

Investigate the Relationship between Organizational Health and Agility as a Competitive and a Strategic Advantage in Organization

Case Study "Gas Company of Semnan Province"

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Abstract

Today's organizations working in an environment that rapidly changes requires them to have adaptive strategies. In fact, this issue, that how can organizations succeed in a dynamic and unpredictable environment is problem that recognized as the most important challenges of today's world. In such an environment, agility has become an important feature, which has a significant effect on organizational performance. The aim of this study is to investigate the relationship between organizational healths with organizational agility. In this study, that in terms of the purpose is applications and in terms of nature of data collection is the descriptive - survey research has selected 108 people as a sample with simple random sampling method, and was examined over a period of 6 months. (Winter 2014 and spring 2015). The results show that at 95 percent of confidence level has a significant relationship between the organizational health with agility in the Gas Company of Semnan province. Also, between the subcomponents of organizational health (institutional level, administrative level and a technical level), the components of administrative level and technical level of organizational health has a significant relationship with the agility in the Gas Company of Semnan province and organizational health from the components of the institutional level has not significant relationship with agility in the Gas Company of Semnan province.

Key words: Organizational Health, Administrative Level, Institutional Level, Technical Level, Organizational Agility

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Introduction

In fact, this issue, that how can organizations succeed in a dynamic and unpredictable environment is problem that recognized as the most important challenges of today's world. However, various strategies have been introduced such as JIT¹ production, re-engineering, virtual organizations and networking, but agile organization is the most popular. Therefore, most researchers have defined agility is the functionality that necessary to actively exploit from the advantages and opportunities and positive exposure to competitive threats that all of them are due to frequent changes and sometimes large and unacceptable prediction. Therefore, lack of agility can lead to losses of significant natural and the loss of opportunities. Also, from the perspective of Sharifi and Zhang in 1999, they can consider the flexibility, responsiveness, speed and competence as components of organizational agility. So today, the importance of the human factor and its unique role as a strategic resource has a place far higher than in the past, to the extent that in advanced organizational thinking referred to from the human as the most important source of finance for organization. On the other hand, organizational health refers to organizational healthy that with the outer barrier forces are treated successfully and effectively lead its force in the direction of the main goals and objectives of the organization. As a result, today's organizations to succeed and survive, they must organized their internal affairs and create in yours, the potentials that are required to be competitive and by linking organized, dynamic and powerful with other members be success of the entire chain, which is active in the organization. Therefore, organizations that investing in speed, more flexibility and responsiveness in all probability reach to their goals because the factors of political, social, economic and technology, as quickly as possible effects on the system and the decisions of the people and the needs of customers and there is agile competitors is always on the rise and survival of the organization is not possible without the agile, and otherwise is seriously threatened the success of the organization. Accordingly, with respect to the issues facing organizations is necessary to investigate the relationship between organizational healths with organizational agility as an important issue. On the other hand, given that Gas Company of Semnan province due to circumstances that in accordance with the rules and regulations exists in it, is a disciplined organization and has a good performance, so it is important to evaluate the agility and organizational health as a strategic competitive advantage, according to the above description. Therefore, the present study investigated to the above relationship as a competitive and strategically advantage in the gas company of Semnan province.

Review of the studies and the concept of variables

Organizational health refers to the stability and survival of the organization in its environment and adapts to it and upgrade and expands its ability to adapt more. Miles in 1999, as the first person who has studied the concept of organizational health, says that health is means no disease and dysfunction in the organism. Accordingly, he believes that regardless of the problems that imposes "imaginary organism" and "ideal type" of the concept of

¹ Just in time

perfect health, the organizational health approach in terms of understanding the dynamics of the organization and research and effort to renew them, has considerable scientific advantages.

- Naseri in an article in 2007, according to a study to assess the health of the company by the Entec company states that every human being or human system as an organization, which has three different items in one environment. At one end, there is distress or illness in middle is located normal situation and at the other end is located health. Illness or distress situation is the sum of individual and environmental conditions and stress, which leads people in an organization have a functional less than expected and its potential. Normal situation is the conditions in which individual and organizational performance is lower than expected. Health is the situation in their respective organizations, which lets have a higher performance than usual expected or even higher than its competitors. In this case, the organization will become the best in its class with the existence of productive, agile and flexible.

