):
- If we are not able to plan for crisis, essentially, we have planned for failure.
- If we do not manage the crisis, it will manage us.
- If we do not try together, disruption will drive us to collapse and destruction.
- If we do not take an action, we have to take a reaction.
- If we are not prepared to attack the crisis, eventually, we have to defend [5]

Nowadays, in consideration of the concept of culture in different fields, all individuals, seeking for effectiveness, reinforcement, elevation and/or even survival, must equip the community of their activity with a strong culture in proportion to area of their activity so that under crisis conditions, the required changes will be made and precise decisions will be adopted quickly and timely and within a least period and act intra-organizationally without any disturbance and chaos. Such events as flood, earthquake, landslide, drought, contagious diseases, lighting, fire, accidents, war, regional and tribe conflicts and chemical poisoning all are certain types of such events as have occurred across the nation occasionally and sometimes they have challenges parts of the society accordingly. Different climate of our nation has helped development of these events. Further to their occurrence, the said events bring about many consequences and effects as well. Bodily and financial damages and creating a gap in development movement forward each affect the emergence of future crisis. According to the statistics given by the UN, Iran is among the first ten accident-prone nations in the world (Souri, 2003- 74).

Iran is among quite a few countries which are constantly threatened by mishaps and events. From among 42 types of natural and unnatural crisis, occurrence of 32 types has been registered in our nation (Souri, 2003).

In fact, management attitude goes beyond an engineering attitude and the ones to a great extent. The domain of engineering attitude toward national crisis management has caused that complicated prescriptions have not relieved sufferings of the nation. Essentially, since the instructions have based on engineering hardware attitude and thought, they have ignored major management software parameters such as time, cost, human resource and the ones. Thus, culturalization and upbringing human resource have been regarded as milestone for comprehensive crisis management and the most fundamental priority (The 13th Conference on Nationwide Civil Engineering Students- 2006).

The theoretical framework of this research is based on the effects of organizational culture in such manner that how it may affect effectiveness of crisis management. It means how identity, spirit and culture of an organization may play its role in affecting crisis management effectiveness by involvement of human resource, consistency and integrity (adaptability) as well as mission. The theorists have stated on organizational culture and management effectiveness: “Organizational culture is a system of joint meanings or a collection of key elements that comprise the organizational value. Thus, organizational culture clarifies method of accomplishment of affairs in an organization for the personnel (Assemi Pour, 1996). Most organizational culture as a major element involved in measurement of the organizational performance designating the determined values, infrastructural assumptions, expectations, group memories and meanings available in an organization. The organizational culture indicates what are in our domain (Queen, 1999). In other words, the culture of an organization is taken from value, dominant leadership style, language and symbols of work procedures and a definition of success in an organization. In its inside, an organization consists of such collections as duty sections, production groups, hierarchal or team levels originated from the organizational culture (Queen 1999). For each crisis, one may try to find
a specific solution. No identical solutions can be used only due to similar origin or form of crisis. The crisis should be identified and removed before they are changed to critical condition. Usually, in lifecycle of crisis, certain stages can be identified that is regarded as pre-mature or critical phase. If at this stage, by using certain mechanisms, potential crisis is identified, it is possible to prevent a serious crisis in an organization. As a fundamental strategy, it has been recommended upon confrontation with crisis, one may avoid taking severe and sudden reactions and the crisis should be faced calmly and on a planned basis. Complete flexibility and adaptation with new conditions are among the key strategies for crisis management. Study of the research background reveals that rear researches have been conducted on the connection between the organizational culture and effectiveness of crisis management. This research has been conducted aiming at filling the existing gap [6].

