



# **Explaining Public Trust As A Consequence of Modern Public Management in Implementing the Policies of the Health and Medical Education System**

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## **Abstract**

The purpose of the present research is to explain public trust as a consequence of modern public management (participation, accountability and citizen's satisfaction) in implementing the policies of the health and medical education system. The statistical population of the research in the process of implementing the model consists of two groups. The statistical sample were estimated to be 262 people using Cochran's formula based on the quota stratified sampling method, which was upgraded to 400 people due to the reversibility rate of the questionnaires and more confidence of the sample. Data was collected by questionnaire whose content and structure validity as well as their internal consistency were investigated and confirmed and collected, using structural equation modeling at 95% confidence level. The results showed that there is a significant relationship between participatory public management and citizen's satisfaction and the mediating role of accountability in the health and medical education system. Also, participatory public management, accountability and citizen's satisfaction had a significant relationship with public trust in the health and medical education system. In addition, public trust as a consequence of modern public management had a significant relationship with the implementation of the policy of the health and medical education system. Finally, there was a significant relationship between the implementation of the policy of health and medical education system and the effectiveness of health and medical education system. While confirming the theoretical results and empirical consistency of the designed model, there was a perfect alignment between the modern public management and public trust with the implementation of the policy of health system and its effectiveness.

**Keywords:** Participation, Accountability, Citizen's Satisfaction, Public Trust, Health System Policies.

## **Introduction**

The general policy is to implement a governing doctrine. The governing doctrine is necessarily an ideology, that is, an inclusive set of political beliefs about the fate of the people (Shafritz & Brick, 2011). Also, public policy making is nothing but

the crystallization of the demands, needs and problems of society (Gholipour & Pirannejad, 2008), which is done in a three-step process of compiling, organizing and evaluating, but what appears and people directly understand are the results obtained from organizing the policy (Danesh Fard,

2010). When a policy is set and approved, the policy-making task is not ended (Parsons, 2006). Incomplete organizing and implementing public policies is one of the problems that all countries, including advanced and developing, are facing. In Iran, the implementation of public programs, plans and policies has not been successful and satisfactory either, so that in practice what is implemented is fundamentally different from what has been compiled (Danaei Fard et al., 2010). The foundation of many everyday interactions and actions in human societies, both in the field of interpersonal communication and in the field of social communication between groups, has been based on trust. There is no doubt that improving the public trust situation in any society plays a pivotal role in supporting the compilation and implementation of public policies. According to Robert Behn, trust is one of the three major issues public management thinkers are facing; lack of trust leads to the limitation of flexibility and freedom of action. Distrust permeates political life, affects the pace of political discourse, and may change individuals' fundamental reasons for participating in politics or avoiding participation (Kazemi, 2000). Accordingly, when talking about public trust, it means that the general public expect the officials and employees of governmental organizations respond to their expectations through their actions in interaction with the public (Alwani & Danaei Fard, 2001). Unfortunately, investigations show that the public trust of many people in many countries of the world is declining, and this distrust includes the government, governmental organizations, governmental services and local authorities. From the point of view of public management, the main source of citizens' trust or distrust in the government is the performance of government.

Government performance is judged by citizens both at the macro level (GDP, inflation, employment, etc.) and at the micro level (public services, and so on). Undoubtedly, in order to build public trust, from any point of view the connection between citizens and the government is necessary, and an important factor that can establish this connection is the formation of participatory public management (Danaei Fard, 2012). Participation is an essential element of pure democracy, and with the formation of participatory public management, public accountability is automatically institutionalized for the citizens, because participatory public management has no choice but accountability, and when accountability is institutionalized inside and within the body of the public management system, citizens will be satisfied with the public sector (Danaei Fard, 2012). In this regard, one of the important priorities in the general policies of the Islamic Republic of Iran is the issues proposed in the field of health, among which improving the quality of life, health, food security and the realization of social justice in the health domain can be mentioned. In order to realize these policies, the health and medical education system plan as one of the high-level political documents of the country was compiled in 2011. This document should guarantee a favorable future for the health and medical education system of the country and draw the plan of the health and treatment activities of the country and the moving path towards the vision. But what is worth considering is the connection between these writings and what is happening in practice. In fact, the main concern is that to what extent this organization can have effective function in realizing executive policies and realize the goals in the form of its mission and vision (Haghdooost et al., 2013). On the other hand, rapid and easy



access to information and consequently public awareness, literacy and culture increase, have increased society's expectations of health and treatment domain, and failure to meet these expectations will be led to dissatisfaction and high probability of public trust reduction and its devastating consequences. Despite the high importance of this issue, so far few studies have been allocated to examine the relationship between modern public management, public trust, policy implementation and performance in organizations, and there is yet no clear understanding of the role of factors such as public trust in the implementation of policies and the realization of the goals of the organizations, especially the positions of social affairs such as health. In addition, indigenous studies in the field of health, despite the considerable expansion in recent years, have focused more on education domain and few and scattered studies have been conducted in the health and treatment sector.

#### *Participatory Management and Public Trust*

Increasing public participation of citizens in public policy-making processes and the administration of community affairs at local, regional and national levels is one of the important indicators in the development of democratic societies (Manovarian et al., 2010). Perhaps one of the most important aspects of public participation is the willingness and action of the people to criticize and ask about the decisions and performance of the government and governmental officials. Obviously, people are inclined to such partnerships if they realize that the government and governmental officials are accountable and responsible for their performance as well as

the demands of the people. Therefore, it can be expected that public accountability increases public participation (Alwani & Danaei Fard, 2001). Governments, according to the consent of the people under governance, must find ways to exploit public agreement and to "refine and enrich public view". An important variable that can establish the link between citizens and government is participatory public management. There are two types of classifications for government-citizen interaction. In the first classification, passive government-citizen interaction or quasi-participation (informing citizens of public management administrative decisions about laws and programs) and active government-citizen interaction or trusted participation (citizens' participation as owners in administrative decision makings) are located. In the second classification simultaneous interactions (simultaneous communication between citizens and the government by telephone, public meetings, and so on) and asynchronous interactions (communication via letter, e-mails, and so on) are located that the government may respond to citizens in four states consisting of no response, general response, direct information response, and informational response referring to others (Danaei Fard, 2005).

