

Artículo de investigación

Correlation of learning organization with organizational commitment and organizational effectiveness of educational and therapeutic centers of Hamadan University of Medical Sciences in Iran

Correlación de la organización de aprendizaje con el compromiso organizacional y la efectividad organizativa de los centros educativos y terapéuticos de la Universidad de Ciencias Médicas de Hamadan en Irán

Correlação da organização de aprendizagem com comprometimento organizacional e eficácia organizacional dos centros educacionais e terapêuticos da Universidade de Ciências Médicas de Hamadan, no Irã

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Written by:

Ali Bikmoradi¹, Javad Fardmal², Yousef Torabi^{3*}

1- Associate professor of medical management, Department of health economics and management, School of public health, University of Medical Sciences, Hamadan, Iran. Email: bikmoradi@umsha.ac.ir

2- Associate professor of Modeling of Non communicable Diseases Research Center & Department of Biostatistics and Epidemiology, school of public health, Hamadan University of Medical Sciences, Hamadan, Iran. Email: javad.fardmal@umsha.ac.ir

3- Master of critical care nursing, Department of medical surgical nursing, school of nursing, Hamadan University of Medical Sciences, Hamadan, Iran. Email: yousef.torabi@gmail.com

*Corresponding author

Abstract

Establishing and identifying of learning organization and its influencing factors is very crucial in therapeutic and educational centers especially in intensive care units. Management concepts like Organizational commitment and organizational effectiveness could be necessary to maintain and promotion of learning organization at context of intensive care units. This study aimed to assess the correlation of learning organization with organizational commitment and organizational effectiveness of intensive care nurses in educational and therapeutic centers of Hamadan University of Medical Sciences in Iran.

A cross-sectional study was conducted using questionnaire on 277 intensive care nurses of educational and therapeutic centers in 2016. Data gathering tool was included 43-question

Resumen

El establecimiento y la identificación de la organización de aprendizaje y sus factores de influencia es muy importante en los centros terapéuticos y educativos, especialmente en las unidades de cuidados intensivos. Los conceptos de gestión como el compromiso organizacional y la efectividad organizativa podrían ser necesarios para mantener y promover la organización del aprendizaje en el contexto de las unidades de cuidados intensivos. Este estudio tuvo como objetivo evaluar la correlación de la organización de aprendizaje con el compromiso organizacional y la efectividad organizacional de las enfermeras de cuidados intensivos en los centros educativos y terapéuticos de la Universidad Hamadan de Ciencias Médicas en Irán.

Marsick and Watkins' learning organization questionnaire, 24-question Meyer & Allen's organizational commitment questionnaire and 24-question Taylor & Bower's organizational effectiveness questionnaire in 5-point Likert scale. Data were analyzed by SPSS software (Version 18) using descriptive and inferential statistics.

Intensive care nurses had 32 ± 5.56 years, 83.4% female, 67.1% married, 71.47% less than 10 years of work experience, and 97.8% bachelor of nursing. Mean score of learning organization, organizational commitment and organizational effectiveness in intensive care units was 128.30 ± 29.18 , 75.65 ± 10.87 and 57.22 ± 15.80 , respectively which were interpreted at a moderate level. There was positive and significant correlation between learning organization with organizational commitment (0.489) and organizational effectiveness (0.684) and also there was positive and significant correlation between Organizational commitment and organizational effectiveness (0.575), ($P=0.01$).

It is suggested that to increase learning organization intensive care unit nurses level, as an important factor for them, organizational commitment and organizational effectiveness level should be increased.

Key words: intensive care unit, nurses, learning organization, organizational commitment, organizational effectiveness

Se realizó un estudio transversal mediante el cuestionario de 277 enfermeras de cuidados intensivos de centros educativos y terapéuticos en 2016. Se incluyó la herramienta de recopilación de datos. Marsho y Watkins cuestionario de la organización de aprendizaje de 43 preguntas, cuestionario de 24 preguntas para el compromiso organizacional de Meyer y Allen. cuestionar el cuestionario de eficacia organizativa de Taylor & Bower en una escala Likert de 5 puntos. Los datos fueron analizados por el software SPSS (Versión 18) usando estadística descriptiva e inferencial.

