

Examine the Effect of Individual Creativity on Job Performance with the Mediating Role of Ethical Leadership of Headquarters Staff of Hormozgan University of Medical Sciences

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Abstract: This research was performed to assess the impact of individual creativity on the job performance with the mediating role of ethical leadership and is descriptive and correlation. In this study, 200 employees of Hormozgan University of Medical Sciences were selected by convenience sampling. Research data were collected by Paterson's job performance standard questionnaires, Torrance test of creativity and de Hoogh and Den Hartog ethical leadership questionnaire. Data using structural equation and were analyzed by Amos Statistical Software. The result showed that there is a significant relationship between individual creativity, ethical leadership and job performance and individual creativity has significant impact on the job performance with the mediating role of ethical leadership.

Key words: Individual creativity, ethical leadership, job performance, headquarters staff, Torrance

INTRODUCTION

In today's world, organizations have been made prominent place in the cultural and social structure. Many essential activities relating to life and the lives of people in organizations is done virtually impossible without the existence of organizations and the success and failure of an organization depends on employee job performance.

Thus, according to the importance of job performance, job performance is defined as assesses whether a person performs a job well (Suliman, 2007). Also, Rogelberg (2007) has defined the activities that are normally part of the job and its individual activities and should do it. Job performance is complex phenomenon's that are related to multiple intrapersonal factors (organizations) and interpersonal. Intrapersonal factors can be pointed to individual creativity and ethical leadership.

Creativity is presenting a new plan to improve the quality and quantity of thought and activities of the organization such as increased productivity, output or services, cost reduction, product or services of better methods, products or new services, etc.

Strengthening the power of individual creativity and initiative is raising morale and motivation, personality development and so on in the management of human resources capability and effectiveness of the organization to create an organization have no choice but to pay attention to education. To achieve these goals, the first

phase of job performance should be appropriately evaluated and assessed and after identifying the strengths and weaknesses of employees in the above fields can be taken to eliminate weaknesses and enhance strengths. In other words, the job performance should be tried in the rehabilitation and training of human resources.

Several studies have confirmed the relationship between creativity and performance, including Vatankhah *et al.* (2013) and Ahmadi and Setorg (2009). In fact, today the development of human resources and skills development, individual creativity and knowledge of the workforce at all levels of the organization is a strategic priority for managers. In other words, sustainable competitive advantage is having valuable human resources.

In this regard, the planning to develop intellectual capital of human resources not only is competitive advantage for organizations but also providing opportunities to learn new techniques and improve the performance and efficiency (Thang *et al.*, 2010).

So, it can be said that prologue job performance and organizational productivity there is unified management and ethical leadership. Ethical leadership is individual and a collective behavior that is normative appropriate and supports this type of followers' behavior, through two-way communication, caused reward and decision. Ethical leadership include of fairness, transparency and sharing of power. Also, the normative conduct through personal actions and interpersonal relationships and

promote the spiritual and moral normative behavior through bilateral relations, ways of reward and punishment and according to the principles and ethical values when making decisions (Brown *et al.*, 2005). Review of research history in this area has shown that different studies including Mishra and Bhaskar (2010) and Barton and Barton (2011) have confirmed the relationship between ethical leadership and performance.

In addition to the presented material, given the pivotal role of leadership in advancing the organization's objectives have been determined and sustained survival, the need for coordination, collaboration and direct interaction with the leaders of all organizational levels in order to achieve this important is inevitable. Therefore, leaders try to adopt different leadership styles appropriate to the culture, maturity and organizational development, growth and development of individual, group and organizational condition. Leader's efforts are to build consensus and understanding organizational leaders and their leadership in the growth and development of the concept of "ethical leadership". Ethical leadership begins through an understanding with the leaders of the around world.

Studies in the field of ethical leadership, principles of corporate ethics and social responsibility are considered as studies that are not separable from each other. Undoubtedly, these two concepts are in progress and at the same time are inseparable. To what extent an ethical leader are connected with the around world and want to understand it, it effects on capacities for research, diagnosis and the operation. This capacity are the foundation of skills, knowledge and attitudes that can be improved. In general, the role of leadership is guidance and support to develop the capacity and potential of the people who are set to gain and achieve organizational goals. They use their potential ideas, assumptions and performance.

With regard to the issue of the role and impact of ethical leadership as a mediating role in influencing individual creativity on job performance considered and proposed the following conceptual model (Fig. 1).