#### *Accountability and Public Trust*

An individual or a group entrusted the responsibility of taking an action is expected to be accountable for the positive and negative consequences of their work and to explain why and how these consequences have occurred (Mohammadifar et al., 2010). (Anderson, 2005) believes that justifying, reporting, and explaining are important

aspects of accountability. Accountability is to recognize public rights so that we know what actions should be done. According to the various models presented, accountability has various types including public, managerial, financial, political, professional, legal, functional, democratic, ethical and social accountability (Jensen, 2001). In general, accountability is divided into the two types of vertical and horizontal. Vertical accountability refers to the accountability of an individual or an administrative unit to a superior person or unit within the organizational system of public and governmental organizations, and horizontal accountability refers to the accountability of a public and governmental organ to the general public (whether individual or non-governmental organizations) and the representatives of the people and the independent judicial systems. Accountability has three goals; first, it is a tool for monitoring power and preventing the abuse of public authorities; second it is a guarantee of the accurate use of national interests, compliance with the law and the protection of the values of public services, and the third is an effective tool for promoting and improving the governance and management of public services (Bovens, 2005).

#### *Citizens' Satisfaction and Public Trust*

Satisfaction refers to the creation of a happiness, contentment and desirability mood that is created in the clients as a result of providing and meeting the demands and needs of client by the service provider. In fact, satisfaction is created from the clients' perception of the performance of the organization and the services received, or from the clients' perception of the fulfillment of their demands and expectations. According to Cutler, the level of satisfaction

is a function of the difference between a person's perception of performance and expectations (Rahnavard, 2003). Citizens' satisfaction with public management consists of five dimensions: being sensitive to the provision of services to citizens, the reliability of public affairs officials, access to facilities and services, communications and costs. Measuring these cases shows the quality of services in five areas. Finally, attracting the satisfaction of citizens and clients increases public trust and loyalty, national consensus, public participation and national authority, which in the current world are considered as the main indicators of measuring the efficiency and development of the administrative and political system (Kazemi, 2000).

#### *Public Trust*

Putnum defined trust as the desire to rely on the other party and to take actions that make one party vulnerable to the other party in certain circumstances. (Mirsepasi, 2013) knows trust as "the tendency of one party to be vulnerable to the other party on the basis of this idea that the other party is a competent and reliable person". Therefore, trust can be defined as the reliance of the parties on the future conditional actions of the parties. (Danaei Fard, 2012) divides trust into three categories: strategic, specific, and ethic oriented. Strategic trust refers to what one party knows about the other party (secrets). Specific trust refers to the faith of individuals in their peers in a particular forum, such as the trust of individuals in each other in the family or in working groups. Ethic orientation trust in one's faith refers to people about whom he/she does not have sufficient recognition (Danaei Fard, 2012). (Manovarian et al., 2010) conceptualized the dimensions of public



trust based on three dimensions. The first dimension is reassurance, which is a positive feeling that people have over time about the government, the officials of governmental organizations, and their performance and decisions. The second dimension is risk-taking, which expresses the ratio of risk-taking of people in communicating with the government and the officials of governmental organizations to freely submit their criticisms and suggestions. The third dimension is righteousness, which refers to the degree of people's belief in honesty and righteousness and doing the entrusted affairs accurately by the government and governmental officials (Manovarian et al., 2010).

### **Implementing Public Policy**

Public policy refers to whatever a government chooses to do or not to do (Dye Thomas, 2002). (Taheri, 2011) has defined public policy as a set of interactive decisions of an actor or a group of political actors about selecting goals and tools to achieve them in certain circumstances, provided that these decisions are legally taken within the authorities of the actors. Policy implementation approaches can be divided into three categories: top-down approach, down-top approach and combined approach. In the top-down approach, the elites are at the top of the affairs and legislate, and the views of all people are not involved in decision makings; this view is in fact the same theory of the elites and the populace. One of the most important criticisms of the top-down approach is to ignore the role of street-level (operational) bureaucracies, which increases the likelihood of failure of this approach (Lipsky, 1978). In the down-top approach, it is assumed that the policy is

explained through explicit and implicit negotiation and bargaining between the members of the organization and its customers, rather than being controlled by policy makers. Plans, therefore, must be consistent with the aspirations and demands, or at least with the behavioral patterns of lower authorities. Although a down-top approach may face fewer problems, the view of this approach is idealistic, because the problem of society cannot be distinguished by the general public and normal people and non-specialists. The down-top approach follows the same thinking of the political and economic process of public policy. The combined approach having hybrid or interactive perspectives emphasizes the complex processes of negotiation and bargaining between policy actors at all levels of the policy and planning process (Ketkar & Sett, 2010).

### *Organizational Effectiveness*

The effectiveness of the organization is the degree or ratio that the organization achieves its desired goals. Effectiveness has a general concept that implicitly includes a large number of variables (at the level of organization and departments) (Ketkar & Sett, 2010). Measuring and assessing organizational performance is possible through numerous indicators and methods, and each of them gives a different scale of organizational effectiveness (Taheri, 2011). Many organizations have realized that the effectiveness ratio of the organization cannot be determined with net profit (Daft, 2015). One of the methods to measure the effectiveness of the organization is the method based on fulfilling the satisfaction of stakeholder groups or the method based on basic indicators in which several various

activities are merged according to the stakeholder groups of the organization. Each of these stakeholder groups has a special index to calculate effectiveness, because they have special interests in the organization (Robbins, 2014). The stakeholder groups and indicators related to each one include company owners (financial return), employees (employees' satisfaction, salary and reward, supervision and management), customers (quality of products and associated services), creditors (credit ratio), society (role of the company in improving the affairs of society), suppliers of raw materials (satisfactory transaction) and the government (compliance with laws and regulations) (Daft, 2015). According to recent studies, if several groups are evaluated in measuring the effectiveness of the organization, especially since the environment is constantly changing and the organization must adapt itself to it, a much more accurate result will be obtained. Beyond that, organizations really care about their prestige, credit and reputation, and strive to meet the demands of all stakeholder groups in their performances and attract their agreed view. If the performance of the organization is poor from the point of view of several stakeholder groups; in fact, it should be said that the organization has not achieved the desired goals in terms of effectiveness.

