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Examine the moderating role of job quirks in the relationship between human resource development and organizational innovation (case study:Ardabil Province Gas Company)

Akbar Minayi¹ and Habib Ebrahimpour^{2*}

Department of Management, Germi Branch, Islamic Azad University, Germi, Iran
Department of Management, Mohaghegh Ardabili University, Ardabil, Iran

Corresponding author: Habib Ebrahimpour

ABSTRACT: In this research, job characteristics are diversity of skills (a level in which job needs to a variety of skills), job importance (a level in which individual's job affects his life and others job), job identity (a level in which an employee do the job completely), freedom in job (a level in which a person can freely plan the procedure of his work and have his own freedom and independence) and feedback (the amount of activities a person needs to reach to the results of his job through direct and clear information about its efficacy) are related to provocation and job satisfaction. The studied statistical population is Ardabil province gas company employees. According to Cochran formula the sample size is 279. In this study, the required data gathered by standard questionnaire. Data's being normal investigated and to test the hypothesis of research due to the three variables normal nature we used Pearson correlation coefficient. The test result is based on the assumptions, the results of Statistical analysis of multiple correlation, indicates that this hypothesis was confirmed.

Keywords: job quirk, human resource development, organizational innovation.

INTRODUCTION

One of the main cycles and duties in human resource cycle is developing the human resource which pays to the issues like creating an active organization and opportunities for education and learning of employees in order to improve the organizational, personal and group function (Armstrong, 2002). Nodler as a pioneer in developing the human resource development theories in 1960 defines this kind of development as organized learning experiences which are presented by employers in a certain period of time in order to improve the personal growth and function. According to them three key activities are the bases of human resource development. These are; training, education and development. Training; includes learning with emphasis on present job of the learner. Education; includes learning with emphasis on future job of the learner. Development; is a kind of learning which is not concentrated on a job (Nadler & Nadler, 1989; 101).

In a nearly comprehensive definition, human resource development can be defined as the process of development and provoking human specialties via organizational development and training employees and development for the sake of function, or in other definition human resource development can be defined as a short or long term process in order to developing knowledge, specialty, productivity and satisfaction in different levels of personal, team, organizational or national (McLean, 2001). From this perspective, human resource development provides a framework for helping employees develop their skills, knowledge, and abilities of individuals and organizations through the provision of educational opportunities, career development, succession planning, performance management and development, coaching and development organizational innovation to achieve organizational goals (Xiaohui And McLean Gary, 2007).

On the other hand, it should be noted that between creativity and innovation there is difference so that the corner stone of change is creativity. Innovation requires creativity and modernistic realization are related to the creativity. Organizational change is to accept a new idea or behavior by an organization and vice versa, organizational innovation is to accept a belief or behavior that is unique to industry, market or environment. Then change and organizational innovation involves the effort deliberately to make the change in the Organization and to improve the existing system and since the human is the drive for the change and innovation in the Organization, so to create change and innovation the most capital should be spent on human resources planning. In result, one of the factors that provide the context for change and innovation, is training and development of human resources, for in training and human resource development, people are equipped with the qualities with which facilitate change and innovation (Imani Pour , 2012: 32).

Innovation means the application of innovative ideas and creative thoughts, such as the provision of goods, services, and new ways of doing things (Kuntz, 1998). Sometimes the purpose of innovation is to use an old technology to solve a new problem; So that it is not already used (Filippo, 1975). Roberts (1988) believes that innovation is a process by which an idea or invention has become into a marketable product or service that can be presented to the market. Organizations and managers, if they are to survive and prosper in the long term, they must be innovative and continually adapt to the new situation. Process of creating new ideas and turn those ideas into practical and useful applications is called innovation. (Abbasian, 2012: 11).

In other words, the concept of innovation as a vital tool for the creation of value and the stability of competitive advantage of organizations are recognized in highly variable environments with ever-increasing complexity (HajiKarimi, 2009). Organizations with the power of innovation in response to changing environments and to create new features that will allow them to achieve better innovation, are more successful (Subramaniam, 2004). Innovation initial point is dependent strongly to the knowledge, expertise and commitment of human resources as the main entrance in the process of value creation and innovation (Youndt, 1996). Human resource development is organizational tool for shaping and influencing skills, attitudes and behavior of individuals in their job functions and. consequently, to achieve organizational goals and innovation (Collins, 2003). To innovation, organizations can use to develop human capital and organizational expertise to create new goods and services, although specialty concept was too complicated, mainly due to deliberate upon the objectives and specific tasks in a given environment (Erikson and Charness, 1995). This aimed investigation is performed for enhancing the performance of those who do these duties. By determination and application of a set of human resource strategic operation, organizations can increase people inclination and motivation in order to do this critical operation for developing and increasing organizational specialty to reach to organizational innovation. Thus, HRD is a leading innovative activity. It enables discovery and use of knowledge and expertise in the organization (Jacobs and Jones, 1995; Swanson, 1994). HRD may influence selections, capacities and behaviors of employees to achieve organizational goals and change them (Collins, 2003; Martinsons, 1995) And play a vital role in manifesting conditions for accelerating and grouping and directing people to the development of innovative activities (Scarbrough, 2003).

