

Evaluation of Empowerment of Human Resources and Effectiveness

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ABSTRACT

The present study seeks to practically collect descriptive information using Delphi survey method to investigate the availability of a significant or lack of relationship between major hypotheses which they have some minor hypotheses as well. The major hypothesis measures the relationship between effectiveness and empowerment of human resources. Statistical population consists of managers, assistants and teachers working in education organization, north Khorasan province including 150 managers, and 260 teachers of high school level. One-hundred and ninety nine people were selected from these 410 subjects through random sampling method and Cochran formula. In this study Kolmogorov-Smirnov Test used to determine the significance of relationship between effectiveness and empowerment of human resources, Pearson's correlation coefficient to tests hypotheses, and t-Student Test for determination of existence or non existence of definite variables for effectiveness and empowerment hypotheses and Friedman's rating test used for effectiveness and empowerment hypotheses rating. In addition, in this article factor analysis based on new and advanced method of structural equations partial least squares (VPLS) applied to analyze coefficient and more important factors, estimate independent variables coefficients and determine effectiveness level of each independent variable on each other. Also, deciding on appropriateness of each item and its coefficient in explaining related index was considered in this method.

KEY WORDS: empowerment, human resources, effectiveness, efficiency.

INTRODUCTION

Individual is one of important elements in extensive organizational changes. In this area, superiority belongs to those companies that are ready to take risk and assign decision making process to the lowest organizational levels. This new paradigm is built upon empowering the person. The companies are designed to exploit individuals' energy and ability in working and achieving their goals. It is usual then, if managers be able to increase their human resources empowerment and lead to development and improvement of organization's affairs. Therefore, since the human is the center for organizational developments, to reach higher growth level, empowerment of human resources is the one and only effective way.

Library studies and applied papers show that investigators believe that resources is the most accessible and sustainable competitive advantage of organizations.

Geisler [1] defines empowerment as power injection to the employees. Based on the post modern theories in management, empowerment could be regarded as a management style in which the managers and human resources have been invited to more engagement in professional processes through participation in decision making processes. Today's managers do attempt to extract intellectual knowledge of organization's members via knowledge management and then shares it among all people. In this state, the knowledge stored in system will change into a permanent useable resource and supply organization with sustainable competitive advantage [2].

Empowerment bears many different broad general and specific definitions that have made difficulties in coming to a well-defined concept. Empowerment refers to a variety of elements including intrinsic motivation, perception and commitment, job structure, transfer of power or authority and sharing knowledge or information. One of effective factors on employee empowerment is information, knowledge and job skill. Therefore, now empowerments can be described as contribution of organization frontline employee in four elements of information, knowledge, reward and power [3].

In conditions when are under the influence of economic competitions, professional quality and organizational efficiency becomes a principle. To improve its own organization's performance, management should wear qualitative glasses and try to maintain the performance quality of company as much as s/he can through presenting executive strategies. That means, every empowerment program can lead to principally more efficiency and production, better services, higher absorption of customers and finally taking charge of greater share of market .this

continuous improvement not only is crucial for threats and opportunities of complicated today's environment but also confirms that the company has not to accept the principle of different human resources solely. Indeed, it should invest on these differences and give them responsibilities match with their abilities. Also, since innovation in creating new opportunities happens when the company possesses powerful human resources, therefore, by analyzing effectiveness variables, efficient factors on process of empowerment of human resources will be evaluated. In addition, some weaknesses and obstacles as well as practical strategies will be evaluated and explained.

After reviewing related literature, methodology is presented and case will be studies. Next, results are provided and discussed.

Theoretical framework:

Here we take a look at empowerment definition in the literature. Oxford concise dictionary defines empower as "power, giving permission, empower and enabling". This word connotes power and freedom in controlling self and in organizational level means change in culture and courage in establishment and direction of an organizational environment. In other words, empowerment used to be the planning of organizational structure in a way that besides self control, employees get ready to accept more responsibilities.

The word empowerment means enabling individuals for doing a work but in terms it consists of reinforcing process of sense of feeling in persons by use of formal and informal organizational techniques for preparing required information lead to effectiveness finally[4].