### *Research Empirical History*

Numerous and scattered researches have been proposed and conducted in the field of current research, that by performed investigations some examples of them are mentioned:

(Alwani & Danaei Fard, 2001) stated that only a moderate level of trust is functional and constructive, meaning that people's

emotional and extreme trust in the government and governmental managers prevents from criticizing and reforming their performance, and the decline in public trust calls into question the legitimacy of the political system and public management. (Gholipour, 2011) stated that one of the main reasons for the failure of policies is the lack of attention to the selection of appropriate tool for implementation according to the implementers and the audience society of the policy. Also, the attention and consideration of policy makers to the prediction of implementation tools in policy texts guarantees the success of policies and facilitates the possibility of monitoring and future follow-ups. (Zahedi, 2011) in a research entitled "Public trust, a link between citizens and the government" showed that accountability of managers increases citizens' satisfaction, and consequently promotes the public trust of society, as a result of which it will lead to the high public participation of society. (Alipour & Zahedi, 2009) in a research by examining the effect of social trust on organized participation of individuals showed that there is a significant relationship between social trust in its three different forms (individual, generalized and institutional) and organized social participation, although the ratio and direction of the impact of this relationship is different in each case. Multivariate regression coefficients also show that among the investigated variables, generalized trust and socio-economic base are the best predictors of social participation. (Danaei Fard et al., 2010) in a research entitled "Public Policy Implementation: Investigating the Role of Rationality in the Policy-Making Stage" concluded that non-observance of rationality in the policy compilation stage by compilers can lead to the unsuccessful implementation of policies.



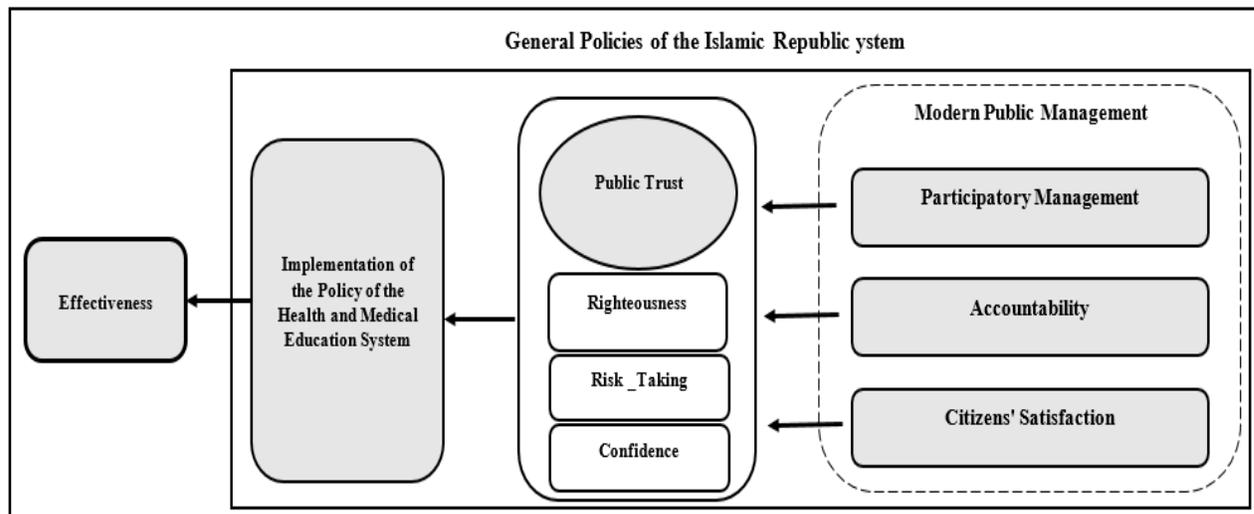
(Mohammadifar et al., 2010) in a research entitled "Trust in Governmental Organizations and the Citizens' Satisfaction Level" showed that there is a difference between performance and expectation. The observed distance is negative in all variables, which means that the organs under study have not been able to fully cover the needs of clients. The highest difference has been in the variable of "trust in resolving complaints" and the least of it has been in the variable of "trust in employees' skill". (Manovarian et al., 2010) in a research examined the relationship between public accountability, public participation and public trust in governmental organizations. The results showed that public accountability affects public trust and trust in turn affects the public participation of citizens. (Khanbashi, 2011) in a research entitled "Accountability; A Context for Strengthening Public Trust" stated that the available evidences indicate that for various reasons, the increase in public sector resources and responsibilities is not coordinated and associated with its accountability ratio, and this factor is the main reason for the decline in public trust in this important part of society." The research results indicate the positive effect of the accountability variable on promoting the level of public trust in the country. (Zahedi, 2011) in a research examined "Public Trust Increase Based on Promoting the Culture of Accountability". The results obtained from the analyses performed in this research indicate the direct effect of accountability ratio on promoting the level of public trust in the country. Therefore, it seems that by relative modification of the accountability situation in governmental organizations, public trust increase at the community level can greatly be hoped. (Mohammadifar, 2010) in a research by studying the concept,

nature and monitoring of the implementation of the general policies of the system stated that the general policies of the system contain the framework and the basis of the general orientation of the country in all governance areas, determined by supreme leader according to the first paragraph of one hundred and tenth principle of constitution and plays role as a linking ring between the principles and goals of the system and the duties of governmental organs and institutions. The main goal of these policies is introduced as creating discipline in the country, which will also specify the overall geometry of the system. (Asghari & Asadi, 2013) in a research examined the effect of accountability on public trust and political trust (Case study: Iranian governmental organizations). The final findings of the research confirm the existence of a significant relationship between a three-dimensional model of public perception of the level of accountability of governmental organizations, the level of public trust in governmental organizations and the level of political trust in government. The continuation of such investigations as well as doing complementary studies in this field can be a context for the government to pay more attention to the issue of accountability, public trust and political trust. (Danaei Fard, 2005) in a research examined the factors affecting trust in governmental organizations in Tehran. The results showed that the seven main factors affecting trust in governmental organizations in order of priority are: citizens' satisfaction with the performance and services provided, the quality of services provided, client participation, social trust, administrative corruption, clients' awareness and informing level. (Belanche Gracia & Casalo Arinob, 2015) in a research stated that a quality of public services has a positive effect on trust in public affairs

administration. Public affairs administration relationship, on the other hand, only affects the trust in the public affairs administration regarding citizens who have tendency towards e-government. (Belanche Gracia & Casalo Arinob, 2015) in a research rebuilt public trust in governmental offices through government actions. This research confirmed that the perceived quality of public services has a positive effect on trust in governmental offices. The results show that public management should invest its limited resources to improve the citizens' trust level.