Las enfermeras de cuidados intensivos tenían $32 \pm 5,56$ años, 83,4% mujeres, 67,1% casados, 71,47% menos de 10 años de experiencia laboral y 97,8% solteros. La puntuación media de la organización de aprendizaje, el compromiso organizacional y la efectividad organizativa en las unidades de cuidados intensivos fue de 128.30 ± 29.18 , 75.65 ± 10.87 y 57.22 ± 15.80 , respectivamente, que se interpretaron a un nivel moderado. Hubo una correlación positiva y significativa entre la organización de aprendizaje con el compromiso organizacional (0,489) y la efectividad organizacional (0,684) y también hubo una correlación positiva y significativa entre el compromiso organizacional y la efectividad organizacional (0,575), ($P = 0,01$).

Se sugiere que para aumentar el nivel de aprendizaje de enfermeras de la unidad de cuidados intensivos de la organización, como un factor importante para ellos, se debe aumentar el compromiso organizacional y el nivel de efectividad organizacional.

Palabras clave: unidad de cuidados intensivos, enfermeras, organización de aprendizaje, compromiso organizacional, efectividad organizacional

Resumo

Estabelecer e identificar a organização que aprende e seus fatores de influência é muito crucial em centros terapêuticos e educacionais, especialmente em unidades de terapia intensiva. Conceitos de gestão como comprometimento organizacional e eficácia organizacional podem ser necessários para manter e promover a organização da aprendizagem no contexto das unidades de terapia intensiva. Este estudo teve como objetivo avaliar a correlação da organização de aprendizagem com o comprometimento organizacional e a eficácia organizacional de enfermeiros intensivistas em centros educacionais e terapêuticos da Universidade de Ciências Médicas de Hamadan, no Irã.

Um estudo transversal foi realizado utilizando questionário em 277 enfermeiros intensivistas de centros educacionais e terapêuticos em 2016. A ferramenta de coleta de dados incluiu o questionário de organização de aprendizagem de Marsper e Watkins de 43 questões, o questionário de comprometimento organizacional Meyer & Allen de 24 perguntas e 24- Questionário de eficácia organizacional de Taylor &

Bower em escala Likert de 5 pontos. Os dados foram analisados pelo software SPSS (versão 18), utilizando estatística descritiva e inferencial.

Enfermeiros de cuidados intensivos tinham $32 \pm 5,56$ anos, 83,4% do sexo feminino, 67,1% casados, 71,47% com menos de 10 anos de experiência de trabalho e 97,8% de bacharel em enfermagem. O escore médio de organização da aprendizagem, comprometimento organizacional e efetividade organizacional em unidades de terapia intensiva foi de $128,30 \pm 29,18$, $75,65 \pm 10,87$ e $57,22 \pm 15,80$, respectivamente, os quais foram interpretados em um nível moderado. Houve correlação positiva e significativa entre organização de aprendizagem com comprometimento organizacional (0,489) e eficácia organizacional (0,684) e também houve correlação positiva e significativa entre comprometimento organizacional e efetividade organizacional (0,575), ($P = 0,01$).

Sugere-se que, para aumentar o nível dos enfermeiros da unidade de terapia intensiva em aprendizagem, como um fator importante para eles, o comprometimento organizacional e o nível de eficácia organizacional devem ser aumentados.

Palavras-chave: unidade de terapia intensiva, enfermeiros, organização de aprendizagem, comprometimento organizacional, efetividade organizacional

Introduction

Health care systems are expanded and complex organizations with numerous processes and components that have an essential role in maintain and promotion community health (Jeong et al, 2006). Variety of health needs in communities has changed importantly and fundamentally with advances of science, technology and population contexts in developing countries like other countries in the world (Bikmoradi et al, 2010). Some of developing countries such as Iran have achieved spectacular advances in their health care system through restructuring of their public hospitals with educational centers in form of the therapeutic and educational centers (Bikmoradi et al, 2008; Bikmoradi et al, 2009).

These centers are delivering their updated services effectively as a key health, treatment and educational delivering organization by training medical group human resources and bridging theory and practice gap (Khodaveisi et al, 2012). These educational and therapeutic centers with academic commitment and accountability have fundamentally roles to maintain and promotion of physical, mental, and spiritual health of individuals of community by scientific, research-based, updated and optimal health, therapeutic and educational services (Amerioun et al, 2011). Moreover, staff of these centers especially nurses occupies a substantial role to maintain and promotion of quality of educational and therapeutic services with patients' satisfaction (Falehalharbi, 2012).

Intensive care units are considered to be heart of educational and therapeutic centers because of providing efficient and high-quality medical and nursing services using advanced technologies (Li et al, 2014). Therefore, they have involved with high levels of stress, depression and emotional reaction to work load resulting from critical positions such as death of patients, so committed and effective nurses in order to maintain quality services, and involving critical situation of nursing, have to promote their learning organization (Jeong et al, 2006).

