Study of the Relationship between Job Characteristics and Teachers Productivity

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ABSTRACT

This research aims to specify the relationship between job characteristics and teachers productivity in Iran-Tabriz region one primary schools in study year of 2010-2011. The methodology of research is correlation and descriptive and it is applied from purpose viewpoint. The statistical population involves 634 individuals and 242 teachers were selected according to Morgan sampling table. The data were collected by two standard job characteristics and teachers productivity questionnaire and they were analyzed by software SPSS, Spearman correlation coefficient, inter group one way independent t test, Yumen-Whitney and Krosal-Valise tests. The results show that Tabriz region one primary schools teachers motivational potential power is average and their productivity is higher than average. There is a significant relationship between job characteristics (skill diversity, job nature, free hand in work and feedback) and Tabriz region one primary schools teacher’s productivity, but there is no relationship between job nature and importance and teachers’ productivity and different motivational potential power is not different based on studies among both genders.


1- INTRODUCTION

Today organizations should be organized in competitive and changing environment. Ever increasing world competition, information technology expansion and changing of human force and customers’ demography characteristics are considered. World competitive force has led organizations to adopt new methods. Most of these organizations employ improvement management skills and try to change organization internal space. The employees are the main organization competition resources and human being as the important element of revolution and survival of the organization and achieving goals is considered as capital and progress factor of a nation (Golamzadeh, 2010). Job characteristics addresses to activities, duties, assignments and different aspects of a job. Some jobs are normal since they are repetitive and some of them are unusual and need to different skills and some have limited practical scope; some employers make employees to be tired by persuasion of trend and some give liberty to their stuff. Sometimes team work leads to promotion and some works are done successfully by independent individuals (Keshtidar, 2002). Change in education system proportionate to technology revolution in information and communication era accompanied by increase of efficacy level is considered as the main element of revolution in 21st century especially in industrial developed countries. By study of the conducted researches and experiences of developed countries, it can be found that teachers are turning point of revolution in education disciplines and they are main elements of progress according to scholars (MehrMohamadi, 2001). Lack of efficiency and efficacy is the important problem of the different organizations and sectors especially educational system. In other words, productivity culture and attitude is not dominated in Iran and it is necessary to take actions in this relation (Torani and Yazdani, 2010). While productivity in educational system increases quality of educational services, it reduces cost and increases capital return and promotes life standards as the main national wealth production factors. So, it can be said that increase of productivity especially in education system is the best way to improve life style and produce national wealth. According to systemic view point by expansion of this thought in order to increase society economic resources level, it can be concluded that enhancement of education productivity causes to enhancement of national efficiency and purchase power, economy promotion, increase of national income, reduction of inflation and also increase of employment in long term.

This research aims to investigate the relationship between job characteristics and teachers productivity in Iran-Tabriz region one primary schools in study year of 2010-2011.

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2- Research Background

2-1- Job Characteristics Model (JCM)

JCM was proposed in 1970 as a framework for analysis and designing of a job. This model specifies job main five characteristics, their interactional relationships, effects on productivity, motivation and job satisfaction. According to this model each job can be explained in frame of job main five dimensions as follows:

Job diversity: job involves different duties so that the individual could use diverse skills and capabilities.

Job nature: total duties are specified from beginning to end and the individual has complete image of his job duties and it is the main part of the work.

Job importance: job is important and valuable and effects on other individuals life and work in tangible way.

Work free hand: an employee has schedule and he is free and independent in determination of his work style.

Job feedback: job is designed so that offers explicit information about efficacy of the results and work performance. Three first dimensions are combined for doing meaningful and valuable work. If these three characteristics are summed in a job it can be predicted that the individual considers his work important and valuable. If the individual is independent and authentic in his work, he will be responsible for his performance. In case of performance feedback the stuff could be productive. From motivational model view point the inner rewards are achieved when the individual learn to do his job and be responsible to his action. By promotion of these three dimensions the motivation, performance and satisfaction are increased and absenteeism is reduced (Robinson, 2009).

The relationship between job main dimensions and results is adjusted by individual need to growth. This growth can be considered in self-esteem and self-manifestation. It means that in individuals with need to growth the mental states are experienced more in case of possessing five dimensions and they respond significantly. In jobs with high motivational power it is necessary to have high score in one of the three dimensions leading to valuation of the job and dependence and feedback. In case of high motivation power scale (MPS) the model predicts that performance motivation and satisfaction are influenced significantly and the probability of absenteeism and leaving is reduced (RahimiNik, 2010).