For investigating the Innovative human resource management effects on production efficiency MacDuffie (1995) used of four criteria, recruitment, remuneration and training to demonstrate strategic human resource practices. He indicated that the integration of various strategic human resource practices are associated with improved production values. In addition, Delery and Doty (1996) identify seven key practice in strategic human resource practices, including staircases of career progression, training, performance appraisal, compensation, job security of staff and making the job attractive for them and using them in order to development of innovation. Our results indicate that each of them can be used in a significant level of innovation.

In addition, Collins and Clark studied strategic human resource practices such as training, performance appraisal and reward them with a field study of 73 participants. The results showed that these operations play an important role in innovation. (Sadeghi and Mohtashami, 2011: 8). On the other hand, the most important model of the job characteristics model is Hackman and Oldham's job characteristics model. This model indicates that job characteristics such as diversity of skills (a level in which job needs to a variety of skills), job importance (a level in which individual's job affects his life and others job), job identity (a level in which an employee do the job completely), freedom in job (a level in which a person can freely plan the procedure of his work and have his own freedom and independence) and feedback (the amount of activities a person needs to reach to the results of his job through direct and clear information about its efficacy) are related to provocation and job satisfaction.

First three dimensions cause meaningfulness of job, fourth dimension is about the results and last dimension is related to acknowledgment about actual results of the job which all these five dimensions are summarized in MPS formula. MPS is the result of multiplying the average of the first three dimensions (job diversity, job nature and importance of the job) in the scope of work freedom and feedback. This model suggests that if the MPS of done job is at a higher level, motivation and job satisfaction increases. (Faraji, 2008: 87).

Considering the above problem the issue that arises is that do job characteristics may play a moderating role in the relationship between human resource development and innovation in the organization?

Conceptual model of research

In the present model of job characteristics from the perspective of "Hackman and Oldham (1975)," Human Resource Development "Tunkenejad and Davari, (2009)," Organizational innovation from the insights of "Kuntz, (1988)" and the combination of these three is done by the researcher.

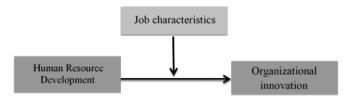


Figure 1. Conceptual model

Human resource development is creating the field of organizational innovation but the study of the job characteristics and the role that it can play in speeding up or slowing down organizational innovation are of the Cases which the will be investigated in this model.

Hypothesis

The main hypotheses:

1. Job characteristics have a meaningful effect on the relationship between human resource development and organizational innovation in Ardabil Province Gas Company.

2.

Sub-hypotheses:

- 1. Job characteristics have the moderator on human resource development in Ardabil Province Gas Company these.
- 2. Job characteristics have the moderator on organizational innovation in Ardabil Province Gas Company these.
- 3. HRD has a significant impact on organizational innovation in Ardabil Province Gas Company.

MATERIALS AND METHODS

Methods

The present study applied one and since it is aimed to find the relationship between two variables, in terms of the nature and type of research method is descriptive - correlational.

The studied statistical population is Ardabil province gas company employees. They are 928 in total. According to Cochran formula the sample size is 274. Sampling method is simple random sampling, in which members have equal chance of being selected Using Cochran formula (one of the most common formula to obtain the volume of the sample) sample of 274 patients was calculated based on the pre-test.

In this study, the required data and information related to literature and theoretical sources from the library and database of domestic and foreign scientific and articles extracted from the Internet and a standard questionnaire is used. In the meantime in order to test the hypothesis the software SPSS has been used. In the present research using K-S test. The Cronbach's Alpha was 0.83 for human resource development, 0.843 for Job characteristics and 0.697 for organizational innovation.

Data's being normal investigated and to test the hypothesis of research due to the three variables normal nature we used Pearson correlation coefficient. And to achieve the amount of defining of dependent variable from independent variables side multivariate regression will be used.

RESULTS AND DISCUSSION

Results

Hypothesis: independent elements have meaningful effect on job knowledge

In Multiple regression table the results of the regressions in understanding of the job is indicated. Given that the meaningfulness level of sub-hypothesis (skill variety, job identity, job importance and job feedback and job autonomy) has a significant impact on the prediction of job knowledge. The research sub-hypothesis is not rejected. According to the coefficient of determination, the amount of 0.99 of dependent variable changes can be explained by the explanatory variables in the model.