2. Literature Review
2-1. Organizational Culture
The organizational culture refers to a perception of an organization by the individuals and it is something that does not either exists neither in the organization nor in an individual. Specific characteristics that exist in an organization reveal usual and fixed particulars that differential the organizations from each other (Moshabaki, 2001). Culture is a collection of knowledge and behaviors (technical, economic, religious and traditional) and beliefs that are allotted to a definite human community and it is used as synonym for civilization and society of ethnicity (Rouholamini-1994). Culture refers to a collection of values, beliefs, perceptions, understanding and methods of thinking which are joined by the members of the organization (Dafat- 1999- page 394). Culture means all material and intellectual works of society (Sadegh Pour, 1996- page 78). The organizational culture is a connected ground that sticks the organizational members together (Queen 1999). The organizational culture is expressed by mental group planning that differentiates the individuals of an organization from other organizations (Mortazavi, 2000). The organizational cultures have historical foundations. It means that the relationship between the organizational culture and history cannot be segregated and the organizational culture does not form suddenly and by accident (Trace Viber, 1993). Many thinkers are of this opinion that the organizational culture is a system of joint understanding of its members toward an organization. This characteristic differentiates two organizations from each other (Robins, 1995- page 967).

2-1-1. Mission Culture
It is the main and unique destination that differentiates type, domain of operations, product and customers of an organization from the other. It reveals the values, desires, and existential philosophy of an organization. The organization with such governing culture pays attention to an exterior environment in terms of emphasizing on strategic. However, it does not deem it necessary to swiftly change the environmental needs. In the mission culture, too much attention is paid to joint viewpoint in terms of organizational goal. This viewpoint determines type of activity of the organizational members and these activities find certain concept that goes beyond the obligatory duties [1].

2-1-2. Consistency Culture
An organization with such governing culture emphasizes on intra-organizational affairs and tries to consider itself a consistent in environment and in terms of behavior it follows a type of consistency of procedure. Such organization enjoys a culture where method or procedure for fulfillment of works are considered and emphasized. Signs, symbols, heroes and festivals develop more
cooperation, emphasize on tradition and enactment of policies and consistent methods that are fulfilled for realization of goals. In such organization, individuals attach more important to consistency of behavior, adaptability of individuals with common traditions, cooperation and synergy. Success of an organization depends on solidity, integrity, and efficiency with high productivity [1].

2-1-3. Adaptability Culture
Adaptability culture means that culture is flexible in terms of environmental requirements and pays attention to outer environment in terms of strategic emphasis and tries to realize the demands of customers. In this culture, norms and beliefs are emphasized so that the environment can be identified and interpreted [7-8].

2-1-4. Involvement Culture
The first emphasis of this culture is to get involvement and participation in works in terms of changeable expectations of the intra-organizational environment. Under this condition, the goal of the organization is quickly respond to environment and to promote productivity. In terms of partnership culture and involvement of employees in organizational activities is the creator of sense of responsibility and belonging among individuals toward goals and responsibilities of an organization [1-8-9-10].

2-2. Effectiveness
Organizational effectiveness refers to the degree or extent that an organization achieves its intended goals. In more simple words, effectiveness reveals that to what extent the intended results have been achieved through efforts made. But use and utilization of resources for achievement of results refers to efficiency. Drucker believes that effectiveness means fulfillment of correct works. From the viewpoint of Drucker, effectiveness is the key of success of an organization. The concept of effectiveness lies inside the concept of efficiency. However, effectiveness should be necessarily defined within the framework of a specific plan that is evaluated. In fact, effectiveness means study of the extent of effectiveness of measures taken for achievement of predetermined goals. The concept of effectiveness in management with change of success of results obtained from work should be regarded as the most important goal of a manager. Productivity of a manager should be also assessed through management outputs and not inputs. It means his work successes not a collection of duties assigned to him or should be fulfilled in one day. Effectiveness is something that is achieved and fulfilled through enactment of precise management. Effectiveness is something that is achieved by a manager through precise enactment of management and offered in form of work productivity. Effectiveness is defined as extent of success of a manager in productivity and results of duties assigned to him.