In 1988 Conger and Kanungo [5] presented the first operational definition of empowerment. They believed since power and control have been applied in two different methods within management texts, the empowerment should also be defined in two different ways. They measure empowerment as either a motivational or interactional construct. The concept of empowerment refers to the process within which managers help employee to achieve necessary abilities of independent decision making.

This process not only is useful for individual's performance but also is effective on his personality. The most outstanding meaning of empowerment is sharing authority to the even lowest organizational levels. Decision making process should contain a great extent of decentralization and professional staff and groups must be in charge of a complete part of work process.

Blanchard [6] said that many of managers emphasize on empowerment since it gives the power to take decisions. Also, most of employees look at empowerment as unconditional freedom for doing every work.

Empowerment additionally, acts to free individual's inner force in achieving amazing outcomes. Giving power is another definition for empowerment through which we help people to improve their self-confidence, cope with their powerlessness or helplessness and stimulate passion and internal motivation of doing their duties.

Research importance:

Conceptually, empowerment fulfills both organizational benefits and ownership feeling in experts and creates a win-win relation for organization and human interests. In other words, empowerment provides a potential capacity of exploiting professional abilities. To mention other privileges of it could be:

- implementation of the best innovations and opinions with higher emotion, ownership and honor
- working along with sense of responsibility and preferring organizational benefits to self.
- presenting strategies in order to establish sustainable and real competitive advantage.
- more managers and experts involvement in work processes through engaging them in decision making procedures.
- having high efficiency, dynamism and flexibility
- maximization of knowledge and skill

In projects related to development of organizational efficiency, two components a) efficiency and b) effectiveness are specifically considered as efficiency inputs. The purpose of describing and performing efficiency projects has to be increase of competition power, organizational performance and employees. This concept, reflects organizational word that empowerment of human resources is one of its principles. One of the reasons to carry the present study relates to finding strategies in enhancement of human resources empowerment through associated methods to the efficiency. Second aim of it of course is the nobility of its subjects encouraged the author to do a study.

REVIEW OF RELATED LITERATURE

The studies have been carried out on human resources empowerment in different countries so far have generalized three models or approaches in this area.

First, the rational approach that believes in sharing of power with subordinates, giving general authority, decentralization of decision-making process, establishment of participatory management and finally formation of quality circles.

Second, the motivational approach that considers power gaining as an inner state for gaining influence and control on other people and a basis for empowerment.

Last but not least is the incentive approach which presents a more theoretical perspective for empowerment through creation of intrinsic motivation by nurturing environment and making a sense of efficacy and higher energy.

The stated approaches could not be practical in all of companies. Therefore, new ideas should be constructed based on different environmental and time needs. from among the most important studies performed in relation to different aspects of empowerment Rinehart and Short (1993) “ study of effective factors on teachers empowerment”[7] , Wu and Short (1996) “ evaluation of relationship between psychological empowerment of teacher with job commitment”[8], Morris (1996) ” study of empowerment relationship with in-service training”[9], Savery and Luks (2001) “ relationship of empowerment with job satisfaction and stress level” [10], Mohammadi (2001)” evaluation of ways of human resources empowerment at Birjand university”[11], Khatibi et al (2002) “ study of educational-professional system human resources and its effect on raising efficiency and empowerment” [12]

Bukingham and Klifton (2003) “ identification of human resources and managers empowerment factors and context” [13], Lampers (2004) “ teachers empowerment and their creativity an efficiency” [14], Mokhtari zadeh (2004) “ analysis of influential factors on human resources empowerment in electricity company, western region” [15], Hor Abadi (2005) who studied the relationship between organizational structure empowerment to mention variety of researches in empowerment[16].