Table 1. Multiple regression

	oefficients ^a					
Mo	odel	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	007	.005		-1.350	.178
	Variety of skills	.203	.003	.231	73.301	.000
	Job Identity	.199	.003	.228	65.981	.000
	job importance	.198	.002	.237	90.613	.000
	Job Feedback	.196	.002	.333	122.368	.000
	job Independence	.205	.002	.306	100.630	.000
a.	Dependent Variable:	job knowle	edge			

The Results of ANOVA test to assess the significance of the regression of job knowledge is used to test the following hypotheses:

H0; All the coefficients of the model are yet zero and the model is not meaningful

H1; At least one of the coefficients of the model are against zero and the model is meaningful

Table 2. The results of the ANOVA test

1A	NOVA ^b					
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	89.955	5	17.991	7.339E4	.000a
	Residual	.067	273	.000		
	Total	90.021	278			
a.	Predictors: (Co	onstant), v5, v2, v3,	v4, v1			
b.	Dependent Vai	riable: job knowledg	ie			

According to the ANOVA table, the probability of F-statistics, namely Sig was equal to (0.000) and regarding the fact that it is less than &=0/01, so hypothesis H0 is rejected and model is up to 99 percent trustable and meaningful and thus whole of the regression model is meaningful.

Hypothesis: independent elements have meaningful effect on HRD

In multiple regression tables, the results obtained from regression on HRD is shown. Given that the sub-hypothesis meaningfulness level (identity, integrity, success and sustainability) has a significant impact on the forecast for human resource development. The research sub-hypothesis is not rejected. According to the coefficient of determination, the amount of variability of 0.99 of changes of dependent variable can be explained by the explanatory variables in the model.

Table 3. HRD Multiple regression

_	oefficients ^a odel	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		Ü
1	(Constant)	.011	.012		.895	.372
	Identity	.246	.007	.291	34.153	.000
	Integration	.299	.010	.304	29.012	.000
	Success	.195	.007	.214	28.096	.000
	Compatibility	.261	.004	.348	60.073	.000
a.	Dependent Varia	able: TMN				

The Results of ANOVA test to investigate the meaningfulness of the whole regression is used to test the following hypotheses:

H0; All the coefficients of the model are simultaneously zero and the model is not meaningful

H1; At least one of the coefficients of the model are against zero and the model is meaningful

Table 4. The results of the ANOVA

1A	NOVA ^b					
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	72.492	4	18.123	1.234E4	.000ª
	Residual	.402	274	.001		
	Total	72.895	278			
a.	Predictors: (Co	onstant), v4, v1, v3,	v2			
b.	Dependent Va	riable: TMN				

According to the ANOVA table, the probability of F-statistics, namely Sig was equal to (0.000) and regarding the fact that it is less than &=0/01, so hypothesis H0 is rejected and model is up to 99 percent trustable and meaningful and thus whole of the regression model is meaningful.

Variable Path Analysis

According to the obtained models, variables of job characteristics as variable are dependent to the variables which are assumed as dependent variables and the effect of other variables has calculated on them. In order to investigate the amount of mutual Correlation between external variables (according to interval scale variables) Pearson's correlation coefficient was used. The coefficient indicates that there is a correlation between these variables.

Using this method and calculating correlation coefficient between external variables it can be said that variable selection was not mosaic type, but there is interaction between them and variables are selected according to theoretical model. The amount of coefficients of every correlation is indicating by two way arrow in the path analysis model. The results show the variables that were selected for this study are highly correlated with each other and have a theoretical foundation, and increase and decrease in each of these variables, is changing with increases or decreases in variables compared with it.

According to the results the overall model and the detailed analysis of path has shown in the following figure: Fig 2: overall model and the detailed analysis.

CONCLUSION

In this research, job characteristics are diversity of skills (a level in which job needs to a variety of skills), job importance (a level in which individual's job affects his life and others job), job identity (a level in which an employee do the job completely), freedom in job (a level in which a person can freely plan the procedure of his work and have his own freedom and independence) and feedback (the amount of activities a person needs to reach to the results of his job through direct and clear information about its efficacy) are related to provocation and job satisfaction.

Test Results: The test result is based on the assumptions, the results of Statistical analysis of multiple multicollinearity and correlation, indicates that this hypothesis was confirmed. According to the table above zero-order correlations HRD variable is equal to 0.790 But while job characteristics as a mediator variable involved, the features in the partial correlations dropped (separately) to 0.743 and correlation part (half- separated) to 0/680, Zero-order correlations for the variables innovation and job innovation (without the intervention of a mediator variable job characteristics) 0.401 but in the presence of a mediator variable job characteristics to 0.014 in separated correlation and part correlation (semi separately) reduced to 0.009. This underscores the mediator role of Job characteristics in relation to human resource development and job innovation, The main hypothesis that job characteristics has meaningful influence on the relationship between human resource development and organizational innovation in Ardabil Province Gas Company, are confirmed.

