

A comparison of level of organizational learning in hospitals based on ownership type: Case study in Iran

Ghahraman Mahmoudi(PhD)

Hospital administration research center, Islamic Azad University, Sari Branch, Sari, Iran
E-mail:Ghahraman48@yahoo.com
Tel:+989111545461

Vahid Rahimi Yeganeh(Msc)

Masters of Health Services Management, Lorestan University of Medical Sciences, KhorramAbad, Iran

vahidry@gmail.com

[Tel:+989166633971](tel:+989166633971)

Fereshteh Fani(Ms.c)

Master of Health Services Management, Mazandaran University of Medical Sciences, Mazandaran, Iran

Fani.fereshteh@gmail.com

Shaharbanoo Mahmoudjanloo(Msc)

Masters of Health Services Management, Mazandaran University of Medical Sciences, Sari, Iran

smh6666@yahoo.com

Tel: +989116268486

Mohammad Ali Jahani *(PhD)

Social determinants of health research center, Health Research Institute, Faculty of Medicine, Babol
University of Medical Sciences, Babol, Iran (Corresponding Author)

Drmajahani@yahoo.com

[Tel:+989111148273](tel:+989111148273)

A comparison of level of organizational learning in hospitals based on ownership type: Case study in Iran

Ghahraman Mahmoudi(Ph.D)¹, Vahid Rahimi(Ms.c)², Fereshteh Fani(Ms.c)³, Mohammad Ali Jahani(Ph.D)^{4*},
Shaharbanoo Mahmoudjanloo(Ms.c)³

¹Associate Professor of Hospital administration research center , Islamic Azad University, Sari Branch, Sari, Iran

²Master of Health Services Management, Lorestan University of Medical Sciences, Lorestan, Iran

³Master of Health Services Management, Mazandaran University of Medical Sciences, Mazandaran, Iran

⁴Associate Professor of Social Determinants of Health Research Center (SDHRC), Health Research Institute, School of medicine, Babol University of Medical Sciences, Babol, Iran

Corresponding Authors: Drmajahani@yahoo.com

Abstract

Objective: Learning new skills, will increase self-confidence of employees tremendously to reach their organization targets. This study was performed aiming a comparison between levels of organizational learning in hospitals with regards to ownership type. **Methods:** This cross-sectional study was conducted using an analytical-descriptive approach in 2016. The research community members were 2162 employees of the nominated hospitals in Lorestan Province. The number of samples was 339 people, using Cochran's formula with a reliability factor of 95%. The data collection tool was the Persian edition of Watkins and Marsick's standard questionnaire (2003). The collected data was analyzed by SPSS 20 software using statistics tests (i.e. Kolmogorov-Smirnov test, t-test and ANOVA) and $p \leq 0.05$ was considered significant. **Results:** The average score of learning variable was 2.77 ± 0.64 for teaching hospitals, 2.57 ± 0.77 for Social Security hospitals and 3.21 ± 0.94 for private hospital. Learning variables variances were not the same in the three type of above mentioned ownerships ($p < 0.001$), Also significant differences were found between learning aspects of individual learning ($p < 0.001$), group learning ($p = 0.007$) and organizational learning ($p = 0.002$) based on the type of ownership of hospitals. **Conclusion :** The level of organizational learning in hospitals has a significant difference regarding to their type of ownership. The level of learning can be improved providing staff's empowerment initiatives towards common goals, creating equal opportunities for continues learning for all personnel, and appropriate organization's relationship with environment around.

Keywords: Hospitals, Organizational learning, Individual learning, Group learning, Iran

Introduction

Organizational learning is a collection of dynamic, complicated and holistic processes (1) that Based on existing knowledge and experience background within organization, it helps creating fundamental qualifications, common experience alignment, reducing issues and increasing potential solutions among employees reaching organization goals (2).

