

Designing a Crisis Management Model for Administrators of Farhangian University of Iran

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Original Article

Abstract

INTRODUCTION: The present study was conducted with the aim of designing a crisis management model for administrators of Farhangian University of Iran.

METHODS: This mixed research was conducted in two phases, qualitative (phenomenology) and quantitative (cross-sectional survey). In the first phase, 16 administrators and academic staff members of universities with experience in crisis management were selected and interviewed. Then, data coding, components and quality requirements of crisis management were obtained through theme analysis. In the quantitative phase, a researcher-made questionnaire was designed based on the obtained indicators and using stratified random sampling method, 265 faculty members were studied and analyzed through Structural Equation Modeling (SEM) method and PLS3 software.

FINDINGS: According to the findings, the components of crisis management in Farhangian University include level of preparedness to deal with the crisis; preparing a risk management plan; organizational structure; participation of organizations; organization communications; continuous monitoring; leadership of the organization; organizational agility; and university infrastructure. Also, crisis management requirements include quality of trainers, educational facilities, performing relief maneuvers, physical equipment and financial resources.

CONCLUSION: The results showed that students, professors and administrators should receive the necessary training on crisis management in universities in order to prevent possible damages when facing a crisis.

Keywords: Crisis management; University students; Administrators of university; Higher education.

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Introduction

Human resources are the important capital of any organization, therefore, organizations not only need to attract experienced and talented employees, but also need to retain them for the long term (1).

Today, in the highly developed business environment, there is priority and importance to human power within the organization, which helps to improve productivity and maximum use of resources (2).

Employees need training to develop skills and knowledge appropriate to their job needs (3).

Colleges and universities as relatively autonomous communities that provide housing, food services, academic and recreational facilities, libraries, and (often) medical facilities can be uniquely affected by natural and man-made disasters (4).

The university is an important introduction to the interpretation of crisis management in the university and belongs to one of the public crises. As soon as a crisis occurs in the university, it directly affects the normal order of education in the classroom and even damages the reputation of

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the university. Generally, a university crisis refers to an emergency situation that lies in a period that has not yet begun or is now threatening the normal order of education. According to the nature of crises in the university, it can be divided into natural disasters, public health and internal management, etc. Different from public crisis, university crisis has sudden, urgent, harmful and uncontrollable characteristics. When a crisis occurs in the university, if it is not controlled properly, it causes dissatisfaction between teachers and students and may even deepen the crisis. Therefore, crisis management in the university is very necessary and meaningful.

Diamond et al. (2006) compared universities to "small towns" and found that the University of Southern California (USC) alone operated close to 20 different businesses, including food preparation and services, hotel services, retail outlets, health-care facilities, sports events, and many other activities besides teaching and scholarship (each of which has its own sub-"businesses" such as distance education). Each of these activities presents the university with different risks (5).

Tourani et al. (2019) in their research reached the conclusion that natural and emergency disasters are increasing all over the world, and today, with the advancement of technology, acquiring knowledge and applying it in practice, is considered the only effective solution to prevent natural disasters or reduce their effects (6).

In their research, Lin et al. (2018) concluded that disaster education is to reduce vulnerability to natural hazards and make people aware of natural disasters and the importance of education in order to reduce disasters and achieve safety for sustainable development among university students. The challenges and opportunities of the disaster education program among students are financial resources, time, target group and in-depth and specific knowledge (7).

Farhangian University is an important place that is able to be the foundation of the country's educational system developments with the quality of education and training of human resources. In order to achieve the goals and continuously improve the quality, this university should pay attention to the improvement of the quality of working life of its human resources, including students, current lecturers of the university, and graduates who are the cultural stratum working in the society, in the first step, i.e. policy making and

formulation of goals (8).

Higher education, Ministry of Education and especially Farhangian University faced difficult conditions after the outbreak of the Corona virus and due to the announcement of the state of emergency in the country regarding the Corona epidemic. China was the first country to order the closure of schools in order to reduce and deal with the spread of this disease. In Iran, since the end of February and after the spread of the corona virus, the Ministry of Science, Research & Technology and the Ministry of Education ordered the closure of universities and schools in order to prevent the spread of the disease.

