Effect of organizational changes on organizational health indicators and its relationship with organizational effectiveness

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Abstract

Aims: Organizational changes have consequences and each organization undergoing changes should confront these consequences properly. The purpose of this study was to assess the changes’ effects on organizational health indicators and its relationship with organizational effectiveness.

Methods: This cross-sectional descriptive study was done in 2010 on 59 military sub-officers who were selected by census sampling method. The data collection tool was a researcher-made questionnaire used in a similar study that was applied after confirming its validity and reliability. The organizational indicators were evaluated before and after the changes and their changes were assessed and the relationship between the organizational effectiveness index and organizational health indicators was evaluated. Data was analyzed using descriptive statistical methods and Kolmogorov-Smirnov test, paired T-test and Spearman correlation by SPSS 18 software.

Results: Healthy work environment (4.7%), organizational effectiveness (6.4%), mood of the staff (6.6%) and employees’ participation (16.08%) showed a significant reduction (p=0.041, 0.013, 0.003 and 0.048, respectively). Also organizational effectiveness had a high and significant positive correlation with organizational health indicators.

Conclusion: Organizational changes may affect organizational health indicators and reduce the following indicators: mood of the staff, healthy work environment, organizational effectiveness and employees’ participation. It seems necessary to measure organizational health indicators after organizational changes and remove the shortages.

Keywords: Organizational Change, Organizational Health Indicators, Organizational Health, Effectiveness

Introduction

At the present time, the base of managers’ work is focused not only on the pivot of common management emphases, but also on an altered pivot which is indeed the change management. That is the way that each organization’s management can direct it in unfriendly circumstances toward the goals [1]. In the period of dramatic changes and evolutions such as the era in which we live, the change and alteration are common phenomena and accepted norms. In the age of rapid structural changes, only those who are leaders and pioneers of changes will survive. The central challenge of the management in the 21st century is that the organization would have a leading role in the changes [2]. It should be noted that the organizational changes have consequences and each organization undergoing changes should confront these consequences properly. Perhaps the deepest changes affecting individuals are the changes in the beliefs, values and assumptions which their impact is the effect they have on the individuals’ performance and consequently, on the organizational health [3]. The changes can affect the motivation and enthusiasm and attitude of the employees as well as their performance and change the organizational health [4]. The concept of organizational health lets us have a gross picture of organizational health. In healthy organizations, the employees are committed, duteous and useful and enjoy a high morale and performance. People go to their work with interest and are proud of working in such a place. The objectives of the institute are clear for the majority of the staff and the problems are resolved actively and realistically. Moreover, planning in the institute is done based on the realities, foresight, and performance and establishing order. Judgment and logical wishes of the low-level employees in the organization are considered and there is cooperation in the organization and honesty is clear in behaviors. Decision making is done to enhance the effectiveness of the institute and the communication channels are open. High success is evident in the organization and leadership and management are flexibly applied.

In Miles’ opinion, organizational health is the survival of the organization in its environment and adaptation with it and the improvement and expansion of its potential for further adaptation. Miles says the organizational health implies not only a state going
The aim of this study was evaluating the effect of organizational changes on organizational health indicators and its relationship with organizational effectiveness.

Methods
This cross-sectional descriptive study was conducted in 2010. The study population was 59 military sub-offices from a military unit with a staff area and two supervised units. Due to the low number of samples, sampling was not conducted and the study was done by census sampling method. The organizational health indicators of this military unit were evaluated before and after the changes and their changes were assessed. The induced changes in the organization were included changing the responsible and the work environment of employees.

To assess the organizational health indicators, the applied questionnaire in the study of Tofighi and Kianpour in 2002 was used which consisted of 32 questions (with slight modifications). The mentioned questionnaire has 4 questions about the organizational awareness, 8 questions about the staffs’ mood, 5 questions about the health of work environment, 5 questions about planning and organizing, 5 questions about team work, and 5 questions about the staff’s participation. These indicators were used by Dennis Jaffe and Scott to enable the organization. To evaluate the organizational effectiveness, a questionnaire containing 10 questions was prepared based on the goal achieving approaches to, systemic, strategic factors and competitive value. The validity of the questionnaire was confirmed via a survey by 7 management professors and its reliability was confirmed by test-retest method. The results of the reliability analysis showed the correlation of 0.78. The questionnaire of the study was set into two questionnaires. The questionnaire 1 included questions related to before the implementation of the changes and questionnaire 2 included questions relating to after the implementation of the changes.