2-3. Crisis Management
It refers to a collection of activities or processes for identification, study or prediction of crisis or a collection of measures that enable the organizations to prevent or administer the crisis effectively (Kash and Darling, 1995- page 179). Crisis management comprises planning, organizing, leadership and control of assets and activities before, during and after confrontation with unexpected effects to decrease losses incurred by organizations and complete reconstruction of the organization (Nyblom, 2003- page 19). Crisis management refers to an organized effort made by the organizational members with beneficiaries outside the organization in order to prevent crisis and/or management of their effectiveness at the time of occurrence (Rezvani, 2006-page 21). Gigliotti and Ronald have defined crisis as capability of an organization for swift, efficient and effective confrontation with an emergent situation aiming at decrease of threatening health and mind of individuals, loss of assets
of a company and decrease of negative effects on routine operations of an organization (Hu and Ann -1999- page 199) [6-11-12].

2-3-1. Effective elements in effectiveness of crisis management

Essentially, the goals of crisis management can be revised in the following items and based on these goals strategies for promotion of effectiveness of crisis management process can be achieved:

- Care of life of personnel
- Prevention, care and decrease of human damages
- Prevention, care and decrease of potential risks of physical assets, property, goods, services, information, reputation and validity of the organization
- Discovery of truths by using precise information
- Return of conditions to normal situation as soon as possible
- Maintaining competitive advantage in business

Enjoyment of structures and methods of flexible business and management and dynamic and creative human resource is among the significant elements affecting success of crisis management plants. Another key strategic in crisis management is explained in this way that individual and organizational preparation for confrontation with crisis should be always tested and controlled. Thus, it has been recommended that skills of crisis management should be tested periodically. Maintaining concentration and mastery over oneself have been introduced as an effective element involved in promotion of effectiveness of measures and plans for crisis management. The concept of prioritization and evaluation of priorities as key strategy for promotion of degree of effectiveness of crisis management process enjoys great importance. Undoubtedly, level of preparation and resources provided for confrontation with crisis shall also be effective for effectiveness process of crisis management [11-12-13-14].

3. Research Method

It is certain that the organizations with their organizational culture play an effective role in management of their resources. However, this question rises what the effect of the organizational culture is on the effectiveness of crisis management is. For this purpose, the goal of this research is to study the effect of organizational culture on effectiveness of crisis management. Consequently, considering this goal, the main hypothesis of research is put forth stating whether or not there is a significant statistical relationship between the characteristics of organizational culture and effectiveness of crisis management. Sub-hypotheses are propounded as follows:

Hypothesis 1: Involvement in work has a desirable effect on effectiveness of crisis management.
Hypothesis 2: Consistency has a desirable effect on effectiveness of crisis management.
Hypothesis 3: Adaptability has a desirable effect on crisis management.
Hypothesis 4: Mission has a desirable effect on crisis management.
Conceputal Model

One of the fundamental strategies of an organization is the organizational culture. The most significant mission of managers is to regulate an organizational strategy in cultural field and to develop a proper organizational culture. Study of the organizational culture act as a means for data collection and enables the managers to firstly compare the working parts and groups and secondly give priority to issues and thirdly identify perceptions and expectations of personnel (Monavarian, 2006).

This model has been designed by Mr. Denison upon many studies and experiences obtained by him. He evaluated the organizational culture based on four dimensions of involvement, consistency, adaptability and mission. In order to evaluate any of the aforesaid four dimensions, three indices have been defined.

Moreover, considering the general model of crisis management that has been given in figure 2, the main hypothesis implies that the organizational culture in crisis conditions affects an effective crisis management. Based on the characteristics and features of an Iranian management community and applying the required adjustments in this respect, a general model of crisis management has been introduced as follows. The main components of this model are introduced in figure 2.

