The relationship between psycho-social supports and reconstruction phase after the crisis in the urban management

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Abstract

Increasing the development of the construction industry and industrial projects has increased the importance of accident and natural disaster subjects. The occurrence of such accidents causes numerous psychological sufferings that cannot be compensated easily its psychological aftershocks and reconstructed the injured persons' psychological framework as a destroyed house one. Psychological injuries may continue till 6 years after accident and create anxiety, depression, fear and even guiltiness in the person. This study aims to evaluate the relationship between psycho-social supports and the reconstruction phase after crisis in the urban management. Statistical population is the staff at Tehran province municipality, rigon 1 using cluster-random sampling. To test the statistical hypothesis, the Structural Equations Modelling was used. Findings suggest that constituing people's committees have the greatest impact on the post-crisis reconstruction phase. It is also necessary to plan according to the cycle of crisis management and implement these plannings with regard to the frequency and likelihood of natural disasters occurring in every region.

Keywords: psycho-social support, crisis management, post-crisis reconstruction.
Introduction
Human beings have taken a lot of steps to rise and make better condition in life by improving sciences, knowledge and technology. But one of the factors always changes his/her life is some natural accidents occurring like flood and earthquick. From one side, increasing development of construction industry and developphsycologial, constructional and industrial projects have increased the importance of occurring accidents like earthquick, and accidents generally have many effects on human and societies. On the other hand, the meaning of crisis management is to make some predictions to confront with this crisis; nowadays it is vital and undeniable for each country to have the ability of confronting these dangers, threats and disasters. In the urban areas, common harmful effects of natural accidents occurring are a mixture of frame devastations and some disorders in the urban elements. Different authorities have suggested several views about crisis management, its desired elements and methods. Development and evolution of these viewpoints have been done with the respect of science and technology development in different countries, and has created a huge difference between developed and developing countries. The dominant view in developed countries is mainly based on prediction, prevention and planning before the crisis, but in developing countries it is mainly rely on momentary and instant and remeasure to crisis. The number of victims and the amount of damages is extremely affected by structural and theoretical differences. The results of Iran studies were not considered from the point of view of number and depth of problems created by cisis managers. Therefore, it is more necessary to do more research in this regard. The importance of this study is mainly related to the high importance of recreation after crisis and the effect of social supports in this phase. In the present study, it is tried to investigate the relation between the amounts of social supports and recreation phase after crisis in the urban management.

Theoritical basis of study
Crisis management
Crisis management is one of the management expression cases; many of its aspects have been unknown and happened suddenly, and many of its problems are unpredictable from the point of view of time influences and the amount of damages. Crisis management is divided in to four phases: pre-crisis phase, the early-crisis phase, during-crisis phase and post-crisis phase; it seems that its most important phase is post-crisis phase. Crisis management is also the process of planning and performance of authority, governmant, non-govermen, municipalty and public departments. They observe and analyse crisis integrately, comprehensivly and coordinately; useing present tools they try to prevent crisis or if a crisis happen they do necessary measures to reduce its effects, creating necessary readiness, quick relief operations and improving conditions to reach normal condition and doing recreational operations.
Crisis management planning
Crisis management planning is a comprehensive process and includes all the practices contrast with an accident before and after its occurrence. Actually this process means managing the contrast with possible dangers and accident results. This point is so important that plans related to post-accident should be done before accident, then they should be evaluated after performing, when performing the plans it should also noted to the principles of accident damages reducing and preparation about accident.