Data was collected in two stages within a month as completely paired and the obtained results were analyzed using SPSS 18 software and descriptive statistical methods. First, the collected data were studied using Kolmogorov-Smirnov which showed a normal distribution. The description of the data was done using the central and distribution indicators and the data analysis was carried out by paired t-test and Spearman correlation coefficient. Regarding the effectiveness of the changes on the organizational health indicators, it should be noted that the scores related to each indicator was calculated through the...
evaluation of the mean score of the questions related to that indicator and the performed changes were assessed through the evaluation of the scores’ difference before and after the changes and were determined as a percentage.

Regarding the relationship between the organizational health indicators and the effectiveness index, the correlation was evaluated between each indicator and the organizational effectiveness before and after the changes. Differences before and after the changes and were assessed through the evaluation of the scores’ difference before and after the changes.

Results
In the studied samples, the highest frequency distribution was related to the Bachelor’s degree and associate degree (30.2%) and the lowest frequency distribution was related to under-diploma degree (3.12%).

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Scores before changes</th>
<th>Scores after changes</th>
<th>Percentage of increase</th>
<th>Percentage of decrease</th>
<th>Significance levels (based on paired T-test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational awareness</td>
<td>1.87 (0.567)</td>
<td>1.88 (0.510)</td>
<td>0.53</td>
<td>-</td>
<td>0.912</td>
</tr>
<tr>
<td>Mood of the staff</td>
<td>2.12 (0.503)</td>
<td>1.98 (0.510)</td>
<td>-</td>
<td>6.6</td>
<td>0.003</td>
</tr>
<tr>
<td>Healthy work environment</td>
<td>2.30 (0.520)</td>
<td>2.19 (0.548)</td>
<td>-</td>
<td>4.7</td>
<td>0.041</td>
</tr>
<tr>
<td>Planning and organization</td>
<td>2.44 (0.402)</td>
<td>2.39 (0.446)</td>
<td>-</td>
<td>2.04</td>
<td>0.343</td>
</tr>
<tr>
<td>Team Work</td>
<td>2.41 (0.436)</td>
<td>2.40 (0.396)</td>
<td>-</td>
<td>0.41</td>
<td>0.876</td>
</tr>
<tr>
<td>Employees’ participation</td>
<td>2.30 (0.576)</td>
<td>1.93 (0.393)</td>
<td>-</td>
<td>16.08</td>
<td>0.048</td>
</tr>
<tr>
<td>Organizational effectiveness</td>
<td>2.16 (0.475)</td>
<td>2.02 (0.405)</td>
<td>-</td>
<td>6.4</td>
<td>0.013</td>
</tr>
</tbody>
</table>

Healthy work environment (4.7%) in the whole organization, organizational effectiveness (6.4%) in organizational unit, staff’s mood (6.6%) in the supervised units, employees’ participation (16.8%) in the managerial staff showed a significant decrease with 95% confidence interval. The indicators of organizational awareness, team work, and planning and organizing showed no significant change (Table 1). In the survey of the questions of the questionnaire, among the questions related to the staff’s mood, scores of questions 14, 16, 18, and 19 had decreased with a coefficient of 95% and scores of questions 15 and 21 had decreased with a coefficient of 90%. Among the questions related to healthy work environment, scores of questions 24 and 26 had decreased with a coefficient of 95%. Among the questions related to employees’ participation, the score of question 41 had decreased with a coefficient of 90%. Among the
questions related to organizational effectiveness, the scores of questions 47 and 51 had decreased with a coefficient of 95% (Table 2).

The correlation between the organizational effectiveness and organizational health indicators before and after the changes is shown in Table 3.

**Discussion**

The findings of the present study showed that the organizational awareness was unchanged after implementing the changes. Investigating the reasons for the lack of change in this indicator showed that this indicator had not changed in awareness of the manager’s expectations, awareness of the colleagues’ expectations, awareness of objectives and planning of the organization, and awareness of work duties and their importance. In the study of Tofighi and Kianpour in 2002, after implementing the changes in organization, the organizational awareness in the employees had decreased 3% [4]. This result was not consistent with the findings of this study and indicated that the managers and administrators were more successful in this study.