Table 1: comparison of previous studies

No.	Author	Year	Area
1	Rinehart & Short	1993	Effective factors
2	Wu & Short	1996	Job commitment
3	Morris	1996	In-service training
4	Savery and Luks	2001	Job satisfaction and stress level
5	Mohammadi	2001	Evaluation of strategies of employee empowerment
6	Khatibi et al	2002	Evaluation of educational-professional system of human resources and its impact on increase of efficiency, Zanjan medical sciences
7	Bukingham and Klifton	2003	Discovering abilities
8	Lampers	2004	10 strategies for staff empowerment
9	Mokhtari zadeh	2004	Analysis of influential factors on human resources empowerment in Electricity Company, western region
10	Hor Abadi	2005	Relationship between organizational structure empowerment to mention variety of researches in empowerment

In all of these articles, all of effective variables on maximization of human resources have been tested. Without considering the environment and researchers, this articles aims to test the relationship between effectiveness and empowerment of human resources in order to research variables determined.

3-METHODOLOGY

The method used in this study is purposely practical and descriptive in collecting information, and data. It is a part of Delphi survey in order to come to an agreement among specialists.

To carry this study out firstly the related well-defined literature in human resources empowerment collected and then a questionnaire based on the conceptual pattern for statistical population designed. Finally, after the questionnaire was distributed the data were analyzed to reach a conclusion.

Research hypotheses:

1-research hypotheses: dependent variables related to empowerment include sense of competence, sense of independence, sense of effectiveness and sense of trust. Defined Independent variables consist of efficiency [6], job satisfaction [10], motivation [11], consistency [13], and conflict [14].

Main hypothesis:

H1: there is a meaningful relationship between organizational effectiveness and empowerment of human resources.

H0: there is no significant relationship between organizational effectiveness and empowerment of human resources.

Minor hypotheses:

1. There is a significant relationship between efficiency and empowerment of human resources.
2. There is a meaningful relationship between job satisfaction and empowerment of human resources.
3. There is a strong relationship between motivation and empowerment of human resources.
4. There is a meaningful relationship between consistency and empowerment of human resources.
5. There is a significant relationship between and empowerment of human resources.

2. Population, statistical sample and sampling method:

The statistical population in this study includes managers, assistants and teachers working at education organization, north Khorasan province. They consist of 150 managers, 260 teachers, high school level, and total number 410 people. The randomly sampling method and Cochran formula with 199 subjects used as the sampling method.

$$n_{\text{cochran}} = \frac{\frac{P(1-p)z_{1-\alpha/2}^2}{d^2}}{1 + \frac{1}{N} \left(\frac{P(1-p)z_{1-\alpha/2}^2}{d^2} - 1 \right)} = \frac{\frac{0.5 \cdot 0.5 \cdot (1.96)^2}{(0.05)^2}}{1 + \frac{1}{410} \left(\frac{0.5 \cdot 0.5 \cdot (1.96)^2}{(0.05)^2} - 1 \right)} = \frac{384.16}{1.9345} \cong 199$$

Where,

P=0.5: possibility of existence of a characteristic in the population due to inaccessibility equals 0.5.

Z_{1-α/2} = 1.96 (α = 0.05)

d = 0.05: maximum accepted error

N = 410: population size

n_{cochran}: sample size

Since it is predicted that some unanswered questionnaire might be available, 11 people were added to the statistical sample that the total number of questionnaire increased to 210 which among them 200 questionnaire were completed at the end.

3-DATA ANALYSIS

In the main hypotheses the relationship between empowerment of human resources as dependent variable and organizational effectiveness as the independent variable was tested by use of Pearson's correlation coefficient estimation (SPSS 19) . The minor hypotheses empowerment as dependent variable and dimensions of effectiveness as independent variable i.e. efficiency, job satisfaction, motivation, consistency and conflict were tested using structural equations PLS.

Moreover, for measurement of rate of empowerment and effectiveness in the organization under the current conditions "t-Student Test "used. That is if mean of larger population obtained from ordinal mean of seven option scale equals 4 is greater than a fixed number, it shows that different dimensions of effectiveness and empowerment exist in current conditions. Finally, to have a complete set of data, the correlation coefficient for each dimension of effectiveness and empowerment was calculated. It's necessary to say that the respondents answers were qualitative and optional and the mean for each index item was quantitative and numerical considered as independent variable. Thus, Pearson' correlation coefficient (using SPSS 19) will be used.

Data collection, validity and reliability of questionnaire:

As it was mentioned, a seven option- questionnaire used as the data collection instrument. It first distributed in a pilot scale among 30 subjects and after revised for final distribution. Next, two standardized questionnaires for measuring human resources empowerment and organization's effectiveness after validation distributed.

