Studying the Impact of Job Turnover on Employees' Productivity in Qom Power Distribution Company

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Abstract

The aim of present paper is to study the impact of job turnover on employees' productivity in Qom Power Distribution Company based on three motivational, educational and managerial components. To analyze data, statistical techniques are used in the level of descriptive statistics including frequency distribution table, percentage, average and standard deviation while T Test is used for deductive test. Considering the results of research findings and conducted investigations by T Test as well as statistical analyses conducted by SPSS statistical software, it is determined that Qom Power Distribution Company has not paid sufficient attention to realize productivity and, as a result, employees' productivity is not in proper status. Therefore, employees' motivation, training and optimization and management do not have the necessary ground for employees' productivity in this organization. Based on the results from testing the hypotheses, several recommendations are provided to improve this situation.

Keywords: Productivity, Job turnover, Training, Optimization.

Introduction

Today, it is considered as an important asset for any organization to have flexible, skillful and creative managers and personnel. Such people can facilitate and accelerate the affairs and can save the time and even the resources. Increase in organizational productivity and their increasingly development requires employees' growth and productivity and to foster their motivational force. Since some knowledge management authors have called motivation as human driving force, organizational success is highly depended to morale, efforts, motivations and satisfaction of human resources. Specialized and knowledge human forces is an important asset for organizations and as the most important competitive advantage and the rarest resource in today knowledge economy. Providing different qualitative products and services, cost mitigation, innovation and competitiveness are the advantages of qualitative and knowledge human resources. In other words, organizational efficiency and effectiveness correlates correctly to efficiency and effectiveness of human force. Human force should be motivated to show desired behavior toward organizational aims and it can be realized by identifying behavioral causes or the reasons of employees' tendencies, reasons and satisfaction in order to guide their behavior toward organizational aims and using them properly by competent managers.

To this end, one of the main guidelines is that human resources are seen as the most important organizational capital and planning to attract and improve their capabilities should be done through new scientific HR management techniques. As a result, achieving sustainable productivity in the country and high quality production in global level demands a systemic approach on HR and strategic attention. Considering the fact that today organizations' business structure is necessarily focused on HR, people play a critical role in organizational growth and development in today changing and challenging environment. Attracting and retaining talented and capable forces is getting more difficult day-by-day.

Such challenge has led into a process to identify, recognize and select right forces. A glance to HR leaving rate and the expansion and development of today organizations reveal that attraction and employment is an endless process. Job designing is the most proper status for using motivational theories by which principles such as job engineering, job development, job enrichment, job categorization and job desired characteristics are executed in the organization among which job turnover is more important in HR optimization due to its more application. Job turnover is a tool for managers and employees and according to many HR management theoreticians, it is a way by which managers prevent employees' exhaustion in work and they increase their employees' motivation by job changes and familiarity with different jobs (Rashidi et al., 2001). Official training cannot alone groom organizational employees in different aspects and it is to same reason that human capabilities are grooming in practice as one of the most important affecting
factors to expand horizon sight of employees. Additionally, job turnover increases individuals’ knowledge and job experiences. Likewise, an individual’s performance in different positions and responsibilities is a good benchmark to assess his abilities (Esmaeili, 1999). Therefore, one of the strategic tasks of organizational management is to create a proper environment for splendor of employees’ talents and abilities through utilizing special techniques.

The concept of job turnover and productivity

The information, knowledge and experience that someone finds through different job positions add to his understanding on the nature of problems and rational relationship among them which can cause that they be more prepared to accept more important positions. The necessity of success for a manager in high organizational level is that he should be fully aware of the complexity of tasks and their different and mutual relations (Saadat, 2011). Job turnover is a managerial initiative in HR management area which can be conducted by changing employees in different jobs with conditioned motivations (Rashidi et al., 2001). Job turnover is considered as a way to design job by which employees learn job skills through different sections and remove the exhaustion of repetitive job tasks by changing their tasks. Job turnover is a way to achieve HR aims, quality increase, employees’ satisfaction and productivity (Alinia et al., 2008). Job focus is a symbol of job stability which would yield into routine and repetitive works. In his book wealth of nations, Adam Smith (1776) provided abstract advantage theory to study this phenomenon. According to his theory, one can achieve below results by specializing the jobs and efficiency increase:

- Workforce becomes more skillful by repeating a job.
- Workers’ time is not wasted due to continuance in stopping the job and a product in order to make another product.
- Production will be increased through skillfulness promotion in one job.