Investigating the causes of the decrease in the staff’s mood in the studied organization based on the significant changes in the scores of research questions (according to the results of questions 14 to 21) showed that the above indicator had decreased due to the decrease in being respected, lack of receiving rewards for their individual efforts, lack of interest to learn new issues, and decrease of trust in authorities to subordinates. It can be said that regarding the change of managers, the decrease of the mutual trust to each other seemed a logical issue due to the lack of enough knowledge between employees and managers. The lack of managers’ complete understanding of the employees was a cause that they did not give employees rewards or caused the decrease of rewards. Giving rewards was based on the performance evaluation, and the performance evaluation was done through the strengths and weaknesses of the performance, important events, and graphic rating scales and the scales based on the behavior [10]. It can be also said that changing the managers due to the managerial aspects, the relations of the mangers and subordinations, psychological- psychological factors, etc. caused that the staffs would consider their colleagues or officials’ behavior as disrespect, whereas there was no intent to disrespect. Changing some factors such as the organizational policies and professional duties had caused that they felt the respect had been decreased. Anyway, the managers should consider that decreasing the trust between them and the employees and giving no reward to the employees’ efforts and lacking their encouragement could affect the employees’ performance, and therefore affect the performance of the organizations.

In the research of Tofighi and Kianpour in 2002 after implementing the organizational changes, the staff’s mood had decreased 1.5%. The results of the Tofighi and Kianpour’s study showed that the changes in the organization (changes in the managers and administrators) had caused a decrease and deficiency in the employees’ interest and mood, and it could be due to thought changing about the managerial method in the organization. The mentioned results were consistent with the results of the present study about the decrease of the staff’s mood. Janis. T. S. had shown in a study in 1997 that there was a significant relationship between the organizational health and job satisfaction [11]. This result was consistent with the findings of this study. The present study stated that the organizational health had caused the interest of the employees to the work in the organizations and it was clear in the results of this study. Since the interest rate of employees to the work in organizations represented their job satisfaction, the present study also indicated that there was a relationship between the organizational health and job satisfaction. The research of Tofighi and Kianpour in 2002 showed that providing the groups of the quality improvement caused an increase in the staff’s mood with 12.4% [4]. This result was consistent with the findings of this study, because there was no specific plan to increase the staff’s mood in the studied organization. The results of the conducted study in the South Dakota Department of Transportation Research in 2006 showed that encouraging the employees’ individual efforts can cause the increase of the job satisfaction, group work, and employees’ trust to the managers [12], therefore it can cause the improvement of the organizational health [5]. These results were consistent with the findings of this study, because the present study showed that the decrease of encouragement and rewards to the employees’ individual efforts was one factor of increasing the staff’s mood and the organizational health.

In the present study, the healthy work environment had decreased 4.7% after implementing the changes. This indicator indicated the existence of the necessary conditions for learning new subjects, feeling of job security, and being pleasant of work environment, dealing with clients properly and effective inspections. Investigating the causes of decreasing the above indicator (with respect to the results of questions 24
employees with the managerial jobs, it is necessary to since the decrease of this indicator had occurred in the employees’ participation in the management [9]. Kate Davis believes that considering the human relationship among the employees such as the improvement of the relationship, participation, and consultation with them has unavoidable effects in the stylized work environment and the improvement of the human relationship, and finally the increase of efficiency in the organization [13]. In the study of Tofighi and Kianpour after implementing the changes in the organization, the work environment had become healthier. This means that in the work environment, dealing with clients had improved and the work environment had become more pleasant. This result was inconsistent with the findings of this study. The results of Bahram Mohammadi’s study in 2008 showed that there was a positive relationship between the job life quality and the organizational health in Kurdistan’s high school and among the variables of the job life quality, providing the promotion opportunity had the highest effect on the organizational health [14]. This result was somewhat consistent with the results of the present study. The results of this study in terms of the healthy work environment were consistent with Janice’s research about the relationship between the organizational health and the social environment [11]. Since the results of this study showed that being pleasant of the work environment and effective inspections which are the components of the social environment were the effective factors on the organizational health.

