



Network Policy Making: A Necessity for Today's Organizations

Mohammad Javad Kameli*, Seyed Mehdi Alvani and Yousef Mohammadi Moghadam

Police University, Tehran, Iran

* Corresponding author's Email: mohamadjavadjkameli@yahoo.com

ABSTRACT: The highly changeable and inconstant condition of organizational environments, including public and private organizations, and consequences of organizational interrelations have made it crucial and extremely necessary to broadly utilize policy making and decision making networks together with the participation of beneficiary organizations and relevant societies. This is an issue within the context of good governance, which is suggested to resolve these problems as an alternative for former trends (hierarchical etc.). In this article, in addition to reviewing the extent of influence of environmental necessities on organizations' internal and external affairs (on the statistical sample group under investigation), which affects the function of alteration of organizational hierarchical policy making and decision making method, and tendency for utilizing more effective network models, we have also provided a conceptual model of research (theoretical), and have finally provided theoretical and applied suggestions in order to prepare organizations for progressing in this direction.

Keywords: Policy making, Decision making, Network structure, Network management, Social capital

INTRODUCTION

It has been quite a long time since the subject of participating and democratic society have turned to be a part of general policy making literature and a number of researchers have called for increasing civil participation at all levels of activities in public organizations (Lasswell, 1956; Fisher, 1989; Deleon, 1992; Dryzek, 1996). Some have also identified methods for studying this phenomenon and introduced instruments for empowering citizens and increase their participation in political procedures (Dahl, 1947; Deleon, 1997). But others (traditionalists) believe that hierarchical structures should continue to be utilized in the organizational structures.

Since most of the economic activities nowadays are observed in multilateral, complicated and long-term contractual relationships, and because our managers are moving away from market policies and getting in track of intra- and inter-organizational cooperation, it seems to be logical to leave traditional methods of policy-making and decision-making, because these methods are no longer equipped with necessary mechanism to obtain desirable objectives (Goldberg, 1980). In other words none of the market-based and hierarchical decision-making models can be useful as policy-making methods in private and public sector organizations (Hajer et al., 2003). Therefore inventing policy-making networks is indeed a proper action against increasing request for participation in decision-making and policy-making measures related to different sections and actions, especially today that complexities and fuzziness of managing are constantly increasing (Margerum et al., 2004).

Based on mentioned points, and due to complicated, ambiguous and broadly changing conditions of today societies, social organizations are encountering circumstances in which they sometimes

make decisions neglecting this dynamic and complicated conditions, which ultimately only leads to defective solutions for the problems of the organization and in some cases add up to its problems. Therefore, in order to cope with this situation, experts have suggested utilization of network models in decision-making processes in organizations that have numerous stakeholders.

This article has reviewed the present gaps in inter-organizational relationships involved between Iran Police Force decision-making process and its stakeholders, regarding decisions to be taken for examination of the extent to which internal and external aspect variables impact the changes made in organizational decision-making process from hierarchical trend to network decision-making.

Literature Review

Significant changes, evolutions and developments have occurred during 80s within the environments of different organizations, including public bodies, and exposed their survival with a serious challenge, making the ongoing trend of approaches (utilization of official bureaucratic structure) in managing the organizations seeming to be impossible, making them encounter certain problems in solving today societies' complicated problems. One of the methods that can be used in solving today societies' complicated problems - which official structure fails to solve and react to - paving the way for solving serious problems, is utilizing policy-making networks (Margerum et al., 2004).

As Wagenback (2005) said networks are including sets of individuals and groups of people that are interconnected through meaningful social relationships. Networks are also defined as "sets of self-governing organizations and authorities that

gather together in order to obtain goals that cannot be fulfilled by individual ones". Organizations also join these networks, because they enable them to face major and complicated problems (Chisholm, 1998). Network relations can be extremely useful and effective in the behavior of individuals and organizations, access to more and new data and resources, and serve for collective value obtained out of these interactions (increase and change in functions). To put it briefly, utilization of networks in policy-making processes of organizations encompass the following advantages:

1. Improving the functions;
2. Obtaining legitimacy in policy-making system;
3. Quick adaptation with sudden local changes;
4. Developing new products and services;
5. Reducing redundancy and repetition;
6. Providing learning opportunities;
7. Obtaining high reputation;
8. Obtaining new sources;
9. Creating variety in provision of products and services (Hill, 2002)
10. Adapting humans with democratic criteria;
11. Increasing the ability to solve problems;
12. Putting in line the requests of stakeholders and players of the policy-making environment;
13. More coordination between different players;
14. Reducing or eliminating hierarchical relationships;
15. Possibility of maintaining independence and latitude for the players;
16. Providing conditions for sharing knowledge of the data and resources among others (Ra'naee, 2006). Etc.