Organizational learning is a crucial factor facing fast environment changes (3) and failure to do so is major cause of organizations loss (1). this reason organizations attempt to provide workspaces that promote and enrich learning(4). Organizational learning is a resource to distinguish between organizations strategically, a basis to create competitive advantages (5, 6) and better functional and financial decision making (7). Formation of new organizations based on learning is one of their essential characteristics (8). Successful managers use the learning

capacity of the organization to turn threats into opportunities (8). Studies show that understanding of the organizational learning culture is low between high-level, middle, and executive managers with no significant difference between them (9).

Organizational ownership affects organizational learning culture and subsequently affects the performance of the top management team (10). The satisfaction and performance desirability will be low in the organization, if organizational structure does not encourage learning (9, 11). Therefore, accomplishing scientific work and improving performance is disrupted in an organization such as a hospital (12). Once it leads to change in behaviour and improve organizational performance, it can be said that all three levels of learning exist in the organization (13).

A two-year study of Wilson and Hartang investigated leaders of non-competing international companies and demonstrated that learning was 35% just organizational, 13% through the group and 11% at the individual level. The operational and empirical learning have been 29% effective while it has been 12% for merely knowledge base learning (14). On the other hand, learning takes place in two cycles. First cycle is individual learning which is the foundation of learning in organizations (15). The institutionalization of individual learning is important to boost learning in the organization (16, 17). In the second cycle, the social phases of individual learning are coupled with group learning and reach organizational learning. This process includes direct understanding (in individual learning), interpretation and convergence (in group learning), formalization (in organizational learning) (15).

Several studies inside and outside Iran have studied individual, organizational and group aspects of learning. Some Iranian studies are carried out by: Farzianpour et al. (12) on the level of organizational learning in Bandar Abbas; Bahadori and colleagues On the learning capacities of Iranian nurses (18); Mirkamali et al. (19), the role of transformational leadership on organizational learning in SAIPA. And some foreign studies are: Kaçmaz and Serinkan, a research on levels of organizational learning in Turkish private and public educational institutions (20); Hasson et al. improving organizational learning through leadership training (21); Tomayo et al. organizational learning and innovation as sources of strategic fit for high tech manufacturing factories in Spain (22); Lim's study on relationships among organizational commitment, job satisfaction, and learning organization culture in one Korean private organization (23); and Cheung and et al. study on Organizational learning in shop floor level in a manufacturing company (24). According to the referred articles, no research has been carried out on staff learning in hospitals based on the type of ownership of the hospital (educational, social affairs and private). This research was conducted with the aim of comparing the levels of organizational learning of the hospital by type of ownership.

Methods & Materials:

This cross-sectional study was conducted using an analytical-descriptive approach in selected hospitals located in Lorestan province, Iran including two Teaching hospitals, one Private and one social affairs(Social security) hospital in the year 2016. This study is approved by Ethical committee of Islamic Azad Sari Branch. The statistical population of

the study consisted of all administrative, financial and therapeutic staff of 2162 people. A number of 339 participants were determined regarding to the desired size of the statistical population (124 employees from Teaching hospitals, 78 people of Social Security hospital and 50 ones working in Private hospitals). The sample size was specified according to Cochran formula with 95% confidence interval. The sample size was calculated by Cochran's formula which is:

$$n = \frac{\frac{Z^2 pq}{d^2}}{1 + \frac{1}{N} \left(\frac{z^2 pq}{d^2} - 1 \right)}$$

Clustering technique was utilized in randomized classification clusters, in order to pick the samples. Accounting, staffing, physician, nurse, operating room, radiology and laboratory groups were selected as classes and the samples were chosen within the classes using simple randomized sampling. The main tool of this study was a questionnaire which included two parts of demographic information (gender, level of education, age, occupational background and occupation level), and a specific Watkins and Marsick's questionnaire (2003) for organizational learning levels including 17 questions in educational, private and social affairs hospitals. The questionnaire has been designed at three levels: individual, group and organizational from very low (1) up to very high (5) on Likert scale. The learning areas comprised three areas of individual, group and organizational.