2-2- Job Motivation Promotion Strategies:

Oldham recognizes management affairs as belonging to activities done for control of resources and organization policy and identifies six strategies for stuff motivation:

Stuff punishment and reward: personnel punishment and reward carried out by employer towards employees based on his authority and employee behavior.

Goal setting: it means that supervisors specify defined goals, duties, frameworks and standards for struggle of the stuff and indeed they motivate them so the stuff should follow these goals and standards.

Feedback systems design: the mechanisms that offer information about stuff performance based on rational discipline. Thus the employee recognizes their strong and weak points rapidly and works better.

Stuff position: job status of employees is identified in the organization and they work according to their occupational duties and it leads to motivation. It is natural that in case of implicit job situation, foresight and job promotion the working duties and performance are vague and disturbed.

Job systems design: this subject matter depends on design and determination of occupations, so that organizational jobs, hierarchical, and supervision scopes should be identified rationally. In other hand it is probable that the mangers offer more responsibilities to their subordinates or expand total organization supervision responsibilities and add their authorities.

Reward system design: this design involves capability of supervisors in distribution of monetary or property rewards and making defined frame work and design for payment of reward in response to stuff behavior and performance. The mangers can offer non cash rewards and options. Punishment and penalty can be carried out by subtracting daily salary that it is conducted according to reward system plan (AsafZadeh and RezaPour, 2007).

2-3- Productivity

Productivity means having power of production and efficacy of an individual and something. Today productivity is considered as a thought viewpoint and it means intelligence working. In deed productivity was used by Kavirzani for first time in 1766 in an agriculture magazine (IranZadeh and Khalili, 2009). Also, productivity means power of returned production by using defined set of inputs. High productivity means achieving more output with less or equal input, so increase of productivity leads to high life standard, less inflation, promotion of trading balance and high quality life (Asadi and Chobchiyan, 2010). Mandel believes that productivity involves efficacy and effectiveness in most of the definitions this concept is related to efficiency and efficacy (Samari, 2007).

Two indices of efficacy and effectiveness are used for evaluation of organization performance. Chasterbox is one of the first theoiests that have compared efficacy and effectiveness. Pitter Draker defines both vocabularies as follow: efficiency is doing competently and in best way and efficacy means doing competent and proper works. Organization efficacy involves a grade or level that the organization approaches to its goals, while efficiency involves amount of input that is used for production of a product (Rezayan, 2008).
2-3-1- **Kinds of Productivity**

Partial productivity: the relationship between output and one of the input resources. Human productivity, capital productivity and material productivity are called partial productivity. Total productivity is net output to sum of inputs of work force and capital ratio. Net output is value added. Total productivity is total output divide to sum of inputs (NoriZadeh, 2009).

2-4- **Human Resources Productivity**

Human resources productivity is optimal utilization of talents, potential and active capabilities of human resources in order to qualitative and quantitative increase of production and reduction of losses and defects so that the individuals could have optimal working life accompanied to doing work in better way (Abili and Jahed, 2010). According to the results of the researches among effective factors on promotion of productivity human plays an important role. Any promotion of productivity requires to coordination with human. Human and his creativity play main role in all activates so he could substantiate productivity goals and wanting (Malekshahi and et al, 2002).

2-5- **Effective Factors on Productivity**

Employees are the valuable capital. Achieving organization goals requires to correct management of these valuable resources. Work force is the main productivity factor and in case of motivation and hope to future the productivity will be increased. Effective factors and values of organization influence on work force productivity it can be referred to continuous education of managers and employees, promotion of motivation for more and better work, providing appropriate context for mangers and stuff creativity, establishing appropriate payment discipline based on performance and establishing reward and punishment discipline, work conscience and social discipline as self-control factor, revolution in systems and methods that play a key role, empowerment of governance and domination of organization polices on affairs (Taheri, 2009).

2-6- **Management Viewpoint about Productivity**

According to managers productivity involves all organizational aspects effective on organization performance. This approach covers efficacy and efficiency, product quality, beneficient satisfaction (Maleki and et al, 2006).