Intra- and inter-organizational factors that affect tendency towards utilization of network-wise thinking in organizational decision-making processes

Serious experienced challenges are due to significant changes, evolutions and developments occurred in organizations environments, in such a way that seriously put their survival at stake. The necessity of overcoming these challenges requires radical evolutions and changes in official and traditional structures of organizational decision making process as an undeniable issue. Some of the most important challenging factors that necessitate an obligation or commitment to make changes are as follows:

1. Reduction of social capital;
2. Network structure;
3. Network management;
4. Increasing development of information technology (IT);
5. Distribution of knowledge power and distribution of citizens among the organization and

society workers and increasing their expectations about policy-making system;

6. Requesting different citizens and stakeholders' to participate in the organization's policy-making and decision-making processes (pluralist society theory);

7. Changing the mixture of population in the society and considering their demands;

8. Intra-sectional and multi-facet nature of the problems and issues of the societies, solving of which requires a multi-dimensional and system-wise way of thinking.

The overall set of factors mentioned previously, led to formation of the conceptual model of the study in the figure 1.

According to what have been stated so far, successful policy-making systems try to compensate shortcomings of traditional systems through implementation of populist approaches and participation of main stakeholders and players in developing implementation and assessment processes of policies, and subsequently obtain necessary legitimacy required for developed policies made. Therefore the definition of policy-making networks could be as follows: "a set of interrelations and interdependencies between relevant institutions, organizations and authorities in an area, together with non-hierarchical relationships" (Ra'naee, 2006).

Iran police force as an organization also needs to consider a change in its nature of decision-making (shifting from a hierarchical approach etc. to a network-based approach through maximum participation of the stakeholders of its policies) in order to successfully and effectively undergo its numerous and interrelated missions, so that it can properly respond to its subject system and society. Therefore, in order to effectively accomplish each of its tasks, Iran police force needs to establish an effective relation and coordination with different institutions of public, private and non-profitable sectors etc. including internal and external to the organization (relationship between the government and the society etc). Generally speaking, a reason for conducting this study regarding the aforesaid issue is the presence of a gap of necessary participation between the interested authorities in policy-making processes related to the tasks of the organization in different aspects that makes participating stakeholders to take advantages. The solution of mentioned problem would lead to making well-oriented policies and directions that multiply effectiveness of the organization and ultimately optimizes the law enforcement strategies. To fulfill this purpose, we would need managers with a systematic way of thinking as well as participation of all

stakeholders in development, implementation and assessment of the law enforcement strategies of the country.

Operational framework

Since the theory of networks is relatively new and underdeveloped, Burt states that "there is still no strong link between strategies utilized for the network analysis, but it can be stated that this theory is developing" (Burt, 2000: 20, quoted by Raider, 2003). It is obvious that what is targeted by researchers is more within the scope of decision-making and strategy-building, because in other areas including information technology, utilization of the concept of networks is as old as this field of study. In the area of state's management, immaturity of studies in this field is clearly apparent. At the level of PhD courses, only one research has been conducted in Allameh Tabataba'ei University in year 2006 entitled "examination of possibilities for implementation of policy-making networks in research policy system of agricultural research policy system". The author concluded at the end of his research that currently there is no possibility for implementing policy-making networks in the organization under investigation (Ra'naee, 2006).

Some studies have been also conducted in other countries, and we will point out their general conclusions. Whittall (2007) and Vogenbeck (2005) have reviewed the effects of social capital, network structure and network management. Findings of these two studies indicate presence of a direct relationship between above mentioned features and functions of decision-making networks. Therefore, empowering relationships between organizations will increase the social capital.

