STUDY OF THE RELATIONSHIP BETWEEN ORGANIZATIONAL CULTURE AND ORGANIZATIONAL MATURITY IN GENERAL HOSPITALS AFFILIATED TO SHIRAZ

Ramin RAVANGARD¹, Zahra SAJJADNIA², Marzie HADIAN³, Iman RAHGOSHAY⁴

¹Assistant Professor, Ph.D in Health Services Management, Department of Health Services Management, School of Management and Medical Information Sciences, Shiraz University of Medical Sciences, Shiraz, Iran.
²Assistant Professor, Ph.D in Statistics, Department of Statistics, Science College, Shiraz University, Shiraz, Iran.
³BSc in Health Services Management, Department of Health Services Management, School of Management and Medical Information Sciences, Shiraz University of Medical Sciences, Shiraz, Iran.
⁴MSc student in Health Services Management, Department of Health Services Management, School of Management and Medical Information Sciences, Shiraz University of Medical Sciences, Shiraz, Iran.

INTRODUCTION: Communities, as sets of humans, have cultures leading their collective action. One of these sets of humans is organization which is defined as "a social entity in which persons working together based on a coordinated and approved arrangement to achieve collective and approved organizational goals" [1]. Organizations are the major cornerstone of the present society in which management is the most important factor in their survival, growth and development, or vice versa, their destruction. On the other hand, organizations like people have personalities entitled Organizational Culture. In other words, the relationship between culture and the organization is similar to the relationship between personality and the person, and as for the development of persons their personalities should be explored, in the same way, for the development of organizations that, in turn, will lead to the development of the society, the organizational culture should be investigated [2].

Among the various scientific disciplines, there is no consensus on the concept and definition of "culture". However, from the organizational perspective, culture has been interpreted as a strong chain that provides stability for the organization [3]. Also, organizational culture can be defined as a system of shared meanings, or characteristics which constitute the dominant value system of the organization maintained by its members, and leads to making a distinction between an organization and other organizations [2].

Organizational culture is the customs, laws, rules, regulations and procedures which are expected to be followed by organization members when performing daily activities.

BACKGROUND: Hospitals are one of the major health care organizations playing an important role in maintaining and improving the human health and, therefore, considering their dominant culture and organizational maturity level is very important. This research aimed to study the relationship between organizational culture and organizational maturity in general hospitals affiliated to Shiraz University of Medical Sciences in 2012.

MATERIAL AND METHODS: This was an applied, cross-sectional, descriptive - analytical study conducted in 2012. The population study was all employees of general hospitals affiliated to Shiraz, University of Medical Sciences. A sample size of 187 employees was selected using stratified sampling proportional to size and simple random sampling methods. The required data were collected using two questionnaires. SPSS 16.0 and some statistical tests including Chi-Square, Independent-Samples T-Test, ANOVA, Kruskal-Wallis tests as well as, Pearson Correlation coefficient were used to analyze the collected data. P<0.05 was considered statistically significant.

RESULTS: The results showed that among the dimensions of organizational culture, Collectivism and Power Distance had the highest (26.26±7.11) and lowest (8.50±3.06) mean score, respectively. Among the organizational maturity dimensions, Clerk and Service and Reward System had the highest (36.45±9.31) and lowest (20.28±6.39) mean score, respectively. Also, among the studied demographic characteristics, there was a significant relationship only between age and organizational maturity (P=0.04). Furthermore, the results showed that there was a significant positive correlation between organizational culture and organizational maturity (r=0.845, P<0.001).

CONCLUSION: According to the present study results, organizational culture improvement can increase the organizational maturity. Therefore, the following suggestions can be offered for improving organizational culture and, consequently, organizational maturity:

- Providing sufficient resources, including human resources, in different departments and units to carry out various activities efficiently, providing opportunities for all staff to attend required training classes in order for they become familiar with the best methods of doing activities and the goals and expectations of their duties, establishing a fair reward and recognition system for appreciating employees' favorable performances and practical suggestions offered, creating proper and safe working conditions with peace, security and enough space for personnel etc.

Keywords: organizational culture, organizational maturity, general hospitals

On the other hand, many organizations today are trying to achieve more maturity in the gradual evolution of their processes. Organizational maturity describes the knowledge, skills and abilities of the organization human resources and their capabilities to apply these skills and abilities to improve job performance. In other words, organizational maturity introduces special skills and expresses the relationships of these skills and abilities with some variables such as job satisfaction, leadership styles, efficiency and productivity, etc. and, finally, provides strategies and better organizational methods to meet the organization needs [4].