<table>
<thead>
<tr>
<th>Management theorist</th>
<th>Brief explanation of view points</th>
<th>Productivity criteria sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific management (1911)</td>
<td>Study of work and time, importance of planning standards, control and coordination, responsible organization, best alternative</td>
<td>Maximization of production, minimization of cost, superiority of method, optimal utilization of resources, specialization of duty</td>
</tr>
<tr>
<td>Management principles (Tylor, 1916-1925)</td>
<td>Completion of management establishment theory, learning of management</td>
<td>Division of work, explicit supervision and discipline, unity of leadership, directing of discipline and hierarchical, fairness and innovation and collaboration</td>
</tr>
<tr>
<td>Human relations (Mayo,1933)</td>
<td>Importance of emotional factors, concept of social relations in group efforts, need to identification and interpersonal skills of organization as collaboration discipline</td>
<td>Productivity by employee satisfaction, satisfaction by attention to stuff physical and emotional needs</td>
</tr>
<tr>
<td>Bureaucracy theory (Vier)</td>
<td>Attention to structure, separation of ownership and management, explicit definition of goals, definition of productivity and efficiency</td>
<td>Division of work, competency and personal capabilities, job compatibility, hierarchical organization, documents, standardization of processes and activities</td>
</tr>
<tr>
<td>Decision making and information management (Simon,1947)</td>
<td>Productivity according to confined rationality, efficiency based on defined goals</td>
<td>Saving in resources by goals rational development, information process efficacy</td>
</tr>
<tr>
<td>Behavioral management (Mack Garigor ,Likert,1967-1961)</td>
<td>Importance of organization needs related to organization demands, power proportionate, participatory management</td>
<td>Employees satisfaction, integration, loyalty, open communication</td>
</tr>
<tr>
<td>Exigency theory (Lorenes and Loresh,1967)</td>
<td>Designing of organization based on environmental factors, difference in the best method of action based on situation necessity and different conditions</td>
<td>Mistake of specialization, organization fitness capability to change in appropriate time and fitness of leader and conditions</td>
</tr>
<tr>
<td>Functional and organizational psychology (Perichard,1992)</td>
<td>Productivity involves all organization aspects that important in effective performance of the organization</td>
<td>Achieving priorities, multiple goals, consideration to organization culture and atmosphere, optimization of cost and time, satisfaction of beneficial and attention to necessities of change capabilities</td>
</tr>
<tr>
<td>Iranian scholars</td>
<td>Productivity by effective using compatible performances, goal achievement, human and organization culture integration based on environment necessities that productivity is function of efficacy, efficiency and capability to change</td>
<td>Achieving priorities, multiple goals, consideration to organization culture and atmosphere, optimization of cost and time, satisfaction of beneficial and attention to necessities of change capabilities</td>
</tr>
</tbody>
</table>
2-7- Productivity in Education

Serving involves any action or work that offers by one to other and it is necessarily intangible and it does not lead to ownership (Marjani and Avouj, 2010). Increase of service sector employees’ productivity is one of the opportunities for national productivity. In organizational environment it is necessary to reduce hierarchical trend and unnecessary affairs so that the productivity enhances to its highest level. Since service organizations benefit from work power higher than other organizations, so, promotion of goals involves reduction process time, work time and enhancement of stuff skills by education and improvement and accuracy of doing activities and improvement of customer serving (Taheer, 2009). Productivity in education is centralization on learner and improvement of learning and it involves the relationship between manner of utilization of educational materials and conversion of them to optimal output by consideration of all employees work life quality. Education productivity is defined as relationship between students study achievement and resources. The common aspect in all definitions is student based trend and increase of their capabilities and also optimal utilization of available resources and reduction of productivity promotion activities (MirKamali, 1998).

Some researches of productivity are as follows:

Shojaei (2010)in a research on investigation the relationship between mangers work life quality and their productivity in Sardasht schools showed that there is a significant relationship among learning continuous opportunities, democracy and mangers productivity organizations, participation in decision making, work space and work plan. Nasrabadi and et al (2010) in a study on supervisors, engineers, workers and middle managers of Esfahan iron melting company showed that there is a significant and positive relationship among work value, independence, occupational opportunities, work facilities, work challenges and job satisfaction of four working groups. Salehi (2010) in research on effective factors on Bokan province teacher’s productivity showed that there is a significant and positive relationship between teacher’s productivity and job security. The teachers’ productivity is different based on gender and it is not different based on income and studies and there is no relationship between teaching records and productivity. Hedayati and et al (2010) in a study the relationship between organization ethical culture and health scope productivity found that explicitness and identification of role and capability indicators obtained highest mean score.