Donald (2007) has explained the role of different organizational structures and the method of decision-making in organizations, relating to three sorts of local, network-based, and humanitarian organizations, focusing on the role of social capital in the manner of establishing connections and synergy of inter-organizational cooperation. In other studies, decision-making networks are regarded as facilitating means of fulfilling objectives of the organization. In this study, along with criticizing the functions of traditional methods of policy-making in organizations, the author has extensively pointed out utilization of information and decision-making networks as a new form of social relationships, exerting numerous changes on the trend of provisioning public services. The author has identified the basis of all these changes as emergence of new information and communication technology (ICT) (Lee, 2000; McNut, 2006).

In general, the common aspects of researches related to networks are as follow:

A. Synergy caused by collaboration between the stakeholders of organizations and its desirable, positive effect on the functions of the organizations;

B. Considering the elevation of social capital as a consequence of cooperation between organizations accompanies with trust;

C. Transition from traditional methods of hierarchy and utilizing networks in decision-making processes etc.;

D. Emphasizing on implementation and utilization of information technology instruments in inter-organizational decision-making processes, etc. in different commercial and service provision fields, etc. This paper has examined the effects of aforesaid variables in the Iranian official society (Police force) and has also overviewed other variables provided in the conceptual model.

Research questions:

Questions raised in this study are as follow:

The main question of the study:

- What is the model of network-based policy-making approach for Iran Police force?

Questions related to marginal factors of internal atmosphere of the organization that have impacts on tendency to use decision-making networks

- Does the structure of policy-making network have an impact on the functions of police policy-making network?

- Does the inter-organizational social capital have an impact on the functions of police policy-making network?

- Does the network management have an impact on the functions of police policy-making network?

Questions related to marginal factors of external atmosphere of the organization that have impacts on tendency to use decision-making networks

- Does information and communication technology have an impact on the functions of police policy-making network?

- Does distribution of knowledge (source of power) in the society (and elevation of citizens' expectations) have an impact on the functions of police policy-making network?

- Does variable mixture of the population of the society have an impact on the functions of police policy-making network?

- Does participation of different stakeholders (in policy-making and decision-making processes) have an impact on the functions of police policy-making network?

- Does the complicated and multi-dimensional nature of the problems of the society and the organizations have an impact on the functions of police policy-making network?

Hypotheses and their relations

- **The structure of policy-making network has an impact on the functions of police policy-making network:** First of all, in a network structure we would consider kinds, extent and quality of interpersonal relationships of the staff, as well as different organizations involved in policy-making processes entitled structural holes or structural gaps, pointing to the meaning of the lack of relationship between the staff or units having a single president or common center for decision-making. In other words, a structural hole emerges when there would better be an organizational relationship policy in order to make correct and applicable decisions and policies. But due to some reasons, this relationship is not established. Secondly, the extent of centrality or the level of relationships' centralization (an individual or organization) is also considered (the number of centralized relationships in a decision-making center. In this study, we are mainly considering relationships between organizations that are not currently at their best level.

Sibert et al. believe that paying attention to the form of the presence of structural centralization and lack of structural holes, will lead to establishment of the necessary synergy in the communicational network and taking more essential policies in the decision-making organizational unit. Therefore in the context of research literature, the degree of centrality emphasizes the number of relations, while in a structural hole the lack of relationships between the stakeholders is regarded. Therefore, considering the network structure and affect the exchange of information and resources and make the relationship experience a development in functions (Seibert, et al., 2001).

- **The inter-organizational social capital has an impact on the functions of police policy-making network:** Loss (decline) of citizens' trust against government institutions has always occurred due to some official corruptions, lack of control over organizations by the citizens, differences in the citizens' values regarding the organizations (Denhardt, 2001), lack of organizations' ability to respond, managers neglecting or undermining the social responsibility of their organization (Robinson, 1997) using instrumental wisdom instead of considering essential wisdom as the basis, separation of managers from the society (Alvani et al., 2001).

Castle believes that trust (feeling secure, cultural variety, cooperation on the basis of trust and the other

party's legitimacy), bilateral relationship (being interested in others' benefits, cooperation and collaboration) and common values, are some of the features of social capital. Because they cause more access to resources and growth in abilities of the network members in adapting with the problems and solving unpredicted ones (Castle, 2006).