Learning organization is an organization that employees are continually increased their capacity for continuous improvement to achieve the best results in, and staffs are constantly learning to obtain the appropriate goals (Senge, 1990). In the early 1990s, the idea of learning organization was considered by Senge in five main categories; system thinking, mental models, shared vision, team learning, and individual expression (Tseng, 2010). All of the five connected components should be considered as a whole (Rahnavard, 1387). Later, Watkins and Marsick explained seven dimensions for learning organization in three levels including; individual level (continuous learning and inquiry and dialogue), team level (team learning), and organizational level (embedded system, empowerment, system connection, and strategic leadership) (Marsick et al, 2003). This model not only identifies learning organizational dimension but also cause to integrated and identify inter relationship (Jyothibabu et al, 2010).

Organizational commitment is the link between individual and organization which can be defined as a psychological thought's frame for people which as a positive attitude motivate personnel to work towards organizational goals (Tseng, 2010). Organizational commitment also has defined as an emotional dependency and loyalty to organization (Herscovitch & Meyer, 2002) which cause to have work conscience, ethics, accountability and motivation (Balay, 2012). Some models have presented for explanation of organizational commitment by researchers such as Quijano, Chatman and Allen-Meyer (Herscovitch & Meyer, 2002, 16). Quijano's four-dimensional model explains organizational commitment with dimensions of value related (congruence of values and objectives), affective (need for affiliation), exchanges (extrinsic rewards), and need (keeping job) (Quijano et al, 2003). The O'Reilly and Chatman's three-dimensional model also explain organizational commitment with dimensions of internalization (congruence of values and objectives), identification (desire for affiliation), and compliance (gaining specific rewards) (O'Reilly & Chatman, 1986). Moreover, Allen and Meyer proposed a three-dimension model which explains organizational commitment with dimensions of affective (emotional attachment, identification, enjoy membership), continuance (leaving costs and benefit), and normative commitment (feeling of obligation) (Allen & Meyer, 1990).

Allen and Meyer's three-dimensional model employed in this study assesses organizational commitment in affective, continuance, and normative commitment dimensions (Allen & Meyer, 1990). Affective commitment is considered as emotional attachment to organization and cause to decreasing absenteeism and job leave and also increasing of motivation and productivity in employees (Carver et al, 2011). Continuance commitment is considered as employees' perception of the costs of staying in the organization as investments rather than leaving the organization as alternatives and is related to compensation and reward systems (Noraazian, 2016). Normative commitment refers to the willingness of employees to stay in the organization based on their feelings, tendencies and judgment of others (Tseng, 2010). Normative commitment is probably when employees' moral obligation find it difficult to reciprocate the organization's investment in them (Allen & Meyer, 1990). Employees' high organizational commitment has

a crucial role in predicting concepts such as organizational effectiveness in the organization (Tseng, 2010).

Organizational effectiveness is not a single concept, but a complex subject that includes different preferences and expectations, which is directly related to the expansion of the organization, first described by Cumming & Warley in 1986 and used as knowledge of behavior and experience for organizations (Aydin & Ceylan, 2009). Organizational efficacy is a way for organizations to evaluate the access of goals through organizational strategies (Jomrog & Overholt, 2004).

Simply, organizational effectiveness is an ongoing companion to achieving goals (Tseng, 2010). Experts believe that organizational effectiveness is a major issue in all organizational analyzes and it is impossible to imagine an organization that is not effective (Seyedesfahani & Kazemi, 1376). An effective organization that benefits from its resources without waste and unnecessary burnout of employees and organizations (Aydin & Ceylan, 2009), which leads to such things as reducing absenteeism, leaving, job dissatisfaction, motivation, value of human resources (Henri, 2009).

Researchers have defined the effectiveness as doing the right thing and efficiency as doing things correctly. The concept of effectiveness lay in the concept of efficiency. Efficiency has a quantitative aspect and effectiveness has a qualitative aspect. The organization's efficiency is the amount of resources used to produce a unit of product and can be calculated in terms of consumption per product, and has a more limited concept that is used in relation to inter-organizational affairs (Henri, 2009).

Productivity is defined as best by using existing resources for current production or production. Efficiency and productivity are closely interrelated with each other, so that they are correlative, but effectiveness is in a higher level in terms of comprehensiveness, which takes into account, in place of an absolute production-oriented view, other parameters such as the status of manpower, the quality and good reputation of the organization (Martz, 2008). According to Peter Drucker, effectiveness is the key to the success of the organization (Ardalan et al, 1391).