In order to achieve the theoretical framework of the research as the basis and foundation of the research, regarding the expansion of the subject, in addition to referring to the results of other conducted researches that their complete descriptions have been presented in the previous sections, Delphi method and the use of the opinions of experts have been applied to identify the research main variables, and finally achieving the theoretical framework of the research. Accordingly, in this research, the variable of modern public management (participation, accountability and citizens' satisfaction) as predictor variables and the variable of public trust and the implementation of the policies of health and medical education system as a criterion variable have been considered. In this regard, according to the study of research history and performed analyses and studying and comparing the results of other researches conducted in this regard, in order

to achieve a different, effective and of course applied model, the above mentioned factors have been classified in three general categories of participation, accountability and citizens' satisfaction that this categorization has not been done yet in any of the researches under study in the form of a preliminary and proposed model that in order to provide a valid and reliable model, tests such as exploratory and confirmatory factor analysis have been used to classify the three variables and indicators related to each category. On this basis, the three factors of participation, accountability and citizens' satisfaction are considered as the dimensions of the macro variable of public trust, so that in this way while examining the status of the three factors, their relationship with the variable of public trust and implementing the policies of the health and medical education system, that in this section is in the role of the dependent variable is examined and tested. In addition, by studying the theoretical literature about the concept of modern public management (participation, accountability and citizens' satisfaction) and its relationship with the variable of public trust and the implementation of policies of the health and medical education system, it is tested and analyzed in this statistical population, so that by relying on the presented theoretical framework, an effective model for the implementation of the health and medical education system in line with the general policies of the Islamic Republic of Iran is compiled and presented (Figure 1).



**Figure 1:** Research Conceptual Model

The present research, while examining the status of the components of modern public management, public trust, policy implementation and effectiveness in the health and medical education system of the country, has been formed by testing the following hypotheses based on a conceptual model to explain the effective model of policy implementation of the health and medical education system in line with the general policies of the Islamic Republic of Iran:

1. Participatory public management has a direct relationship with public trust in the health and medical education system.
2. Public management accountability has a direct relationship with public trust in the health and medical education system.
- 3- Citizens' satisfaction has a direct relationship with public trust in the health and medical education system.
- 4- Public trust has a direct relationship with the implementation of policy in the health and medical education system.

5- The implementation of the policy of the health and medical education system has a direct relationship with the effectiveness of this system.

### **Materials and Methods**

The present research is applied and developmental in terms of purpose and is descriptive of survey-correlation type in terms of implementation method and is specifically based on the structural equation model. The statistical population of the research in the process of implementing the model consists of two groups; the first group includes those who refer to the Ministry of Health and Medical Education that due to the large size of this population and also the limitations ahead of the researcher such as the specific subject of the research and the reluctance of many clients to complete a sufficient number of modern public management and public trust questionnaires according to the conditions, it was preferred to use the available sampling method. The second group, based on the development

indicators of five provinces (Kohgiluyeh and Boyer-Ahmad, Tehran, Semnan, Khuzestan and Ilam, respectively) out of 31 provinces are heads, deputies and the managers of medical universities (223 people), treatment area (245 people), public hospitals (192 people) and health networks and centers (162 people) as 822 people. The statistical sample was estimated as 262 people using the Cochran's formula, which was increased to 400 people due to the return rate of the questionnaires and for more confidence. Their selection was done based on the quota stratified sampling method.

Library studies and information, written records and other Persian and Latin sources were used to compile the theoretical foundations and research literature. In order to further ensure the content validity in the assessment tool, the following measures were taken:

- Studying written sources and using the opinions of experts in the field of policy making process.
- Initial distribution of the questionnaire among the sample groups and using their feedbacks and corrective opinions.
- Providing the necessary explanations along with delivering the questionnaire in written and electronic form to the respondents.

A questionnaire tool was used in five sections to collect data. The first part of the personal information form consisted of three questions to determine age, gender and level of education, respectively. The second part was a 20-phrase scale made by (Manovarian et al., 2010) to evaluate the modern public management in the form of participation, accountability and citizens' satisfaction by the clients. This scale has the three dimensions of participatory (phrases 1 to 5), accountability (phrases 6 to 14) and citizens' satisfaction (phrases 15 to 20). The third

section was a 10-phrase scale made by (Manovarian et al., 2010) to measure the public trust ratio of clients. This scale has the three dimensions of righteousness (phrases 1 to 3), confidence (phrases 4 to 7) and risk-taking (phrases 8 to 10). The fourth section was a 24-phrase researcher-made scale to evaluate the views of heads, deputies and the managers of the Ministry regarding the implementation of the policy of the health and medical education system. This scale has the eight dimensions of providing educational, health, and treatment services (phrases 1 to 3), realization of a comprehensive health approach (phrases 4 to 6), community mental health (phrases 7 to 9), creating and strengthening infrastructures (phrases 10 to 12), providing food security (phrases 13 to 15), separation of financing and procurement services duties (phrases 16 to 18), quantitative and qualitative development of insurances (phrases 19 to 21) and qualitative and quantitative development of the system (phrases 22 to 24). The fifth section was a 24-phrase researcher-made scale to measure the effectiveness of the health and medical education system in line with the general policies of the Islamic Republic of Iran. This scale also has eight dimensions consisting of flexibility (phrases 1 to 3), benefits acquisition (phrases 4 to 6), planning (phrases 7 to 9), efficiency (phrases 10 to 12), access to information (phrases 13 to 15), stability (phrases 16 to 18), cohesive work force (phrases 19 to 21), and skilled work force (phrases 22 to 24). The responses of the scales of second, third, fourth, and fifth sections were graded on a Likert's five-degree continuum from 1 (I completely disagree) to 5 (I completely agree). To validate the tool, first the face and conceptual validity was examined and confirmed by 30 experts, and then to measure its content validity, the content



validity ratio method was used. The values obtained for the modern public management scale was 0.85, public trust was 0.88, policy implementation was 0.85 and system effectiveness was 0.87. Exploratory and confirmatory factor analyses were used to evaluate the validity of the tool structure (Table 1). The results of exploratory factor analysis showed that 20 phrases of modern public management scale on three factors explain 50.83%, 10 phrases of public trust scale on three factors in total explain 59.14%, 24 phrases of policy implementation scale on eight factors in total explain 56.01%, and 24 phrases of the health system effectiveness scale on eight factors in total explain 64.03% of the variance of the relevant structures. (Table 2) shows the factor load of the phrases on their related factors (the phrases of each factor have been specified at the beginning of the paragraph). In addition, the results of confirmatory factor analysis (Table 3) showed that the three-factor measurement models of modern public management, three factors of public trust, eight factors of policy implementation and eight factors of health system effectiveness have good fit with the collected data. Also, the internal consistency of the tool was performed using Cronbach's alpha coefficient in the two stages of retesting and re-reliability, the value of which for the modern public management scale was obtained 0.86, for the public trust was obtained 0.87, for the policy implementation was obtained 0.91 and for the system effectiveness was obtained 0.90.