Fukuyama (2002) and Ring et al. (1997) believe that increasing usage of horizontal relationships etc. in the organizations will lead to more trust, and therefore elevating the function of relationships within the governments and organizations (Putnam, 1995).

- **The network management has an impact on the functions of police policy-making network:** In network management we mainly focus on discussions, proper managerial methods, ability to produce a common objective and settlement of potential disputes, the kind of successful relationship in the organization and a proper role of the managers etc.

Network management measures are important and key factors in forming successful decision-making models and improvement of functioning in the organization. Cross et al. (2004) have stated that one of the most effective and powerful features of network management is improving responsibilities, application and effectiveness of (function of) decision-making network through changing attitudes of using hierarchical decision-making structures and tending to utilization of network-based decision-making structures. Whitall (2007) has also supported this issue.

Individuals within a network might need to increase their information and knowledge and establish strong and appropriate social relationships through reaching agreement on how to efficiently undergo their tasks. The result of these measures can then removes interpersonal and organizational discrepancies and lead to obtaining integrity and consequently elevating functions of the group. Therefore from a theoretic point of view, network management in time and place and even in a specific business unit would follow a demanding and flexible method of management which is one of the prerequisites of a successful business (McGuire, 2002).

Success of network management in activities of an organization depends upon how people and different organizational units are related to each other. If the both sides of relationship build strong business relationship, coming to an agreement or removing ideological clashes and identification of common objectives would be possible through numerous and repetitive negotiations. In order to build strong business relationships, some items are needed, such as precise information exchange based

on real preferences of individuals, organization, different stakeholders and an ability to meet their needs (Margerum et al., 2004).

- **Information and communication technology has an impact on the functions of police policy-making network:** Connection of the managers with international information networks and their continuous use of the flow of information have evolved their vision and perception in different aspects including method of policy-making, control and supervision, method of direct participation of the citizens in national and organizational decision-making such as elections, establishing virtual organizations etc. (Alvani et al., 2001).

- **Distribution of knowledge (source of power) in the society (and elevation of citizens' expectations) has an impact on the functions of police policy-making network:** Since the future power will be the power of knowledge, and this power is being distributed within the society, it will lead to elimination of hierarchy caused by informative prevalence (Alvani et al., 1978). Therefore, there would be a situation under which decisions would not be limited by a person or group, only because of their knowledge or information. These attitudes will evolve general policy-making and decision-making system and will be followed by development of democracy (Alvani et al., 2001).

- **Variable mixture of the population of the society has an impact on the functions of police policy-making network:** The population mixture of the society has put government management under conditions which forces it to consider public interests. In such a condition, general policy-making will be an extremely difficult task. Therefore, building and forming networks that can follow common objectives along with being heterogeneous, is the task of today government management, so that help reducing polarization of societies through providing different views (Alvani, et al. 2001).

- **Participation of different stakeholders (in policy-making and decision-making processes) has an impact on the functions of police policy-making network:** Under current conditions of the societies, considering expansion and complexity of government activities, there is no way of survival in government management other than participation and intellectual collaboration between different organizations and citizens. By doing this the cycle of organization activities will accelerate and fulfillment of public sector tasks would be possible in a more efficient way (Alvaniet al., 2001).

- **The complicated and multi-dimensional nature of the problems of the society and the organizations has an impact on the functions of**

police policy-making network: Avoidance from systematic way of thinking (general view) is a problem which blocks the pathway of effective policy-making. When policy-makers pay attention to only one aspect of the issue and neglect other aspects, a defective result will come up in form of a policy, which would hardly be successful. In decision-making processes, neglecting different contexts affecting the issue under discussion, including cultural, social, political, legal, economical, technical, local and geographical contexts would make policies made from the view point of whatever neglected context to be vulnerable and encounter difficulties when implemented. In general, one dimensional vision and perception of decision-makers and neglecting a set of ideas and factors that are effective in decisions and policies are among main obstacles on the pathway of effective and successful policy-making process (Alvani et al., 2007).