Considering the economic, social and cultural consequences of the epidemic of this virus in all aspects of the lives of the people of the world, education is one of the national functions that has been severely affected by the current crisis. Because due to the observance of social distancing since the beginning of March, the country's educational system in the field of education and higher education was somehow closed.

Since the closure of schools and universities to help eliminate this disease, the concern of developing and implementing educational programs to continue education at home and in the conditions of home quarantine has become the biggest challenge of educational systems, that is, both Ministry of Education and Higher Education. This challenge and concern has been raised not only in our country but for all countries of the world (9).

Universities will also be affected by disasters, although these conditions prevail, but the level of awareness and preparation to deal with these disasters is still unknown. However, in order to answer the questions of whether universities are disaster prepared or not, there are other questions in mind that need to be answered such as what is the level of preparation of individuals and organizations for managing incidents? Since crisis management in Iran is still in its infancy, this research is to answer this question: what the appropriate model of crisis management is for Farhangian University administrators.

Methods

The current research is a mixed exploratory and hybrid design in two qualitative and quantitative stages. In the qualitative approach, deep and unstructured interviews were conducted

with 16 administrators and faculty members using targeted sampling, and the adequacy of sampling was determined according to the rule of theoretical saturation.

According to the criteria provided by Creswell (10) to ensure the reliability of the findings obtained from the first phase of the research (qualitative phase) and to ensure the accuracy of the findings, a review by members and a peer review were done. To analyze the findings, the

inductive content analysis method based on open coding was used.

In the quantitative stage, based on the findings of the qualitative research and theoretical foundations, a researcher-made questionnaire was designed. Then, using the stratified random sampling method, 265 faculty members were selected and the mentioned model was used quantitatively to test the crisis management model for Farhangian University administrators.

Table 1. Identified categories and subcategories related to crisis management

Main category	Subcategory	Codes identified in open coding
Preparedness level to deal with crisis	Individual factors	Age/gender/ level of education / work history / physical diseases / psychological problems/ teacher's attitude and belief towards herself and the teaching profession/ scientific competence / moral responsibility / study level/ faith and beliefs
	Organizational factors	Matching job and employee/ unclear and vague rules/ intra-organizational and extra-organizational discrimination/ centralized decision-making/ competition and challenging work environment
	Educational factors	Training facilities and equipment/providing necessary training for new forces/holding retraining courses in the field of safety issues for experienced forces/sufficient knowledge and awareness of employees regarding preventive measures in the field of crises/updating safety information through on-the-job training/training Use of different crisis procedures
	Economic factors	Welfare and living conditions of employees/ insufficient budget/low salaries and benefits
Preparation of risk management plan	Before crisis	Providing suggestions related to the implementation of disaster drills in universities / Determining the responsibilities of people before, during and after the disaster / Teaching disaster-related subjects to students /University professors and employees
	During crisis	Providing suitable programs to deal with disabled people/ Providing a suitable communication program in the university
Organizational structure	Organizational structure	Chain of command/monitoring operations
Participation of organizations	Participation of social resources	Psychologists/social workers/ therapists/ social service organizations/ hospitals
Organizational communication	Internal communication plans	Fast and effective communication with employees / use of various communication tools/ use of oral and face-to-face communication
	External communication plans	Communication with parents of students/communication with society/ use of key communications/media relations
Continuous monitoring	Crisis maneuver	Performing similar operations/imitation of crisis conditions
	Possible crisis scenario	Crisis identification/discussing the types of crises/brain storm/designing a plan to face the crisis
Organizational leadership	Analysis & evaluation	Annual evaluation of crisis plans/checking the effectiveness of the plan after each crisis/evaluation of the crisis plan by each employee
	Leadership & management	Allocation of the necessary budget by organization leaders/proper and timely supply of resources/lack of continuous and effective communication with the organization when facing critical situations
Organizational agility	Organizational culture	The existence and strengthening of the safety culture and crisis prevention/ design of safety culture promotion brochures /dealing with past events
	Organizational agility	Coordination of all teams in dealing with critical situations/regular planning for conducting maneuvers/ existence of emergency notification infrastructure
University infrastructure	Facilities and equipment	The existence of sufficient infrastructure for transportation/ adequacy of facilities for transporting the injured/ adequacy of medical centers and hospitals