The Persian edition of this questionnaire was used in the study of Nadi and Sajjadian (25). In this study 30 questionnaires were distributed, filled out and collected to evaluate reliability of the questionnaire (as a pre-test step). After entering data, the coefficient of reliability (Cronbach's alpha) was calculated 0.82 using SPSS-20 software.

The data collected was entered to and analyzed by SPSS 20 software at a significant level of $P < 0.05$, utilizing multi statistics tests: Kolmogorov-Smirnov test to investigate the normality of the data of quantitative variables, ANOVA test to scrutinize the differences between the research variables, the one sample t-test to verify the status of the research variables, Levene's test to assess the equality of variances and the Welch's test to identify differences between variables.

Findings:

The highest frequency in this study was 143 males (42.2%) in gender distribution, 184 nurses (54.3%) in Occupational distribution and 310 therapeutic staff (91.4%) in the type of professional services distribution. There were 211 (23.2%) of the Teaching hospitals, 78 (23%) of the Social Security hospital and 50 (14.7%) of Private hospitals .

Based on K-S test, research data distribution was normal ($Z=0.74$, $p\text{-value}= 0.64$).

The study of the status of the variables of research with one sample t-test and a constant value of 3 (mean and median) showed that the mean of learning variables in Teaching hospitals of Lorestan province was 2.77 ± 0.64 ($p < 0.001$), in Private hospital was 3.21 ± 0.94 ($p = 0.16$) and in Social Security hospital was 2.57 ± 0.77 ($p < 0.001$) (Chart 1) and (Table 1).