MATERIALS AND METHODS

Sample society of this study includes the organization's high level, mid level and executive managers serving in mission-based police departments (traffic, forensic, prevention and narcotics) of Tehran city, with 550 organizational posts. Through Cochran sampling formula, 165 persons were selected for the test. But practically, 240 persons were randomly selected rationed with the number of managers, and were asked to answer to the questions of main factors of the study, that were identified in the conceptual model in form of a questionnaire. The questionnaire was designed according to Likert scale (5 degrees), its content value was approved by 30 university professors and also through actor analysis and durability of the questions was calculated through Cronbach's Alpha coefficient and turned out to be 0.83.

RESULTS

In this phase, to analyze the data, descriptive statistical methods (abundance of percentages) was used in order to describe the data (tables 1 and 2), Kolmogorov and Smirnov presumptive statistical tests (KS) were used to examine normality of group distribution, and X^2 test (because group distribution was not normal and variables were quantitative and for reviewing independence between variables) and Kendall correlation coefficient (in order to determine severity of effectiveness of reviewed variables in X^2 test) were used for data analysis.

The study reports that 72.1% of respondents had B.A. and M.A. and 4.6% had Ph.D. or were Ph.D. course students. At the meantime 67.5% of respondents served for 26-30 years and the rest served for 15-25 years.

Regarding objectives of the study, the following are results obtained from statistical tests.

Objective 1: Analysis of current procedure of police policy-making and determination of its responsibility related to organization objectives.

- Results of the test of determining prevalent structure of the organization indicate that the organizational structure is moving from mechanical state to organic state (scores obtained: 33.2 out of 50). For detailed explanation about this issue, see "Discussion".

Objective 2: Determining the extent of cooperation of different players in policy-making networks in professional police departments.

It is worth noting that maximum score 3 means complete cooperation and minimum score zero means no cooperation between organizations. It must be noted that because at the time of policy-making and decision-making no specific authority was available to determine the number of intervening organizations in this decision in the structure of expertise department of the police, this has an effect in increasing structural hole in police policy-making.

Objective 3 and 4 (determining extent and preference of effectiveness of internal and external atmosphere factors in the function of organization's policy-making) and hypothesis 8 have been proposed with regards to these objectives.

Regarding the results of conducting X^2 tests and approving all hypotheses at a safe level of 0.95, these results show the effectiveness of independent and dependent variables. The results of this test are displayed in table 3.

Suggestions with a structural a managerial view have been identified as the following 10 items:

1. Regarding structural aspect, according to results obtained from the discussion about the organization as being mechanical or organic, it seems that with a practical action in order to accelerate the organization's movement towards the goal of making its structure more organic, for most proper responsibility to the subject society, regarding the complicated and variable nature and expanding tasks of the organization, naming acceleration of former enforcement actions in this context and updating its executive processes etc. by realizing above mentioned issues, in fact the police force will move forwards to reach a real structure, which means a professional bureaucracy. So, maximum effectiveness will be achieved due to matching and adaptation of organizational structure with environmental factors, and gradually the way will be paved for utilizing network-based way of thinking in the organization's major policy-making processes.

2. In taking any kind of policies, policy-makers should immediately determine relevant organizations with this policy, and then take proper actions to build network-based relationships with them.

3. Obstacles and the reasons for inter-organizational lack of cooperation will be identified for each policy as much as possible, and proper actions will be taken to remove them. At the meantime, grounds will be prepared for cooperation through different ways.

4. By pointing out the advantages obtained from network-based relationships between organizations (including synergy caused by different ideas), organizations should be encouraged to have such relationships.

5. Since inter-organizational social capital level is not in a good condition, we can elevate the level of inter-organizational social capital through trust-building, so that movement towards maximum usage of network-based way of thinking in policy-making would be substituted with hierarchical thinking.

6. In order to prevent falling aback of quick changes due to information and communication technology, the police organization must establish and activate communication networks management, producing the culture of making decisions based on team, group, participation and network methods and substituting them with traditional methods, providing backgrounds for direct and indirect participation of the other organizations for making decisions by organization's computers, providing the staff with authority etc.

7. Organization managers must empower the staff of police organization as much as possible, and consider high value for knowledge value added in accordance with the objectives of the organization, in order to achieve stable development. Take proper actions in order to release the organization from trouble making traditional methods and to use newer and more efficient methods that can be followed with innovation. Taking these issues into consideration will bring about changes and evolutions in policy-making and decision-making system together with expansion of democracy.