Findings

The findings obtained from the interviews are as follows. In order to organize better, each of the findings was examined in relation to the research questions (Table 1)

The findings in the qualitative phase showed that the components of crisis management in Farhangian University include the degree of preparedness to deal with the crisis (individual, organizational, educational, and economic factors); preparation of risk management plan (before and during the crisis); organizational structure, participation of organizations; organizational communication (internal communication and external communication plans); continuous monitoring (crisis maneuver,

possible crisis scenario, review and evaluation); organization leadership (leadership and management, organizational culture); organizational agility; and university infrastructure.

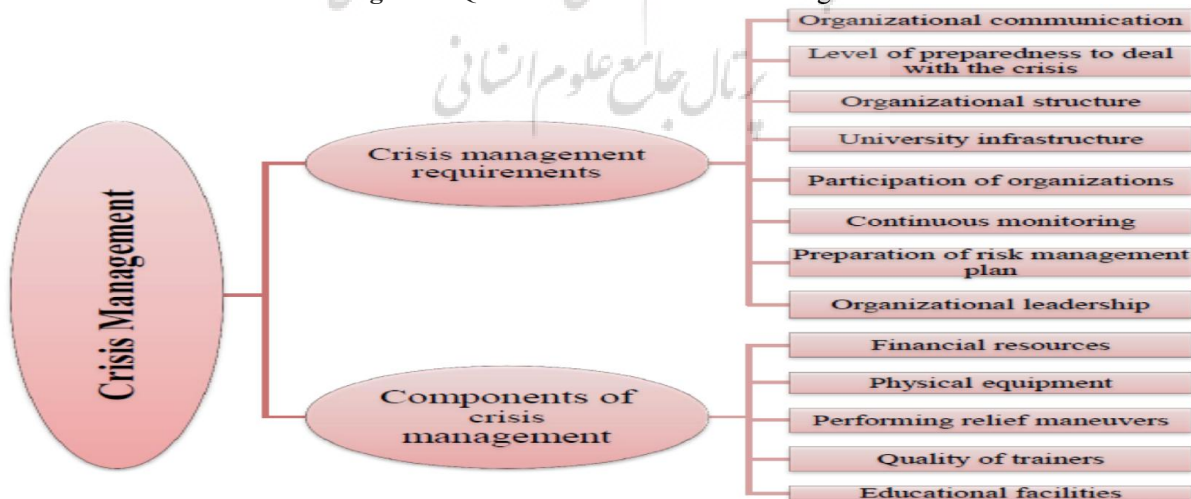
Question 1: What are the crisis management requirements for administrators of Farhangian University?

According to the research results, the requirements of crisis management include quality of trainers (knowledge of trainers and teaching methods of trainers), educational facilities (in-service training, up-to-date educational resources), performing relief maneuvers (training maneuvers), physical equipment and financial resources (Table 2).

Table 2. Identification of crisis management requirements for administrators of Farhangian University

Main category	Subcategory	Codes identified in open coding
Quality of trainers	Knowledge of trainers	Qualifications and knowledge of trainers/ employing trained and experienced trainers & updating their information/ teacher quality /using trainers with a high level of education related to rescue and rescue/specialist trainers in the field of education
	Teachers' teaching method	Teachers' teaching method/ the way of training implement
Educational facilities	In-service training	In-service training for trainers/ retraining of trainers/training of efficient and experienced managers to teach people and groups retraining of trainers.
	Up-to-date educational resources	Use appropriate and updated teaching aid equipment/learning assist tools /up-to-date educational resources/ use of quality and up-to-date educational facilities /training according to the risks of the regions
Performing relief maneuvers	Training maneuvers	carrying out group and practical activities to increase the power of the troops/dealing with cross-border aid organizations and holding joint maneuvers and exchange of views/ carrying out relief maneuvers continuously/ holding disaster prevention drills at the community level /holding empowerment exercises
Physical equipment	Physical equipment	Low training equipment/ training equipment
Financial resources	Financial & credit resources	Financial and credit resources