Interpretation of test results; according to the context and background of research that shows the positive impact of HRD on organizational innovation, This means that human resource development through training and organization, including recruiting new employees as part of their identity . . . will lead to Organizational innovation increase, In this study, the first hypothesis in this regard was paid to the mediator roles of characteristics and Test results indicate the mediator role of the variable in the relationship between human resource development and organizational innovation, In fact, regardless of job characteristics, organizational development studies cannot predict favorable outcomes for organizational innovation, because with human resource development without regarding to job scales such as recruiting new employees without enough skills in the given job or improper training of human resource of organization, and without having proper job feedback for the employees, organizational innovation will not reach to supposed development.

Suggestions

- It is proposed to develop human resources to coordinate their intended profession and the professionalism of the human resources development component to be done.
- It is suggested that in recruitment of new human resource having enough skill be considered.
- It is proposed in training of manpower a scientific and systematic training be done and coordination each individual job be considered.
- It is proposed to optimize the working environment factors such as working space and office equipment and automation are improved to increase employee effectiveness.
- It is recommended the assessment of performance of employees in a particular period of time continuously.
- It is proposed to grant bonuses to employees in accordance with their organizational growth, success and innovation.

REFERENCES

Abbasian MR. 2012. Human Resource Development in the Navy, approach to creativity and innovation, the National Conference of coastal and maritime power of the Islamic Republic of Iran

Armstrong M. 2002. Human resources Strategic management, translation Arabi and Davood M. Izadi, Tehran: Cultural Research Bureau.

Delery JE and Doty DH. 1996. Modes of theorizing in strategic human resource management: Tests of universalistic, contingency and configurationally performance predictions. Acad Manage J.39(4):802-35.

Ericsson KA and Charness N. 1995. Cognitive and developmental factors in expert performance. In: Feltovich PJ, Ford KM,

Faraji A. 2008. The role and effect of Job Characteristics Model (JCM) on job satisfaction, College of Public Health and Institute of Health Research, Volume 6, No. 2, pp. 38-31.

Flippo EB and Gary Munsinger M. 1975. Management; 3rd ed., Boston: Allyn & Bacon, Inc. Roberts, Edwards.B., (1988), "Managing Invention and Innovation," Research Technology, January-February.

Hajikarimi A and Bathaee A. 2009. Intellectual capital management: Strategic advantage organizational value creation, concepts and application. Tehran: The Commerce Printing and Publishing Company

ImaniPour N, Mohammadpour S and Qolipur A. 2012. The role of e - human resource management on organizational innovation, entrepreneurship development, pp. 87 - 106.

Jacobs RL and Jones MJ. 1995. Structured on the job training: Unleashing employee expertise in the workplace. San Francisco: Berrett-Koehler:

Koontz H and Others. 1988. management; 8th ed., New York: McGraw-Hill, Inc

MacDuffie JP. 1995. Human resource bundles and manufacturing performance: Organizational logic and flexible production systems in the world auto industry. Ind Labor RelatRev, 48(2):197-221.

Martinsons MG. 1995. Knowledge-based systems leverage human resource management expertise. Int J Manpow;16 (2):17-34. McLean GN. 2006. National Human Resource Development: A Focused Study in Transitioning Societies in the Developing World. Advances in Developing Human Resources, 8(1), pp. 3-11.

Nadler L and Nadler Z. 1989. Developing Human Resource, Jossey-Bass Press, First Edition, San Francisco, p. 4.

Sadegi Z and Mohtashami R. 2011. The relationship between strategic human resource practices and organizational innovation in military centers, Journal of Military Medicine, Volume 13, Issue 2, Pages: 102 -97.

Scarbrough H. 2003. Knowledge management, HRM and the innovation process. Int J Manpow. 24(5):501-16.

Subramaniam M and Youndt MA. 2004. The influence of intellectual capital on the types of innovative capabilities. Acad Manage J.;48(3):450-63

Swanson RA. 1994. Analysis for improving performance: Tools for diagnosing organizations and documenting workplace expertise. San Francisco: Berrett-Koehler;

Tonkehnejad M and Davari A. 2009. A sociological approach to the development of human resources. Journal of Human Resource Management, University of Imam Hussain (AS), the first year, No. 3, pp. 51-80

Xiaohui W and McLean Gary N. 2007. The Dilemma of Defining International Human Resource Development, Human Resource Development Review. Vol. 6, No. 1, p. 96-108

Youndt MA, Snell SA, Dean JW and Lepak DP. 1996. Human resource management, manufacturing strategy and firm performance. Acad Manage J. 39 (4):836-66.