By validity, we mean how much accurate the indexes are in assessing a certain phenomenon. To assess empowerment, the Spreitzer's questionnaire (1995) applied. It is developed based on Thomas and Volt House model of empowerment to measure psychological empowerment. He organizational learning assessed through Nief's questionnaire (2001). Theses questionnaire validity has been confirmed within different international and domestic studies.

Reliability holds characteristics like repetition, stability and adaption in measurement instrument. It tests how much exactly a concept in each time. Since the two questionnaires of this study are standardized their reliability in different international and domestic studies has been approved. To have more confidence on achieved results, the questionnaires reliability tested by use of Cronbach's alpha, SPSS 15, once more.

$$\alpha = \left(\frac{j}{j-1}\right)\left(1 - \frac{\sum s_j^2}{s^2}\right)$$

Where,

α : is test reliability

j: number of items

S_j^2 : variance of j subset

S^2 : test variance

This value was calculated higher than 75% for both questionnaires.

5-FINDINGS

5-1: assessment of sample distribution normality

Table 2: Kolmogorov-Sminov Test

	effectiveness	Empowerment of human resources
Kolmogorov-Smirnov Z	2.150	2.127
Asymp. Sig. (2-tailed)	0.102	0.091

According to level of significance 5% for each empowerment and effectiveness variables, the assumption of normality isn't rejected.

Diagram 1: histogram with standard normal distribution for effectiveness

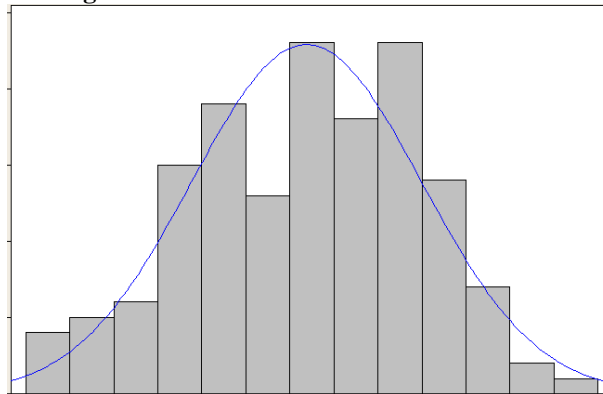
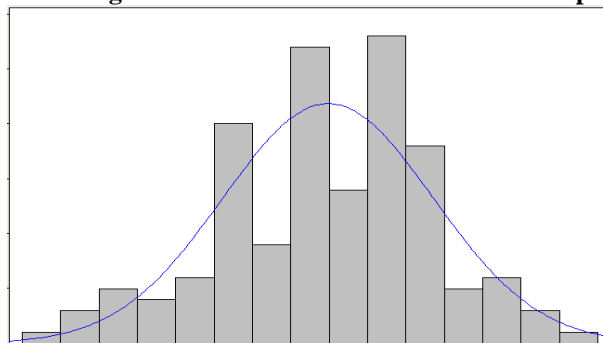


Diagram 2: histogram with standard normal curve for empowerment



5-2: results of Pearson's correlation coefficient

H1: there is a significant relationship between organizational effectiveness and empowerment of human resources.

Table 3: Pearson's correlation coefficient for H1

result	p-value	Estimation of correlation coefficient
Direct and strong relationship	0/0000	0/752

As it is clear from table (11), the p-value is smaller than level of significance 0.05. It could be concluded then; there is a relatively strong and positive relationship between organizational learning and empowerment.

5-3: Pearson's correlation coefficient for dimension of empowerment

Table 4: Pearson's correlation coefficients for dimension of empowerment

result	Sig	Correlation coefficient	Dimensions of empowerment
Direst and meaningful relationship	0/0000	0/452	Sense of competence
Direst and meaningful relationship	0/0000	0/568	Sense of independency
Direst and meaningful relationship	0/0000	0/654	Sense of effectiveness
Direst and meaningful relationship	0/0000	0/557	Sense of trust

As it can be seen from table (4), correlation coefficient for sense of competence is 0.452, sense of independency, 0.568, sense of effectiveness 0.654, and sense of trust 0.557 that shows all of variables have a direct relationship with empowerment of human resources. This relationship is approved with 95% level of confidence.