Organizational maturity is a component enabling organizations to achieve stability, prosperity and outshining the competitors through standardizing the application of knowledge, skills, and proper management.
techniques and methods [5]. In a mature organization, workers do the repeatable work and fulfill the requirements expected from their positions. The more mature the organization is, the more ability to attract, develop and retain the talented and skilled workers needed for performing the jobs it has [4].

Organization is a social system in which human resources are the most important factor of its efficiency and effectiveness and among the various organizations, health care organizations, especially hospitals, have great importance because they play an important role in maintaining and improving the human health and, therefore, considering their dominant culture and organizational maturity level is very important [6-7]. The hospital culture influences the performance of employees, as well as, the effectiveness and success of the hospital [8].

The results of some studies show that organizational culture has significant relationships with organizational entrepreneurship [9], creativity and innovation [10-11] organizational commitment [12-14], employees’ and organizational productivity [15-17], efficiency [17-18], strengthening the recommendation system [19], job satisfaction and job motivation [14, 20-24], organizational trust [25], organizational effectiveness and performance improvement [26-27], the level of employee participation in decision making [28], decreasing job stress and anxiety [29-30], and reducing employees' depression and burning out [31-32].

Also, the results of some other studies indicate that organizational maturity has significant relationships with increasing the accuracy of managers and employees in identifying weaknesses of operations and routine activities and processes in order to improve processes [4], organizational innovation [11], and job satisfaction [33-34].

Finally, considering to the importance of these two factors in improving the performance and productivity of organizations including hospitals, and given that the current study researchers did not find any similar study in Shiraz hospitals in their searches, this research was conducted to study the relationship between organizational culture and organizational maturity in the general hospitals affiliated to the Shiraz University of Medical Sciences in 2012 in order to acquaint managers with the importance of organizational culture and its effects on organizational maturity, and help them to make the hospitals more successful and efficient, and with higher performance.

This sample was selected using stratified sampling proportional to size method, so that each of the two hospitals was considered as a stratum in which the studied sample of employees was selected considering the total number of each hospital employees and using simple random sampling method by random numbers table.

The required data were collected using two questionnaires. The first questionnaire consisted of two parts. Its first part included 11 items to determine the studied employees' demographic data (such as age, sex, marital status, education level, experience, etc.) and the second part included 50 items developed by Hosseini and colleagues [7] to assess the dimensions of organizational culture including Masculinity/Femininity (7 items), Attention to details (8 items), Innovation (6 items), Risk taking (6 items), Stability (4 items), Collectivism (10 items), Power distance (3 items), and Bureaucratic/Organic orientation (6 items). A five-point Likert scale was used to measure the organizational culture whereby 1 refers to very little and 5 as very much [7]. The validity and reliability of this questionnaire had been confirmed in Hosseini and colleagues study (α=0.88) and found to be adequate for the analysis purpose.

The second questionnaire included 61 items developed using the Persian version of the People Capability Maturity Model (P-CMM Model), which was provided by Carnegie Mellon University, to determine the dimensions of organizational maturity including Clerk (16 items), Communication and coordination (10 items), Work environment (8 items), Performance management (10 items), Training and Development (8 items), and Service and reward system (9 items). A five-point Likert scale was used to measure the organizational maturity whereby 1 refers to very little and 5 as very much [35-36]. The validity and reliability of this questionnaire had been confirmed in the Hatampour and colleagues’ study (α=0.96) and found to be adequate for the analysis purpose [4].

Informed consent was obtained from all nurses participating in this study. SPSS 16.0 and some statistical tests including Chi-Square, Independent-Samples T-Test, ANOVA, Kruskal-Wallis tests as well as, Pearson Correlation coefficient were used to analyze the collected data. P<0.05 was considered statistically significant.

MATERIAL AND METHODS:

This was an applied, cross-sectional, descriptive - analytical study conducted in 2012. The population study was all employees of general hospitals affiliated to Shiraz University of Medical Sciences included two hospitals. A sample size of 187 employees was determined using the findings of previous studies, the results of the pilot study, as well as the following formula (assuming α=0.05, β= 0.1, r=0.5): \[ n = \frac{3(2\times1+(\frac{z_α}{\beta})^2)}{\left(\frac{z_α}{\beta}\right)^2} + 3 = 187 \]

RESULTS:

The results showed that most of studied employees were men (n=105, 56.15%), married (n=101, 54.01%), in the less than 30 years age group (n=97, 51.87%), had a baccalaureate degree (n=89, 47.60%), were in the diagnostic-therapeutic categories (n=103, 55.09%), were contract employees (n=83, 44.38%), and had lower than 10 years job experience (n=122, 65.24%) (Table 1).