Various models have been developed to assess the effectiveness of an organization, which is used in measuring effectiveness that focuses on human resources (Henri, 2009). Models include: goal model, traditional model, system model, strategic constituencies model, competitive values model and ineffective model (Henri, 2009; Martz, 2008).

Today's management concepts, in organizations such as organizational commitment and organizational effectiveness and effect on learning Organization and inter relationship is more attention for organizational leaders and researchers (Tseng, 2010; Martz, 2008). In Iran, studies have also been conducted in manufacturing organizations focusing on the establishment of learning centers or the use of educational, information, innovation and motivation mechanisms and the reengineering of the learning process (Mosadeghrad & Ferdosi, 2013; Asgari et al, 2012). Tseng identify that there is a strong influence of learning organization practice on organizational commitment and organizational effectiveness where the relationship between them is reciprocal (Tseng, 2010). Learning level is interaction between employees with common vision that enhanced organizational commitment and organizational effectiveness (Jeong et al, 2006; Nonaka, 1994). The open communications in organizations also make employees more amenable to cooperation and thereby increase organizational commitment and organizational effectiveness (Tseng, 2010, Dee et al, 2006). Using learning organization and its performing is organizational needs which can improve the quality of nursing services and decrease nursing and their services error (Yaghoubi et al, 2010). Therefore Because of lots changes on the organizations, organizational study and attention to learning organization in therapeutic and educational center in Iran is few, manager to enhance organizational level in therapeutic and educational center and management of occupational stress, Burnout, lack of consent and leave jobs in intensive care nurses have to be in line with those changes (Montazaerofaraj et al, 1390; Asghary et al, 1391). Then, present study was done in title of relationship between learning organization with organizational commitment and organizational effectiveness in intensive care unit nurses in therapeutic and educational centers Hamadan.

Methods

A cross-sectional study was carried out in 2016 on 300 randomized intensive care nurses working in five therapeutic and educational centers (Besat, Ekbatan, Shahid beheshti, Farshchian, and Fatemieh) of Hamadan University of Medical Sciences, Hamadan, Iran. The data gathering tool was a questionnaire consisting of four sections; demographic characteristics, Watkins and Marsick's learning organization questionnaire (Marsick et al, 2003), Allen & Meyer's organizational commitment questionnaire (Allen & Meyer, 1990) and Taylor & Bower's organizational effectiveness questionnaire (Tseng, 2010).

demographic characteristics; Nine questions were about age, gender, marital status, education level, employment status, and work experience, work experience in an intensive care unit, unit and educational and therapeutic center.

43-questions were about learning organization in individual level (7-question continuous learning and 6- question inquiry and dialogue); team level (6-question team learning) and organizational level (6- question embedded system, 6-question empowerment, 6-question system connection, and 6-question strategic leadership). The questionnaires were measured on a 5-point Likert scale ranging from 1 (totally disagree) to 5 (totally agree).

24-questions were about organizational commitment in three dimensions; 8- question normative commitment, 8-question continuous commitment, and 8-question emotional commitment. The questionnaires were measured on a 5-point Likert scale ranging from 1 (totally disagree) to 5 (totally agree).

20-questions of organizational effectiveness in three dimensions: satisfaction (7 questions), leadership (8 questions) and organizational climate (5 questions). The questionnaires were measured on a 5-point Likert scale ranging from 1 (Very Low) to 5 (very much).

Learning organization overall score was interpreted in three levels high (157-215), moderate (101-156) and low (43-100). Organizational commitment overall score also was interpreted in three levels high (89 to 120), moderate (56 to 88) and low (24 to 55) and for organizational effectiveness score was 80-100 as high, between 41-60 as moderate and between 24-40 as low levels.

Watkins and Marsick's learning organization questionnaire, Allen and Meyer's organizational commitment and Taylor & Bower's Organizational effectiveness questionnaire have been confirmed by numerous studies in terms of content validity and reliability (10, 12 and 18). In the present study, for the learning organization questionnaire Cronbach's alpha was 0.92 and reliability of the test was 0.78, For the organizational commitment questionnaire Cronbach's alpha was 0.81 and reliability of the test was 0.79 and for organizational effectiveness, Cronbach's alpha was 92% and the reliability of the test was 0.89 respectively. Nurses were chosen from intensive care units of therapeutic and educational centers by kind permission of Hamadan University of Medical Sciences.