5-4: Pearson's correlation coefficient for dimensions of effectiveness

Table 5: results of Pearson's correlation coefficient for dimensions of effectiveness

result	Sig	Correlation coefficient	effectiveness
Direst and meaningful relationship	0/0000	0/685	competence
Direst and meaningful relationship	0/0000	0/521	Job satisfaction
Direst and meaningful relationship	0/0000	0/632	motivation
Direst and meaningful relationship	0/0000	0/489	consistency
Direst and meaningful relationship	0/0000	0/434	conflict

5-5: assessment of effectiveness and empowerment rate in present condition of organization

Results test of computational assumption to determine significant relationship between independent variable (empowerment) and dependent (effectiveness) is listed as follow.

Table 6: t-Student Test results (fixed amount is 4)

result	t-Student statistic	mean	index
Sense of competence exists in organization at present.	8.137	4.78	Sense of competence
Sense of independency exists in organization at present.	5.620	4.83	Sense of independency
Sense of effectiveness exists in organization at present.	5.986	4.83	Sense of effectiveness
No sense of trust in organization currently.	1.947	3.45	Sense of trust
Efficiency exists in organization currently.	4.273	4.99	efficiency
Job satisfaction exists in organization at present.	9.532	5.03	job satisfaction
No motivation exists in organization.	1.182	3.30	motivation
Consistency is available in organization.	13.740	6.41	consistency
Conflict is available in organization currently.	5.672	4.78	conflict

As table 6 presents the mean of sense of trust and motivation are smaller than 4 that is an indication of unavailability of these two indexes in organization.

5-6: Prioritizing of empowerment dimensions using Spearman's Test:

Table 7: Ranking test results for empowerment of group n1

Ordinal mean	dimensions
3.50	Sense of competence
4.91	Sense of independence
4.65	Sense of effectiveness
3.44	Sense of trust

According to obtained results, the prioritizing human resources dimensions follow as below.

First: sense of independency, 4.91 points

Second: sense of effectiveness, 4.65 points

Third: sense of efficacy, 3.50 points

Fourth: sense of trust, 3.44

This ranking shows that organizational activities should be focused on what priorities and to what extent.

5-7: prioritizing effectiveness dimensions through Friedman's Test:

In order to rate sense of efficacy, sense of independency, sense if effectiveness and sense of trust for increasing empowerment of human resources, after confirming the powerful relationship between these factors and empowerment, Friedman's Test used.

As it can be seen from table (7) , prioritizing of empowerment dimensions in managers are as sense of competence, sense of job significance, sense of trust among colleagues, sense of independency and sense of effectiveness.

Table 8: Ranking test results for empowerment of group n2

Ordinal mean	Dimensions of effectiveness
4.82	competency
4.81	Job satisfaction
4.17	motivation
4.04	consistency
4.06	conflict

Table (8) presents that prioritizing of empowerment dimensions order in employees is sense of efficacy, sense of job significance, sense of effectiveness, sense of independence, sense of trust among colleagues.

As the results indicate, prioritizing of effectiveness dimensions forms as follows.

First: competency, 4.82 points

Second: job satisfaction, 4.81 points

Third: motivation, 4.17 points

Fourth: consistency, 4.06 points

Fifth: conflict, 4.04 points

This ranking shows that organizational activities should be focused on what priorities and to what extent.

Factor analysis of main variables and factors:

In this part, factor analysis method based on new and advanced method of structural equations partial least squares VPLS (partial least squares) applied to analyze the more important coefficient and factors, estimation of independent variables and determination of each independent variable effectiveness on each other. Diagram below presents VPLS software output containing coefficients of variables and their significance (t statistic).