The library method was used to collect data to compile the literature and research history

and the field method was used to collect data related to research variables. In data processing and analysis, mean, standard deviation, frequency and frequency percentage were used; form and table were used for classification and description of personal information and research variables, Cronbach's alpha coefficient was used to determine the internal consistency of measurement tool, confirmatory factor analysis. (CFA) was used to investigate the construct validity of measurement tool, one-group t-test was used to estimate the population parameter based on sample information, Pearson correlation coefficient was used to determine simple two-way relationships between variables, and structural equation modeling (SEM) was used to determine multiple relationships. All analyses were performed at 95% confidence level, using the statistical package for social sciences (SPSS) version 23 and LISREL statistical package version 8.8. It should be explained that the LISREL statistical package provides numerous indicators for the fitness of the model with the collected data. In the present research, the ratio of Chi-square to the degree of freedom ( $\chi^2 / df$ ), the root mean square error of approximation (RMSEA), comparative fit index (CFI), goodness of fit index (GFI), adjusted goodness of fit index (AGFI), non-normed fit index (NNFI) and normed fit index (NFI) were used. Acceptable amplitude for Chi-square ratio on the degree of freedom is less than 3, for RMSEA values is less than 0.08 and for CFI, GFI, AGFI, NNFI and NFI indices values are higher than 0.90.

**Table 1.** Summary of the Results of Exploratory Factor Analysis and the Factor Load of Phrases

Number of Phrases	The Factor Load of Scales Phrases			
	Public Management	Public Trust	Policy Implementation	System Effectiveness
1.	0.699	0.724	0.804	0.740
2.	0.743	0.679	0.759	0.858
3.	0.512	0.616	0.715	0.839
4.	0.622	0.602	0.743	0.823
5.	0.595	0.792	0.750	0.837
6.	0.653	0.787	0.714	0.842
7.	0.520	0.611	0.781	0.711
8.	0.669	0.652	0.716	0.736
9.	0.582	0.878	-	-
10.	0.708	0.802	-	-
11.	0.597	-	-	-
12.	0.620	-	-	-
13.	0.699	-	-	-
14.	0.545	-	-	-
15.	0.609	-	-	-
16.	0.683	-	-	-
17.	0.656	-	-	-
18.	0.573	-	-	-
19.	0.670	-	-	-
20.	0.760	-	-	-
KMO Test	0.872	0.732	0.730	0.881
Bartlett's Test	3065.41***	919.39***	666.69***	2377.04***
Total Variance Explained	50.83	59.14	56.01	64.03

\*\*\* p<0.001

**Table 2:** Fit Indicators of Research Tool Measurement Model

Fit Index	Symbol	Acceptable Range	Public Management	Public Trust	Policy Implementation	System Effectiveness
Ratio of Chi-Square to the Degree of Freedom	$\chi^2/df$	<3	1.37	2.66	1.88	2.08
Root Mean Square Error of Approximation	RMSEA	<0.08	0.06	0.02	0.04	0.05
Comparative Fit Index	CFI	>0.90	0.98	0.99	0.98	0.98
Goodness of Fit Index	GFI	>0.90	0.98	0.94	0.96	0.95
Adjusted Goodness of Fit Index	AGFI	>0.90	0.97	0.98	0.98	0.96
Non-Normed Fit Index	NNFI	>0.90	0.98	0.93	0.94	0.97
Normed Fit Index	NFI	>0.90	0.96	0.94	0.93	0.95



## Results

(Table 4) shows the descriptive statistics related to the research variables and a summary of the results of the one-group t-test for estimating the population parameter based on the sample information. According to the data in this table, the highest score among the dimensions of modern public management is related to participatory management (SD = 0.59, M = 3.11) and the lowest score is related to accountability (SD= 0.76, M= 2.98). Also, among the dimensions of health system policy implementation, the highest score is related to the creation and strengthening of infrastructures (SD = 0.80, M = 3.58) and the lowest score was related to the quantitative and qualitative development of education (SD= 0.94, M= 3.15). In addition, the highest score among the dimensions of the health system effectiveness is related to skilled work force (SD = 0.59, M = 3.11) and the lowest score was related to the acquisition of benefits (SD = 0.59, M = 3.14). The results of one-group t-test (Table 3) showed that except the mean scores of accountability ( $p < 0.583$ ,  $t = -0.549$ ), the mean scores of all studied variables were higher than moderate limit with more than 95% confidence in the population under study. It is necessary to explain that according to the range of scores, the value of t-test (moderate limit) for all variables has been considered 3.

In the following, structural equation modeling was used to test the hypotheses and to test the research conceptual model. For this purpose, at first the research hypotheses were designed in the form of a base model. In this model of participatory public management, accountability and citizens' satisfaction with the health system are defined as latent exogenous

(independent) variables and public trust, policy implementation and effectiveness of the health system are defined as latent endogenous (dependent) variables. Also, the phrases of the subscales of participatory public management, accountability, citizens' satisfaction and public trust were considered as the indicators of these variables and eight subscales of policy implementation and health system effectiveness were considered as the indicators of these two variables. In this model, the direct effect of participatory, accountability and citizens' satisfaction on public trust and also the direct effect of public trust on the health system policy implementation and the direct effect of health system policy implementation on the effectiveness of the health system are considered as structural relationships. The fit indices for the base model showed that the designed model has a good fit with the collected data (Table 4), because all fit coefficients are in the acceptable threshold, so that the ratio of Chi-square to the degree of freedom is equal to 2.13 and RMSEA index is less than 0.08. Also, the values of CFI, GFI, AGFI, NNFI, NFI indices are all higher than 0.90, which all indicate the fit of the native model and its appropriateness. Standardized path coefficients (Figure 2) and the results of significance tests of path coefficients (Figure 3) show that participatory public management ( $p < 0.001$ ,  $t = 9.55$ ,  $\beta = 0.70$ ), accountability ( $p < 0.001$ ,  $t = 6.16$ ,  $\beta = 0.50$ ) and citizens' satisfaction with the health system ( $p < 0.001$ ,  $t = 4.53$ ,  $\beta = 0.39$ ) have significant, direct and positive effect on public trust and also public trust has significant, direct and positive effect on health system policy implementation ( $p < 0.001$ ,  $t = 14.85$ ,  $\beta = 0.79$ ) and the health system policy implementation on the effectiveness of this system ( $0.001 > p$ ,  $t = 11.67$ ,  $\beta = 0.66$ ). In addition, the results of

this modeling showed that participatory, accountability and citizens' satisfaction with the health system explain a total of 32% of public trust, and public trust explains 62% of health system policy implementation changes, and the health system policy implementation explains 44% of the changes

in the effectiveness of this system respectively. In this model, based on the obtained coefficients, participatory public management, accountability and citizens' satisfaction with the health system are the strongest determinants of public trust, respectively.

