



THE RELATIONSHIP BETWEEN ORGANIZATIONAL AGILITY AND ORGANIZATIONAL PERFORMANCE IN SHIRAZ NAMAZI HOSPITAL EMPLOYEES

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ABSTRACT

Background: The Organizational Agility is considered as one of the most important requirements to Responds the collection of internal and external factors and continuous changes. The hospitals should Responds the needs of their customers and patients by more effective, cheaper and faster ways to become successful and improve their performances. The objective of the present study was to evaluate the situation of agility and determination of its relation on the organizational

performance of Shiraz Namazi hospital Employees. **Methods:** this is an applied & cross-sectional study that was conducted by a descriptive method. In the present study, 120 nurses, official experts and the paraclinic personnel of Namazi hospital participated. They were selected by the classified and random sampling. Also, the size of sample was determined based on the number of each section in the research community. The instruments used in this study were the standard questionnaires of organizational agility and performance. Their validity and reliability were measured again and they were confirmed by the researcher. In order to analyze the data, the descriptive statistics, Pearson correlation coefficient test and SPSS (version 19) were used. **Results:** the present study indicated that the status of

organizational agility in Shiraz Namazi hospital Employees in with the grade of 73.93 is in an intermediate level and the organizational performance with the grade of 95.62 is considered as upper intermediate and in an acceptable level. There was a positive and significant relationship between the organizational agility and organizational performance with the correlation coefficient 0.779($p < 0.0001$). In addition, there was a positive and significant relation between the four factors of agility including speed (0.689), merit competence (0.689), responsiveness (0.690) and flexibility (0.776) respectively with the organizational performance. All of them had a positive and significant relation with the statistical probability under 0.05 ($p < 0.0001$). **Conclusion:** with regard to the findings of this study, it was concluded that there was a direct relation between the organizational agility with the performance of the hospitals. Thus, the policy makers and the managers of health sectors in the hospitals should enforce the organizational agility factors of personnel to improve their performance and productivity. Thus, the employment of agile personnel and also the pre and in-service trainings can be so helpful.

KEYWORDS: Organizational Agility, Organizational Performance, Speed, competence, Responsiveness, Flexibility.

INTRODUCTION

Today, organizations are subject to permanent and great changes and their internal and external settings, human and non-human factors all are changing rapidly.^[1] In such condition, those organizations that have more optimal organizational performance than other organizations can survive and continue their activities in a competitive world and they can also use threats in addition to opportunities.^[2] One of capabilities that are necessary for reaching competitiveness of supply chain is agility.^[3] The aim of an agile system is to overtake from its opponents. Agile organization is a new model resulting from changes in companies. In two recent decades, agility was a key concept and was discussed by many researchers and different theories have been presented.^[4] Agile organizations are worried about environmental uncertainty and lack of predictability of the work setting. Such organizations require number of capabilities to deal with change, uncertainty, and lack of predictability in their work setting. Such capabilities include four main elements that are considered as the bases for agility development. These capabilities are responsiveness, competency, flexibility, and speed.^[5]

- Responsiveness refers to the ability for recognizing changes and showing rapid reaction to them and benefiting them
- Competency refers to the ability for acquiring goals of the organization.
- Flexibility and adaptation are the ability for implementing different processes and acquiring different goals via similar facilities.
- Speed is the ability for doing activities in the shortest time.^[6]

Agility is a strategy that includes guidelines for improvement of performance and requires application of new technologies in addition to other strategies. In one hand, all businesses throughout the world are under pressure for reduction of cost and increase of value to customers. Therefore, many organizations are seeking strategies to be superior to other organizations by presenting high quality services, flexibility, innovation, and fast responsiveness and they want to reach high effectiveness and efficiency.^[3] Hospitals are among those organizations that should be agile due to sensitivity and importance of treatment in order to survive in dynamic environment and to respond demands of patients. Agility of a hospital indicates its responsiveness to internal and external changes and if hospitals are designed in an agile form, they will be able to compete with other hospitals and to offer proper services to patients. It is necessary that management designs and implements its managerial policies in order that hospitals could coordinate with changes such as advancement of technology and equipments and providing up-to-dated methods and treatments. Health system is not exceptional in this regard and without agility, the management of this system will not be able to change the organization based on health goals and policies. Also, it should be noted that like producers, other organizations and institutes have to seek agility for competition in 21st century because modern organizations are under the increasing pressure to find new ways for efficient competition in global dynamic market. Agility promotes the ability of organization for supplying high quality goods and services and it is an important factor for productivity of the organization.^[7] Organizational performance results from executive processes and realization of organizational goals. In another definition, organizational performance is to complete tasks that are undertaken by human force.^[7] Organizational performance includes all goals of competitiveness and production and it associates with cost, flexibility, speed, certainty, and quality. Nevertheless, organizational performance can be like an umbrella that includes all concepts related to success and total activities of the organization. Factors influencing on organizational performance are divided into intra- and extra-organizational factors. Extra-organizational factors include socio-