Table 2-3 time-operation cycle of crisis management

<table>
<thead>
<tr>
<th>Pre-crisis</th>
<th>After crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>prediction</td>
<td></td>
</tr>
<tr>
<td>prevention</td>
<td></td>
</tr>
<tr>
<td>Vulnerability</td>
<td></td>
</tr>
<tr>
<td>reducing</td>
<td></td>
</tr>
<tr>
<td>Damaging reducing</td>
<td></td>
</tr>
<tr>
<td>Improvement and reconstruction</td>
<td></td>
</tr>
<tr>
<td>Infrastructure development</td>
<td></td>
</tr>
<tr>
<td>Creating normal condition</td>
<td></td>
</tr>
<tr>
<td>Evaluation and review plans</td>
<td></td>
</tr>
<tr>
<td>Investigation and study</td>
<td></td>
</tr>
</tbody>
</table>
Phyco-social reconstruction
Occurance of natural accidents and disasters leaves numerous psychological sufferings that can not compensate easily its psychological aftershocks, comfort the injured person easily and reconstruct the injured person’s psychological framework like the framework of his/her destroyed house. Psychological injuries of injured person may continue till 5 or 6 years after accident and creates anxiety, depression, fear and even guiltiness in the person. Damaged and injured persons of these accidents should pass some phases to retrieve their psychological health and pass this crisis. It can be so helpful that some groups of psychologists present there to solve this crisis. Psychological supports are done in different levels and proportion according to needs and cooperation of injured person. These supports are done to put the injured person in some condition that can confront with its problems and excitement without anxiety.

Phyco-social supports:
Psychological supports actually is a process based on group cooperation which were done before, during and after accident to prevent psychological injuries created by accidents or reducing their effect and secure injured person’s psychological health so as injured person can adjust himself/herself with the psychological pressures of accidents. Also psychological support relief workers are those who do some measures for creating preparation in people as well as psychological contrasting with accidents creating stress so as to prevent creating psychological tension and accurate confrontation with them;
consequently they should actively present in all axises of crisis management. So it can be said phsycological support purposes are to help survived people after accident to fix their life, keep hope, dignity, altitude, phyco-social health and feeling natural.

**Common phycological and behaviorial disorders in events:**
Events and disasters effect on different dimention of human being essence. These dimentions are: body, thought, behavior, feeling and emotion. The most important phsycological, emotional and behaviorial disorders in unexpected accidents survivors may be seen are as follow:

- **Phsycological health crisis (personal and social):** after accident phsycological injuries are so deep in people. In the area of investigation and recognition of phsycological health, It should be considered personal phsycological health firstly and then public phsycological health will be considered. Generally speaking, it can be said this crisis which happens after the accident is divided in to some phases. At first is the time of confronting with crisis that is followed with shock and confusion, the next phase happens some weeks or some monthes later and followed with indigestion.

- **Women and girls crisis:** this is one of the important and complex discussions because of the extensive delicate mental feelings in women and also they are the base of their children due to children are the most damageable group in society.

- **Orphans crisis:** Children are the most vulnerable ages because they can not use their experiences in relation to understand what happened. Adaptation strategies have not grown yet and they are depending on their family and feel comfortable by them.

- **Security crisis:** One of the main issues in the crisis region is the lack of security, this will create many problems; we can prevent the next problems with the predetermined plans, some necessary measures after the crisis should be made and permanent presence and the deployment of police officers to the area can stop future problems.
Research conceptual model
Based on the research and exited findings in the literature, conceptual model will be provided according figure 1.

Figure 1. Conceptual model of study
According to the model of research and literature, the research hypothesis is as follows:
Main hypothesis:
- There is a significant relationship between psycho-social supports and the reconstruction phase after the crisis.

Sub- hypothesis:
- There is a significant relationship between the creating populational committees and post-crisis reconstruction phase.
- There is a significant relationship between the promotion of positive mental health level and the post-crisis reconstruction.
- There is a significant relationship between strengthening social skills and the post-crisis reconstruction.

Study methodology:
The study is applied from the point of view of the main orientation, it is quantitative and developmental from the point of view of investigation type and the methods of data
collection is a survey. It is used of questionarrie to gather the needed data and information to check the study hypotheses. In addition to the questionnaire, it is also used of books, articles, thesis, Internet and databases as secondary sources to collect information and data.

**Statistical population and statistical sample**

In the present study, statistical population are the staff of the area 1 of Tehran Municipality, it was used cluster-random sampling and then the questionarries were distributed randomly-simple between staffs.