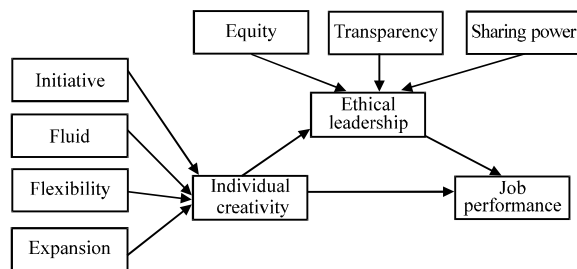


Fig. 1: Conceptual model

MATERIALS AND METHODS

Population, statistical samples and sampling method:

Populations for present study are 400 staff of Hormozgan University of Medical Sciences. In the present study because of non-experimental survey, using the following formulas that can be used to determine the sample size (Sarmad *et al.*, 1997):

$$n_0 = \frac{Z^2 pq}{d^2}$$

$$n = \frac{n_0}{1 + \frac{n_0}{N}}$$

Where:

N = Population size is 400 people

n = Number of sample

d² = The error that considered 95%, the probability of error is 0/05

Z = The value of normal unit of confidence level is 1.96

P = Choose a success ratio, calculated as the ratio of variable with previous studies (success in this study is intended 0/5)

q = 1-p of failure of elections is due to the amount of p is 0/05

In this case, the amount of variance reaches its maximum 0/25. Because the population variance is unknown is used above formula. According to the calculations of the 400 population, 196 samples were obtained that due to the possible loss was considered 200 people. In this study, the available sampling method was used for statistical sample.

Data collection instruments: Paterson's job performance questionnaire was used to measure job performance (1970) that includes 15 questions with 4-point scale. About reliability and validity, Manzari and Shokrkon reported the reliability of the questionnaire in a sample of male school teachers in Ahvaz City using the Spearman-Brown formula and split-half (odd/even) at 0/84. Amini and Noori in samples of 88 people of Isfahan refinery staff reported the reliability of questionnaire with Cronbach's alpha coefficient 0/70 and split-half 0/58. Sayahi and Shokrkon reported the reliability of the questionnaire in a sample of Khuzestan steel company staff with Cronbach's alpha 0/85 and split-half methods 0/85.

Khoshkam using the test sample in water and power employees of Ahvaz and have reported reliability and

validity of questionnaire of two ways, Cronbach's alpha and split-half 0/85 and 0/80 and reported reliability factor by linking the test with a score 1 general questions and calculated 15 degree 0/43 on level of $p < 0/0001$. Kerdeli in the case of Pegah Dairy Company employees of Khuzestan obtained Cronbach's alpha reliability coefficient of the questionnaire that is equal to 0/89 (according to the Barzegarand Mohammadi).

In this research, the assessment tool of ethical leadership is ethical leadership standard questionnaire that is designed by De Hoogh and Den Hartog. The questionnaire included 15 questions based on the 5-point Likert scale and includes dimensions of equity, transparency and sharing of power. The reliability of this questionnaire in the study of De Hoogh and Den Hartog was calculated with Cronbach's alpha and reported 0/893. They also examined and approved the validity.

Torrance (1972) test of creativity is one of the standard tests to measure people's creativity. The test is used more than any other test and measurement educational research. So, far, more than two thousand studies that published in scientific journals, Torrance test has been used as a means of measuring individual creativity that developed in 1992 by the University of California in Los Angeles and is divided to some parts that have 60 articles the number of 22 articles in initiative part, 16 articles in the fluid part, 11 articles in the flexible part and 11 articles in expansion part. Each article has three options. An option reflects the creativity from low to high is to arrange a score from 1-3 are awarded to them.

These scores are gathered in four groups thus obtained four score and by totaling four scores can be achieved a total score to creative subjects. About the reliability and validity of questionnaire, this test for the first time was translated into persian by Shokrkon and Kefaiat. Creativity test reliability by Kefaiat was obtained to Cronbach's alpha for the total test 0/85 and by Mobini. In Mahmoudi calculated Cronbach's alpha coefficient equal to 0/87 and in Miandoost study was 0/88.

So, for implementation of introduced questionnaires is provided sufficient evidence and validity of these tests has been confirmed by experts. At the same time, before the final analysis, use pre-test for 30 employees and Cronbach's alpha was calculated. Because of this ratio was $> 0/70$ it follows that the validity and reliability is high. The values of these coefficients for each of the questionnaire are presented in Table 1.

Data analysis: In this study, using the Kolmogorov-Smirnov test to check the normality of variables using simple regression and multivariate Software SPSS22 as well as using structural equation

Table 1: Cronbach's alpha coefficient

Questionnaire	The number of items	Cronbach's α coefficients
Job performance	15	0/88
Individual creativity	60	0/86
Ethical leadership	15	0/84
Total	90	0/87

modeling Amos 18 Software proposed conceptual model and were paid to examine acceptance or rejection of hypotheses.