economic, political, cultural, and legal factors and intra-organizational factors involve intellectual capital, innovation, and organizational strategy and the role of such factors is very obvious in organizations.^[8] Agility means the ability to responsiveness and rapid reaction to environmental changes and it is an important factor for hospital effectiveness. Agility of a hospital shows responsiveness of hospital when facing internal and external changes. If hospitals are designed in an agile form, they will be able to compete with other hospitals and to present proper services to patients. Concerning abovementioned and the amount of sensitivity and importance of services presented in hospitals, offering rapid, proper, and high quality services to patients are one of priorities of every hospital.^[9] Therefore, it is necessary that hospital managers and decision makers are aware from amount of performance and agility of hospitals and factors affecting them and also the relation between them in order to remove weaknesses in factors related to organizational performance, hospital agility and their relationship and to promote their strengths. According to abovementioned, the importance of agility is clear. Also it should be noted that no research has been conducted about agility in health and treatment area. This will increase importance of this research. The present research aims to study status of agility in Namazi hospital of Shiraz and to determine the relationship between dimensions of organizational agility and performance in Namazi hospital of Shiraz. Results of the research can be useful in direction of planning for improvement of responsiveness and flexibility of hospitals.

METHODS

This is an analytic-sectional study. The population under study is official, para-clinical, and Nurses of Namazi hospital of Shiraz in 2016. In the first stage, the number of staff who referred to hospital management was 400 persons. Concerning the goals and type of the study (which is correlative), the amount of the sample was determined as 120 persons using following formula.

$$n = \left[\frac{Z_{\alpha} + Z_{\beta}}{c} \right]^2 + 3$$

In this relation, each parameter is defined as follows.

n= number of all required samples

r= the least correlation coefficient

c=0.5+Ln[(1+r)/(1-r)]

That based on previous results, $r = 0.3$, $\alpha = 5\%$ and $\beta = 10\%$. Let the amount of sample is

$$\alpha = 0.05 \rightarrow z_{1-\alpha/2} = 1.96$$

$$\beta = 0.1 \rightarrow z_{\beta} = 1.28$$

$$r = 0.3$$

$$c = 0.5 \times \ln \left[\frac{1+0.3}{1-0.3} \right] \cong 0.3$$

$$n = \left[\frac{1.96 + 1.28}{0.3} \right]^2 + 3 = 113 \cong 120$$

The random stratified sampling was done concerning the amount of each layer, 75 nurses, 25 official staff and 20 staff from Para-clinical department entered the study. Inclusion criteria were work experience higher than 10 years, M.S degree and higher. After referring to each department and before starting the study, the goals of the study, anonymity of people and freedom of people for entering the study (they can enter or leave the study freely) were explained verbally to the staff. Information was completed using two questionnaires which validity and reliability were confirmed in previous studies by researchers. In order to measure organizational agility, a 21 item questionnaire was used which validity and reliability was confirmed in the study done by Akram Tanha (Cronbach alpha=0.7) and it includes four components: speed (6 items), competency (6 items), responsiveness (4 items), and flexibility (5 items). Each item was scored between one and five based on Likert 5 point scale (from completely agreed to completely disagreed). Organizational performance questionnaire was used to measure organizational performance and it includes 31 items and 4 components: customers' satisfaction (7 items), staff satisfaction (12 items), effectiveness of organization (3 items), and financial performance (9 items). Questions were answered based on Likert 5 point scale (from completely agreed to completely disagreed). The scores were ranged from 5 to 1. Descriptive statistics, Pearson correlation coefficient test, and SPSS version 19 were used to analyze data.

RESULTS

Totally 120 persons with mean age of 5.34 ± 38.97 entered the study. Demographic specifications of persons under study are shown in table 1.

Table 1: Frequency distribution of demographic specifications of people under study.

| Variable | | Number | Percentage |
|-----------------|-----------------|--------|------------|
| Age | 31-40 years old | 50 | 41.7 |
| | 41-50 years old | 70 | 58.3 |
| Gender | Male | 37 | 30.8 |
| | Female | 83 | 69.2 |
| Education | B.S | 95 | 79.2 |
| | M.S, PhD | 25 | 20.8 |
| Work experience | 10-15 | 44 | 36.7 |
| | 16-20 | 14 | 11.7 |
| | 21-25 | 32 | 26.7 |
| | 26-30 | 30 | 25 |

Analysis of Status Quo of Organizational Agility in Hospital

Results of Pearson correlation coefficient are shown in table 2. There is a positive and significant relationship between organizational agility and performance ($P < 0.001$, $r = 0.799$). Also, there is a positive and significant relationship between components of organizational agility and performance, between organizational performance and speed ($P < 0.001$, $r = 0.689$), between organizational performance and competency ($P < 0.001$, $r = 0.689$), between responsiveness and organizational performance ($P < 0.001$, $r = 0.690$), between flexibility and organizational performance ($P < 0.001$, $r = 0.776$).

