

Investigating the effect of work stress, general health quality, organizational intelligence and job satisfaction on employee performance

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ABSTRACT

During the past few years, there have been tremendous efforts on measuring the effects of different factors such as work stress, general health quality, etc. on performance of employees. In this paper, we present an empirical investigation to study the effects of work stress, general health, organizational intelligence and job satisfaction on employee performance. The proposed study of this paper uses two questionnaires where one is associated with general health quality (GHQ) with 20 questions and the other one consists of 12 questions, which is associated with work stress. The study chooses a sample of 144 employees from 222 people who worked for one of Islamic Azad University in Iran. Cronbach alphas for work stress, general health, organizational intelligence, job satisfaction and organizational performance are 0.911, 0.895, 0.795, 0.863 and, 0.864, respectively. The results indicate that job satisfaction has the highest influence on organizational performance followed by other factors.

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1. Introduction

Human resource management plays important role on managing organizations and they are considered as intangible assets (Acker, 1998; Boles, & Babin, 1996; Baral & Bhargava, 2010). There are literally many studies on learning the effects of various factors on improving organizational performance. Eyvazi et al. (2013) investigated whether or not employment type influences customer satisfaction, whether or not training as well as empowering employees could increase organizational commitment, whether there is a positive relationship between creating motivation as well as job security and profitability and whether there is a positive and meaningful relationship between leadership style and supplier satisfaction. They examined these relationships on some private banks in Iran and confirmed all these relationships. Job satisfaction plays an important role on the success of organizations.

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Shirvani et al. (2013), for instance, presented an empirical investigation to investigate the relationship between job satisfaction and employees' personal characteristics including gender, marital status, etc. among employees who worked for cement industry in Iran. The results indicated that while there was not any meaningful relationship between gender and job satisfaction there was some meaningful relationship between marital status and job satisfaction. Rafiee et al. (2013) studied the effect of job stress on job performance through emotional, organizational and moral intelligence. They reported that job stress influenced on job performance through organizational intelligence and moral intelligence, but job stress did not impact on job performance through emotional intelligence. They also reported that job stress influenced on emotional, organizational and moral intelligence, but job stress did not influence on job performance. In addition, their results explained that organizational and moral intelligence influence on job performance but emotional intelligence did not influence on job performance.

Inrshahi et al. (2013) performed a survey to assess the relationship between female employees' organizational citizenship behavior and job satisfaction within organization among employees who work in city of Qom, Iran. They reported a strong relationship between citizen-organization behavior of female employees and job satisfaction. In addition, the survey examined six sub-hypotheses and confirms that there were positive and meaningful relationships between female employees' custom, altruism, work consciousness, mutual coordination, fairness and courtesy on one side and job satisfaction on the other side.

Khodaei et al. (2013) presented an empirical investigation to study the effect of social capital on job satisfaction and citizenship behavior among some employees who work for Allameh Tabataba'i University in Iran. The results of their survey indicated that social capital positively influenced on both mentioned variables.

According to Soltani et al. (2013), many people are interested in subject of stress. They also recommended that preventing stress called destructive stress results from factors such as role ambiguity, role uncertainty, and organizational policies, and decreases both the individual and organizational performance. They investigated the effect of role conflict and role ambiguity on employees' job stress by explaining the role of work-family conflict. They reported that the effect of role ambiguity on work-family conflict was statistically significant (p -value = 62.40). Furthermore, the effect of role ambiguity on job stress was confirmed with significance of 1.83. They also reported that the job stress was influenced by role conflict (p -value = 2.35) and the effect of work-family conflict on job stress was confirmed with the number of .93 for its significance value.

2. The proposed study

In this paper, we present an empirical investigation to study the effects of work stress, general health, organizational intelligence and job satisfaction on employee performance. The proposed study of this paper uses two questionnaires where one is associated with general health quality (GHQ) with 20 questions and the other one consists of 12 questions, which is associated with work stress. The study has been applied in one of Iranian non-governmental universities located in city of Tehran, Iran during the year, 2013. The sample size is calculated as follows,

$$n = \frac{N \times z_{\alpha/2}^2 \times p \times q}{\varepsilon^2 \times (N - 1) + z_{\alpha/2}^2 \times p \times q}, \quad (1)$$

where N is the population size, $p = 1 - q$ represents the yes/no categories, $z_{\alpha/2}$ is CDF of normal distribution and finally ε is the error term. Since we have $p = 0.5$, $z_{\alpha/2} = 1.96$ and $N = 222$, the number of sample size is calculated as $n = 141$. Cronbach alphas for work stress, general health, organizational

intelligence, job satisfaction and organizational performance are 0.911, 0.895, 0.795, 0.863 and, 0.864, respectively. The proposed study considers the following five sub-hypotheses,

1. There is a relationship between work stress and organizational performance.
2. There is a relationship between general health quality and organizational performance.
3. There is a relationship between organizational intelligence and organizational performance.
4. There is a relationship between job satisfaction and organizational performance.
5. How could we measure the relationship between organizational performance as dependent variable and four other independent variables including work stress, general health quality, organizational intelligence and job satisfaction?