Hypotheses:

- H₁: individual creativity has an impact on job performance
- H₂: ethical leadership has an impact on job performance
- H₃: individual creativity has an impact of ethical leadership
- H₃: individual creativity through ethical leadership has an impact on job performance

RUSULTS AND DISCUSSION

First by using the Kolmogorov-Smirnov test to check the normality of the variables in each of the hypotheses and using the Software SPSS18 and then using structural equation modeling (path analysis) with Amos22 Software was paid the approval or rejection of the hypothesis of the study.

Since, the normal distribution of variables in the regression of the defaults is the most important assumptions, before examining the research hypotheses, using non-parametric Kolmogorov-Smirnov were examined assuming normal distribution of data related to each of the variables. In all the conducted tests in this study, the significance level is considered equal to five percent (A). The results of Kolmogorov-Smirnov test which is written as follows are summarized in Table 2.

- H₀ (null hypothesis): data distribution is normal
- H₁ (alternative hypothesis): data distribution is not normal

Since, achieved significance level for all variables is a number greater than 0.05, there is no reason to reject the null hypothesis and the assumption of normality about all variables is confirmed.

To test the hypothesis in accordance with the number of independent variables and multivariate regression was used to examine the assumptions and results are shown in Table 3.

According to the results and based on the obtained correlation coefficients conclusion that the 99/2% of the job performance of individual creativity as well as 1/4% of

the changes in job performance be explained by the dimensions of ethical leadership. Also to evaluate other assumptions was used single variable regression. Results are shown in Table 4.

According to the results in Table 5, all hypotheses are confirmed. Also adjusted coefficient of determination, 97/1% change in job performance by individual creativity in 3/6% changes in job performance by the ethical leadership and 6% changes of ethical leadership can be explained by individual creativity.

In this study in particular structural models or structural equation modeling (path analysis) is also being used by Amos Software. Normal distribution of variables in the regression is the most important assumptions with respect to non-parametric Kolmogorov-Smirnov test (Table 2); the assumption has been confirmed about all variables.

Data analysis: Before testing the hypotheses must be examined in the overall model. The remarkable thing is that while the model is fitting with confirm model, the structural model, did not prove the only valid model.

According to the provided results of Amos Software output, the overall fitting indices model shows a favorable situation. Comparative indicators show higher values or close to 0.90 which means the model away from independence model and approaching the saturation model based on defined criteria. RMSEA fitting index and its confidence interval are in the acceptable range 0.90.

The results of structural equation: In order to assess the hypothetical causal relationship had been used structural equation modeling, through indicators model that shows proposed conceptual model. In this study,

after drawing model based on the data size, parameters model using obtained Amos Software and hypotheses have been examined (Fig. 2 and 3).

Testing hypotheses

Testing hypotheses 1: Individual creativity has an impact on job performance. The results of hypothesis 1 will be examined according to the information (Table 6). The coefficient of external latent variable individual creativity on job performance internal variable shows that desired statistics is meaningful as a result the null hypothesis is rejected on the absence of relevant coefficient (confirming the hypothesis 1).

Testing hypothesis 2: Ethical leadership has an impact on job performance. The results of hypothesis 2 will be examined according to the information (Table 7). The coefficient of internal latent variable ethical leadership on job performance shows that desired statistics is meaningful as a result the null hypothesis is rejected on the absence of relevant coefficient (confirming the hypothesis 2).

Testing hypothesis 3: Individual creativity is the impact of ethical leadership. The results of hypothesis 3 will be

Table 2: Results Kolmogorov-Smirnov test

Variables	Indicators	Performance	Creativity	Ethical leadership
Normal	Mean	2/301	2/31	0/72
parameters	Standard deviation	0/706	0/68	0/95
Highly	Absolute value	0/224	0/227	0/075
critical	Positive	0/161	0/158	0/065
	Negative	-0/224	-0/227	-0/075
	Kolmogorov-Smirnov	3/16	3/205	1/056
	Significant level	0/600	0/660	0/215

Table 3: Multivariate linear regression test simultaneously

The criterion variable	Predictor variables	B	β	t-values	p (Sig.)	R ²	F-values	df
Job performance	Constant coefficient	0.041	-	2.591	0.010	0.992	6105.524	4
	Initiative	1.627	1.669	34.789	0.000			
	Fluid	0.357	0.376	29.715	0.000			
	Flexibility	0.33	0.348	27.491	0.000			
	Expansion	1.329	0.354	28.993	0.000			
Job performance	Constant coefficient	2.213	-	12.512	0.000	0.014	0.936	3
	Equity	0.143	0.246	1.607	0.010			
	Transparency	0.006	0.010	0.092	0.026			
	Sharing power	0.110	0.187	1.222	0.023			