- Seddighi and colleagues in a study in 2014 examined the relationship between organizational health and organizational agility in the Medical University of Bam city. The findings showed that there is a relationship between organizational health and organizational agility and also, there was a significant relationship between organizational health component (level of administrative, institutional, technical) and organizational agility.

- Kalani and colleagues in their study in 2013, dealt with to examines the relationship the organizational learning capabilities and organizational agility in the Ministry of Youth and Sports. The results showed that in scale vision system for organizational learning and total quality management for organizational agility achieved the highest average compared to other variable factors. Also, organizational learning has a significant relationship with organizational agility.

- Khosravi and colleagues in 2012, in a study began to identify the factors of enabling agility of human resources to the Delphi method in electronic industry. In this study, we were provided with work framework using the studies and previous research in this area and then using the experts Delphi method and with judgment and chain sampling, we tried to prepare the true model according to experts. Delphi four stages were during and finally was developed the pattern of Experts Board approved with five dimensions and multiple indicators relating to agility enablers of human resources. These dimensions include: authority, rules and procedures, coordination, structure and engineering work.

- Adibi and Vazifehdooost in during research in 2009 began to investigate the relationship between agility strategy, agile organization and agility workforce in emergency hospitals in Tehran University of Medical Sciences. Confirmatory factor analysis showed that there is not a significant relationship between latent variable of agility strategy and work agility, but had a significant relationship between agility strategy and agility workforce and were confirmed by the relationship between workforce flexibility and work agility. Some of the indicators of the nature of the organization as well as some elements of the complexity of the job were eliminated in agility strategy variable.

- Sadeghian and colleagues in their study in 2012 began to investigate the relationship between purposeful organizational forgetting and organizational agility. Pearson correlation test results showed that there is a significant relationship between purposeful organizational forgetting and organizational agility. Also, there is significant and positive relationship between de-learning components from the dimensions of organizational forgetting with all the components of organizational agility. Also, there is significant and positive relationship between components of to avoid bad habits with component of technology and the market from the components of organizational agility, but there is not a significant relationship between components of to avoid bad habits and other agility components including: integration, team building, quality, change, development and welfare of employees. Also regression analysis result showed that the purposeful organizational forgetting is a good predictor of organizational agility and among the components of purposeful organizational forgetting, the de-learning component has the highest prediction from the organizational agility.

- Shain in 2002, in the research noted to the relationship between organizational health and organizational effectiveness as figures adaptable, solves problems and has motivated. In his view the mistakes related to effectiveness should be based on the interactions that the organization by taking them to investigate and solve problems, not the comprehensive measurements and static labor market after the organizational health, also used as a measure to determine the effectiveness of the organization.

- Plonka during study in 1997 has given the importance of human factors in the study of human resource agility, because these factors are widely supported by the high level the ongoing process of training and development, as well as theory, experiment and practice. In addition, he discussed the mechanisms of agile-based potential for knowledge worker, such as selection of staff; acquire new knowledge, accelerated learning, providing timely education.

- Arteta and Giachetti during research in 2004, in different measure raised complexity, as a substitute for agility. They believed that organizations are less complex in their processes, easier to accept change and therefore, are more agile, and vice versa, create change in organizations that processes have complex is difficult and these organizations are less agile.

- Bottani in 2009, in research is chosen fuzzy approach in order to assess organizational agility and believed, because of the uncertainty of measurement of agility; the fuzzy logic is the best method of assessment in this regard. On the other hand, according to studies, in terms of subject matter, it should be noted that in an organization as a social system, there is three elements which are: activities, interactions and trends. Activities are tasks that people do. Interactions are behaviors that while performing duties occur between individuals and trends are attitudes that arise between individuals and within groups. Homanz argues that these concepts despite being separate from each other have a very close relationship with each other and in turn are dependent on each other. Any change in any of these three elements will create change in other elements. For the survival of an

organization, activities, interactions and certain trends of the organization is expected. Otherwise, Organizational health is a question, in other words, activities that must be performed requires people to work together (interactions). These works should be enough to be satisfying to people, so that they continue to work.