**Inputs**: Data entered the crisis management are classified and identified in the following items.

- **Hardware inputs**: Equipment, facilities and physical and technical substructures
- **Software inputs**: Structure, quality systems, motivation, education, evaluation, leadership and the ones
- **Brain inputs**: Number, variety, quality and quantity, level of education and experience of human resource
- **Mental inputs**: Religious and ethical teachings and culture and individual and group beliefs

In this research, mental inputs and organizational culture have been identified in the figure by an asterisk and have been studied as well. In this study, for data collection, two questionnaires of Likert’s Five-option scale have been used (Agree too much- agree- no idea- disagree- disagree too much). Furthermore, a population of 52000 persons and a sample of 385 relief workers and rescuers of Red Crescent Society have been used as well. The size of the said sample has been obtained at the probability level of 95% by using Cochran’s Equation. It should be noted that SPS software and

![Denison’s Model of Organizational Culture](http://www.ijhcs.com/index/fig1.png)

Figure 1. Denison’s Model of Organizational Culture
description and analytical statistics have been used to test the hypothesis of this research. For data analysis, Pearson’s Correlation Coefficient has been used (Azar, 2006 to specify the significant relationship between coordination and effectiveness of crisis management has been used (Taheri, 1997- Hafez Nia, 2003- Khaki and Sakaran- 2001-28).

Figure 2. General Model of Crisis Management Economic Conditions

In this study, for inferential statistics and in order to promote conceptual validity of the questionnaire, similar research questions, concepts and models corresponding to the organizational culture have been used. In order to assess the reliability of the questionnaire in this research, the comments of professors, specialists, experts and students have been used and indices in this research have been achieved from the English articles as well. The research method, considering the discretion and decision of professors and specialists of cultural management and crisis management has been localized. Cronbach Alpha has been used to test the capability of the questionnaire and the coefficient reveals that the internal adaptability validity of the said questionnaire is high. The reliability of this questionnaire has been obtained by using Cronbach Alpha- SPSS software. The reliability coefficient of the questionnaire equals to 0.93. Moreover, central indices and dispersion of research variables have been given in Table 2. Considering table 2, involvement average equals to 4.326; consistency: 4.063; adaptability: 4 .161; mission: 4.218. In order to study normalization of data Kolmogorov-Smirnov test has been used. The results of the said test have been given in Table 3 and it equals to a level of significance given as 95%; Z testable<+1.96 and >-1.96.
Table 2. Central indices and dispersion of research variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
<th>Mean</th>
<th>S.D.</th>
<th>Lower L.</th>
<th>Upper L.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>385</td>
<td>4.32</td>
<td>2.87</td>
<td>11.00</td>
<td>25.00</td>
</tr>
<tr>
<td>Mission</td>
<td>385</td>
<td>4.21</td>
<td>4.01</td>
<td>22.00</td>
<td>40.00</td>
</tr>
<tr>
<td>Consistency</td>
<td>385</td>
<td>4.16</td>
<td>3.32</td>
<td>18.00</td>
<td>35.00</td>
</tr>
<tr>
<td>Adaptability</td>
<td>385</td>
<td>4.06</td>
<td>4.05</td>
<td>21.00</td>
<td>40.00</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>385</td>
<td>4.16</td>
<td>3.91</td>
<td>21.00</td>
<td>40.00</td>
</tr>
</tbody>
</table>

Table 3. Kolmogorov- Smirnov Test

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Statistics</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptability</td>
<td>385</td>
<td>1.347</td>
<td>0.053</td>
</tr>
<tr>
<td>Consistency</td>
<td>385</td>
<td>1.546</td>
<td>0.017</td>
</tr>
<tr>
<td>Mission</td>
<td>385</td>
<td>1.674</td>
<td>0.007</td>
</tr>
<tr>
<td>Involvement</td>
<td>385</td>
<td>1.866</td>
<td>0.009</td>
</tr>
</tbody>
</table>

Thus, data of four variables enjoys normal distribution. Consequently, in order to analyze the hypotheses, parametric tests (correlation coefficient) should be used. In order to connect the variables, correlation method and to display the relationship between the two variables, correlation test is used. The correlation shows the relation among variables. Analysis of correlation is a statistical means by which we are able to measure the degree of relationship between one variable and the other in linear views.

4. Test of Research Hypothesis and Test Results

The main research hypothesis implies that there is a significant relationship between the organizational culture and crisis management effectiveness.