**Table 3:** Descriptive Statistics and Variables Levels

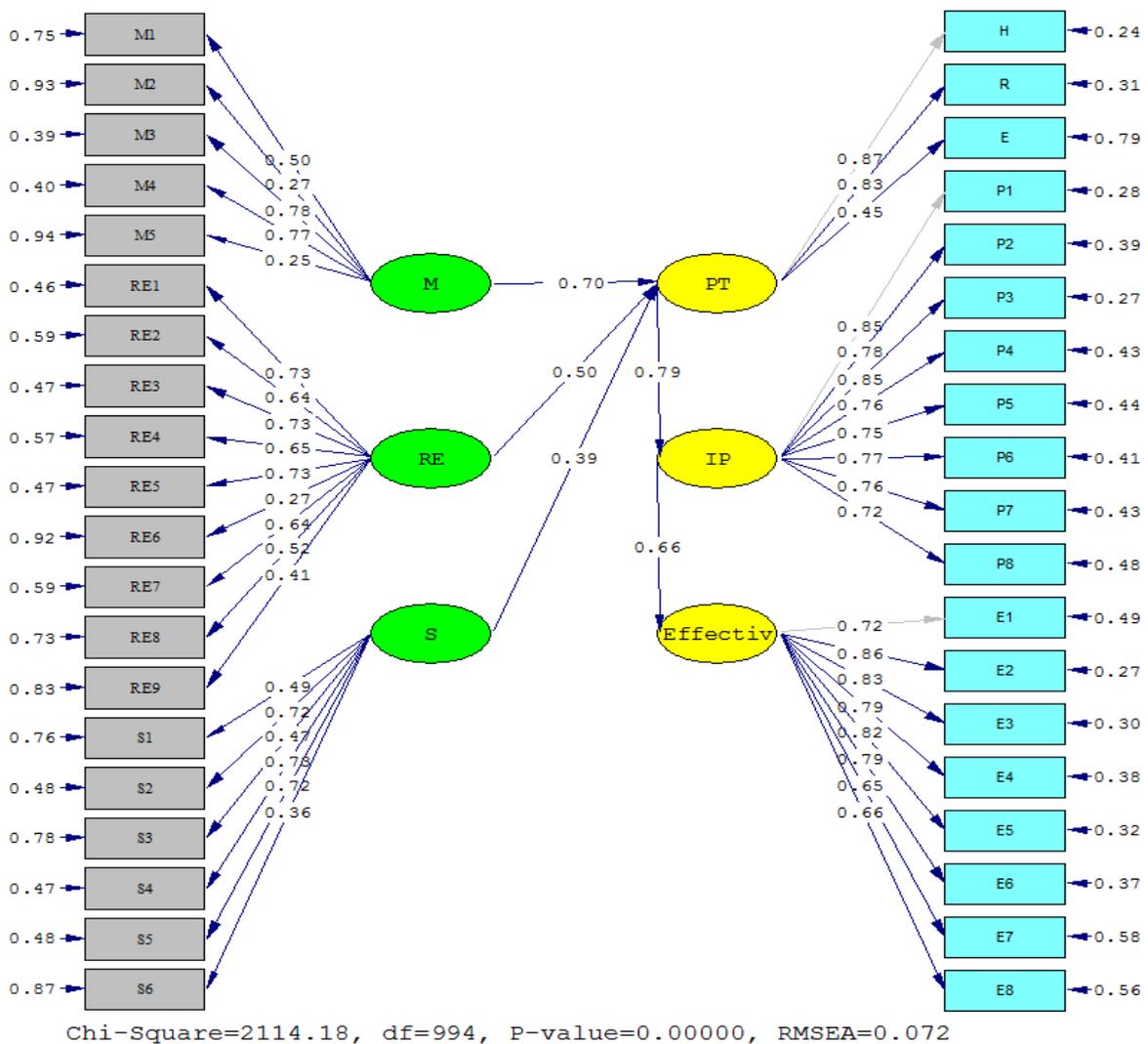
Variables	Descriptive Statistics			One-Group T-Test			
	N	M	SD	ΔM	T	P	Result
Participatory Management	400	3.11	0.59	0.11	3.804	<0.001***	>3
Accountability	400	2.98	0.76	-0.02	-0.549	0.583	~3
Citizens' Satisfaction	400	3.10	0.61	0.10	3.18	0.002**	>3
Public Trust	400	3.94	0.49	0.94	2.57	<0.01**	>3
Policy Implementation	400	3.27	0.39	0.27	14.129	<0.001***	>3
Providing Services	400	3.27	0.82	0.27	6.694	<0.001***	>3
Realization of Health Approach	400	3.31	0.92	0.31	6.757	<0.001***	>3
Community Mental Health	400	3.19	0.89	0.19	4.257	<0.001***	>3
Creating and Strengthening Infrastructures	400	3.58	0.80	0.58	14.536	<0.001***	>3
Ensuring Food Security	400	3.25	0.82	0.25	6.152	<0.001***	>3
Separation of Duties	400	3.19	0.69	0.19	5.540	<0.001***	>3
Quantitative and Qualitative Development of Insurance	400	3.22	0.68	0.22	6.611	<0.001***	>3
Quantitative and Qualitative Development of Education	400	3.15	0.94	0.15	3.287	<0.001***	>3
Effectiveness of the Health System	400	3.30	0.45	0.30	13.283	<0.001***	>3
Flexibility	400	3.28	0.64	0.28	5.972	<0.001***	>3
Acquisition of Benefits	400	3.14	0.59	0.14	2.558	0.011*	>3
Planning	400	3.37	0.86	0.37	7.330	<0.001***	>3
Efficiency	400	3.40	0.68	0.40	6.935	<0.001***	>3
Access to Information	400	3.33	0.79	0.33	6.720	<0.001***	>3
Stability	400	3.18	0.72	0.18	3.127	0.002**	>3
Cohesive Workforce	400	3.30	0.46	0.30	5.129	<0.001***	>3
Skilled Workforce	400	3.14	0.56	0.41	6.152	<0.001***	>3

\* P<0.05, \*\* p<0.01, \*\*\* p<0.001



**Table 4:** Structural Model Fit Indicators

Fit Index	Symbol	Acceptable Range	Value	Fit result
Ratio of Chi-Square to the Degree of Freedom Index	$\chi^2/df$	<3	2.13	Desirable
Root Mean Square Error of Approximation	RMSEA	<0.08	0.072	Desirable
Comparative Fit Index	CFI	>0.90	0.98	Desirable
Goodness of Fit Index	GFI	>0.90	0.98	Desirable
Adjusted Goodness of Fit Index	AGFI	>0.90	0.96	Desirable
Non-Normed Fit Index	NNFI	>0.90	0.97	Desirable
Normed Fit Index	NFI	>0.90	0.98	Desirable