Dimensions of organizational health

With the systematic approach to the organization as a living organism, what a given to an organization, What is taken an organizations and the impact that has on raw materials and caused the changes in it, and the results will be of this transformation forms dimensions of organization and if this mechanism operate with the program and all its parts regardless of different roles, act in line with the organization, then the organization's health finds expression and appearance. In other words, if the input, output and process and organization feedback with different roles are trying for a goal, they will manifest a healthy organization. In addition, according to Parsons analysis in 1976, to meet the basic needs of these organizations in three distinctive with responsibility and supervision. These levels include a technical level, administrative level and institutional level. On a technical level the organization product is produced, administrative level is supervision and management the organization's internal management practices, and institutional level is linking the organization with its environment. In an overview, based on the theoretical framework of Parsons, we can say that a healthy organization is an organization that the levels of technical, administrative and institutional are coordinated and consistent work.

Dimensions of agility in the organization

Agility dimensions in organization are the dimensions and capabilities that must be developed in an organization, so organizations have the power needed to respond to the changes ahead.

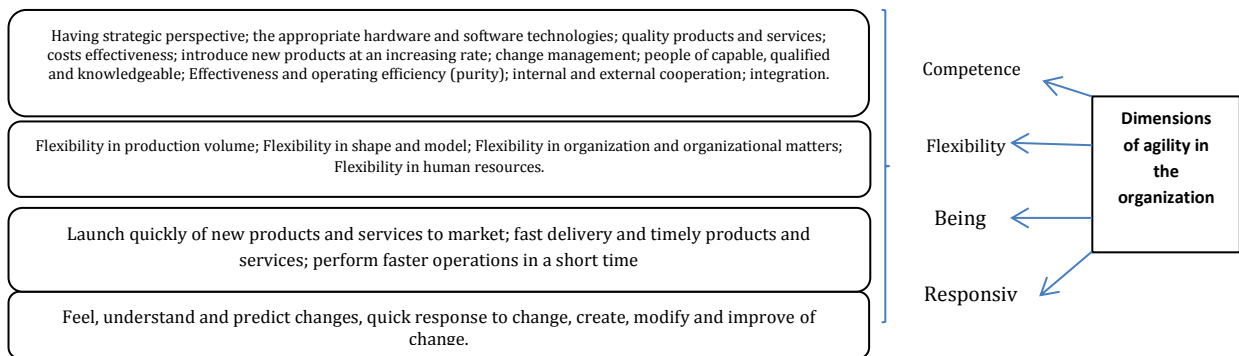


Figure1. The dimensions of organizational agility (Mehdi, 2006, 32)

Regarding organizational agility expressed several models, which in continue refer to most of them.

In 1999 by Sharp et al., presented a theoretical model to agile produce that this model, which has three components: 1. Model base. 2. The ability to model builder. 3. Model output. (Gunasekaran, 1999, 3). The proposed model is indicative of the fact that development and coordination skills and abilities in an organization are similar hidden roots of trees, which give strength to the organization. In other words, the stability and strength of an organization depends on the roots and base of the set. (By the way, either directly or indirectly the human resources of an organization are a fundamental component of any organization). In 2000 immediately introduced another model in this regard by Sharifi and Zhang. In this model a concept that has been proposed for deployment agility in manufacturing organizations, which includes three components: 1) agility stimulus. 2) agility ability. And 3) agility producers, and third model, which was presented as the model of Yusuf and his colleagues have provided the basic concept for agile manufacturing and is indicative of the fact that people inside the firm can be upgraded through capital investment In education and training and with a renewed focus on the advantages of identify current trends and potential has earned customer needs. In addition, due to the fact that management has a special responsibility in the acquisition of knowledge and basic skills, we should also recognize the basic capabilities of the company and found the missing ring and through the links completed them. Therefore, labor organizations, who need to be agile have been motivated, well trained, and be strengthened with a complete set of skills, expertise and knowledge to act as an essential element of strategies. (Yusuf et al., 1999, 47, as quoted by Fathian et al., 2009). According to the research hypotheses and existing models and raised in the study, it was possible to design the conceptual model and reach a common understanding of the other components. In addition, they proposed conceptual model. The independent variable in this study is organizational health and the dependent variable is also an organizational agility.

