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Designing an Organizational Resilience Education Model of Crisis Management of Universal Centers to Facing with Natural Hazards and Prevention from Psychological and Social Interventions (A Case Study of Universal Centers of Karaj City)

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Purpose: Organizational resilience in the crisis conditions is one of the important and effective concepts in crisis management for facing natural hazards. Therefore, the present study was conducted with the aim of designing an organizational resilience education model of crisis management of universal centers to facing with natural hazards and prevention from psychological and social interventions.

Methodology: The current research was descriptive from type of correlation. The statistical population of this study was all employees of the universities of Karaj city in the 2022-23 academic years with number of 850 people, which according to Cochran's formula the sample size was determined to be 264 people. The samples of this study were selected with the random cluster sampling method and responded the researcher-made questionnaire of organizational resilience of crisis management (125 items) and the data obtained from its implementation were analyzed with the methods of exploratory factor analysis and structural equation modeling in SPSS-27 and Smart PLS-3 software.

Fidnings: The findings of the present research showed that the organizational resilience education of crisis management of universal centers to facing with natural hazards and prevention from psychological and social interventions had 125 items, 12 components and 3 dimensions. The dimensions were include individual (with two components of psychological factors of resilience and creativity and innovation), structural (with six components of resilience planning, adaptive factors, commitment and management, crisis culture, learning culture and leadership and decision-making) and operational (with four components of knowledge use, communications, effective public participation and operational knowledge of resources and equipment). The factor load and average variance extracted of all components were higher than 0.50 and the combined reliability of all of them was higher than 0.80. Also, the organizational resilience education model of crisis management of universal centers to facing with natural hazards and prevention from psychological and social interventions had a good fit and this model on all three individual, structural and operational dimensions and each dimension on its components had a direct and significant effect (P<0.001).

Conclusion: The results of this study about the designed organizational resilience education model of crisis management of universal centers to facing with natural hazards and prevention from psychological and social interventions can help to crisis management specialists and planners to face hazards in order to increase organizational resilience.

Extended Abstract

Purpose: In the past years, the world has witnessed some unforeseen natural hazards such as tsunami, tornado and earthquake, and although tools are used to measure and predict natural hazards, it is very difficult or impossible to predict them. Accordingly, increasing the ability to deal with natural hazards is very important and necessary. Natural hazards refer to the changes that occur in environmental conditions and cause people's natural life process to be disrupted and their exposure to dangerous and destructive environmental elements and factors; So that these risks are harmful to human life and are caused by forces beyond human control. Natural hazards are an unexpected, relatively sudden, unpredictable disorder with serious negative consequences in the normal structure of a society, which causes a deviation from the normal situation in a certain time and place. Planning to reduce natural hazards is done with the aim of reducing vulnerability and increasing the resilience and resistance of societies, and in this regard, natural hazard crisis management means the process of identifying risks, assessing the consequences of risks, deciding on a course of action to deal with risks and evaluating the results of the aforementioned activities. Crisis management is an applied science that seeks to find a solution through the systematic observation of natural hazards and their analysis in order to reduce the consequences or prevent it through the necessary preparation to deal and relief quick and improve the situation. The management of natural hazards as a multifaceted, continuous and integrated process from the planning and implementation of measures to reduce the risk of hazards, reduce the severity of their consequences, prepare for unexpected accidents and events, respond quickly and effectively to hazards, improve conditions after hazards and restore the environment and its ultimate goal is to prepare and implement a comprehensive plan to deal with it. Planning to reduce natural hazards is to reduce the vulnerability and increase the resilience of societies against them, and in this regard, the risk of natural hazards in particular and risk and crisis management in general means the process of identifying risks, evaluating their consequences, deciding on a course of action and evaluating the results. At the global level, significant changes have been made in the attitude towards risks, and the current dominant view has changed from focusing on reducing vulnerability to increasing resilience. Meanwhile, the process of returning to the equilibrium state and the time required for this return are very important; So that many experts and researchers are working in this field. Natural hazards affect each part of the world in a different way according to the geography and demographics of that place, and since these hazards are unexpected in terms of form, quantity and location, they cannot be prevented from occurring. Therefore, it is necessary to improve the capacity of a system to increase resistance, improve exposure to hazards, and promote resilience. Resilience is the ability to maintain balance in dangerous and adverse conditions and hazards, which the result is a kind of restoration with positive emotional, affective and cognitive consequences. One of the types of resiliency is organizational resiliency, which as an interdisciplinary term has attracted the attention of many researchers and helps to manage and perform better risks and critical situations throughout the life of the organization. The structure of organizational resilience indicates the capacity of an organization to absorb or resist stressful factors so that the organization maintains its structure and performance against disruption and has the ability to change in future challenges. Organizational resilience as adaptation to unforeseen conditions and critical situations to respond to threats in the face of conditions of stressful, challenging, adaptation, acceptance of opportunities and providing sustainable performance is a necessary factor. Organizational resilience in the crisis conditions is one of the important and effective concepts in crisis management for facing natural hazards. Therefore, the present study was conducted with the aim of designing an organizational resilience education model of crisis management of universal centers to facing with natural hazards and prevention from psychological and social interventions.

Methodology: The current research was descriptive from type of correlation. The statistical population of this study was all employees of the universities of Karaj city in the 2022-23 academic years with number of 850 people, which according to Cochran's formula the sample size was determined to be 264 people. The samples of this study were selected with the random cluster sampling method. This population were included all the employees of the universities and higher education institutions of Karaj city, which from among the elites who have a degree in educational management, a work experience of at least 5 years, and have research degrees and participated in related seminars number of 264 people were selected as the sample of the present study. The samples responded to the researcher-made questionnaire of organizational resilience of crisis management (125 items) and the data obtained from its implementation were analyzed with the methods of exploratory factor analysis and structural equation modeling in SPSS-27 and Smart PLS-3 software.

Findings: The findings of the present research showed that the organizational resilience education of crisis management of universal centers to facing with natural hazards and prevention from psychological and social interventions had 125 items, 12 components and 3 dimensions. The dimensions were include individual (with two components of psychological factors of resilience and creativity and innovation), structural (with six components of resilience planning, adaptive factors, commitment

and management, crisis culture, learning culture and leadership and decision-making) and operational (with four components of knowledge use, communications, effective public participation and operational knowledge of resources and equipment). The factor load and average variance extracted of all components were higher than 0.50 and the combined reliability of all of them was higher than 0.80. Also, the organizational resilience education model of crisis management of universal centers to facing with natural hazards and prevention from psychological and social interventions had a good fit and this model on all three individual, structural and operational dimensions and each dimension on its components had a direct and significant effect (P<0.001).

Conclusion: The results of this study about the designed organizational resilience education model of crisis management of universal centers to facing with natural hazards and prevention from psychological and social interventions can help to crisis management specialists and planners to face hazards in order to increase organizational resilience.