Shafig (1997) in determination of rehabilitation scope jobs motivational potential in Tehran rehabilitation centers based on motivation indictor found that there is no relationship among demography variables of age, gender, record, martial statues, studies, membership and potential motivation power and its components and rehabilitation scope jobs are diverse, independent and important but they do not have feedback. Sahatchi (2008) points that job fatigue, communicative networks, stuff attitudes, personal difference and mental health effect on productivity. Farji (2009) in a study on the role and effect of job characteristics model on job satisfaction concluded that there is a significant relationship among motivational potential power and its components except feedback and job satisfaction and job nature affects significantly on job satisfaction. Nourozi (2002) investigated the relationship between organizational culture and teacher’s productivity in Zanjan state high schools in 2000-2001 and found that there is a positive relationship among organizational culture and job identification, motivation, performance feedback and job satisfaction. Mayo and et al found other relationship and they showed that high productivity is result of work environment it means that meeting human needs enhances productivity and intimate relationship is established among stuff and supervisors try to preserve informal social relations (Shafig, 1997). Golmohammadi (1996) found that there is no relationship between job characteristics and job satisfaction of SIPA company stuff.

Farahpour (1994) studied the interactional effect of job and employee in establishing job satisfaction in Tehran private firm’s accountancy and auditors and found that job satisfaction insignificant among them because of fitness of job and employee and job fitness effects on job satisfaction.

3-hypotheses

There is a relationship between skill diversity and teachers productivity in Tabriz region one primary schools.
There is a relationship between job importance and teachers productivity in Tabriz region one primary schools.
There is a relationship between job nature and teachers productivity in Tabriz region one primary schools.
There is a relationship between free hand and teachers’ productivity in Tabriz region one primary schools.
There is a relationship between feedback and teachers’ productivity in Tabriz region one primary schools.
There is a relationship between motivational potential power and teachers’ productivity in Tabriz region one primary schools.
There is a relationship between motivational potential power and teachers’ productivity in Tabriz region one primary schools without consideration of study level.

4-METHODOLOGY

The research method is descriptive and correlation and it is applied according to purpose. The statistical population consists of all 634 teachers of Tabriz region one primary schools that 242 teachers were selected by
relative cluster random sampling method according to Morgan table by 160 women and 82 men. The data were collected by using two questionnaires. John Wagner job identification standard questionnaire and author made questionnaire based on Achiyo model were employed for measuring job characteristics variable and teacher productivity respectively and the date were analyzed by software SPSS.

5-DATA ANALYSIS

Descriptive and inferential statistics were used for analysis of data so that Spearman correlation test was employed for analysis of hypotheses 1, 2, 3, 4 and 5 because of abnormality and Yemen Whitney test was employed for analysis of hypothesis 6 and Croscl Valise test was used for analysis of hypothesis 7.

5-1-inferential statistics results

According to table 2 the correlation coefficient of 0.14 in significant level less than 0.05 was obtained between skill diversity and productivity that by confidence level of %95 it can be said that there is a significant relationship between skill diversity and productivity and in general hypothesis zero is rejected and the research hypothesis is confirmed. Also in hypothesis two the correlation coefficient of 0.05 in significant level higher than 0.05 was calculated between job nature and productivity that by confidence level of % 95 it can be said that there is no significant relationship between job nature and productivity and in general hypothesis zero is accepted as there is no relationship between job nature and productivity and the research hypothesis is rejected. In hypothesis three the correlation coefficient of 0.07 in significant level higher than 0.05 was calculated between job importance and productivity that by confidence level of %95 it can be said that there is no significant relationship between job importance and productivity and in general hypothesis zero is accepted as there is no relationship between job importance and productivity and the research hypothesis is rejected.

In hypothesis four the correlation coefficient of 0.15 in significant level less than 0.05 was calculated between free hand and productivity that by confidence level of %95 it can be said that there is a significant relationship between free hand and productivity and in general hypothesis zero is rejected as there is no relationship between free hand and productivity and the research hypothesis is confirmed. In hypothesis five the correlation coefficient of 0.13 in significant level less than 0.05 was calculated between feedback and productivity that by confidence level of %95 it can be said that there is a significant relationship between feedback and productivity and in general hypothesis zero is rejected as there is no relationship between feedback and productivity and the research hypothesis is confirmed.