Diagram 3: structural equation VPLS software output

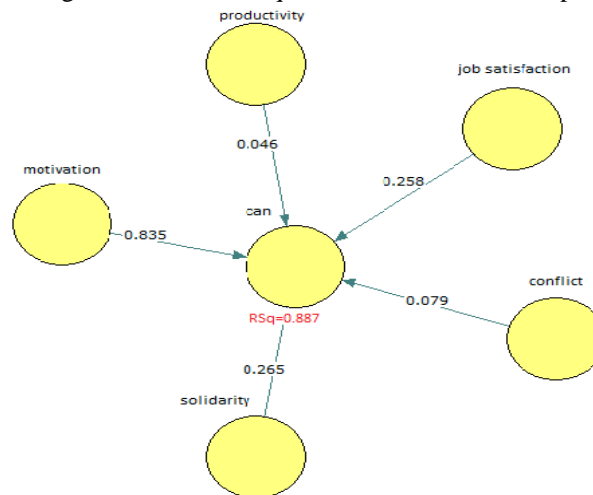


Table below shows impact factor of each independent variable (entire sample estimate) on dependent variable. Statistic t for significance of variables is listed.

Table 9: coefficients estimation of model

Result	t-Student	Coefficient estimation of model	index
Direct and positive relationship	4/325	0/046	Efficiency→ empowerment of human resources
Direct and positive relationship	5/411	0/258	Job satisfaction → empowerment of human resources
Direct and positive relationship	7/195	0/835	Motivation → empowerment of human resources
Direct and positive relationship	5/201	0/265	Consistency → empowerment of huam reources
Direct and positive relationship	4/325	0/079	Conflict → empowerment of human resources

As it can be seen from Table (9), t-Student estimation for each coefficient of model is higher than level of confidence 95% (1.96) , therefore the research hypotheses will be approved as follows.

1. One unit change in efficiency, empowerment I of human resources increases 0.046 units.
2. One unit change in job satisfaction increase empowerment of human resources 0.258 units.
3. One unit change in motivation increases empowerment of human resources 0.835 units.
4. One unit change in consistency increases empowerment of human resources 0.265 units.
5. One unit change in conflict, increases empowerment of human resources 0.079 units.

Conclusion

According to level of significance for effectiveness and empowerment variables, normally distributed samples confirmed. As Table (3) shows, there is a direct and strong relationship between organization effectiveness and empowerment of human resources.

Correlation coefficients for sense of efficacy, sense of interdependency, sense of effectiveness and sense of trust indicates that all variables hold a direct relationship with empowerment. Correlation coefficient estimation for efficiency, job satisfaction, motivation, and conflict also proves that all variables have a direct relationship with empowerment in 95% level of confidence.

As Table (6) shows the mean score for sense of trust and motivation is smaller than 4 which is an indication of absence of these two indexes in the organization. After approving a significant relationship between these factors and empowerment, Friedman's ranking test used. Obtained results prove that empowerment priorities include sense of interdependency, sense of effectiveness, sense of competence, and sense of trust. Effectiveness priorities are efficient, job satisfaction, motivation, consistency and conflict in order. the order of priorities explains direction of organizational empowerment activities focus should go to what direction and what extent.

Suggestions for major and minor hypotheses

One of the important results in this study is determination of correlation coefficient between independent and dependent variables. It is recommended based on the research procedure; other investigators go through increasing of their favorite organization empowerment via structural equations.

1. There is a positive and strong relationship between effectiveness and empowerment of human resources. That means to increase empowerment of human resources development of effectiveness level (based on defined factors) has to be programmed.
 2. To increase the organization's empowerment through indigenous human resources variables according to correlation coefficients in Table 4, senior managers must proceed to effectiveness strategies through improvement of sense of effectiveness, sense of interdependency, sense of trust and sense of competence respectively.
 3. Based on Table 5 and computed Pearson's correlation coefficient, since the increase of organizational effectiveness is the aim therefore, senior managers should try to improve and maximize efficiency, motivation, job satisfaction, consistency and solving conflict based according to effective strategies. It is clear that improving activities will induce a strong and powerful impact on human resources.
 4. Table (6) and t-Students results explain a computed mean smaller than 4 for sense of trust and motivation. This means, no such parameters exist in the organization. Thus, it's recommended that senior managers plan to establish sense of trust and motivation in human resources immediately. Lack of these endogenous and exogenous variables of human resources empowerment means absence of effective relationships between defined variables. So, the required actions to be done could make a powerful and strong impact on human resources empowerment.
- According to the above findings, VPLS software computations and data in Table (9) managers should follow the recommended order to allocate resources. The priorities consist of motivation (7.19), job satisfaction (5.411), consistency(5.201), and efficiency and conflict (4.235). for one unit of cost in motivation, job satisfaction , consistency , efficiency and conflict leads to increase of empowerment up to 0.079,0.046,0.265,0.285, and 0.835 respectively.