Figure 1. Qualitative model of crisis management



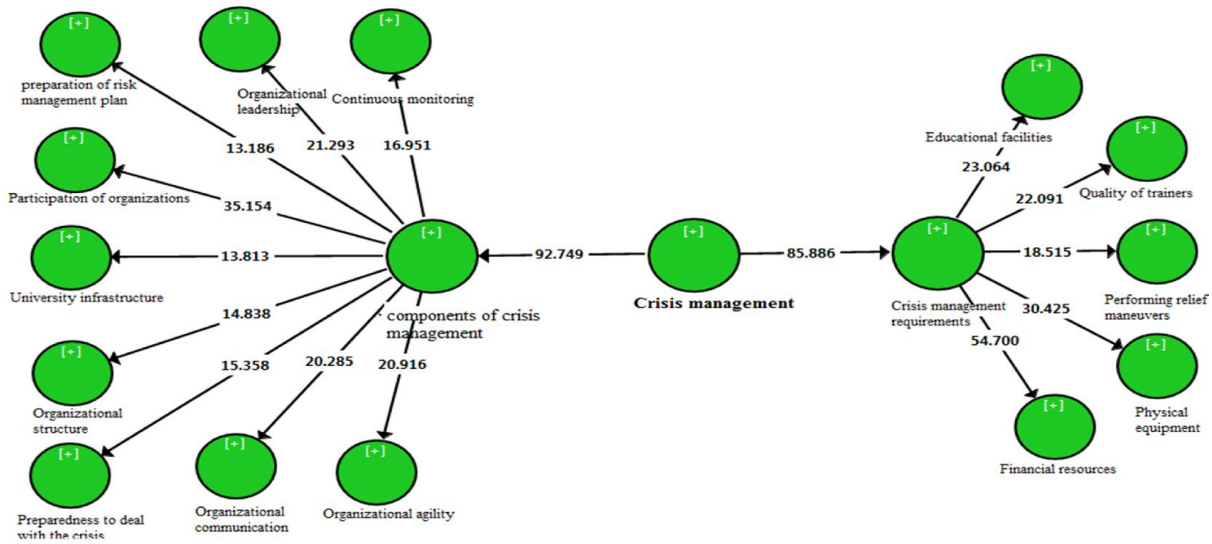


Figure 2. Student's t-test results to check the significance of factor loadings

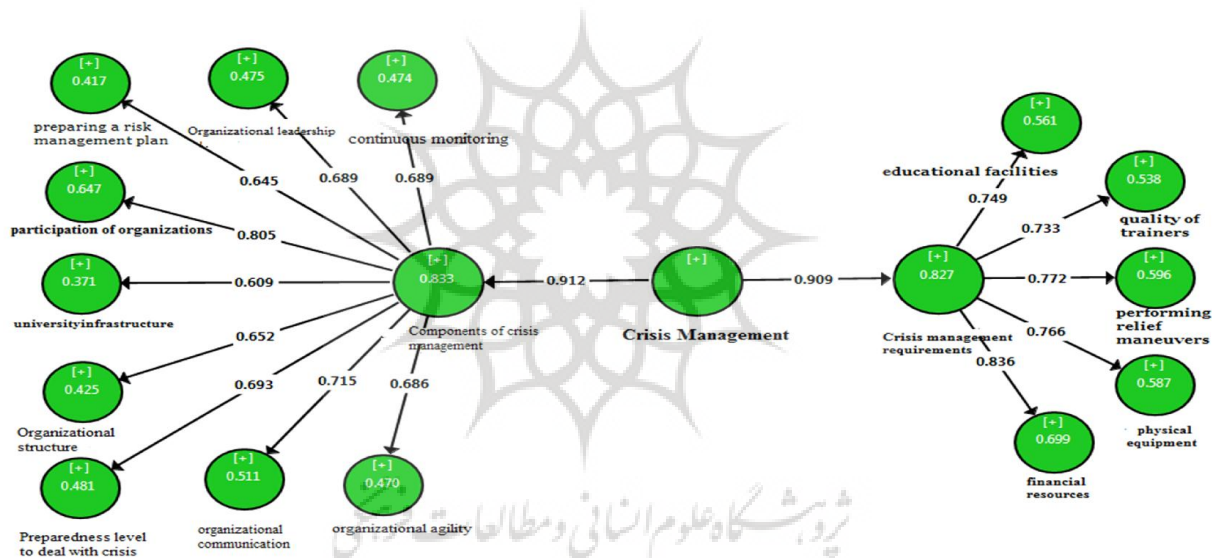


Figure 3. Standard factor loadings of the research conceptual model

Structural model of research

After examining the measurement model, it is time to examine the structural model of the research. The graphical output of the research model is as follows.

The numbers written on the paths show the path coefficients. T-Student's test values were calculated in order to test the significance of path coefficients using the bootstrap method. If the T-Student test is greater than 1.96, the path coefficient is significant at the 0.05 level. (Figure 2)

Question 2: To what extent is the crisis

management model valid for administrators of Farhangian University?

To check the fit of the crisis management model for the administrators of Farhangian University, three fit criteria were checked: model criterion, criterion, GOF. The results of the model are suitable for predicting the endogenous variable of the model.

The output of the software has been used to check the hypotheses and test the significance of the factor loadings between the variables. (Figure 3)

The path coefficients and the results related to their significance are given in the Table 3.

Table 3. The results of structural model evaluation

Path	T-value	Path coefficient (β)	Results
Components of crisis management → Crisis management	92/749	0/912	Ok
Crisis management requirements → Crisis management	85/886	0/909	Ok
Continuous monitoring → Crisis management	16/951	0/689	Ok
Organizational leadership → Crisis management	21/293	0/689	Ok
Preparation of risk management plan → Crisis management	13/186	0/645	Ok
Participation of organizations → Crisis management	35/154	0/805	Ok
University infrastructure → Crisis management	13/813	0/609	Ok
Organizational structure → Crisis management	14/838	0/652	Ok
Preparedness to deal with the crisis → Crisis management	15/358	0/693	Ok
Organizational communication → Crisis management	20/285	0/715	Ok
Organizational agility → Crisis management	20/916	0/686	Ok
Educational facilities → Crisis management	23/064	0/749	Ok
Quality of trainers → Crisis management	22/091	0/733	Ok
Performing relief maneuvers → Crisis management	18/515	0/772	Ok
