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Received: 01.02.2015; Accepted: 05.05.2015

Abstract. The present study is an attempt to survey the effect of organizational intelligence and intellectual intelligence on performance of employees in Yazd Social Security Medical Management Organization. The study, as to the purpose, is an applied work and regarding the study procedure is a correlative work. Sample group was comprised of 270 managers and management experts in the organization. For data analyzing, The Pearson's Correlation and step-by-step regression in SPSS were used. The results indicated significant relationship between organizational intelligence and intellectual intelligence on one hand and performance of the employees on the other hand. In addition, relationship between organizational intelligence and intellectual intelligence and employees' performance was supported.

Keywords: organizational Quotient, Spiritual Quotient, Yazd Social Security Medical Management, Spiritual, performance of employees

### **1. INTRODUCTION**

Introduction of new technologies in service provision has led to notable changes in service industries and organization. Being an outcome of efficiency and effectiveness, performance is one the key issues that has caught attention of managers. The fact that employees' performance is an element of performance is beyond any doubt and thereby, spotting the factors that may improve performance of employees and organizational performance consequently is an essential task of human resource (HR) management. This is where the importance of employees' performance assessment lies. In other words, performance assessment is a way for the managers to find out strength and weaknesses of employees and improve activities in the organization based on the findings (Reza, 2010). It must be admitted that there are variety of factors such as cultural, personal, and structural features, that may influence performance of the staff and finding these factors can be an improvement in job performance. In this regard, organizational intelligence and spiritual quotient (SQ) are two factors to be concerned about.

Intelligence, among many, is a factor that dictates differences between people and an area of interest from the early days of written history (Wong and Law, 2003). A novel concept in the organizational literature is organizational intelligence. Any employee has the capacity to perform excellently the assigned tasks provided that decisions in the organization are made based on precise information rather than on guesses or the mere adherence of norms. In this regard, we need documentations regarding all factors effective in the organization and it is based on the facts and documentation that we may avoid errors. One may expect from organizational intelligence fast and easy access to all data generated in the company using digital dashboards and performance indices (Wong and Law, 2003).

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Special Issue: The Second National Conference on Applied Research in Science and Technology

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On the other hand, a great deal of data and scientific evidences have been collected over the last few years as to existence of a specific type of intelligence known as organizational intelligence. As recommended by the recent findings, this type of intelligence is ultimate human intelligence. Nowadays, issues such as moralities and intelligence capitals have drawn considerable attentions so that businesses should prove that they do not just care about money, but rather they also are concerned about specific meaning in life and strive to add value, meaning, and purpose to the life. Spiritual quotient refers to one's ability to see dreams and work hard to achieve the dreams. This type of intelligence prepares the ground for whatever we believe in and fills in the role of beliefs and values in activities. It is the way of bringing questions as to fundamental issues of our lives and helps us to accept changes in life. The intelligence enables us to give meaning to our activities and assign wider and deeper meaning to our performance. Furthermore, it leads us toward the meaning of our deeds and finding out which of them are more valuable and the ways that bring higher values.

The preset study is an attempt to highlight the role of organizational and spiritual quotient in improving employees' performance and also brings in theoretical evidences as to two types of intelligence and the employees' performance and their relationship.

#### 2. THEORETICAL BACKGROUND

The general belief among psychologists and behavior science experts is that intelligence is an discrete feature that one inherits and that human beings are like white papers that can receive different trainings if proper method is adopted. Recent research have shown the opposite however so that there are different and completely independent types of intelligences. Among the pioneers of studies on different types of intelligence, Howard Gardner (1993) defined intelligence as "capacity to solve problems or match structures relative to cultural set." His



Figure 1. Different intelligence pyramid.

researches indicated that there are different types of intelligence that develop relatively independently so that any skills has specific area of brain that is responsible for it (diagram below).

Physical Quotient (PQ): the first type of intelligence that draws attention of the experts and it is in charge of skills of controlling physical actions or using tools.

Intelligence Quotient (IQ): logical and linguistic skills, which is the main type of quotient that educational system are concerned about.