**Figure 2.** Standardized Path Coefficients for Research Base Model

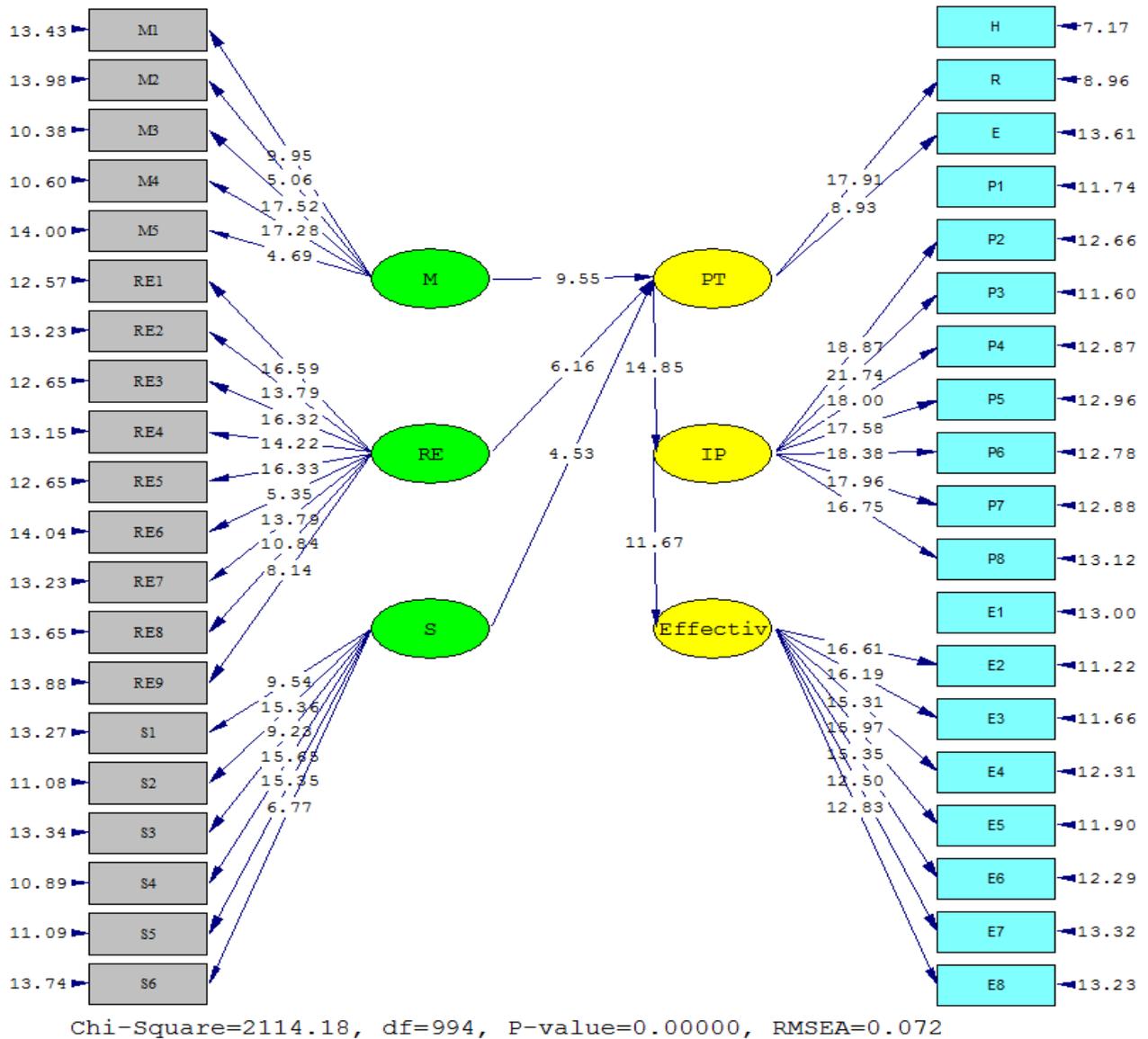


Figure 3. Tests Results of the Significance of Path Coefficients for the Research Base Model

### Discussion

To succeed in their work, organizations need to gain the trust of those who are activating under their supervision, and their success depends on gaining trust. (Alwani & Danaei Fard, 2001) also believe that if public affairs administrators have citizens' trust in themselves use their skills, abilities and

independence better to provide services and making their actions effective. When managers and supervisors in organizations are trusted by citizens, they are able to use their skills more flexibly, as well as their freedom of action and independence in order to increase efficiency and effectiveness. On the other hand, the information that is transparently provided to the people for the



adaptation of actions of public affairs officials leads to an improvement in government accountability and public trust increase. (Danaei Fard, 2012) also acknowledged that citizens' satisfaction with the performance and provided services, the quality of services provided, clients' participation, social trust, administrative corruption, clients' level of awareness and informing leads to trust increase in governmental organizations. Public trust, unlike individual trust, results from existing networks in social and civic affairs and the mutual relations norms (Mehni et al., 2019). The right to control one's behavior and actions does not belong solely to oneself, but is collectively exercised on him by the community in which one is located, and its main reason is that these actions may impose unintended consequences on others, the consequences whose exchange cannot be controlled in society. In an environment based on trust, tools such as force and compulsion to guarantee transactions lose their efficiency, and instead people's intention to repay and belief in righteousness increases. (Alwani & Danaei Fard, 2001) stated that trust is an indicator of social capital that facilitates social exchange in uncertainty and risk conditions and is considered as a necessary and vital element in the realization of social order and also daily life. In societies where there is high trust, more responsibility is observed at the lower levels of society, and in societies where there is less trust a kind of escape from responsibility is observed. Therefore, the success of today's organizations depends on building trust. Thus, it is necessary to plan to improve the public trust status in governmental organizations and to raise the ideal level. In this regard, it seems necessary to try to improve the accountability situation in the country's public organizations. The

research results showed that the relative increase in accountability of governmental organizations leads to an improvement in public trust ratio or at least it can be guessed that one of the important factors affecting the improvement of public trust is the accountability ratio of executive organizations. In addition, due to the various dimensions in modern public management, especially in the health and medical education system, it is hoped that in the future applying strategies related to the research conceptual model in some Iranian organizations will be facilitated. Accordingly, the present article has been prepared and compiled with the aim of explaining and designing an effective model for explaining public trust as a consequence of modern public management (participation, accountability and citizens' satisfaction) in implementing the policies of the health and medical education system in line with the general policies of the Islamic Republic of Iran.