3. The results

In this section, we present details of our findings on testing different hypotheses of this survey.

3.1. The relationship between work stress and organizational performance

The first question of this survey is associated with the relationship between work stress and organizational performance. Table 1 demonstrates the results of Pearson correlation between these two components.

Table 1

The results of relationship between work stress and organizational performance

		Organizational performance	Work stress
Organizational performance	Pearson Correlation	1	.584**
	Sig. (2-tailed)		.000
	N	144	144
Work stress	Pearson Correlation	.584**	1
	Sig. (2-tailed)	.000	
	N	144	144

** . Correlation is significant at the 0.01 level (2-tailed)

As we can observe from the results of Table 1, there is a positive and meaningful relationship between organizational performance and work stress ($r=0.584$) when the level of significance is one percent.

3.2. The relationship between health care quality and organizational performance

The second question of this survey is associated with the relationship between health care quality and organizational performance. Table 2 demonstrates the results of Pearson correlation between these two components.

Table 2

The results of relationship between health care quality and organizational performance

		Organizational performance	Health care quality
Organizational performance	Pearson Correlation	1	.784**
	Sig. (2-tailed)		.000
	N	144	144
Health care quality	Pearson Correlation	.784**	1
	Sig. (2-tailed)	.000	
	N	144	144

** . Correlation is significant at the 0.01 level (2-tailed)

As we can observe from the results of Table 2, there is a positive and meaningful relationship between organizational performance and health care quality ($r=0.784$) when the level of significance is one percent.

3.3. The relationship between organizational intelligence and organizational performance

The third question of this survey is associated with the relationship between organizational intelligence and organizational performance. Table 3 presents the results of Pearson correlation between these two components.

Table 3

The results of relationship between organizational intelligence and organizational performance

		Organizational performance	Organizational intelligence
Organizational performance	Pearson Correlation	1	.837**
	Sig. (2-tailed)		.000
	N	144	144
Organizational intelligence	Pearson Correlation	.837**	1
	Sig. (2-tailed)	.000	
	N	144	144

** . Correlation is significant at the 0.01 level (2-tailed)

The results of Table 3 indicate a positive and meaningful relationship between organizational intelligence and organizational performance ($r=0.837$) when the level of significance is one percent.

3.4. The relationship between job satisfaction and organizational performance

The next question of this survey is associated with the relationship between job satisfaction and organizational performance. Table 4 presents the results of Pearson correlation between these two components.

Table 4

The results of relationship between job satisfaction and organizational performance

		Organizational performance	Job satisfaction
Organizational performance	Pearson Correlation	1	.914**
	Sig. (2-tailed)		.000
	N	144	144
Job satisfaction	Pearson Correlation	.914**	1
	Sig. (2-tailed)	.000	
	N	144	144

** . Correlation is significant at the 0.01 level (2-tailed)

The results of Table 4 imply a positive and meaningful relationship between job satisfaction and organizational performance ($r=0.914$) when the level of significance is one percent.

3.5. The regression model

The last question of the survey investigates whether these four variables could be stated as a linear regression model as follows,

$$OP = \beta_0 + \beta_1 OS + \beta_2 HCQ + \beta_3 OI + \beta_4 JS + \varepsilon, \quad (1)$$

where organizational performance (OP) is a linear function of organizational stress (OS), health care quality (HCQ), organizational intelligence (OI) and job satisfaction (JS). Table 5 demonstrates the summary of ANOVA test.

Table 5

The summary of ANOVA test

	Sum of Squares	df	Mean Square	F	Sig.
Regression	230095.653	4	57523.913	3941.254	.000
Residual	2043.347	140	14.595		
Total	232139.000	144			

As we can observe from the results of Table 5, F value is equal to 3941.254, which is significance with $\alpha=0.01$. Therefore, we can proceed to the regression model and the results are summarized in Table 6 as follows,

Table 6

The summary of regression analysis

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	3.183	3.664		1.644	.101
	OS	.612	.041	.596	2.533	.007
	HCQ	.125	.055	.204	2.286	.024
	OI	.196	.057	.342	3.471	.001
	JS	.993	.087	.953	11.416	.000

As we can observe from the results of regression analysis, the coefficients of all four independent variables are positive and they are statistically significance with $\alpha=5\%$. In other words, all four independent variables positively influence organizational performance.

4. Conclusion

In this paper, we have presented an empirical investigation to study the effects of different factors on organizational performance on one of private universities in city of Tehran, Iran. The study has used Pearson correlation ratio and found some positive relationship between organizational performance on one side and work stress ($r=0.584$), health care quality ($r=0.784$), organizational intelligence ($r=0.837$) and job satisfaction (0.914). The results of regression analysis also indicate that job satisfaction plays the most important factor followed by organizational stress, organizational intelligence and health care quality.

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