Emotional Quotient (EQ): it is highly important for success in business world as it helps us to communicate with others. It has the capacity of prediction. In addition, EQ tells us what to do in different social situations. In other words, EQ is the capability to show sympathy with others and understand their feelings.

Spiritual quotient (SQ): refers to internal knowledge and guidance, keeping intellectual balance, internal, external, and functional peace along with wisdom, tenderness, and gentelness. It is the capability to find the power that leads us toward our dreams (Keshmiri and Arabahmadi, 2007).

The pattern we look after is founded based on the viewpoint that people first take control of their body (PQ), followed by verbal and conceptual skills (IQ). The latter mainly concerns with educational activities. The next step is EQ, which is important for many who are eager to develop their social relationship. Eventually, comes SQ that helps people to answer questions like "is that all exists?"

Organizational intelligence can be approached from two viewpoints:

- 1. As process: it represents competitive, accumulative, coordinative complicacy with human and technical intelligence in an organization. Competitive complicacy of organizational intelligence indicates the relationship between human and technical elements of the organization. Accumulative feature of organizational intelligence emerges in different hierarchy including individual, group, and organizational levels. Correlation in this approach has a critical and pivotal role regarding accumulative and competitive aspects of organizational intelligence. As a process, organizational intelligence is a process with five critical elements: organizational memory, organizational knowledge, organizational learning, organization communications, and organizational conclusion.
- 2. As consequence of a process or mode: it represents generality and wholeness of structured and purposeful sections of information. Organizational intelligence from this viewpoint should be used to empower capabilities of information systems and solve organizational problems in a proper way.

Studies have shown that there is a correlation between spirituality, purpose of life, satisfaction with life, and performance (Georg et al., 2000; Caus et al., 1991; Vich and Chepel, 1992). Masalolamr et al. found in their studies on the effects of spirituality on individuals' performance that the higher spirituality, the longer life expectancy and fewer the diseases. Employees with spiritual attitudes tend to recover faster from injuries and damages and better cope with diseases (Iemonz, 2000). In addition, depression is less common among them (Mc Donald, 20002). Furthermore, there are evidences that show spiritual practices increase awareness as to multiple levels of consciousness (reflection) with positive effect on people's performance. Warner measured the extent of cognitive flexibility implemented between a control and experimental group and showed that reflection positively influence mental development.

#### **3. LITERATURE REVIEW**

#### Table 1. Literature reviewç

Title	By	Results
Surveying relationship between organizational intelligence and organizational culture	Khodadai & Kashef (2007)	There was positive and significant relationship between organizational culture and its elements and organizational culture of the management. Moreover, no significant relationship was found between organizational intelligence of the management based on education and experience.
Designing and explaining hospitalized patients' satisfaction: with emphasis on the role of EQ, SQ, and emotional capability of the clinical teams	Rezaiean (2010)	Spiritual and emotional specifications of the medical teams explained 39% of the patients' satisfaction. In addition, EQ, positive emotional capacity, and SQ had the highest effect on patient's satisfaction, while negative emotional capacity had negative effect on the patients' satisfaction.
Measuring organizational intelligence of library employees of Bu Ali Sian University and Islamic Promotion, Org., Hamadan.	Tahmasbi (2010)	There was not strategic outlook in the study group and the employees of the both organizations believed that they have the same fate. In addition, as to performance of the employees and desire to change, the both groups were identical.
Determining organizational intelligence level of employees of central library of Islamic Azad University, Science and Research Unit	Seyed Alavi (2011)	As to applying knowledge, strategies outlook is the desire toward change and pressures of performance at normal level; however, the elements of unity and agreement, common fate and motivation were at low level.
Analytical comparison of organizational intelligence in higher education	Mirsepasi (2012)	Shahid Beheshti University is in good condition regarding the indices organizational belongingness, creating agreement, and trust among employees and professors. However, as the using knowledge and desire to change, Mashhad Ferdowsi University had better condition
Surveying relationship between organizational intelligence and performance of managers of Islamic Azad University, Dist. 8	Rezghi (2012)	The Pearson Correlation Test results as tot all elements of organizational intelligence and performance the managers showed complete correlation. Although, correlation level was no equal regarding different elements.
The effect of SQ of managers and performance of public organizations	Asharlos (2012)	SQ of the managers had notable effect on performance of the employees and the element meaning and purposefulness had highest effect on the elements self-awareness, understanding, bless, and perfection quest were next in the line and last element reality of managers' action had lowest effect on performance of employees.
Surveying relationship between organizational intelligence and leadership style of managers and job satisfaction of high school teachers of Boyerahmad City (2011-2012)	Jamalzadeh (2012)	The relations between organizational intelligence and leadership style and job satisfaction of school teachers was not confirmed. There was negative and significant relationship between task-oriented leadership and organizational intelligence of the managers. There was also significant relationship between job satisfaction of the participant and task- oriented leadership.
Measuring organizational intelligence in Iran Information Science and Technology Research Center	Hariri (2012)	Despite high points as to many aspects of organizational intelligence in the center, there is a need to improve organizational intelligence by revising all aspects toward empowerment of organizational intelligence.