## **Conclusion**

The results obtained from the present research show that in general, the existence of participation, accountability and citizens' satisfaction has a basic role in increasing public trust as a consequence of the modern public management in order to implement the policies of the health and medical education system. The research findings of (Asghari & Asadi, 2013) confirm the existence of a significant relationship between a three-dimensional model of public perception of the level of accountability of governmental organizations, the level of public trust in governmental organizations and the level of political trust in government. Continuation

of such investigations as well as doing complementary studies in this field can be a context for the government to pay more attention to the categories of accountability, public trust and political trust. Also, the results of the research while showing that the status and ratio of the policies implementation of the health and medical education system is at a desirable limit, indicate that this point is normal considering the confirmation of the existence of factors. In addition to the above points, the output of the statistical tests used show that there is a positive and significant relationship between participatory public management, accountability and citizens' satisfaction and public trust in the health and medical education system and also there is a positive and significant relationship between public trust as a consequence of modern public management and the policy implementation as well as between the policy implementation of the health and medical education system and the effectiveness of the health and medical education system in line with the general policies of the Islamic Republic of Iran. Finally, by combining these models in the research conceptual model, we have achieved similar results. Regarding the comparison of the results of this dissertation with the findings of other researches in this regard, the results of researches conducted by (Zahedi, 2011) and (Khanbashi, 2011), (Danaei Fard et al., 2010), (Mohammadifar et al., 2010), (Belanche Gracia & Casalo Arinob, 2015) can be mentioned. It should be considered that a high level of trust does not eliminate accountability but gives managers freedom of action and leads to greater delegation of authority. (Manovarian et al., 2010) in proposing the problems of governmental organizations consider the lack of accountability as the main factor of distrust. According to them, the existence of

organizations without appropriate effectiveness, inefficient governmental organizations and unresponsive governmental organizations are the main factors, and the general problems of governmental and non-profit organizations and failure to respond to these problems lead to distrust. A responsive government in a society provides the conditions for gaining the public trust of the citizens and ultimately increases the public participation of the citizens in political and social affairs such as elections. (Mohammadifar et al., 2010) also showed that trust has a significant effect on the clients' satisfaction level, and standardization and increasing the sensitivity of the employees of managers to improve it is recommended. (Khanbashi, 2011) stated that due to various reasons, increasing the resources and responsibilities of the public sector is not in line and associated with its accountability ratio and this factor is the main reason for the decrease in people's trust in this important part of society. (Alwani & Danaei Fard, 2001) believe that governments must always be sensitive to the ratio of trust in society and keep their trust reserves full in order to enjoy the support of the people in difficult and failed conditions. However, as it was also mentioned above in detail, among each of the above mentioned researchers, some performed their researches to identify, and some to explain public trust and policy implementation and also have achieved some results. But, the present dissertation, both in terms of content and structure, and consequently the obtained results has significant differences with other conducted researches, some of which are mentioned below.

\* Recognizing and describing public trust as a consequence of modern public management (participation, accountability and citizens' satisfaction) in implementing the policies of the health and medical



education system in line with the general policies of the Islamic Republic of Iran

\* Simultaneous investigation of the status and relationship between the components of modern public management and public trust and the implementation of the policies of the health and medical education system, while in other researches, other factors have been considered and analyzed.

\* Explaining the effective model of implementing the policy of the health and medical education system.

\* The breadth, difference and diversity of the statistical population of the present dissertation compared to the statistical populations of other researches that this important point can lead to the emergence of more reliable results.

\* Presenting scientific and practical solutions in terms of organization to increase public trust and effective implementation of the policy of the health and medical education system.

\* Assisting the top managers of the organization and forming specialized working groups to implement the policy of the health and medical education system.

Among the limitations and obstacles that existed in the way of the present research, the inherent limitations of the questionnaire and using it as a tool to measure and quantify the qualitative points related to the research variables can be mentioned. Also, the involvement of personal issues and people's inner desire to answer the questionnaires, time constraints to conduct research and short sampling period, members of the statistical population being very busy, and consequently, not having the necessary time to respond to questionnaire questions and some respondents' concern about stating information and expressing their opinions about the organizations have limited the present research findings, which

are beyond the control of the researcher and should be considered in interpreting the results. However, based on the findings of the present research, it can be suggested that:

1) Due to the unfavorable situation of accountability in the health and medical education system, top managers took the necessary measures to promote and improve it as better as possible. 2) In order to strengthen public trust in the health and medical education system, the order of priority of the participatory management, accountability and citizens and clients' satisfaction should be emphasized. In this regard, creating mechanisms for citizens' participation to promote the effectiveness of the health system, creating and promoting social capital and citizens' participation, increasing the quality of services, increasing accountability to citizens' problems and expectations are recommended to the authorities. 3) Despite the favorable situation of the policy implementation of the health and medical education system, in order to improve the implementation of these policies as much as possible, the system of selection, evaluation and education and training of professors, students and managers in the health system and public hospitals should be continuous and ongoing; people should be informed of their social rights and responsibilities to the health system and public hospitals; moral and spiritual trainings should be promoted in the health system and public hospitals; through the insurance system with the focus on the Ministry of Health, and Medical Education in the health system and public hospitals, health resources management should be implemented; and human resources having skill and competencies appropriate to the needs of various regions of the country should be explained in the

health system and public hospitals. 4) Considering the importance and priority of the health and medical education system in the general policies of the Islamic Republic of Iran, to promote the effectiveness of this system, the effectiveness of the workforce in the health system and public hospitals can be continuously investigated; standard operating procedures of the health system and public hospitals in response to environmental changes in the organization should be implemented; the performance of the units and the imposed costs should be compared, and in time periods, it should be tried to maintain the functional structure and parts of the health system and public hospitals.

Regarding the breadth and extent of the concept of public trust as a consequence of modern public management and its numerous advantages in various fields and sectors, it is necessary to investigate this important issue as much as possible. Therefore, it is recommended that in future studies, a developmental model of the modern public management system be designed and explained with emphasis on public trust and political trust; the effectiveness of health and medical education system programs should be evaluated, strategic factors related to political trust and public trust should be explained; the status of public trust and its components and its role in the development of the organization and society should be examined and a desirable model should be provided in this regard; and finally, the model of public management and the development of public trust should be designed and explained in order to increase public participation.

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