However, Bahadury and Rdovilsky (2008) believe that the advantage of job turnover is not fully supported in improving employees’ performance. According to them, using very simple and trivial rules such as what already done by an operator would not lead into performance improvement and it is necessary to develop creative-based models so that one can improve the performance by modifying working schedule. Confronting these new tasks would encourage employees to re-enthusiasm and increases his morale to improve his performance. Classic theoreticians like Taylor, Gilbert, Fayoll and others emphasized on specializing and standardizing the works to get them more routine. However, one may say that industrial revolution has the most important factor on specializing and repeating the works. Initially, it seems that work repetition and specialization is very fruitful to increase efficiency and effectiveness so many managers may be influenced by above factors and prefer job stability to job turnover. Here, one should say that raised ideas and theories are only related to classic ages and such thoughts and approaches have been due to its environmental and technological conditions. Today, due to rapid technological changes, job stability and repetition by someone would lack necessary efficiency and effectiveness (Keramati, 2006). Managers should note that job turnover is not without its own problems for organization. It increases training costs, decreases people’s efficiency in addressing to different jobs and has some costs at least in short term due to its wide application in organization (Zarei MAtin, 2000). Employees’ turnover happens inside an institute due to different reasons. In other word, sometimes it relates to management taste and demand, sometimes to employment environment and laws and other times to employees’ needs (Mirsepapsi, 1992).

The most important ones include

- Changing organizational structure which would yield to categorization of executive units, increase/decrease in the number of organizations posts and increase/decrease in the threshold of organizational personnel. In this regard, such initiatives as downsizing, degradation, creating different companies from a big corporation specially outsourcing would play a vital role in HR qualitative and quantitative changes.
- Increase in goods and services production level which needs to more human resources would likely lead into new positions. Usually, more operational volume would make the works more specialized. For instance, in a small institute, the manager does different jobs like employment, running wages and salaries, training, HSE and other affairs. If the volume of operations is high, each task would need offices with several staff. If the volume of operations is decreased, the reverse procedure would be happened. In both cases, employees’ turnover is highly important.
- Introducing a product, service or production method would change the jobs both qualitatively and quantitatively. In this regard, technological changes in operational process would have the highest impacts in employees turnover in the organization.
- Market depression and extreme economic changes which stop some production lines and unemployment of some workers.
- The type of the market to which the institute confronts.
- Turnover due to suspension, retirement and firing decided be organization or to refuse attending in workplace, resignation and so on by workers.

In organizational terms, turnover is divided into four high, low, horizontal and out of organization types. As seen in figure 1, different forms of turnover are adapted to these four mentioned types: promotion, demotion, transfer, suspension, retirement, firing and resignation (Saadat, 2001). If done correctly and regularly, vertical (promotion and demotion) and horizontal turnovers (transfer) and other ones would not only increase HR effectiveness but also would exit the organization from depression and would lead into employees’ satisfaction and, as a result, institute’s efficiency and effectiveness (Mirsepapsi, 2003).
Job turnover has other definitions

- Inter/intra-organizational turnover: intra-organizational turnover means that someone changes his job inside his organization while inter-organization turnover means that he changes his organization.
- Inter/intra-profession turnover: since there is a difference between those people who leave their job and/or organization and those ones who leave their profession, job turnover by those ones who are dislocated inside a profession is referred “intra-profession turnover” while job turnover by which people also change their profession is referred “inter-profession turnover” (Ramzguyan et al., 2009).

Mirkamali (206) has divided job turnover grounds into six groups that all of them improve organizational performance

- Job turnover to get familiar with organizational policies and procedures
- Job turnover to modify special skills
- Job turnover to modify human relations
- Job turnover to resolve the problems
- Job turnover to modify managerial and monitoring techniques
- Job turnover to learn jobs

In executing job turnover, it is necessary to consider cultural, environmental and structural factors, to determine organizational level and to identify proper way of job turnover by analyzing the condition (Rashidi et al., 2001). Productivity is a multilateral concept which can be seen as an economic, financial, cultural and social variable. Many factors from technology to employees’ job insights play role in determining this variable. Since human force is the most important source of any organization, it is a critical factor to improve productivity and there is a direct relationship between success and progress of an organization and its human force. Although productivity is a radical variable in controlling economic activities and its improvement is seen as an organizational competitive advantage and one of the most important affecting factors on competition, it is sometimes neglected. Perhaps, one of the reasons for such negligence is lack of agreement on its concept (Singh et al., 2002).