Table 4: Multivariate linear regression test simultaneously

The criterion variable	Predictor variables	B	β	t-values	p (Sig.)	R ²	F-values	df
Job performance	Constant coefficient	0.056	-	1.854	0.047	0.971	6637.223	1
	Individual creativity	0.018	0.985	81.849	0.000			
Job performance	Constant coefficient	2.201	-	10.858	0.000	0.036	0.259	1
	Ethical leadership	0.027	0.036	0.509	0.011			
Ethical leadership	Constant coefficient	3.532	-	14.829	0.000	0.060	0.710	1
	Individual creativity	0.083	0.060	0.842	0.001			

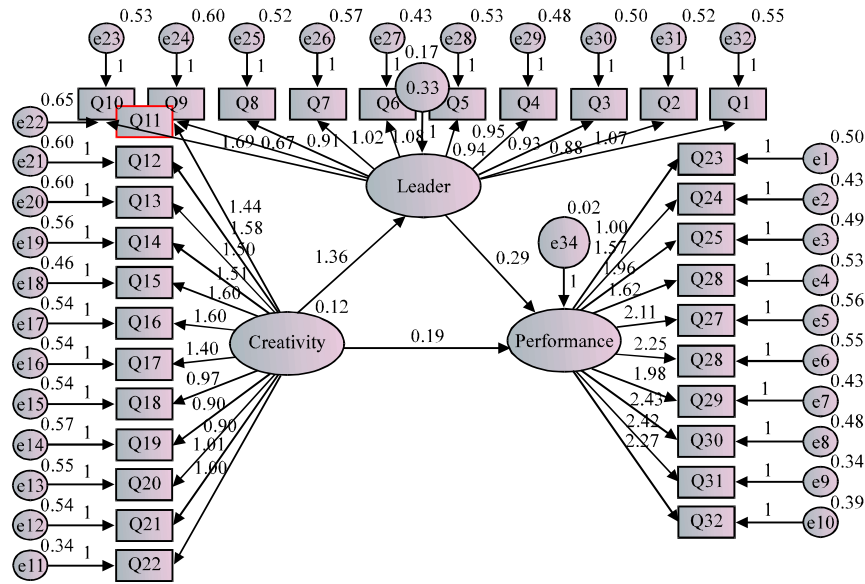


Fig. 2: The non-standard structural coefficients model and measurement

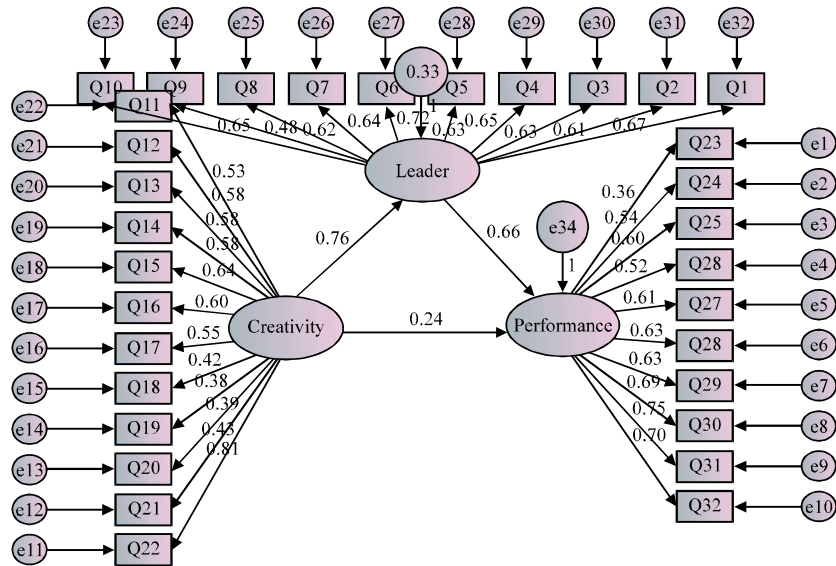


Fig. 3: Standardized structural coefficients and measurement models

Table 5: Research model of fitting indexes

Fitting indexes	Values
Degrees of freedom	461
χ^2	1079.608
χ^2/df	2.342
GFI	0.718
NFI	0.637
CFI	0.750
AIC	1213.608
RMSEA	0.082

Table 6: Summary analysis of research data

Direction	Path coefficient	Standard coefficient	Results
Individual creativity→job performance	0.29	0.66	Accept

Table 7: Summary analysis of research data

Direction	Path coefficient	Standard coefficient	Results
Ethical leadership→job performance	0.76	1.36	Accept

examined according to the information (Table 8). The coefficient of internal latent variable individual creativity on ethical leadership shows that desired statistics is

meaningful as a result the null hypothesis is rejected on the absence of relevant coefficient (confirming the hypothesis 3).