Suggestions for future researchers

1. Designing increasing strategies of effectiveness variables and measurement methods and determination of result of cost spent on maximization of empowerment.
2. Using mathematical pattern in sharing related budget for increase of human resources empowerment.
3. Applying Friedman's Test for rating increased patterns variables of human resources abilities for linear programming in future studies.
4. Determination of other enablers through future researches based on Durbin-Watson's Test.

5. Determination of empowerment equation according to effective patterns of step-by step regression as final empowerment model for a special organization.

REFERENCES

- 1- Geisler, David. A, (2005). The next level in employee Empowerment Quality Progress, research Library core. Vol.38 No.6.pp.48-52.
- 2- Huysman, M. (2006). IT to Support Knowledge Sharing in Communities: Towards a Social Capital Analysis, *Journal of Information Technology*, Vol. 21, No. 3, 40-51.
- 3- Bowen, D. E. & Lawler, E. E.(1992). The Empowerment of Service Workers. What, Why, Who, When, *Sloan Management Review*.
- 4- Thibodeaux, M.S. and Favilla, E; Organizational effectiveness and commitment through strategic management, *Industrial Management & Data Systems*, 1996, Vol. 96, p. 21.
5. Zahedi et al. Encyclopedia of management. Tehran, Alameh Tabatabaee press, 2000, 2nd edition, p.269.
- 6- Blanchard. Ken and Carlos. John P and Randolph. Alan, (1999). The 3 keys to empowerment. P: 58-59-65-93-116.
- 7- Short, P.M. and Rinehart, J.S. (1993). Teacher empowerment and school climat. Paper presented at the annual meeting of the American educational research association. San Francisco, CA, April, 20-24.
- 8- Wu, V. & Short, P. M. (1996). The relationship of empowerment to teacher job commitment and job satisfaction. *Journal of Instructional Psychology*, 25, 85–89.
- 9- Morris, L. (1996) Training: Empowerment and Change Training & Development Alexandria, Vol. 5 N7, p. 51.
- 10- Savery L K, Luks J A., (2001). "The relationship between empowerment, job satisfaction and reported stress levels: some Australian evidence". *Leadership & Organization Development Journal*, Vol. 22, No 3.pp:97-104.
- 11- Mohammadi, Mohammad,(2001). Evaluation of employee empowerment strategies,"Birjand University",thesis, Tehran,Tarbiat Moddares University.
- 12- Khatibi,A,Asghari, L,Naderi,H,and Kafash, A.,(2002). Evaluation of educational training of human resources and its impact on increase of efficiency at Medical Sciences University, Zanjan.
- 13- Bukingham and Klifton, Donald,2003. Discovering abilities, translated by A.Rezaee nejad, Tehran Farda publication.
- 14- Lampers. B. (2004) 10 strategies for staff empowerment, Reston. Vol. 4, ISS, G. P. 32.
- 15- Mokhtari, S., (2003). Evaluation and analysis of effective factors on human resources empowerment in western electricity company and providing development strategies. M.A. thesis.
- 16- Hor Abadi Farahani, M, (2004). Study of relationship between organizational structure and employee empowerment. Thesis, Tehran, Tehran University.
- 17- Spreitzer, G.M. (1995). Psychological empowerment in the workplace: Dimensions, measurement and validation. *Academy of Management Journal*, 38, 1442-1465
- 18- Bakhtiari et al . The role of management strategies in empowerment of managers. *Police management studies quarterly*, 5th year, issue 1, pp.39-53.
- 19- Neefe. Diane Osterhause, (2001). "Comparing levels of organizational learning maturity of colleges and universities participating traditional and non-traditional (academic quality improvement project) accreditation processes".