Table 4. Correlation between involvement and crisis management effectiveness

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
<th>Number</th>
<th>Correlation</th>
<th>Sig.</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>Crisis management</td>
<td>385</td>
<td>0.057</td>
<td>0.263</td>
<td>Rejected</td>
</tr>
<tr>
<td>Consistency</td>
<td>Crisis management</td>
<td>385</td>
<td>0.775</td>
<td>0.000</td>
<td>Confirmed</td>
</tr>
<tr>
<td>Adaptability</td>
<td>Crisis management</td>
<td>385</td>
<td>0.719</td>
<td>0.000</td>
<td>Confirmed</td>
</tr>
<tr>
<td>Mission</td>
<td>Crisis management</td>
<td>385</td>
<td>0.656</td>
<td>0.000</td>
<td>Confirmed</td>
</tr>
</tbody>
</table>

Considering table 4 that shows the test result of Hypothesis 1, at reliability level of 95%, considering the correlation coefficient of +0.05, there is no significant relationship between involvement and crisis management effectiveness. It means that upon increase of involvement of personnel in their job, no change is made in effectiveness of crisis management.

Considering the test result of Hypothesis Two given in Table 4, at reliability level of 95%, in consideration of correlation coefficient of 0.77, there is a direct relationship between consistency and crisis management effectiveness. It means that upon increase of consistency in work, effectiveness of crisis management is increased as well.

Considering Table 4 that shows the test result of Hypothesis Four, at reliability level of 95%, considering the correlation coefficient of 0.71, there is a direct relationship between adaptability and crisis management effectiveness. In other words, upon increase of adaptability, crisis management effectiveness is increased.
Regarding table 4 that shows test result of Hypothesis Four, at reliability level of 95%, in consideration the correlation coefficient of 0.65, there is a direct relationship between mission and crisis management effectiveness; it means that upon increase of attention to mission, crisis management effectiveness is increased accordingly.

5. Discussion and Conclusion
Concerning the fact that test results of hypothesis, one negative, three positive and direct relation/s are shown between three sub-hypotheses i.e. consistency, adaptability, mission and crisis management effectiveness, it can be said that there is a positive and significant relationship between the organizational culture and crisis management effectiveness. It means that upon increase of the organizational culture, crisis management effectiveness can be increased.

From among the approaches to remove many executive problems of projects, one may point out the strategic planning to prevent routines and prompt decisions of managers and enjoyment of an equal perspective by consultants. Considering the advantages of crisis management, this capability in managers is regarded as an approached that is based on certain principles leading to promotion of its effectiveness.

Since in this statistical sample, increase of involvement does not desirably affect the crisis management effectiveness, in order to promote crisis management effectiveness, partnership and teamwork should be improved and the staff get involved in activities and their competence is used. This great aim can be realized through conduction and training of some measures and skills such as promotion of human resource capabilities, development of a model (by the help of operational thought), study and test of model, team orientation and empowerment of human resources. Whereas consistency has an effect on crisis management effectiveness, it is recommended that for promotion of effectiveness of crisis management, consistency should be promoted through conduction and training of such items as work union, coordination, consistency, agreement, fundamental values, applicable generalization and convention of group meetings can be useful for realization of this goal. Since adaptability has an effect on crisis management effectiveness and in order to promote the effectiveness of crisis management, adaptability can be promoted through conduction of such measures as organizational learning, development of changes and flexibility. Furthermore, since mission has an effect on crisis management effectiveness, in order to promote effectiveness of crisis management, mission can be promoted through conduction of such measures as attention to beliefs and ideas of individuals especially fresh and initiative thoughts, selection of perspective from among the said viewpoints, purposefulness, and direction toward the goad.
References


Ghoreishi Tabar, A. (2005), Studying the effective factors in effectiveness of crisis management (Case study: Earthquake of Bam, Iran), MA thesis, Islamic Azad University, Dehaghan Branch.