After the necessary permission from Hamadan University of medical sciences was obtained, 300 samples were selected from the intensive care units of therapeutic and educational centers on stratified random sampling basis. Nurses were selected accidentally from the monthly shift program in every intensive care unit, then, informed consent was obtained from each of the nurses before they filled out the questionnaire in the presence of the researcher. Data were extracted from questionnaires and subsequently fed into the computer, where the SPSS software (Version 18) was run to conduct statistical analyses, that is, to find descriptive statistics (frequently distribution, mean, Standard deviation), inferential statistics (Pearson's correlation coefficient).

Results

Out of the 300 nurses who had been provided with the questionnaire, 277 returned it (response rate = 92.3%). The subjects in this study had a mean age of 32 years, 83.4% of them

were female (the rest were male), and 67.1% of them were married (the others were single). A substantially large proportion (97.8%) of the nurses had a bachelor's degree, with the rest holding a master's degree in nursing. Their total work experience and work experience in intensive care units were on average 8.59 and 5.3 years, respectively. Most of the nurses (31.4%) worked in the ICU, while only small minorities of them were employed in the burn care unit (1.8%). Slightly more than half (56.65%) of the subjects were permanent employees, and the rest were on a fixed-term contract (Table 1).

The highest mean scores of learning organization were obtained for: the 46-50 years age group; males; singles; subjects holding an M.Sc.in nursing; nurses on a fixed-term contract; those who had total work experience between 21 and 25 years; nurses with 11-15 years of work experience in intensive care units; cardiac surgery ICU nurses, and those working at Besat educational and therapeutic center (Table 1).

The highest mean scores of organizational commitment were obtained for: the 46-50 years age group; females; singles; subjects with a bachelor's degree in nursing; nurses on a fixed-term contract; those having total work experience between 21 and 25 years; nurses with 11-15 years of work experience in intensive care units; cardiac surgery ICU nurses, and subjects working at Farshchian educational and therapeutic center (Table 1).

The highest mean scores obtained in the organizational effectiveness of nurses in intensive care units is the age group under 30, women, single nursing staff, contractual employment status, overall work experience of 21-25 years, work experience in intensive care units less than 5 years, ICU Cardiac Surgery nurses and Besat educational and therapeutic center nurses (Table 1).

Table 1: Demographic characteristics of intensive care nurses according to their learning organization, organizational commitment and organizational effectiveness and mean scores

Demographic characteristic variable	Number (%)	Learning organization	Organizational commitment	Organizational effectiveness	
		Mean(SD)	Mean(SD)	Mean(SD)	
Age	≤ 30	76 (27.4)	133.02 (32.14)	76.03 (10.40)	60.10 (16.08)
	31-35	83 (30)	120.59 (27.29)	75.75 (11.91)	53.75 (15.41)