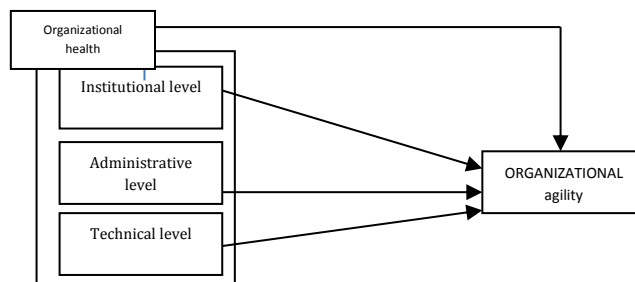


Figure2. Conceptual model derived from studies of Hui et al (1996) and Sharifi and Zhang (1999)

Research Methodology

This study, that in terms of the purpose is applications and in terms of nature of data collection is the descriptive - survey research. In this study investigated to examine the relationship between the variables of organizational health and organizational agility. So this study is correlational. In fact, the descriptive study to examine and describe the conditions or phenomena. The researcher plans to use the research findings gain related information and describes them without any changes. For this purpose, method of data collection is a field - survey method. In addition, the population of this study is to include all the official employees of the gas company of Semnan province in 2014. It was based on the definition of the population and according to the personnel of Gas Company of Semnan province, the population is 150 people. For sampling been used simple random sampling method, and sample volume obtained using Morgan table. Of the total number of 150 people, at least 108 people have been studied as sample. The data used in this study obtained either through interviews and questionnaires, which is the primary data and has been achieved through library studies and review corporate documents, papers and theses, and use of internet resources, which is of secondary data. Also, data collected using the Excel software and after the required classification and reform based on studied variables are entered into the computer. The final analysis investigates the relationship between studied variables was performed using the SPSS software. Given that the data used in the study have been used a valid questionnaire of organizational health and organizational agility, there is no need to check the validity. Therefore, in order to conform options with conditions studied were used of face validity. For this purpose, the questionnaire was put to the supervisor and several experts and they confirmed validity. On the other hand, in this study, the reliability usage and is calculated based on Cronbach's alpha for internal consistency. In addition, according to the output of the SPSS software the questionnaire reliability coefficients, respectively, for institution level of organizational health is 0.84, for the administrative level of organizational health is 0.89, for the technical level of organizational health is 0.83, and for the organizational agility is 0.91, which is indicative of high precision measuring devices used in this study. As a result have the necessary validity for analysis.

Research Findings

The main hypothesis: There is a significant relationship between organizational health with organizational agility in Gas Company of Semnan province. Test structural equation modeling diagram to verify the main hypothesis research for a standard approximate and for a significant mode shown in Figures 3 and 4.

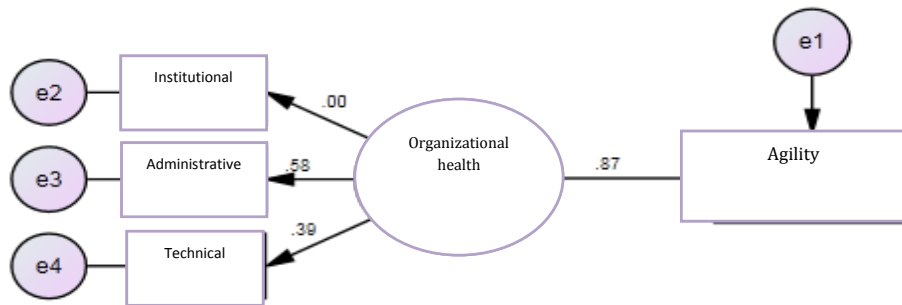


Figure3. Test structural equation model diagram to verify the main hypothesis of research in the case of standard approximate