Productivity concept and its indicators

Productivity is a culture and rational attitude toward work and life and aims at making the activities more intelligent to achieve a better and excellent life (Ranjbarian, 2004). By using human force potential talents and capabilities in the organization optimistically, HR management can improve organizational productivity, competencies, personal skills, HR retain, and human force training and growth through a proper performance based payment (Aselman & Robinson, 2007). Employees’ training and development would cause that they learn how to do their work favorably and improve their performance. Hence, educational systems throughout the world should create the main development resource by grooming specialized human force so that they can move the wheels of development in a dynamic and excellent system.
Productivity indicators are in the format of output to input or deliverables to data and are seen in different forms of economic, qualitative and quantitative indicators, in various organizational levels and management. Overall, productivity has three important components: efficiency, effectiveness and using production factors constantly. Efficiency means to do the works rightly. In other words, it relates to use incomes from resources in production process. Performance efficiency measurement is used through measuring the costs of resources in relation to meeting the aims as comparing achieved outputs to inputs. Effectiveness is an indicator to achieve organizational aims. To this end, one should care in defining the aim so that the aims should be neither unreal and inaccessible nor very simple and accessible. It can be also defined as doing the right work. Effectiveness is to measure the output or to meet an aim. For instance, performance effectiveness for a supervisor means that to what extent his department has achieved both qualitative and quantitative goals. Another productivity component is to use production factors constantly. It means to do our job seamlessly and with wasting the resources. Therefore, one can define productivity as to do a right work rightly and constantly which expresses such components as efficiency, effectiveness and job continuance.

Research background

In a research by Nasiripour et al (2009), the impact by job turnover on nurses’ performance in Tehran Social Security hospitals were analyzed and it was determined that nurses’ performance in studied hospitals was independent from their job turnover and current job turnover method had not improved their performance. Ramzgooyan et al (2009) studied the impact of managers’ job turnover in Tehran Mellat Bank branches on their performance and found that there was a positive and significant relationship between job turnover and employees' satisfaction, managers' work quality, managers' team working, customers' satisfaction and innovation. In this research, team working had the highest and employees' had the lowest impact on job turnover. In a research by Sharifipour et al (2009), affecting motivational, educational and managerial factors on employees' empowerment and productivity was measured in Lorestan Power Distribution Company and concluded that in order to improve its productivity, this company should initially pay attention to its employees' empowerment and it should also consider educational, motivational and managerial factors.

Borbar and Monfarad (2011) studied affecting factors on employees' productivity in Yazd Gas Company and concluded that innovative, educational and managerial factors are important. In his research titled HR productivity assessment model in Mobarakkeh Steel Complex, Asgari (2004) studied affecting factors on HR productivity. These factors include: human force training, investments on equipment, job satisfaction, contribution and belief in contributive systems, and motivational factors. He divided above factors into two specialized and demanded factors. Additionally, he studied the impact by training and investment on human force productivity quantitatively. In a study on banking employees, Fooladi (1997) indicated that job turnover impacts on their performance. In a study in Mehr Abad Customs, Bazrafshan (2005) concluded that there is positive relationship between job turnover and productivity.

Research scope (time, thematic)

Research scope is to study the impact of employees’ job turnover in Qom Power Distribution Company on their productivity. This study is conducted in autumn 2013.

Methodology

This is an applied study while in terms of data collection technique, it is a descriptive survey in which secondary information are gathered by reviewing relevant literature while preliminary data is collected by a questionnaire. In present study, both data analysis techniques namely descriptive and deductive statistics are used. Average test and t test are statistical techniques used in this research. T test is used to estimate the average of selected samples of a random variable. It shows confidence level from the difference of two random variables in their samples. Average test is used to test descriptive hypotheses. T statistic freedom degree is n-1 in present study.