	36-40	84 (30.3)	128.33 (24.40)	75.27 (10.65)	56.71 (15.34)
	41-45	19 (6.9)	123 (24.56)	73.21 (11.80)	55.18 (13.50)
	46-50	15 (5.4)	137.50 (25.79)	78.40 (7.089)	51.33 (18.39)
Gender	Female	231 (83.4)	129.19 (28.98)	75.74 (10.84)	57.51 (16.38)
	Man	46 (16.6)	129.59 (30.18)	75.11(11.22)	55.39 (11.43)
Marital status	Married	186 (67.1)	124.13 (29.28)	74.24 (10.73)	55.19 (15.54)
	Single	91 (31.8)	137.1 (27.37)	78.62 (10.74)	61.52 (15.79)
Education Level	Bachelor	271 (97.8)	128.21 (29.09)	75.69 (10.88)	57.23 (15.68)
	Masters	6 (2.2)	132.33 (35.89)	73.83 (11.514)	57 (22.13)
Employment status	formal	157 (56.6)	128.5 (28.59)	74.50 (10.59)	74.50 (10.59)
	Contractual	120 (43.3)	133.92 (28.08)	76.92 (11.08)	76.92 (11.08)
Total work experience	0-5	83 (55.2)	130.29 (30.40)	75.90 (9.96)	59.25 (16.50)
	6-10	115 (36.1)	127.96 (32.74)	75.66 (12.24)	56.79 (16.95)
	11-15	46 (6.1)	130.07 (22.21)	75.22 (10.08)	55.09 (14.89)
	16-20	22 (0.7)	117.90 (20.19)	73.41 (9.45)	55.09 (9.87)
	21-25	11 (1.8)	130.90 (15.79)	79.30 (8.15)	59.40 (10.64)
	0-5	153 (31.4)	127.83 (30.36)	75.39(10.88)	58.42 (16.02)
Work experience in intensive care units	6-10	100 (17.7)	128.62 (28.03)	75.15 (10.75)	56.54 (15.73)
	11-15	17 (10.5)	137.56 (24.91)	80.24 (11.08)	53.71 (14.72)
	16-20	2 (3.2)	93.5 (5.20)	75.00 (19.79)	41.5 (24.74)
	21-25	5 (1.8)	120.80 (6.68)	78.20 (10.01)	52.60 (7.66)
	ICU	87 (30.1)	135.78 (37.13)	74.28 (11.03)	59.64 (21.34)
Intensive care units	CCU	49 (41.7)	119.98 (27.60)	74.18 (10.95)	52.31 (15.07)
	NICU	29 (16.7)	117.28 (24.12)	75.48 (13.23)	55.31 (11.56)
	angiography	9 (8)	119.67 (13.48)	79.00 (7.365)	54.67 (7.38)
	Burn	5 (3.6)	138.20 (14.18)	74.40 (2.881)	48.60 (6.87)
	Emergency	50 (18.1)	127.29 (21.57)	76.60 (10.435)	57.22 (12.42)
	ICU Heart	16 (5.8)	140.88 (23.28)	80.38 (10.30)	61.06 (5.83)
	Dialysis	32 (11.6)	127.34 (22.47)	77.19 (10.26)	60.06 (10.86)
	Beast	81 (29.2)	140.27 (30.39)	76.72 (8.34)	62.73 (17.11)
	Beheshti	54 (19.5)	122.54 (28.78)	73.39 (11.74)	52.46 (17.04)
	Farshchian	37 (13.4)	131.73 (26.37)	77.81 (11.04)	60.41 (15.75)
Therapeutic and treatment centers	Fatemiyeh	33 (11.9)	117.88 (24.26)	76.39 (13.95)	57.18 (10.16)
	Ekbatan	72 (26)	122.24 (27.53)	74.69 (10.96)	57.22 (15.80)
	Overall mean of study component		128.30±29.18	75.65 ± 10.87	57.22 (15.80)

Other results show that, Mean score of learning organization, organizational commitment and organizational effectiveness in intensive care units was 128.30 ± 29.18 , 75.65 ± 10.87 and 57.22 ± 15.80 , respectively which were interpreted at a moderate level (Table 1).

In the present study, learning organization with organizational commitment (0.489,) and organizational effectiveness (0.684) had a significant positive correlation which is considered a moderate correlation. Results also revealed that there was a significant correlation between organizational commitment and organizational effectiveness (0.575) (Table 2).

Table 2: Correlation of intensive care nurses' learning organization with organizational commitment and Organizational effectiveness

Learning organization	Organizational commitment				Organizational effectiveness			
	Affective commitment	Continues commitment	Normative commitment	Organizational commitment	Leadership	Satisfaction	Organizational climate	Organizational effectiveness
Continuous learning	0.307	0.135	0.244	0.313	0.446	0.486	0.452	0.482
Inquiry and dialogue	0.272	0.135	0.248	0.296	0.519	0.510	0.487	0.531
Team learning	0.355	0.232	0.362	0.427	0.575	0.621	0.573	0.616
Embedded system	0.334	0.308	0.360	0.451	0.504	0.587	0.538	0.565
Empowerment	0.311	0.185	0.351	0.379	0.535	0.624	0.555	0.594
System connection	0.347	0.232	0.388	0.433	0.540	0.640	0.539	0.594
Strategic leadership	0.472	0.279	0.459	0.546	0.570	0.626	0.574	0.616
Learning organization	0.413	0.259	0.414	0.489	0.634	0.703	0.638	0.684

The highest correlation between strategic leadership dimension of learning organization and organizational effectiveness, was found to be positively correlated equally (0.616) (Table 2), and also satisfaction dimension of organizational effectiveness was found to be positively correlated to learning organization (0.703) and also organizational dimension of learning organization (0.694), ($P = 0.01$), (Table 3).