Physical equipment → Crisis management	30/425	0/766	Ok
Financial resources → Crisis management	54/70	0/836	Ok

In the following, according to the output of the conceptual model, the hypotheses of the research will be expressed and examined.

Question 3: Do the requirements of crisis management have an effect on the crisis management of Farhangian University administrators?

Table 3 showed that educational facilities, the quality of trainers, performing relief maneuvers, physical equipment and financial resources have a positive and direct effect on managers' crisis management.

Discussion and Conclusion

This research aims to design a crisis management model for administrators of Farhangian University. The findings showed that the components of crisis management in Farhangian University included the degree of preparedness to deal with the crisis (individual, organizational, educational, and economic factors); preparation of risk management plan (before and during the crisis); organizational structure, participation of organizations; organizational communication (internal communication and external communication plans); continuous monitoring (crisis maneuver, possible crisis scenario, review and evaluation); organization leadership (leadership and management, organizational culture); organizational agility and university

infrastructure.

In explaining this finding, it can be said that crisis is a concept that goes back a long time and has been developed all over the world in recent decades. As pioneers of this development, some countries have gained valuable experiences in this field, and most other countries are trying to solve the problems and obstacles in this field.

Serious attention and detailed planning to provide a healthy environment in the university in terms of physical and mental health is one of the most important tasks of Higher Education due to the vital role of humans in sustainable development; however, crisis management is raised in different fields and universities, as one of the main components of today's society are not exempt from this rule.

The dimensions that can cause crises in universities are divided into six categories:

1) *The crisis caused by natural or man-made factors* such as earthquakes, floods, gas leaks and accidents caused by damage to vital infrastructures.