8. The organization managers must establish networks which are heterogeneous and at the same time follow same objectives in order to:

- Determine common objectives and ideals among organizations;
- Produce and expand a capacity for accepting and tolerating opposing and different ideas of others in the managers of the organization;
- Draw all managers' attentions to the benefits of public and different stakeholders of interested organizations, Etc.

9. Establish organizational culture of system-based thinking, as the major and vital principal in improving functions of organizations with any kind of possible means, in order to prevent further losses to be imposed on the benefits of the society and related organizations.

10. Properly inform the heads of the three powers of the country about benefits achieved from network-based way of thinking and losses caused by egotism in organizations and ministries in a written form, in order to gradually implement this approach especially in the ruling policy-making system after providing necessary legal, cultural and social background. If this realizes, many enormous losses caused by ignorance toward this issue, section-based view and egoism of organizations would be prevented and other problems of the society could be solved by making use out of the capitals saved this way.

The finalized model of network-based policy-making in police organization is designed within the following frameworks:

1. Desirable network-based relationship between units of the organization, inside the police organization, has not been the objective of this study at the first step, but its application will be very useful for the organization.

2. Since relationships of all organizations related to a certain policy cannot be shown in one model, therefore the final model is categorized under three general categories of organizations namely public, non-public and private organizations, and their imaginary subsidiaries and their overall relationships are shown here. Therefore, this model is generally covering the concept of the quality and method of establishing network-based relationship between the organizations. The number of relations in one policy-making process might be more than 20 organizations in one process and might be less than 10 in the other.

Main objective of the study: designing a model of network-based policy-making in Iran Police Organization

Table1: Demographic features of the respondents

Ref	Mission Departments	abundance	Percent	Education	Abundance	Percent	Years at services	Abundance	percent
1	Forensic	60	25	B.A.	173	72.1	15-20	32	13.3
2	Traffic	60	25	M.A.	56	23.3	21-25	46	19.2
3	Prevention	60	25	Ph.D. and	11	4.6	26-30	162	67.5
4	narcotics	60	25	Ph.D. student					
Total		240	100		240	100		240	100

Table 2: Average cooperation of organizations relevant to police strategies from structural aspects (concentration of relationships and structural hole)

Average cooperation of organizations related to police strategies (concentration of relationships)	Average structural hole (shortcoming or lack of cooperation) between organizations relevant with police strategies
1.60	1.40

Table 3: Determining different factors of internal and external environment of the organization, their preference and effectiveness in tending to organization's network-based decision-making process, calculated according to X²

Ref	Organization's internal and external atmosphere factors	The extent of effectiveness of each internal and external atmosphere factors per preference according to calculated X ² s
1	(Hypothesis 6) different mixture of the population of the society	98.83
2	(Hypothesis 2) social capital	90.38
3	(Hypothesis 3) network management	86.87
4	(Hypothesis 1) network structure	80.25
5	(Hypothesis 5) distribution of knowledge power among the organization's society and the staff and increasing expectations from policy-making system	64.10
6	(Hypothesis 8) complexity and multi-dimensional nature of society and organization's problems	3.40
7	(Hypothesis 7) request for participation of different participants of the organization	3.38
8	(Hypothesis 4) information and communication technology (external)	3.04

Figure 1: Conceptual model of the study (Source: Alvani et al., 2001; Whittall, 2007)