Table 3: Correlation of intensive care nurses' Organizational Commitment and Organizational effectiveness

organizational effectiveness	Leadership	Satisfaction	Organizational climate	Organizational effectiveness
Organizational Commitment				
emotional	0.412	0.417	0.471	0.457
Continuous	0.289	0.257	0.330	0.311
normative	0.472	0.472	0.528	0.518
Organizational commitment	0.525	0.512	0.595	0.575

The highest correlation between strategic leadership and group learning dimensions of learning organization and organizational commitment was found to be positively correlated (0.546) and also normative dimension of organizational commitment was found to be positively correlated to learning organization (0.414). And then organizational dimension of learning organization was positive correlated to organizational commitment (0.508), ($P = 0.01$), (Table 4).

Table 4: Correlation of intensive care nurses' organizational commitment and Organizational effectiveness with learning organization in three dimensions

Learning organization		Organizational commitment				Organizational effectiveness			
		Affective	Continues	Normative	Organizational commitment	leadership	satisfaction	Organizational Climate	Organizational effectiveness
Individual	Continuous learning Inquiry and dialogue	0.314	0.147	0.266	0.330	0.525	0.540	0.509	0.549
Team or group	Team learning	0.355	0.232	0.362	0.427	0.575	0.621	0.573	0.616
Organizational	Embedded system Empowerment System connection Strategic leadership	0.411	0.281	0.437	0.508	0.603	0.694	0.618	0.664

The highest correlation between Organizational climate dimension of organizational effectiveness and organizational commitment, was found to be positively correlated (0.595) and also normative dimension of organizational commitment was found to be positively correlated to organizational effectiveness (0.518), ($P= 0.01$), (Table 4).

Discussion

The nurses had a mean age of 32 years; they were predominantly female and married; most of them had a B.Sc. in nursing; they had on average 8.59 and 5.3 years of total work experience and work experience in intensive care units, respectively; a majority of them were employed in an ICU while a small proportion of them worked in burn care units, and slightly more than half of them were permanent employees.

Results demonstrated that the level of learning organization among the nurses was moderate, which is consistent with other studies (Tseng, 2010, Nazari & AkmaliahlopePihie, 2012). It seems that managers should pay special attention to the practice of learning organization because it can help the organization recognize its vision, mission, strategy, and actions. On the other hand, understanding the functions of learning organization can inspire the staff to come up with innovative ideas to solve organization problems. Organizational commitment among the studied nurses turned out to be at a moderate level, which is in agreement with other studies (Yaghoubi et al, 2010; Nazari & AkmaliahlopePihie, 2012). A high level of organizational commitment causes all personnel

to accept organization's values and objectives, do their best for the organization, and have a desire for staying (Yaghoubi et al, 2010). It seems crucially important that the organizational commitment of intensive care nurses should be increased to have their sense of loyalty and devotion to the organization sharpened and subsequently make them provide sustained high-quality health care services.

In this study, the results indicate that the organizational effectiveness of the nurses in intensive care unit is interpreted in the moderate level, which is by studying Tseng and Sashma suri in a same direction (Tseng, 2010; Suri & Lal, 2011). Organizational effectiveness, the extent to which the organization meets its goals using specific resources, makes its goals to reality without waste of resources and worn out employees (Tseng, 2010).

There is little research in relation to the correlation between organizational commitment and organizational effectiveness, especially in nurses of intensive care units (Tseng, 2010, Nazari & AkmaliahlopePihie, 2012). In this study, there was a positive and significant relationship between organizational commitment and organizational effectiveness, which is in line with the study of Tseng (Tseng, 2010). Educational and therapeutic center managers seem to establishing and identifying of learning organization use organizational commitment and organizational effectiveness practices in intensive care unit nurses.

In this study, learning organization had a significant correlation with organizational

commitment, which is consistent with Iranian and foreign studies (Tseng, 2010; Mosadeghrad & Ferdosi, 2013). Also the relationship between the two constructs is reciprocal (Tseng, 2010). Group and organizational dimensions of learning organization had correlation with organizational commitment, which is consistent with the study conducted by Wahba (Wahba, 2013).

Organizational commitment of the nurses in this study has an organizational process that is related to the group and organizational dimensions of learning organization. According to Watkins and Marsick's theory, learning processes might be the same, organizational learning is the result of interactions between individuals. In the organizational learning model, a dynamic organization environment will be known through new regulation, new competition, using new technology, customer dissatisfaction, new organizational demands, and so on, which are all considered as organizational learning activators. The strategy's success is due to the organization's ability to act cohesively (Marsick et al, 2003). Organizational commitment is a thought frame that motivates the staff to pursue organizational goals and serves as a link between individuals and the organization (Tseng, 2010). It is obvious that, among other staff members, committed intensive care nurses occupy a distinctive role in improving learning organization and organizational commitment. Therefore, the moderate-level learning organization and organizational commitment in this study don't seem to be satisfactory to managers. As a result, therapeutic and educational centers need to motivate and sensitize their intensive care nurses through new competition, using new technology, customer/patient dissatisfaction, and new organizational demands in order to achieve their goals.