Assessing organizational intelligence in municipalities of east of Mazandaran	Satari Qahfaroki (2013)	Average point of organizational intelligence and its elements were at acceptable level and there was significant relationship between average minimum points of two elements of organizational intelligence. Moreover, the findings indicated necessity to pay more attention to continuous development of organizational intelligence elements and balanced and simultaneous development of all these elements.
Surveying justifying effect of organizational commitment on relationship between employees' perception of spirituality of work environment and SQ in Isfahan Steel Co.	Yazdani (2013)	There was positive and significant relationship between the employees' perception of spirituality at work and SQ. The justifying effect of organizational commitment was also confirmed.
Surveying SQ of employees of executive bodies and its effect on professional ethics	Ebrahimi (2013)	The Pearson Correlation Coefficient showed that there is a significant and direct relationship between SQ and professional ethics.
Implementing spirituality at work environment from HR viewpoint	Mitrov (1999)	The respondents had different viewpoint regarding definition of spirituality. The did not tend to separate family, personal, work, and family lives and strongly believed in difference between religion and spirituality and highly preferred spiritual measures at work. Thus, spirituality at work can be manages and is one of the main tasks of the managers.
The relationship between spirituality at work and job attitude of the employees	Miliman (2003)	All three aspects of spirituality had significant relationship with two or more variables of the five job attitudes. However, spirituality at work is an abstract concept.
Organizational intelligence and KM with outside the organization approach in public organizations regarding the elements of organizational intelligence and culture and physical education organizations in Australia	Karl Albrekt (2003)	Designing a model for KN with four enabling key along with seven keys or organizational intelligence brings in a strong executive aspect and highlights it as essential for an understandable development of organizations as organizational intelligence
Measuring SQ of hospital nurses	Yong (2007)	Marital status is a relative predictor comparing with other demographical variables, still religious beliefs are the best predictors of SQ of the subjects.
Ways to determine organizational intelligence in universities and how to measure it	Prigmerin and Vasilach (2007)	The main measures taken were defining and describing organizational features of the universities using specific methods to implement organizational intelligence approaches and to expand standards of organizational intelligence in universities.
The relationship between IQ, SQ, EQ, and compatibility among prisoners in Nigeria	Animasahon (2010)	The findings showed that SQ and EQ intelligence are far more important that IQ

#### 4. METHODOLOGY

The study is an analytical-descriptive work conducted through fields study. Geographical region of the study was Yazd, Iran and the study population was comprised of all experts, employees, and managers of medical services management in the city (n = 810). Based on Morgan's Table, sample group size was obtained 261, and the participants were selected

through simple random sampling. For data gathering, a questionnaire with 35 statements, which was designed based on literature review and consulting with the experts through Delphi method was used.

To ascertain validity of the questionnaire, it was provided to the experts for examination and having validity confirmed, the questionnaire was used for a pilot study to check reliability of the questionnaire using Cronbach's alpha ( $\alpha = 0.875$ ).

#### 5. MULTIVARIATE REGRESSION TEST

Regression analysis was used to determine contribution of each independent variables in predicting the dependent variable. The technique predicts changes of dependent variables based on changes of independent variables. It also highlights linear relationship between sets of independent variables and a dependent variables so that the relationship between the independent variables are also examined. Regression analysis is aimed at determining variance of dependent variable and this is done through participating the variables (two or more independent variable) in the variance. Multivariate regression analysis is recommended for studying effects of several independent variables on a dependent variables.