Table 2: correlation among job satisfaction and productivity components

<table>
<thead>
<tr>
<th>Variable</th>
<th>Skill Diversity</th>
<th>Job Nature</th>
<th>Job Importance</th>
<th>Work Free Hand</th>
<th>Feed Back</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>r=0.14</td>
<td>r=0.5</td>
<td>r=0.07</td>
<td>r=0.15</td>
<td>r=0.13</td>
</tr>
<tr>
<td></td>
<td>P=0.02</td>
<td>P=0.42</td>
<td>P=0.24</td>
<td>P=0.01</td>
<td>P=0.02</td>
</tr>
<tr>
<td></td>
<td>n=242</td>
<td>n=242</td>
<td>n=242</td>
<td>n=242</td>
<td>n=242</td>
</tr>
</tbody>
</table>

According to Table 3 and 4 the test significance is less than 0.05 and by confidence level of %95 it can be said that there is a significant relationship between motivational power and gender and based on mean score it can be said that men motivational power is higher than women.

Table 3: motivational potential power in primary schools without consideration of gender

Table: results of U and Wilcoxon test

<table>
<thead>
<tr>
<th>Test</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>U Whitney</td>
<td>5.3883</td>
</tr>
<tr>
<td>Wilcoxon</td>
<td>1.8274</td>
</tr>
<tr>
<td>Zscore</td>
<td>-2.277</td>
</tr>
<tr>
<td>sig</td>
<td>.023</td>
</tr>
</tbody>
</table>

Table4: groups’ difference

<table>
<thead>
<tr>
<th>Sex</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woman</td>
<td>0.5556</td>
</tr>
<tr>
<td>Man</td>
<td>0.8333</td>
</tr>
<tr>
<td>Total</td>
<td>0.6570</td>
</tr>
</tbody>
</table>

According to tables 5 and 6 it is found that the test significant level is higher than 0.05 and degree of freedom is 1. It can be concluded that there is no difference between motivational potential power and studies level and this difference in study level is equal according to means equality test of three groups.

Table 5: results of difference between studies and motivation

<table>
<thead>
<tr>
<th>Kruskal-Wallis test results</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>K Square</td>
<td>1.490</td>
</tr>
<tr>
<td>df</td>
<td>1</td>
</tr>
<tr>
<td>sig</td>
<td>0.222</td>
</tr>
</tbody>
</table>
Table 6: results of difference between Degree and motivation

<table>
<thead>
<tr>
<th>Degree</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>0.6111</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>0.6667</td>
</tr>
<tr>
<td>Bachelor and above</td>
<td>0.6667</td>
</tr>
<tr>
<td>Total</td>
<td>0.6570</td>
</tr>
</tbody>
</table>

6- DISCUSSION AND CONCLUSION

The research results are confirmed by research goals and hypotheses. According to the results there is a significant relationship among skill diversity, free hand, feedback and productivity of primary schools and there is no relationship between nature and importance of job and productivity and also, there is a significant difference between motivational potential power and gender and men motivational power is higher than women. There is no difference between motivational potential power and different study levels and the difference between study levels equals according to test of equity of three groups mean.

The findings of this research are in agreement to findings of Mack Kinon (1962), Salanic and Fefer (1987), Karimi and Pirasteh (2004), Amini and Hejazi (2008), Rasuli, Mogadam (2009), Pasha (2009), Nazir Poti (1993), Taheri (2009), Shahbegi and Mohamad Mahdi (1996), Harasi and Blanchard (2009), Bartel (1994) and Codobiya (2003) and they are in agreement with findings of Faraji (2009), Karimi (2010), Mir Gafori (2006), Pasha (2009) and Faraji (2009).

7- propositions
- Investigation of the relationship between job characteristics and teachers productivity of other grades in other provinces
- Investigation of the effective factors on complainant of teachers about conditions and possibilities according to frequency percentage of 26.4
- Investigation of the teachers interested in adoption of new decisions according to the results by frequency of 34.7
- Investigation of the effective factors on freehand in teachers affairs and study achievement according to this fact that 24.4 percent of the teachers believe that teaching does not allow teachers to decide to eliminate their needs.
- Investigation of the effect of feedback on motivation and productivity according to this fact that 19.4 percent of the teachers believe that teaching gives required directions and there is no need to colleagues’ feedback or supervisors.
- Investigation of the reasons for lack of attitudes toward adopted decisions in schools (34.7 percent of teachers believe to decisions)
- Investigation of the strategies for enhancement of motivation in teachers according to importance and identity of job (99.9 percent do not believe in importance of teaching).

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