2) *The crisis in the political dimension*, for example, the presence of non-conventional people in various forms in the university campus, apoliticism among students, the lack of transparency and legality of political activities in the university territory, political discontent in universities and elite immigration, political mistrust of students and professors towards university management.

3) *The crisis in the managerial dimension*

including insufficient commitment of managers to implement changes, applying parallel management as a factor of conflict in university administration, the dominance of bureaucratic and inflexible management in universities, problems related to the centralized system of academic management, managers' unfamiliarity with crisis management in the university.

4) *The crisis in the educational dimension* includes the number of applicants to enter the university, lack of physical space and student dormitories, improper quality of food, lack of up-to-date information and knowledge of university professors, student admission method, and the predominance of credentialism thinking among students.

5) *The crisis in the economic dimension* consists of the university's strong financial dependence on the approved budget, low salaries and benefits of university faculty members, individual and social convulsions of students due to the pressure of tuition increase, lack of suitable job opportunities to attract university graduates.

6) *The crisis in the socio-cultural dimension* including increasing the tendency of students to migrate abroad, students' alienation from culture and national identity, self-defeat against foreign culture, clash of student values with university cultural values and psychological aspects of unemployment among graduates, etc.

Other research results showed that crisis management requirements include quality of trainers (educators' knowledge, teachers' teaching methods), educational facilities (in-service training, up-to-date educational resources), performing relief maneuvers (training maneuvers), physical equipment and financial resources.

The findings of the present research are in line with the research results of Tourani et al (2019), Lin et al (2018), Rezaei & Nouri (2017), Vakili et al (2016), Pourkarimi (2014) and AlQahtany & Abubakr (2020). (6 &7, 11-14)

The experience of past disasters and accidents all over the world shows that in the early moments of disasters, especially widespread and large accidents, no organized and equipped organization, group or team with advanced operational tools can start relief and assistance faster than the survivors of the region for many reasons, including special conditions created after the disasters and incidents. If the help of such people in the early moments is not accompanied

by prior and sufficient knowledge and training and is done solely based on a sense of responsibility or human emotions, not only will it not be effective, but it may also increase human casualties. It is obvious that in this field planning, design, formulation and appropriate comprehensive and efficient training will be a very effective factor in reducing vulnerability.

Today, human resources play an undeniable role in organizations, and the organization must rely on strong, experienced and expert human resources to achieve its goals.

Employee training is one of the most important and easiest tools to achieve the growth and development of employees and the organization, which is very important to achieve these goals. Among the steps and programs to improve the ability of managers, employees and agents of the organization, the following can be mentioned: opening the doors of science and knowledge to employees, assessment of employee ability needs, creating and designing educational models, evaluation and feedback of the level of ability and skills, standardization in education, having specific and required goals in the organizational training of employees, conducting suitable and effective in-service courses for managers and human resources.

In the process of planning, performance and executive measures that are carried out by governmental, public and non-governmental organizations around the recognition and reduction of the risk level (risk-taking management) and the management of countermeasures, reconstruction and rehabilitation of the affected area (crisis management), by observing the pre-indicators and analyzing them and the available information sources, efforts are made to prevent crises in an integrated, comprehensive and coordinated manner using the available tools, or in the event of their occurrence, with the necessary preparation to reduce human and financial losses until the situation returns to normal.

Therefore, it can be concluded that it is almost impossible to have a chance to successfully maneuver in a crisis without having a crisis management team based on a healthy structure.

Team structure is part of the overall crisis planning process and should be relevant to how your particular organization is set up. However, there are key roles that are common to most team structures, for example, any plan needs to identify

a crisis team leader who will often, but not always, is the CEO and the final decision-maker during a crisis.

At the end, it can be said that the current research is one of the most important basic principles of dealing with and preparing for disasters and incidents, the basic condition of which is to raise the level of public awareness, create recognition, sense of responsibility and public participation in getting prepared to face the disasters, creating the potential for self-help and other aid and relief, and improving people's knowledge with the aim of reducing vulnerability.

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Conflict of Interests

The authors declare no conflict of interest.

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