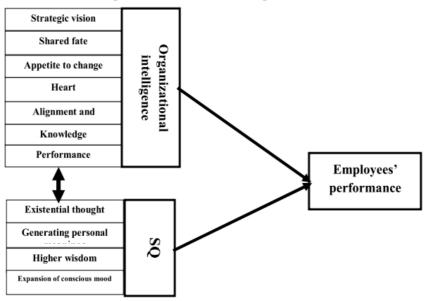


Figure 2. Conceptual model

Questions:

- 1. Do the elements of organizational intelligence predict performance of employees?
- 2. Do elements of spiritual intelligence predict performance of employees?

#### 6. FINDINGS

The results of data analysis were examined by Student's One-way test and based on the hypothesis of the study. Taking into account that the questionnaire is based on 5-point sore, the mean point or tested value should strictly be 3.

Here we test if status of SQ is at acceptable level in management of medical services of Yazd. To find the answer, one-sample T-test is used based on 3. Descriptive statistics showed that mean point of all variables were higher than 3.

 Table 2. Mean and standard deviation.

Aspects	Number of questionnaire	Mean	SD	Mean deviation
Critical existential thinking	268	4.3855	.60033	.03709
Generating personal meanings	270	4.3000	.52697	.03207
Higher wisdom	270	4.0000	.69518	.04231
Expansion of conscious mood	270	3.8556	.82111	.04997

As the results further showed, sig of all elements is less than 0.05. That is, mean value of the elements has no significant difference with 3. As listed in Table 3, upper and lower limit of all aspects are positive and mean value of all variables is higher than 3. Thus these elements are at acceptable level.

Table 3. one-sample t-test on the elements of  $\operatorname{SQ}$ 

	Tested value $= 3$						
Aspects				Mean	Level of confidence = 95%		
	Т	DF	Validity	deviation	Lower	Upper	
Critical existential thinking	37.356	267	.000	1.38550	1.3125	1.4585	
Generating personal meanings	40.536	269	.002	1.30000	1.2369	1.3631	
Higher wisdom	23.637	269	.000	1.00000	.9167	1.0833	
Expansion of conscious mood	17.121	269	.000	.85556	.7572	.9539	

Table 4. Mean and standard deviation of the aspects (one-sample test).

Aspects	Number of questionnaire	Mean	SD	Mean deviation
Strategic vision	270	4.0630	.84907	.05167
Shared fate	270	3.3370	.72740	.04427
Appetite for change	270	3.3815	.98635	.06003
Heart	270	3.5259	.78394	.04771
Alignment and congruence	270	3.8296	.79535	.04840
Knowledge deployment	270	3.3556	.71590	.04357
Performance pressure	270	3.2111	.73915	.04498

	Test value=3						
	Т	DF	V. 1: 1:	Mean deviation	Level of confidence = 95%		
	1	Dr	validity		Lower	Upper	
Strategic vision	20.571	269	.000	1.06296	.9612	1.1647	
Shared fate	7.614	269	.000	.33704	.2499	.4242	
Appetite for change	6.355	269	.000	.38148	.2633	.4997	
Heart	11.024	269	.000	.52593	.4320	.6199	
Alignment and congruence	17.140	269	.000	.82963	.7343	.9249	
Knowledge deployment	8.161	269	.000	.35556	.2698	.4413	
Performance pressure	4.693	269	.000	.21111	.1225	.2997	

 Table 5. One-sample t-test on aspects of organizational intelligence

A standard way of predicting dependent variables based on independent variables is multivariate regression analysis through step-by-step approach. At each step the variables that their effect in the model is not significant are removed from the model (Table 6).