**Determining the sample size:** Due to in the present study the statistical population is specified and the scale of data is qualitative, so the following formula is used to determine the sample size.

\[
n = \frac{1067 \cdot (1.96)^2 \cdot 0.5(1 - 0.5)}{0.07^2 \cdot (1067 - 1) + (1.96)^2 \cdot 0.5(1 - 0.5)} \approx 165
\]

In this study, after collecting data, Cronbach's alpha coefficients were calculated using SPSS software and desired rate of questionnaire is determined approximately 7.0; this shows the acceptable reliability of measuring tool.

**Data analysis and research findings**

In this study, it is evaluated the demoghrapic characteristics of questionarriess with the using of Spss software, questionarriess is made of 28 questions and evaluated 3 separate sections. After calculating descriptive indicators, it is used of structural equation analysis and SMARTPLS software to respond the questions of study and test the statistical hypothesis of study testing.

In order to study the relationship between subscales of social skills and post-crisis reconstruction phase 13 questions, to study the relationship between subscales of Creating populational committee and post-crisis reconstruction phase 5 questions, and to study the relationship between the promotion of positive mental health level and the clients post-crisis reconstruction phase 10 questions are dedicated. In this study, it is used of distance scale and used of a five options Likert spectrum to design questionnaire options; and marking the questions are made based on Likert method from very high to very low amplitude.

**Agent analysis calculation**

With due attention to KMO is equals to .852 for the adequacy of the sample size and also is higher than the meaningful amount of .7, which shows the adequacy of options for agent analysis, as well as the Britlet Kroit test is in the significant level of .01 so we can conclude that pre-hypothesis of agant analysis is right and we can operate agant analysis test.
Table 1. KMO calculation

| 852. | The efficiency amount of Keiser-Maier-Oklin sampling |
| 14062.913 | KHee Square |
| 148 | Free degree |
| .000 | Significant level |

Bartlet test Kroit

It is used of $\alpha$-KronbaKh to investigate test subscales of “psycho-social supports with reconstruction phase after the crisis”. $\alpha$-KronbaKh coefficient shows the amount of internal parallelism of test questions.

Table 2. $\alpha$-KronbaKh coefficient in the total grade of questionarrie agents

<table>
<thead>
<tr>
<th>Sample group volume</th>
<th>$\alpha$-KronbaKh</th>
<th>$\alpha$-KronbaKh according to each section standardization</th>
<th>volume of subscales</th>
<th>subscales</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>.834</td>
<td>.834</td>
<td>28</td>
<td>Total grade</td>
</tr>
<tr>
<td>150</td>
<td>.784</td>
<td>.784</td>
<td>13</td>
<td>Social skill</td>
</tr>
<tr>
<td>150</td>
<td>.719</td>
<td>.719</td>
<td>5</td>
<td>Constituating populational committe</td>
</tr>
<tr>
<td>150</td>
<td>.862</td>
<td>.862</td>
<td>10</td>
<td>The promotion of mental health level</td>
</tr>
</tbody>
</table>

In the narrative phase of questionarrie, the KMO of questionarrie questions have been evaluated and with due attention that this amount is /825 in the test questions, there fore we concluded that considered test has a high narrative.

A significant level of 99% means that you are sure about the conditions of performing analysis test of one-way agent variance and also the correlation of normal distribution of study scores. This pre-supposition is tested here by Kolmogorov-Smirnov test, all components with degrees of freedom 148 and a confidence level of 99 percent were significant so the distribution of data is normal.

Regression analysis

Table 3. Regression analysis

<table>
<thead>
<tr>
<th>Correctness model</th>
<th>R</th>
<th>R²</th>
<th>Correctness amount of R²</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.380a</td>
<td>.145</td>
<td>.132</td>
<td>2.67014</td>
</tr>
</tbody>
</table>
With due attention to $R^2$, we can conclude that 99% of the dependent variable variance can be explained with the help of a linear combination of forming populational committees to promote positive mental health level and promotion of social skills.