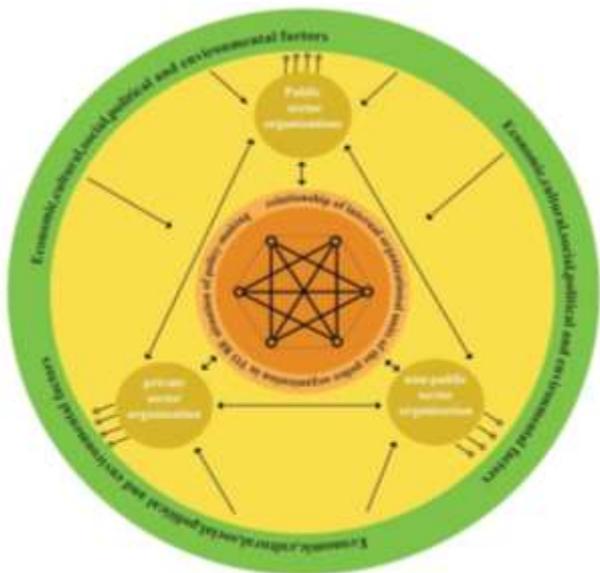
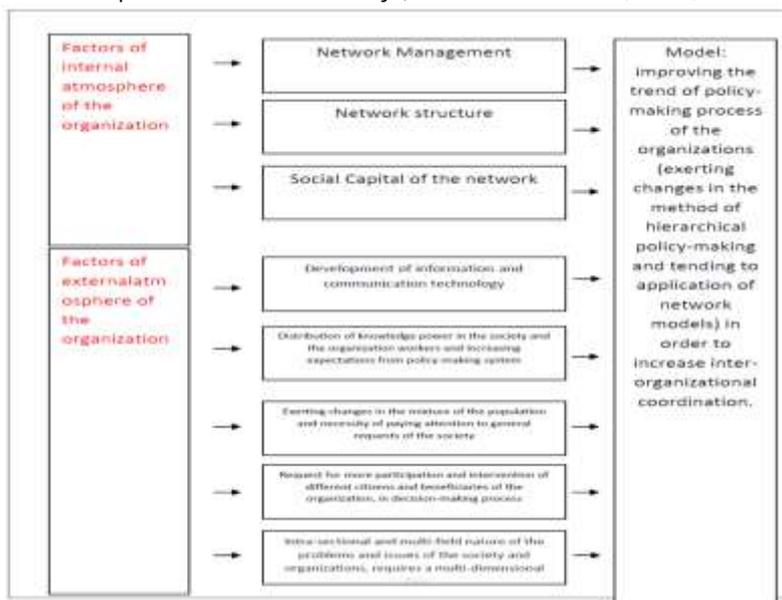


Figure 2: The finalized model of network-based policy making

DISCUSSION

Now regarding the objectives of the study and results of statistical test, we will analyze the study and discuss it: Maximum percentage of the respondents' studies was (72.1%) B.A. and its minimum percentage was (4.6%) PhD or PhD course students. Meanwhile, the number of years at service of 67.5% of the respondents was between 26-30 and the rest served between 15-25 years. The reason behind selecting study samples as such was the importance of understanding the subject by respondents and involving this layer of sample population in the form of relationship and decision-making because of their managerial posts.

The average cooperation of organizations that were relevant with law enforcement strategies (centralized relations) was 1.60 and the average structural hole (shortcoming and lack of cooperation) among related organizations with law enforcement policies was 1.40 out of 3 which means complete cooperation and the minimum score is zero, meaning no cooperation between organizations. Various reasons including low social capital between the organizations, lack of prevalence of system-based way of thinking in some managers, etc which are pointed out in conceptual model of the study are involved in this. Regarding the issue of networks, Whittall (2007) and Vogenbeck (2005) have studied the effect of social capital between organizations, network structure and network management in policy-making networks. Findings of these two studies show the presence of a direct relationship between the aforesaid features with the function of decision-making networks. Meanwhile, empowering relationships between organizations will have more effect in increasing inter-organizational social capital.

Regarding the issue of social capital, Donald (2007) has also studied the quality of synergy relationships caused by inter-organizational collaborations. Therefore the results of these two studies approve the findings of the present study.

Results of conducting X² test supports the hypotheses, and at the same time clarifies this issue that independent variable of mixed population of the society with 98.83% is the first preference of external factors from the viewpoint of effectiveness in improving the function of the organization's policy-making process (changing the method of hierarchical policy-making approach and tending to utilization of network models) and ITC (external factor) with 3.04%

has the 8th place of preference in this regard. Other factors also have different percentages of effectiveness and placed in between of these two figures.

Therefore, as we put forward previously, today in order to maximize the optimization of the organizations under their extensively changing environment in all issues including policy-making and decision-making and also defining strategies between the organizations, etc. there is no way but transition from traditional (hierarchical) methods and utilizing network-based way of thinking.

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