**Table 6.** Step by step multivariate regression

	Independent variables	Dependent	В	Sig	Result
		variables			
4 <sup>th</sup> step	Critical existential thinking	Employees'	/017	/000	H1 supported
regression	Generation of personal	performance	/021	/000	
	meaning		/141	/000	
	Higher wisdom		/012	/000	
	Expansion of conscious				
	mood				
			F=2/9	3	$R^2 = /195$

As listed in Table 6, multivariate regression equation of employees' performance based on the aspects of SQ is as follows:

Y=0/017 X1 +0/021 X2+0/141 X3+0/012 X4

Where, Y denotes performance of employees, X1 denotes critical existentialist thinking, X2 denotes generation of personal meaning, X3 denotes higher wisdom, and X4 denotes extension of conscious mood.

To interpret the regression equation, the contribution of critical existentialist thinking, generation of personal meaning, higher wisdom, and extension of conscious mood on the employees' performance is 0.017, 0.021, 0.141, and 0.012 respectively. In other words, one unit change in critical existential thinking leads to 0.017 unit change in employees' performance; one unit of generation of personal meaning contributes in 0.021 unit of employees' performance, and one unit of extension of conscious mood contributes in 0.012 unit of employees' performance.

Value of R2 is 0.195, which means that variables of SQ totally contribute in 19.5% of changes of employees' performance.

 Table 7. Multivariate correlation coefficients of the elements of organizational intelligence and employee's performance

	Independent variables	Dependent variables	В	Sig	Result
4 <sup>th</sup> lev	el Strategic vision	Employees'	0/15	/000	H1 supported
regressio	n Shared fate	performance	0/05	/000	
	Appetite to changes		0/1	/000	
	Hear		0/12	/000	
	Alignment and congruence		0/07	/000	
	Knowledge deployment		0/09	/000	
	Performance pressure		0/42	/000	
	P=0/0001		F=4/9	99	$R^2 = /31$

As listed in Table 7, regression of predicting performance of employees of medical services management of Yazd City was significant (P < 0.0001, F = 4.99). In addition, as to the aspect performance pressure, organizational intelligence significantly and positively predicts employees' performance ( $\beta = 0.42$ ). Furthermore, with R2=0.31, the variables of SQ explain 31% of changes of employees' performance. That is, 31% of variance of the performance is determined by the variables.

### 7. RESULTS AND RECOMMENDATIONS

The followings are few recommendations based on the results of the study:

- 1. Based on hypotheses one and two regarding the extent of organizational intelligence and SQ of the employees of Social Security Org., the results showed satisfactory level of SQ and organizational intelligence of the employees (above mean point); however, there is a way to go to reach optimum condition. In light of this, the management needs to think of the ways to improve organizational intelligence and SQ.
- 2. Holding training courses prepares the ground to improve awareness among managers and employees as to the role of organizational intelligence and SQ.
- 3. SQ has notable effect in deeds of the employees and consequently performance of the organization. As the results regarding the main hypothesis regarding the effect of SQ on performance of employees showed, there is a need to uncover new potentials that prepares the ground for spiritual growth through physical and spiritual development. In addition, more emphasis should be put on interpersonal relationships (managers and employees) to improve coordination between functions of the organization with documented principles of organizational development and creating internal unity between the managers, employees, and the organization.
- 4. Taking into account that organizational intelligence and SQ were at acceptable level and needed further improvement, there must be planning to improve organizational intelligence and SQ permanently. By desirable condition we refer to increase the point of organizational intelligence and SQ and its elements to 5 in Likert's scale. To this end, integrated programs to lead change and development in all areas including organizational intelligence and SQ is essential. To make this happen, support, believe, and commitment of the top managers on one hand and participation of the employees and setting and evaluating the programs on the other hand are essential.
- 5. Moore serious attention should be paid to the elements of shared fate, alignment and congruence, and knowledge deployment that had lower effect on the employees' performance.

- 6. The subject organizational intelligence and SQ deserves special attention of the managers and each and every aspect of them must be measured periodically. Through this, improvement in subsystems of organizational intelligence and SQ that are needed in a highly intelligence organization can be expected.
- 7. In general, mere recruitment of smart employees is not enough, and there must be proper condition for people to improve and develop their potentials in line with the goals of the organization. To survive the competitive world, an organization needs to improve its competitive advantages and it is essential that the managers adopt novel approach to their organization and a living creature.

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