Table 8: Summary analysis of research data

Direction	Path coefficient	Standard coefficient	Results
Individual creativity→ethical relationship	0.19	0.24	Accept

Table 9: Summary analysis of research data

Direction	Coefficient	Results
Individual creativity→ethical relationship	1.36×0.29 = 0.39	Accept
Ethical relationship→job performance		

Testing hypothesis 4: Individual creativity through ethical leadership has an impact on job performance. The results of hypothesis 4 will be examined according to the information Table 9. The coefficient of external latent variable individual creativity on ethical leadership and internal latent variable coefficient of ethical leadership on job performance shows that desired statistics is meaningful as a result the null hypothesis is rejected on the absence of relevant coefficient (confirming the hypothesis 4).

CONCLUSION

It can be said that in justification of the above findings, creativity known with initiative, fluids, flexibility and expandability. In the examination of population of the study in terms of staff, all of these variables showed a significant effect on job performance. The results of hypothesis 1 will be examined according to the information table. The coefficient of external latent variable individual creativity on job performance internal variable shows that desired statistics is meaningful as a result the null hypothesis is rejected thus the first claim of researcher has been confirmed and individual creativity has an impact on job performance.

In fact, the capabilities and the predictive power of individual creativity for job performance are much more than ethical leadership. At the same time, ethical leadership has an impact on job performance with increasing the mediating role of individual creativity. In general, it can be said that with rising individual creativity, opportunity for advancement goes up and vice versa.

In Ruiz Moreno and Garcia Morales study, these results were obtained that organizational performance is developed through innovation and organizational creativity and to enhance creativity will increase job performance. The findings are now also supports that conclusion.

The results of hypothesis 2 will be examined according to the information table. The coefficient of internal latent variable ethical leadership on job performance shows that desired statistics is meaningful as a result the null hypothesis is rejected and researchers claim has been confirmed and ethical leadership has an

impact on job performance. Thus, managers sharing power with the dimensions of ethical leadership, participative atmosphere and create substrates that eliminates the terms of powerlessness also with corporate transparency policy and clarification of job duties and expectations of employees, however insignificant they provide to enhance job performance. The results of hypothesis 3 will be examined according to the information table. The coefficient of endogenous latent variable individual creativity on ethical leadership shows that desired statistics is meaningful as a result the null hypothesis is rejected and the third claim of researcher was approved and thus ethical leadership has an impact on individual creativity. The results of hypothesis 4 will be examined according to the information table. The coefficient of external latent variable individual creativity on ethical leadership and internal latent variable coefficient of ethical leadership on job performance shows that desired statistics is meaningful as a result the null hypothesis is rejected and the fourth claim of researcher is confirmed and individual creativity through ethical leadership has an impact on job performance. Actually, in fact, process optimization and working methods on transparency and identify the job rotation and information on the organization, documentation of tasks, work methods and simplify ways of doing things are important factor in job performance. Accordingly, it can be concluded that clarification of the duties and matters relating to staff, since they will be clarified the issues to perform job duties could increase any attempt to productivity and their performance in the workplace. Also, the sharing of power, adoption of opinions and ideas of employees in decision-making and improve their cooperation in the organization, delegating to staff at different levels of organization, cooperation and participation of employees in order to offer more effective to perform and control affairs that is carried out by staff can work as a group to increase participation and creativity of individual employees to increase productivity and efficiency and affect job performance in organizations.

To achieve better results it is necessary to apply the principles of ethical leadership and motivate people and develop individual creativity, the following actions will be performed.

Consideration of matters relating to the implementation of ethical leadership, learn the basics with in-service training courses, forming related educational workshops, providing behavioral patterns for notebook and brochures and the use of bulletin boards in the organization.

To achieve the goal and creating job performance need to create infrastructure and preparation and understanding of organizational units and emphasized more than ever staff trying to achieve the desired goals and they are more motivated to perform tasks and be able to apply more individual creativity in their work.

Creating a suitable environment and localization purposes and indicators and by computerizing and activation of virtual suitable space to increasing the work motivation for the use of individual creativity could easily benefit from the experiences of colleagues in jobs and job duties. Is provided suitable environment for the use of individual creativity, by creating job rotation, delegating more authority to employee and indirectly monitor the activities of managers.

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