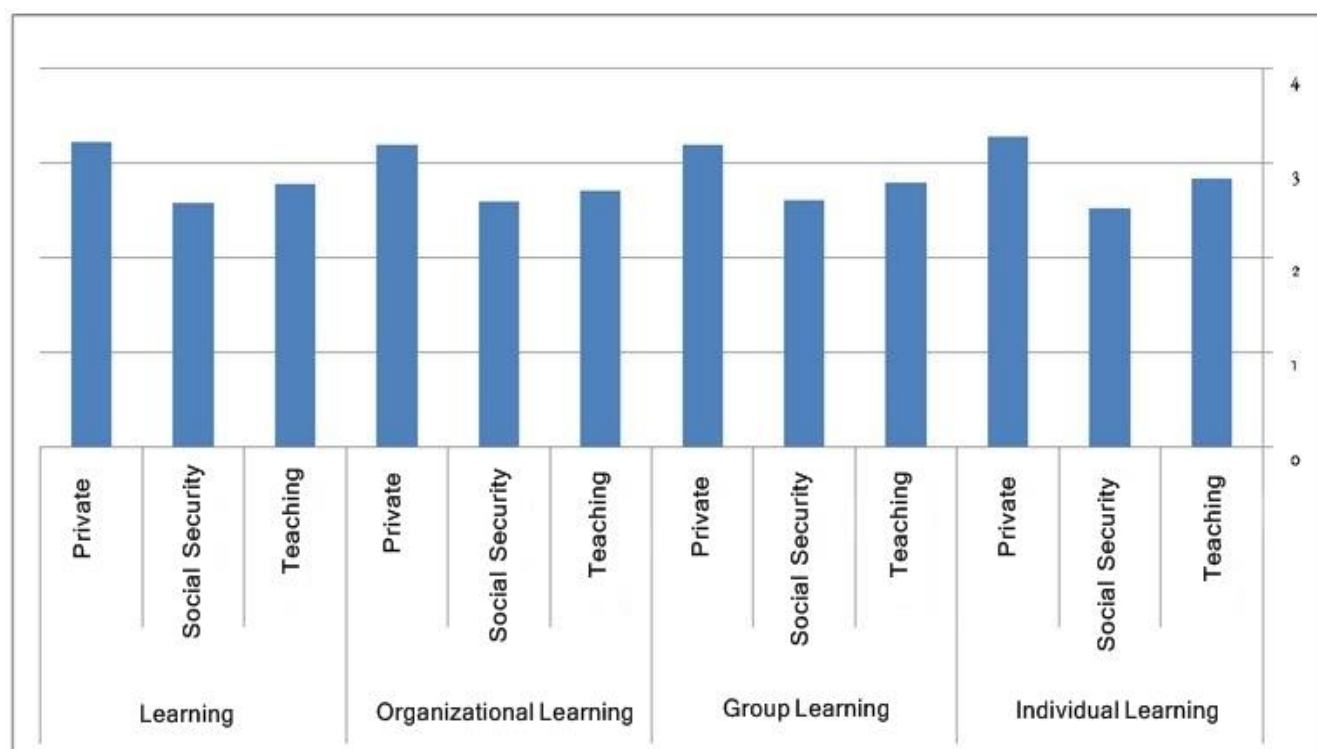


Chart 1. The mean of learning and its levels in the hospitals based on ownership type,2016

Table 1. comparative study of learning status in hospitals based on ownership type

Variable	Teaching				Social Security				Private			
	Mean±SD	t	f	p-value	Mean± SD	t	f	p-value	Mean± SD	t	f	p-value
Individual Learning	2/83 ±0/69	-3.67	210	0.000	2/52±0/82	-5.14	77	0.000	3/27±0/97	1.94	49	0.058
Group Learning	2/78±0/78	-4.12	210	0.000	2/60±0/92	-3.80	77	0.000	3/19±1.04	1.29	49	0.204
Organizational Learning	2/70±0/69	-6.19	210	0.000	2/59±0/84	-4.30	77	0.000	3/18±0/95	1.38	49	0.174
Learning	2/77±0/64	-5.25	210	0.000	2/57±0/77	-4.87	77	0.000	3/21±0/94	1.60	49	0.116

Levene's test used for equality of variances and it was demonstrated that, the variance of learning variables was not equal in three types of hospital ownership of Teaching, Social security and Private hospitals ($p < 0.001$). Therefore, the results of Welch's test were used to check the mean difference between groups. There was a significant difference between organizational learning variables based on the ownership of hospitals ($p < 0.001$). Also a considerable distinction was found between learning aspects, in individual learning aspect ($p < 0.001$), group learning ($p = 0.007$) and organizational learning based on the ownership of hospitals ($p = 0.002$) (Table 3).

Table 2. One-way Variance Analysis(ANOVA), learning variable and its dimensions in the studied hospitals,2016

Variable	Ownership	Frecuancy	Mean±SD	welch Statistics	p-value
Individual learning	Teaching	211	2.825 ^a ± 0.691	10.274	0.000
	Social Security	78	2.524 ^b ± 0.819		
	Private	50	3.267 ^c ± 0.972		
Group	Teaching	211	2.780 ^a ± 0.776	5.253	0.007
	Social Security	78	2.603 ^a ± 0.924		

Organizational learning	Private	50	3.190 ^b ± 1.044	6.920	0.002
	Teaching	211	2.705 ^a ± 0.694		
	Social Security	78	2.593 ^a ± 0.836		
Learning	Private	50	3.184 ^b ± 0.946	8.000	0.001
	Teaching	211	2.770 ^a ± 0.637		
	Social Security	78	2.573 ^a ± 0.774		
	Private	50	3.214 ^b ± 0.944		

Discussion:

Findings showed that organizational learning in private hospital was higher than average ,but in Teaching hospitals and Social security hospital it was less than average . The results of this research were aligned with the study performed by Farzianpour et al. (12), which illustrated that organizational learning capacity of Private hospitals was much higher than Social security and Teaching hospitals. Also matching with Mirkamali's study (19), who stated that the mean organizational learning in SAIPA was higher than average. The results of this research are consistent with the results of the research made by Kaçmaz et al. (20) and Aparicio et al.(26), which found a higher than average level of organizational learning for Private educational institutions comparing to public education institutions. The same is expressed moderately by Raj and colleagues (27) have suggested that organizational learning has a direct effect on innovation variables.