The employees’ participation in the present study indicated that sounding out the employees in decisions about their work, consultation with subordinates, regular staff meetings with officials and involvement of the employees in the management planning (regarding questions 37 to 41 of the questionnaire). Investigating the causes of the decrease in the employees’ participation showed that the above indicator had mainly decreased due to the decrease in the employees’ participation in the management planning (based on the findings of question 41) and since the decrease of this indicator had occurred in the employees with the managerial jobs, it is necessary to be assessed accurately. The employee involvement in the organizational decisions is not only involved the physical presence in the decision-making meetings, but also their opinions should be taken account and their ideas and suggestions should be valued. The meaning of the employees’ participation is an involved process which its goal is the encouragement of the employees and of the organization for having more commitment and involvement in the success of the organization [15]. The results of the South Dakota Department of Transportation Research had shown that involving the employees in the decision-making can increase job satisfaction, group and team work, trust of the employees to the managers, good communication between the employees [12]. This result was somewhat consistent with the findings of this study. The present study had shown that the involvement of the employees in the organizational planning was the component of the organizational health change and was affected by the organizational health.

The cause of decreasing the organizational effectiveness in the studied organization is the undesirable level of services provided by the organization and the failure of the organization success in providing job satisfaction. It should be considered that the important and major issue in the organizational change is the improvement of the organizational effectiveness through development in the organizational processes. The organizational development is a planned activity or effort throughout the organization which increases the organizational effectiveness and health through the change in the organizational processes [16].

Evaluating the correlation coefficient of the organizational health and organizational effectiveness indicators showed that the organizational health indicators had a significant positive correlation with the organizational effectiveness both before and after the changes. In the stage before the changes, the highest correlation between the organizational health and organizational effectiveness indicators were included: 1) healthy work environment, 2) employees’ participation, 3) staff’s mood, 4) organizational awareness, 5) group work and 6) planning and organization, respectively. In other words, in the stage before the changes, healthy work environment had the highest effect and planning and organizations had the lowest effect on the organizational effectiveness. The above order in the stage after changes was included: 1) healthy work environment, 2) group work, 3) staff’s mood, 4) organizational awareness, 5) planning and organization, 6) employees’ participation. The above order showed that after the changes, the
The most important indicator affected the organizational effectiveness was the healthy work environment as same as before the changes but the second indicator was group work which was replaced for the employees’ participation. The third and fourth indicators were the same as before the changes, but the fifth and sixth indicators had changed. Therefore, it can be concluded: first, after the organizational changes, the order of the organizational health importance had changed in influencing the organizational effectiveness.

Second, to improve the organizational effectiveness using the organizational health indicators, the correlation among them should be found and the order of the organizational health importance should be specified in influencing the organizational effectiveness. Then based on the obtained order, planning and organization can be done with respect to the necessary priorities for improving the organizational effectiveness.

Mosadeghrad in a study in 2005 had concluded that the leadership style was one of the effective factors in increasing the effectiveness, efficiency, and ultimately productivity of the organizations, and the participatory management style had been effective in increasing the productivity of the hospitals. This result was consistent with the results of the present study. Because based on the present study, the employees’ participation which was one of the organizational health indicators had a direct and positive relationship with the organizational effectiveness [10]. The organizational health is a concept that reflects the organizational effectiveness in the various environments and shows how the organization reacts to the changes in the events [11].

Considering that the organizations face the dynamic and changeable environments, they have to be consistent with the environmental changes in order to survive their existence. Since humans are the most resource of the organization and those who are responsible for the organizational approaches and functions are responsible for changes in the organization, an environment should be prepared in the organization in which flourishes both human beings and their talents with respect to the empowerment the human resource via the democratic management as well as the preparation of the employees to deal with the changes [17]. It should be noted that considering the studies as same as the previous one [4] and also considering the reliability of the applied questionnaire in the present study in evaluating the organizational health indicators of the military units, this questionnaire can be used with the reform and completion to evaluate the organizational health indicators in all military units.

It is recommended that the ability of the applied indicators and questionnaire in the present study be studied and analyzed in the further studies to evaluate the organizational health indicators in the various military units. The organizational effectiveness indicator and the questions related to it which had the positive and direct significant coefficient with the organizational health indicator and evaluated the separate dimensions of the organizational health will be added to the applied indicators and questionnaire in this study and the validity of the research questions should be reviewed and reformed in perspective with the future condition and structure of the various military units.

Conclusion

Organizational changes affect organizational health indicators and decrease the following indicators: mood of the staff, healthy work environment, organizational effectiveness and employees’ participation. It seems necessary to measure the organizational health indicators after organizational changes and remove the shortages. It can be also said that the effects of changes on the organizational health are positively associated with organizational effectiveness; it means that if the change decrease the organizational health indicators, it’s also able to decrease organizational effectiveness.

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