Table 2: The relationship between organizational agility, its components, and organizational performance.

| Row | Independent variable | Dependent variable | Sample | Amount of correlation | Significance level |
|-----|------------------------|----------------------------|--------|-----------------------|--------------------|
| 1 | Organizational agility | Organizational performance | 120 | 0.779 | < 0.001 |
| 2 | Speed | Organizational performance | 120 | 0.689 | < 0.001 |
| 3 | Competency | Organizational performance | 120 | 0.689 | < 0.001 |
| 4 | Responsiveness | Organizational performance | 120 | 0.690 | < 0.001 |
| 5 | Flexibility | Organizational performance | 120 | 0.776 | < 0.001 |

Based on results of table 3, there is a positive and significant relationship between speed and effectiveness ($P < 0.001$, $r = 0.535$). also there is a positive and significant relationship between speed and customer's satisfaction ($P < 0.001$, $r = 0.565$), between competence and effectiveness ($P < 0.001$, $r = 0.535$), between competence and customer's satisfaction ($P < 0.001$, $r = 0.565$), between responsiveness and customer's satisfaction ($P < 0.001$, $r = 0.588$), between

responsiveness and effectiveness ($P < 0.001$, $r = 0.560$) and between flexibility and customer's satisfaction ($P < 0.001$, $r = 0.613$).

Table 3: Results of Pearson correlation coefficient.

| Row | Independent variable | Dependent variable | Sample | Amount of correlation | Significance level |
|-----|----------------------|-------------------------|--------|-----------------------|--------------------|
| 1 | Speed | Effectiveness | 120 | 0.535 | <0.001 |
| 2 | Speed | Customer's satisfaction | 120 | 0.565 | <0.001 |
| 3 | Competency | Effectiveness | 120 | 0.535 | <0.001 |
| 4 | Competency | Customer's satisfaction | 120 | 0.565 | <0.001 |
| 5 | Responsiveness | Customer's satisfaction | 120 | 0.588 | <0.001 |
| 6 | Responsiveness | Effectiveness | 120 | 0.560 | <0.001 |
| 7 | Flexibility | Customer's satisfaction | 120 | 0.613 | <0.001 |

DISCUSSION

In this study, there is a positive and significant relationship between organizational agility, its components, and organizational performance. It means that the increasing score of organizational agility increases the score of organizational performance ($P < 0.001$, $r = 0.779$). Concerning correlation coefficient, this relationship is relatively strong and it is in agreement with researches done by Baroni et al, Maleki, Sadeghi et al, Moshabeki et al.^[11-13] Therefore, concerning abovementioned and organizational agility and performance, managers and experts of Namazi hospital of Shiraz can be familiar with these new categories by holding educational courses and workshops and a step can be taken in direction of promotion of organizational performance in order to have an organization with high effectiveness and efficiency. Also, managers and experts of Namazi hospital of Shiraz can take step in direction of having an agile organization with the best performance by learning different dimensions of organizational agility, flexibility in removal of old regulations of the organization, making organizational structure more flexible and removal of high formality and strict hierarchy for more optimal relationship. Other results of the research suggest that there is a positive and significant relationship between different components of organizational agility (speed (< 0.001 , $r = 0.689$), competency (< 0.001 , $r = 0.680$), responsiveness (0.690), flexibility (0.776)) and organizational performance of staff. These results are in agreement with those of Azizpour.^[14] et al. other results of the research suggest that there is a positive and significant relationship between speed and effectiveness (< 0.001 , $r = 0.535$), between speed and customer's satisfaction (< 0.001 , $r = 0.565$), between competency and effectiveness (< 0.001 , $r = 0.535$), between competency and customer's satisfaction (< 0.001 , $r = 0.565$), between responsiveness and customer's satisfaction (< 0.001 , $r = 0.588$), between responsiveness and

effectiveness (<0.001 , $r= 0.560$) and between flexibility and customer's satisfaction (<0.001 , $r=0.613$). In a study conducted on agility of hospitals in Isfahan city, Yarmohammadian et al (2011) stated that agility means to respond and react rapidly and successfully to environmental changes and it is an important factor for hospital effectiveness.^[15]

CONCLUSION

Therefore, concerning abovementioned, it can be concluded that components of organizational agility should be paid attention to for promotion of organizational performance of managers and experts of Namazi hospital of Shiraz in order that the organization benefits from essential productivity and efficiency and waste of sources can be prevented by informing managers and experts from such important components and applying them correctly.

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