The findings of the current study are in contradiction with the results of Bahadori et al. (18), which indicates a moderate mean of organizational learning for nurses of an Teaching hospital affiliated to Tehran University of Medical Sciences. It sounds that the hospital was undergoing a series of training courses for employees at that time. Hampton et al. (28) showed that online training courses had positive impact on the effective learning outcomes of nursing students in United States. Also, the study of Montgomerie et al. (29) positively evaluated the impact of online education on personnel professional development in New Zealand. The study of Heidari et al in Iran (30), which investigated the role of organizational learning on patient care quality in Kerman public hospitals, showed that organizational learning plays a crucial role in respecting the rights and satisfaction of the patient. Lim's study in Korea (23) appraised a positive but average correlation between variables of learning culture in Private companies, which is inconsistent with the current research findings .

The results of the study showed that there is a significant difference between the levels of organizational learning with the types of hospital ownership. The level of individual, group, and organizational learning in Private hospitals is higher among all types of

assessed ownership styles. The results of this study are consistent with Xin's research (31) which states that there is a significant difference in terms of quality and cost between public and private hospitals in United States. Beyene et al. (32) concluded that the ownership type of manufacturing organizations affects the innovation performance. In their opinion Private manufacturing organizations have better performance indicators as they are investing more on R & D comparing to Government and public firms.

Also the investigation of Zhou et al. (33) in Chinese Private firms shows a positive correlation between organizational learning levels and financial performance and creativity in the organization. Private firms provide more training for their workforce since profitability and optimal financial turnover are important for the organization's continuity and survival. On other hand, managers are hiring their own human resource in private hospitals, so those individuals are selected who are closer to the organization's goals, but are being recruited in Teaching and Social security hospitals by conducting public tests through recruitment.

The results of this study showed the highest organizational and the lowest individual learning for Private hospital comparing to Teaching and Social security hospitals. In an organization with a low level of organizational learning, its top executives do not utilize learning as a strategy for convergence and achievement of organizational goals. Yan et al. (34), believe that organizational learning is very important at both high and low level to determine organizational strategy and to execute activities respectively. Research by Tamayo et al.(22) found that in dynamic organizations, organizational learning positively affects decision makers to adapt to change. Hospital executives should create a proper place to motivate their staff to learn in their area of responsibilities. Hasson et al. (21) stated that educational intervention in leadership training has positive effects on the perception of the personnel on the aspects of organizational learning level and on the understanding of managers about the level of individual learning. In an organization with a low level of individual learning, personnel do not have the capacity to listen and ask other people's point of views. In such an environment, organizational culture should be supported by the spirit of inquiry, feedback and experimentation .

Research Restrictions :

Number of personnel of selected hospitals were initially refusing to complete the questionnaire, which the researcher attempted to minimize this limitation by providing explanations on the necessity of implementation and the objectives of the study .

Conclusion :

The results of the study demonstrated that the level of organizational learning among Private hospital staff was significantly higher than that of Social security and Teaching hospitals. Therefore, it is recommended that managers of Teaching and Social security hospitals to improve the learning level with changes in the approach of having employees participation, establishing working teams and empowering of personnel towards common goals. Also it is suggested to provide equal opportunities for all personnel on continuous learning and the organization's proper relationship with the environment around .

Conflict :

There was no conflict between results of this study and any hospital .

Ethics approval and consent to participate

This project is approved by Ethical committee of Islamic Azad Sari Branch.

Consent to publish

Not applicable.

Competing interests:

The authors declare that they have no competing interests.

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Authors' contributions

MAJ, GM, VRY contributed to the conception and the design the study. VRY,MAJ,GM collected the data, transcribed the interviews and drafted the manuscript. SHM, FF contributed to the interpretation of the results and critical revised the manuscript. All authors read and approved the final manuscript.

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