According to the findings, group and organizational dimensions of learning organization had the highest correlation with normative and emotional dimensions of organizational commitment. Suggesting the staff with high emotional commitment and those with a sense of loyalty and devotion tend to stay and continue working in the organization (Meyer et al, 2002). High workload, critical and stressful situations, and a high risk of death in ICU patients seem to cause intensive care nurses to lose interest in work and therefore respond to organizational matters such as competitiveness and dynamism less interactively (Tsai, 2014). Hence, to ensure that nurses have the necessary

ability to adapt to changes, nursing managers should provide nurses with continual education and training to enhance their ability to provide patients with a consistent quality of nursing care.

There was a relationship between the leadership dimension of learning organization and organizational commitment that is in line with finding (Mosadeghrad & Ferdosi, 2013). It seems that strategic leadership has an effective role in increasing organizational commitment, so managers should focus on suitable managerial learning strategies to improve organizational commitment.

In this study, learning organization had a significant correlation with organizational effectiveness and also satisfaction dimension of organizational effectiveness that is in line with researchers (Dekouloua & Trivellas, 2015; Erdem et al, 2014).

Learning organization, is an organization that employees are continually increased their capacity for continuous improvement to achieve the best results in, and staffs are constantly learning to obtain the appropriate goals (Senge, 1990). An effected employee continually increase their capacity learning and furthermore satisfaction as an outcome cause to the individual and organizational welfare so it can encourage the employee to continue learning, thinking and expands their needs to improve organizational goals.

There is little research in correlation between organizational commitment and organizational effectiveness, especially in nurses of intensive care units (Tseng, 2010; Pourpanahikoltapeh et al, 2015). In this study, there was a positive and significant relationship between organizational commitment and organizational effectiveness, which is in line with the study of Tseng (Rahnavard, 1387). According to finding high effectiveness strongly related to tendency level to stay and loyalty to organization which lead to organizational commitment (Pourpanahikoltapeh et al, 2015) so educational and therapeutic center managers seem to use organizational commitment practice to enhance organizational effectiveness in intensive care unit nurses.

Another results show that there is a relationship between organizational commitment and organizational climate that is in line with (Bahrami et al, 2016; Hosseini & Talebianna,

2015). A suitable organizational climate leads to innovation and enthusiasm in the organization and has a positive role in reaching organizational vision and mission. Accordingly, managers should always monitor the organizational climate (Ghasemi & Keshavarzi, 2014). Also improving the organizational climate could be a valuable strategy for improving organizational commitment so nurses manager have to monitor their collection to be stable.

In this study there was relation between normative commitment and organizational effectiveness that is consistent with research finding (Metin & Asli, 2018). Normative commitment refers to the willingness of employees to stay in the organization based on their feelings, tendencies and judgment of others (Allen & Meyer, 1990) and it is probably when employees' moral obligation find it difficult to reciprocate the organization's investment in them (Meyer et al, 2002). Organizational effectiveness is an ongoing companion to achieving goals (Tseng, 2010). Thus high normative commitment reduces the probability of leaving staff to the requirement of staying nurses in intensive care units. Conducting in-service training, division of work based on merit, continuous and fair evaluation of performance and attention to nurses' abilities and talents in intensive care units can play an important role in increasing their normative commitment (Abely & Nastyzayee, 1388) which it cause to achieving organizational goals and also organizational effectiveness. Managers of educational and therapeutic centers should strengthen leadership and management practices such as explaining the organization's vision and sharing it in achieving goals, providing the information, knowledge and methods needed to access it, creating a balance between conflicting interests of stakeholders in nurses, the intensive care units provide effective leadership effectiveness and, consequently, increase their effectiveness in the organization or educational and therapeutic centers.

Conclusion

It is suggested that to increase learning organizational intensive care unit nurses level, as an important factor for them, organizational commitment and organizational effectiveness level should be increased.

Limitations of the study

First, the results couldn't be generalized to all intensive care nurses in Iran because only a small number of educational and therapeutic centers were studied herein. Second, the intensive care nurses didn't seem to have an accurate, clear perception of each educational and therapeutic center as an organization.

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