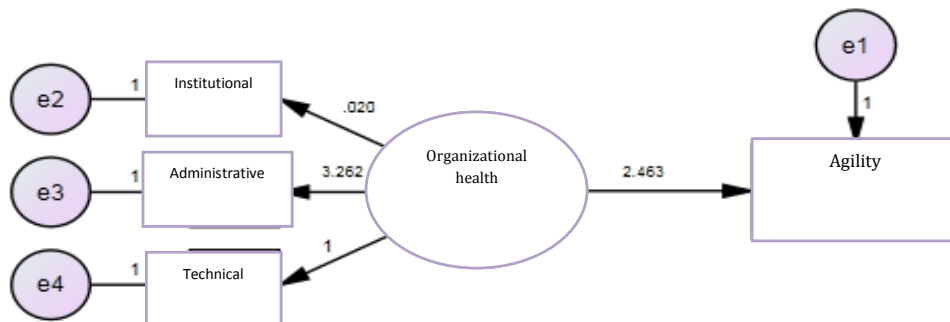


Figure4. Test structural equation model diagram to verify the main hypothesis of research in significant mode

Table 1 shows the results of the fitted model to evaluate the main hypothesis of research.

Table1. Estimated coefficients of structural equation model related to the main hypothesis of research

Significant	Critical value	Estimation error	Standard coefficient	Coefficient	Dependent	Independent
0.014	2.463	0.941	0.87	2.319	Organizational agility	← Organizational health

According to Table 1, we see that the test statistic related to the impact of "organizational health" on the "organizational agility" is a test statistic ($|t| = 2.463$), which are larger than the critical value 0.05 ($t_{0.95}=1.96$), and therefore, may be to accept a significant relationship between these components at the 0.05 type one error level in this model. The results of goodness of fit of the model are shown in Table 2.

Table2. Results of fit goodness of structural equation model for the main hypothesis

PCLOSE	RMSEA	P-Value	χ^2	AGFI	GFI	RMR
0.590	0.000	0.505	1.365	0.968	0.994	0.010

Significant level of chi-square test that puts to the test the saturated of structural model for this model achieved greater than 0.05 type one error, and thus, can accept this level of error that fitted model has swept all the significant relationships between the variables and indexes them, and considered at the 0.05 error level of saturation model. Saturation model is indicative of the lack of another significant relationship in the model. Also, goodness of fit indices of GFI and AGFI in this model is estimated greater than contract value of 0.9, which is indicative of the high power of the model in explaining the relationship between the variables. Also indices of RMSE and RMSE, which is related to the amount of corresponding model error to predict the correct amount of observations was small amounts, which closer to zero is indicates a slight error in the model of communities explanation. Also, small probability value of being RMSEA, also (PCLOSE) shows that this probability amount error for the fitted model is smaller than 0.05 contract amount. Consequently, the results of the model are reliable and valid and the model is fitted to the good. Thus, the accepted main hypothesis of research, namely: There is a significant relationship between organizational health with organizational agility in gas company of Semnan province. According to the standard positive coefficient the organizational health variable (0.87) in the corresponding structural model, we can say that variable of organizational health is directly linked with organizational agility variable.

The results of the research sub-hypotheses:

1. First hypothesis: there is a significant relationship between the institutional levels with the organizational agility in the Gas Company of Semnan province.
2. The second hypothesis: there is a significant relationship between the administrative levels with the organizational agility in the Gas Company of Semnan province.
3. The third hypothesis: there is a significant relationship between technical levels with the organizational agility in the Gas Company of Semnan province.

Test structural equation modeling diagram to verify the sub-research hypotheses for a standard time and for a significant mode shown in Figures 5 and 6.