Statistical population and sampling method

When population size is clear, Kokaran equation can used to determine sample size

\[
N = \frac{z^2pq}{d^2} \left( 1 + \frac{N}{a^2} \right)
\]

Where N = population volume. Usually, P and Q equal to 50% , d is lower than 10% and z is standard unit normal variable which is 1.96 by assuming α = 5% in confidence level of 95% in normal distribution table. Statistical population consists of 81 employees in different levels of Qom Power Distribution Company and finally 70 subjects responded questionnaire. Sampling method among the employees of Qom Power Distribution Company was categorized and simple random sampling. In preliminary study, the validity of the questionnaire was measured by Sharifipour et al (2009). The reliability shows stability and rational harmony of responses in measurement tool. There are different statistical methods to measure questionnaire reliability while one of the most credible one is Chronbach's alpha test. On this basis, reliability test results are shown in table 1. Since Chronbach's alpha value is greater than 0.7
for all components, questionnaire reliability is supported. Tables and figures were prepared after gathering the questionnaires and extracting and analyzing the results by SPSS software package. Then, all data and statistics were analyzed by t test.

### Table 1. Reliability test by using Chronbach’s alpha value.

<table>
<thead>
<tr>
<th>Tested case</th>
<th>Chronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivational</td>
<td>0.83</td>
</tr>
<tr>
<td>Educational</td>
<td>0.83</td>
</tr>
<tr>
<td>Managerial</td>
<td>0.86</td>
</tr>
<tr>
<td>Total</td>
<td>0.86</td>
</tr>
</tbody>
</table>

### Table 2. Employees' ages.

<table>
<thead>
<tr>
<th></th>
<th>+40</th>
<th>26-40</th>
<th>-25</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Frequency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>22</td>
<td>63</td>
<td>4</td>
</tr>
</tbody>
</table>

### Table 3. Employees' educations.

<table>
<thead>
<tr>
<th></th>
<th>Under diploma</th>
<th>Diploma</th>
<th>Associate of Arts</th>
<th>Bachelors</th>
<th>Masters &amp; Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency %</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1.5</td>
<td>19</td>
<td>27</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>6</td>
<td>26</td>
<td>37</td>
<td>11</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

### Table 4. Employees' job background.

<table>
<thead>
<tr>
<th></th>
<th>-5 years</th>
<th>6-10</th>
<th>11-15</th>
<th>16-20</th>
<th>+21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency %</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>30</td>
<td>31</td>
<td>30</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>17</td>
<td>24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 5. Employees' job turnover.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>1 Time</th>
<th>2 Times</th>
<th>More</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency %</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>26</td>
<td>16</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td>27</td>
<td>17</td>
<td>24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Hypotheses

Main hypothesis: job turnover impacts on employees' productivity in Qom Power Distribution Company.

Sub-hypotheses

Motivational factors impact on employees' productivity in Qom Power Distribution Company. Educational factors impact on employees' productivity in Qom Power Distribution Company. Managerial factors impact on employees' productivity in Qom Power Distribution Company. In studying hypotheses, null hypothesis and its alternative hypothesis are defined as below:

### Null hypothesis

Job turnover x aspect does not impact on employees' productivity.

Alternative hypothesis: job turnover x aspect impacts on employees' productivity.

\[
H0: \mu \leq 3 \\
H1: \mu > 3
\]

Where, \( \mu \) is the average of relevant response measured by Likert range. One-way T Test is used to analyze data.

- T Test is compared with its value in T Student table in confidence level of 95% and the hypothesis is supported if the obtained value from table is greater than 1.96.
- Lower and higher levels in the confidence level 95%: if the interval does not include zero, the hypothesis is accepted.
- Alternative hypothesis is supported if significance (Sig) level is lower than 0.05 in confidence level of 95%.

\[
\text{Sig.(2-tailed)} = p\text{-value} = 0.000 < 0.05 = \alpha
\]
Table 6. Testing hypothesis 1.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>t</th>
<th>FD</th>
<th>Sig.</th>
<th>SD</th>
<th>Average</th>
<th>Confidence level of 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>motivational</td>
<td>-5.147</td>
<td>69</td>
<td>0.000</td>
<td>0.572</td>
<td>2.64</td>
<td>Lower level: -0.48, Higher level: -0.21</td>
</tr>
</tbody>
</table>

Average testing of the sample to assess motivational aspect (with error level of 5%)

Hypothesis 1: Qom Power Distribution Company has considered motivational factors as an affecting factor on promoting its employees' productivity. T Test is used to examine this hypothesis. We have: Null hypothesis: job turnover motivational aspect does not impact on employees' productivity. Alternative hypothesis: job turnover motivational aspect impacts on employees' productivity.