Also, the results showed that among the dimensions of organizational culture, Collectivism and Power Distance had the highest (26.26±7.11) and lowest (8.50±3.06) mean score, respectively. Among the organizational maturity
Table 1. The demographic characteristics of studied employees

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency (%)</th>
<th>Variables</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td>Job Category</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>105 (56.15)</td>
<td>Administrative-financial employees</td>
<td>84 (44.91)</td>
</tr>
<tr>
<td>Female</td>
<td>82 (43.85)</td>
<td>Diagnostic-Medical</td>
<td>103 (55.09)</td>
</tr>
<tr>
<td>Total</td>
<td>187 (100)</td>
<td>employees</td>
<td>187 (100)</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td>Employment Status</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>86 (45.99)</td>
<td>Contract employees</td>
<td>83 (44.38)</td>
</tr>
<tr>
<td>Married</td>
<td>101 (54.01)</td>
<td>Treaty employees</td>
<td>35 (18.72)</td>
</tr>
<tr>
<td>Total</td>
<td>187 (100)</td>
<td></td>
<td>187 (100)</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td>Job Experience (years)</td>
<td></td>
</tr>
<tr>
<td>Less than 30</td>
<td>97 (51.87)</td>
<td>Total</td>
<td>187 (100)</td>
</tr>
<tr>
<td>30-40</td>
<td>57 (30.48)</td>
<td>&lt;10</td>
<td>122 (65.24)</td>
</tr>
<tr>
<td>More than 40</td>
<td>33 (17.65)</td>
<td>10-20</td>
<td>40 (21.39)</td>
</tr>
<tr>
<td>Total</td>
<td>187 (100)</td>
<td>&gt;20</td>
<td>25 (13.37)</td>
</tr>
<tr>
<td>Education Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma and Under</td>
<td>26 (13.90)</td>
<td>Total</td>
<td>187 (100)</td>
</tr>
<tr>
<td>Diploma</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Associate Degree</td>
<td>30 (16.04)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>89 (47.60)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master's Degree and above</td>
<td>42 (22.46)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>187 (100)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Mean and Standard Deviation (SD) of organizational culture and organizational maturity and their dimensions

<table>
<thead>
<tr>
<th>Organizational Culture Dimensions</th>
<th>Mean</th>
<th>SD</th>
<th>Organizational Maturity Dimensions</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masculinity/Femininity</td>
<td>18.52</td>
<td>4.27</td>
<td>Clerk</td>
<td>36.45</td>
<td>9.51</td>
</tr>
<tr>
<td>Attention to Details</td>
<td>22.06</td>
<td>4.82</td>
<td>Communication and Coordination</td>
<td>27.79</td>
<td>8.64</td>
</tr>
<tr>
<td>Innovation</td>
<td>15.84</td>
<td>3.90</td>
<td>Work Environment</td>
<td>20.44</td>
<td>6.30</td>
</tr>
<tr>
<td>Stability</td>
<td>10.43</td>
<td>2.80</td>
<td>Training and Development</td>
<td>20.34</td>
<td>5.89</td>
</tr>
<tr>
<td>Collectivism</td>
<td>26.26</td>
<td>7.11</td>
<td>Service and Reward System</td>
<td>20.28</td>
<td>6.39</td>
</tr>
<tr>
<td>Power Distance</td>
<td>8.50</td>
<td>3.06</td>
<td>Total Organizational Maturity</td>
<td>153.9</td>
<td>40.2</td>
</tr>
<tr>
<td>Bureaucratic/Organic orientation</td>
<td>16.73</td>
<td>3.71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Organizational Culture</td>
<td>135.2</td>
<td>28.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

dimensions, also, Clerk and Service and Reward System had the highest (36.45±9.51) and lowest (20.28±6.39) mean score, respectively (Table 2).