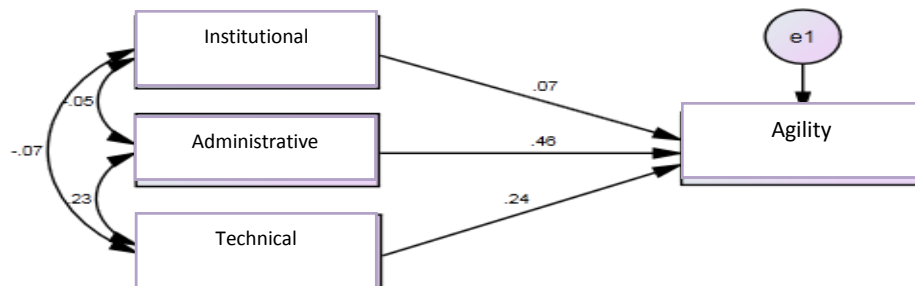


Figure5. Test structural equation modeling diagram to verify the sub-research hypotheses for a standard time mode

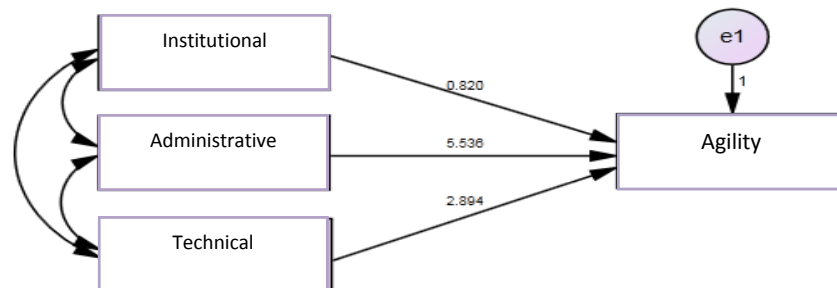


Figure6. Test structural equation modeling diagram to verify the sub-research hypotheses for a significant mode

Table 3 shows the results of the fitted model, to verify the research hypotheses.

Table3. Estimated coefficients of structural equation model, related to research secondary hypotheses

Significant	Critical value	Estimation error	Standard coefficient	Coefficient	Dependent	Independent
0.412	0.820	0.093	0.07	0.076	Organizational agility	← Institutional level
***	5.536	0.110	0.48	0.609	Organizational agility	← Administrative level
0.004	2.894	0.085	0.24	0.247	Organizational agility	← Technical level

According to Table 3, we see that the test statistic related to the impact of "Administrative level" and "Technical level" on the "organizational agility" is respectively equal to ($|t| = 5.536$) and ($|t| = 2.894$), which are larger than the critical value 0.05 ($t_{0.95}=1.96$), and therefore, can be to accept a significant relationship between these components at the 0.05 type one error level in this model. But the test statistic related to the impact of the components of the "institutional level" on the "organizational agility" is equal to ($|t| = 0.820$), which are smaller than the critical value 0.05 ($t_{0.95}=1.96$), and as a result, can be rejected the significant impact of these components, at 0.05 type one error level in this model. The results of goodness of fit of the model are shown in Table 4.

Table 4: Results of goodness of fit structural equation model for secondary hypotheses research

PCLOSE	RMSEA	P-Value	χ^2	AGFI	GFI	RMR
0.658	0.002	0.598	0.887	0.957	0.979	0.009

Significant level of chi-square test that puts to the test the saturated of structural model for this model achieved greater than 0.05 type one error, and thus, can accept this level of error that fitted model has swept all the significant relationships between the variables and indexes them, and considered at the 0.05 error level of saturation model. Saturation model is indicative of the lack of another significant relationship in the model. Also, goodness of fit indices of GFI and AGFI in this model is estimated greater than contract value of 0.9, which is indicative of the high power of the model in explaining the relationship between the variables. Also indices of RMSE and RMSE, which is related to the amount of corresponding model error to predict the correct amount of observations was small amounts, which closer to zero is indicates a slight error in the model of communities explanation. Also, small probability value of being RMSEA, also (PCLOSE) shows that this probability amount error for the fitted model is smaller than 0.05 contract amount. Consequently, the results of the model are reliable and valid and the model is fitted to the good. Thus, the accepted secondary hypothesis of research, namely:

There is not a significant relationship between the institutional levels with the agility organizational in the Gas Company of Semnan province. There is a significant relationship between the administrative levels with the organizational agility in the Gas Company of Semnan province. According to the standard positive coefficient the administrative level variable of organizational health (0.48) in the corresponding structural model, we can say that administrative level variable of organizational health is directly linked with organizational agility variable. There is a significant relationship between a technical level with the organizational agility in the Gas Company of Semnan province. According to the standard positive coefficient the technical level variable of organizational health (0.24) in the corresponding structural model, we can say that technical level variable of organizational health is directly linked with organizational agility variable. In total, according to the carried out analysis, it can be concluded from among subcomponent related to organizational health the subcomponent of institutional level, there is not a significant relationship with agility in Gas Company of Semnan province, but other subcomponent (administrative level, technical level) based on the results, have a significant relationship. In addition, the results of testing research hypotheses in the form of the final and corrected model, as shown in Figure 7.

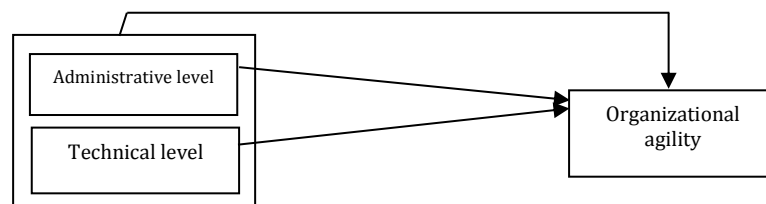


Figure7. The final structural equation model

Conclusion

The main objective of this study is to examine the relationship between organizational health and organizational agility as a competitive and strategic advantage of Gas Company in Semnan province. The results, in terms of research main hypothesis showed that there is a significant relationship between organizational health and organizational agility in Gas Company of Semnan Province. In addition, according to available results in the more components can also be said about the research secondary hypotheses. About first secondary hypothesis of the study, which examined the relationship between institutional levels of organizational health and organizational agility, it can be said that there is not a significant relationship between the institutional level of organizational health and organizational agility in Gas company of Semnan Province, therefore, not accepted first secondary hypothesis of the study and as a result, are not approved there is a significant relation between institutional level of organizational health with organizational agility. Therefore, according to the results of the main hypothesis of this study presented suggestions for the use of these results the following: It is suggested that administrators support of employees against unreasonable demands of clients and maintain a good relationship with employees and with good relationship with supervisor deliver the demands of your employees to them and their efforts in order to solve the problems of employees. Also, administrators pay attention to staff suggestions and establish an intimate relationship with employees and are careful well-being of their employees. Also, the administrators the clearly expressed their thoughts and attitudes for employees and announced to employees, which is what is expected of them. It is suggested that the management give adequate materials and equipment to the employees for use at work, as well, is to use complementary training equipment to employees available. It is suggested that employees in the workplace in relation to each other be gracious and collective passion and have good behavior with clients. Also, staff will try to assist to clients in achieving their problem solving in the corresponding unit. Employees must work hard to improve their work and develop serious and disciplined environment for learning in the workplace for employees. About the second research of secondary hypothesis, which explains to examine the relationship between administrative level of organizational health and organizational agility, it can be said that there is a significant relationship between administrative level of organizational health and organizational agility in Gas Company of Semnan province, so the second research secondary hypothesis is accepted, and thus, are approved there is a significant relationship between administrative level variable of organizational health with organizational agility. Finally, About the third research of secondary hypothesis, which examined the relationship between a technical level of organizational health and organizational agility, it can be said that there is a significant relationship between the technical level of organizational health and organizational agility in the gas company of Semnan province, therefore, accepted the third research of secondary hypothesis, and thus, are approved there is a significant relationship between the technical level of organizational health with organizational agility. Also, Seddighi and colleagues in a study in 2014 examined the relationship between organizational health and organizational agility in the Medical University of Bam city. The findings showed that there is a relationship between organizational health and organizational agility and also, there was a significant relationship between organizational health component (level of administrative, institutional, technical) and organizational agility. So we can say that the findings of this study are consistent with findings of Seddighi et al. (2014).

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