**Table 4. Regression estimate power**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>Standard deviation</th>
<th>Beta</th>
<th>T</th>
<th>Significance level</th>
<th>capacity</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constituting populational committee</td>
<td>8.594</td>
<td>.946</td>
<td>.521</td>
<td>9.081</td>
<td>.126</td>
<td>.126</td>
<td>7.959</td>
</tr>
<tr>
<td>Promotion of mental health level</td>
<td>.567</td>
<td>.106</td>
<td>.423</td>
<td>5.353</td>
<td>.247</td>
<td>.247</td>
<td>4.054</td>
</tr>
<tr>
<td>Promotion of social skills</td>
<td>-.276</td>
<td>.090</td>
<td>-.245</td>
<td>3.058</td>
<td>.143</td>
<td>.143</td>
<td>6.629</td>
</tr>
</tbody>
</table>

According to the table, t constituting populational committee (9/081), t promotion of mental health level (5/353), t promotion of social skills (3/058) were significant in the confidence level of .05, therefore all of them enter the regression equation. The tolerance coefficient of VIF in constituting populational committee (7/959), promotion of positive mental health level (6/629), promotion of social skills (6/629) is lower than 10 so model is stable and there is an ability to estimate regression.

**Conclusion and suggestions**

Accidents and disasters effect on different aspects of human being essence. These aspects are: body, thought, behavior, feeling and emotion. This study sought to evaluate the relationship between social supports and reconstruction phase after the crisis in the urban management. Accordingly, four hypothesized were introduced in this study. The main hypothesis claims that there is a significant relation between psycho-social supports and post-crisis reconstruction phase and the results of study shows that this hypothesis is not refuted. In the sub-hypothesis of research, the relationship between psycho-social aspects and post-crisis reconstruction phase were investigated; these phase include constitution of populational committee, promotion of social skills and promoting positive mental health level; and it was claimed that each of these aspects have a significant relationship with the post-crisis reconstruction. The results of study show that these hypothesis do not denide, too. It was shown in this study that the constituting populational committees are the most
effective in the post-crisis reconstruction phase. Therefore, a municipality of area 1 puts its first priority on the constituting populational committees with regard to the post-crisis reconstruction phase level.

Among the factors contributing to the constituting populational committees, the following factors are the most influential in the measuring of constituting populational committees. So municipalities should have special attention to the following criteria when constituting populational committees:

- City reconstruction
- Reducing and managing crisis

Another factor contributing to the post-crisis reconstruction phase is promoting the social skills; following indicators are influential to promote the populational social skills:

- reorganization
- self-help
- society reconstruction

And the third factor promoting positive mental health level has the less effect in the post-crisis reconstruction. Tehran municipality of region 1 can make the post-crisis reconstruction phase stronger with the focus on the constitution of population committees, promoting social skills and promote positive mental health level so it is suggested that municipality of region 1 pay more attention to the formation of populational committees and later on promoting social skills and finally on the promotion of positive mental level. It is also necessary in all provinces and cities to do needed planning based on disaster management cycle, and necessary plans should be performed with regard to the frequency and likelihood of natural disasters in every region. In addition, regular and planned training should be done in non-crisis condition to provide necessary experiences on how to handle the crisis so that provide necessary readiness about further possible accidents based on obtained results. Among the important measures may be noted in this context: 1-prevention of over-construction in seismic areas, 2- using new technology to produce building materials, 3- precise monitoring of material producer activities, 4- increasing the confidence and safety coefficient in the new construction, especially residential and public buildings, 5- appointing a trustee institution and resistant authority. With due attention to the results of study, some levels should be noted at the time of post-crisis construction which includes:

1- Constituting populational committees to reconstruct city;
2- Constituting populational committees to reduce the crisis and its management;
3- The supply of skilled and experienced groups that have the efficiency after disasters;
4- Providing a conducted training program by mental health counselors to give aid and intervent in the vital services crisis in order to maintain mental health of damaged person;
5- Increasing the respect of survivors and development of communicational and agreemental skills in victims and promoting problem-solving skills in victims. According to the obtained results in this study, other variables can affect components of post-crisis reconstruction. Researchers who want to do research on post-crisis reconstruction can consider the effect of other factors and variables that affect the post-crisis reconstruction. It is also recommended to the future researchers to do this research in other areas of Tehran Municipality and organizations or among their managers and to compare the results.
References


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