H0: µ ≤ 3  
H1: µ > 3

It is expressed in null hypothesis that job turnover motivational aspect does not promote employees' productivity. The average of provided responses is 2.64 and standard deviation is 0.57 which indicates lower average of provided responses compared to scale value (3). Since t value is lower than 1.96 in confidence level of 95%, therefore, null hypothesis considering no impact by job turnover motivational aspect on employees' productivity promotion is supported.

Table 7. Testing hypothesis 2.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>t</th>
<th>FD</th>
<th>Sig.</th>
<th>SD</th>
<th>Average</th>
<th>Confidence level of 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>educational</td>
<td>-2.76</td>
<td>69</td>
<td>0.007</td>
<td>0.822</td>
<td>2.72</td>
<td>Lower level: -0.46, Higher level: -0.57</td>
</tr>
</tbody>
</table>

Average testing of the sample to assess educational aspect (with error level of 5%)

Hypothesis 1: Qom Power Distribution Company has considered educational factors as an affecting factor on promoting its employees' productivity. T Test is used to examine this hypothesis. We have: Null hypothesis: job turnover educational aspect does not impact on employees' productivity. Alternative hypothesis: job turnover educational aspect impacts on employees' productivity.

It is expressed in null hypothesis that job turnover educational aspect does not promote employees' productivity. The average of provided responses is 2.72 and standard deviation is 0.82 which indicates lower average of provided responses compared to scale value (3). Since t value is lower than 1.96 in confidence level of 95%, therefore, null hypothesis considering no impact by job turnover educational aspect on employees' productivity promotion is supported.

Table 8. Testing hypothesis 3.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>t</th>
<th>FD</th>
<th>Sig.</th>
<th>SD</th>
<th>Average</th>
<th>Confidence level of 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>managerial</td>
<td>-6.31</td>
<td>69</td>
<td>0.000</td>
<td>0.752</td>
<td>2.43</td>
<td>Lower level: -0.74, Higher level: -0.38</td>
</tr>
</tbody>
</table>

Average testing of the sample to assess managerial aspect (with error level of 5%)

Hypothesis 1: Qom Power Distribution Company has considered managerial factors as an affecting factor on promoting its employees' productivity. T Test is used to examine this hypothesis. We have: Null hypothesis: job turnover managerial aspect does not impact on employees' productivity. Alternative hypothesis: job turnover managerial aspect impacts on employees' productivity.

H0: µ ≤ 3  
H1: µ > 3

It is expressed in null hypothesis that job turnover managerial aspect does not promote employees' productivity. The average of provided responses is 2.43 and standard deviation is 0.75 which indicates lower average of provided responses compared to scale value (3). Since t value is lower than 1.96 in confidence level of 95%, therefore, null hypothesis considering no impact by job turnover managerial aspect on employees' productivity promotion is supported.

Table 9. Descriptive statistics.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Data quantity</th>
<th>Changes domain</th>
<th>Min data</th>
<th>Max data</th>
<th>Average</th>
<th>SD</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivational</td>
<td>70</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>2.64</td>
<td>0.57</td>
<td>0.32</td>
</tr>
<tr>
<td>Educational</td>
<td>70</td>
<td>3.25</td>
<td>1.25</td>
<td>4.5</td>
<td>2.72</td>
<td>0.82</td>
<td>0.67</td>
</tr>
</tbody>
</table>
Managing the affairs by them as well as determining the responsibilities and functions proportionate to employees' physical and mental status and missions for employees.

Concerning the improvement of job turnover educational factors in order to improve employees' productivity, the organization is recommended to make its employees' satisfaction and safety based on fair distribution of welfare facilities. Managers should pay sufficient attention to their employees' job situation and to create a proper and desired workplace to prevent them suffering from job stresses.

Concerning the improvement of job turnover motivational factors in order to improve employees' productivity, the organization is recommended to make managerial and expert positions specialized and people are posted based on their capabilities and professional abilities and designating responsibilities to creative and talented staff should be all paid attention.

**Recommendations for future studies**

- Using other affecting factors on productivity especially cultural factors
- Comparative study of affecting factors on satisfaction and job turnover among managers and employees of Qom Power Distribution Company.
- Studying affecting factors on implementing job turnover successfully among managers and experts of Qom Power Distribution Company.
- Studying the impact of lack of job turnover on the performance of managers and experts at Qom Power Distribution Company
- Studying other aspects of job turnover such as service leaving, firing and demotion on the performance of managers and experts at Qom Power Distribution Company.

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