In the present study, among the studied demographic characteristics including sex, age, education level, etc., there was a significant relationship only between age and organizational maturity (P<0.04) so that the organizational maturity increased with increasing age. However, other demographic characteristics did not have any statistically significant relationships with organizational culture and organizational maturity (P> 0.05). Furthermore, the results showed that there was a significant positive correlation between organizational culture and organizational maturity (r=0.845, P<0.001) indicating that an increase in the organizational culture leads to an increase in the organizational maturity (Table 3).

**DISCUSSION:**

In today's world, increasing efficiency and productivity is the most important goal of organizations managers, and all managers in all organizations and institutions are seeking greater effectiveness, efficiency and productivity [37]. This research aimed to study the relationship between organizational culture and organizational maturity in general hospitals affiliated to Shiraz University of Medical Sciences in 2012 in order to help managers to be more successful in achieve the goals of the health system efficiently and effectively.

The results of this study showed that among the demographic characteristics of studied employees, there was only a significant relationship between age and organizational maturity, and other demographic characteristics did not have any significant relationships with organizational culture and organizational maturity. The results of Abbasi (1998) [38], Javadi and colleagues (2005) [33], Ghahremani and colleagues (2010) [9], and Hatampour and colleagues' (2012) [4] studies, which showed that organizational culture or organizational maturity did not have any significant relationships with sex, marital status, and job experience, confirm the present study results.

The results of the current study showed that there was a significant relationship between organizational maturity and age (P<0.04) so that the organizational maturity increased with increasing age. The reason could be that increasing age, which is usually accompanied by increased job experience, can result in increasing the consistency and stability in the person's work and tasks, having more control over his/her duties, as well as, increasing his/her ability to...
coordinate the activities in the organization. Also, increasing age leads to increase in the interpersonal communication skills for establishing and maintaining effective working relationships and, consequently, establishing better relationships among working groups and, finally, increase in the organizational maturity.

However, Nasiri (2012) in his study, conducted on the school administrators, [3] and Javadi and colleagues (2005) [33] in their studies, conducted on the teaching hospital managers, did not find any significant relationship between age and organizational maturity. Therefore, the results of their studies are not consistent with the present study results. The difference between these study results can be due to the difference in their studied target populations.

Finally, the results of the present study showed that there was a significant positive correlation between organizational culture and organizational maturity indicating that an improvement in the organizational culture and an increase in its mean could increase the organizational culture. The results of this study showed that in the studied hospitals, there were not sufficient resources to carry out various activities efficiently and, also, due to employees' overwork, more emphasis was on maintaining the status quo and there were not adequate opportunities for employees to attend training classes and familiarize with new methods and activities, as well as, conduct different researches in order to find solutions to their available problems, all of which can prevent the organization from its future development.

On the other hand, giving people enough opportunity to offer new suggestions, promoting the spirit of self-reliance, independence, effort and perseverance, and responsibility in the employees, as well as, establishing good communication with others were moderate which can cause the lack of adequate communication and coordination among the processes and activities, as well as, among the departments and staff with each other and, also, the lack of consistency in performing tasks and duties. Consequently, all of these problems can prevent the organization from reaching its greater maturity.

Hosseini and colleagues (2010), also, in their study concluded that there was a significant positive correlation between organizational culture and organizational maturity [7], which confirms the present study results.

Limitation:
The present study had a limitation. The sample size in this study was relatively small due to the low number of general hospitals in Shiraz which may result in reducing the statistical significance of the results, and can restrict the generalization of the findings.

**Conclusion:**
According to the present study results which showed that there was a significant positive correlation between organizational culture and organizational maturity and that an organizational culture improvement could increase the organizational maturity, the following suggestions can be offered for improving organizational culture and, consequently, organizational maturity:

Providing sufficient resources, including human resources, in different departments and units to carry out various activities efficiently, providing opportunities for all staff to attend required training classes in order for they become familiar with the best methods of doing activities and the goals and expectations of their duties, establishing a fair reward and recognition system for appreciating employees’ favorable performances and practical suggestions offered, creating proper and safe working conditions with peace, security and enough space for personnel, etc. Finally, it is recommended for future studies conducting similar studies using larger samples and considering the results of this study, to conduct similar studies in the future with larger samples and in various parts of the country.
sample sizes and population studies, as well as some research to study the effects of variables such as organizational structure, leadership style, organizational commitment, job satisfaction, etc. on organizational maturity in hospitals.

Acknowledgment

We would like to thank the hospitals' heads and staff for their kind cooperation with the researchers in collecting and analyzing the data.

Conflict of Interest

The authors declare no conflict of interest.

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25