Evaluating And Ranking Factors Influence On Organization Commitment Of Education Staffs Of Babol City Using Topsis Techique

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Evaluating And Ranking Factors Influence On Organization Commitment Of Education Staffs Of Babol City Using Topsis Techique

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ABSTRACT

The Purpose of this research is evaluating and ranking factors influence of organizational commitment of Babol's education staffs. Research method is descriptive survey, regard to research nature. Statistical community of research includes Babol's Education staffs with master and phd graduate degree with work experienced above 5 years among them 288 persons were selected as randomly sampling method. Research hypothesis were evaluated using t-test. To rank factors influence on organizational commitment, according to opinions of 10 experts with PHD degree and work experience over 15 years, decision matrix of factors influence on organizational commitment han been created and data rank using topsis technique. Results show that all four factors influence on employee organization commitment have significant effect on organization commitment. Also effective factors were ranked based on their priority as: environmental factor, individual factor, organizational factor and job-related factor.

Keyword:
organizationl commitment, enviromental factor, individual factor, organizational factor, job-related factor and topsis technique.
1. INTRODUCTION

It is the purpose of any organization to achieve the highest level of efficiency as optimal as possible. According to Friedman et al. (2010), education is responsible for supplying human resources in the society in terms of social and cultural fields. With guidance and supervision planning, movement of society toward industrialization has made more perceptible the need to guide the management of human resources in various aspects of society. Thus, it is appropriate for managers to give more attention in the modern area to modern issues related to human resources and focus on educational systems (Telebpoor Emami, 2007). Although, achieve pure educational aims related to optimal using human resources, finance and respective equipments, but dynamics of education system depends on various factors such as having happy employees, enjoy the high commitment and loyalty toward organization and interest to their own work to step in a vibrant and healthy environment, through applying all their energies, for getting organization with greater efficiency, (Sheikh et al. 2003).

Human resource is considered as the most important capital in organizations. The more and suitable quality be the human resource, it is more possible the successness, survival and improvement in the organization. Thus it should be more tried to improve the quality of human resource. Only. Specialized training is not enough, and specialized training is not enough, and it is necessary to improve attitudes and adjustment of individual values. One of the most important attitudes is organizational commitment. Because it plays an important role in meeting organization aims. Cmadani and Zadedi 2006). Committed staffs try more to achieving corporate objectives. (Pool & Pool 2007).

For this reason, present research aims to evaluate and rank factors and elements affecting on organizational commitment of education employees of Babol city.

1.1. Organizational commitment:

Organizational commitment is a word that is expressed in many definitions from various views. Although several concepts such as the willingness to responsibility, conscience and work ethic, have conceptual difference, but are used as equivalents of commitment. (Shokrzadeh 2002) He defined commitment as a linking factor of individuals and their personal...
actions. Namely when the obligation is realized that individuals have a sense of responsibility and attachment toward their behadviours and actions (Alhoseini 2001, p- 3/30).

So far, many researches has been conducted on commitment mwyer & Allen (1991) introduced a triple model of organization commitment, including.

A) Emotional commitment: it means emotional attachment of individual and a sence of belonging of individual toward organization. In this kind of commitment, a person remains in the organization because he has positive attitude and feeling to existential mission. Values and objective; and because meet the values and objectives that deeply believe them. Employees with high emotional commitment, have more commitment to their values and feel more responsibility toward fulfill organization objectives.

B) Continous Commitment: Commitment ot organization because of awareness of costs of leaving the organization. For this reason, the person beased on analysis of cost-benefit results, decide to stay.

C) Normative commitment: Indivjdual stay in the organization due to normal pressures and morals.

A Person never leave the organization because of other judgment about his action. There is many reasons why organizations must enhance organizational commitment of their members. Firstlyl. It is a relatively new conce'l't which in general. Is different from dependence and occupational satisfaction secondly, researches have shown that organizational commitment are related with consequences such as job satisfaction. Attendance, performance and turnover.

In a theorical model of mody et al in 1982 s, expressed four sets of preconditions of organizational commitment which represent the effective factors result in organizational commitment, including

A) Personal characteristic cage, sex, education, work experience)
B) Characteristics associated with job, role omibiguity and job strain. Some roles are more complex than others. Some members of group only plays on role and others have multiple roles. Those who play complex roles usually have higher base. But these complex roles can impose enormeous psychological pressure on people, in particular when behaviours tha must be conducted in that role, are not well defined, or are in conflict with each other, pressures
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due to role ambiguity and role conflict effect on organizational commitment of individual and group

D) Structural features; Studies on organizational size, supervision scope, focus and job dependency show that there is not significant relationship between any of these variables and organizational commitment.

Results of other studies showed. That size of organization and its monitoring scope don't relate to commitment, but recognition. Job continuity and focus are related with commitment that is employees who experienced less focus, more job continuity and more recognition. Showed greater commitment In addition, it has been evaluated the influence of variables such as ownership and participation in decision-making as positive effects.

E) Work experiences: work experiences which occur during the working life of individual in the organization are known as the one of the major forces in the socialization process or employee impressionability and influence on employees psychological dependence on the organization. Having importance feeling of individual to organization have positive impact on organizational commitment. (Moody, Porter, Steers 1982). A Research was conducted to investigate factors influencing on enhance organization commitment. Results showed that three factors affect on organizational commitment: personal, organizational and non-organizational csteers (Porter 1983).

Results of another research show that leader reward behaviour, leader punishment, behaviour, job characteristic, concentration, need to be successful, alternative job outside the organization, job, tension, job satisfaction, age, work experience, career tenure, work alternatives and job stress, negatively related to commitment; and other variables showed a positive correlation (Batm & Astrasrz 1984).

In another study, factors influencing on organizational commitment is classified in three general categories (Curry, Wakefield Tprice, 1986): variable related to environmental specificity (job opportunity and family responsibility), individual property (work experience, education, turnover history, work involvement and cooperation) and perception (including opportunities to promote, organization size, instrumental communications and organizational structure, and...)

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In addition, research findings show that equitable distribution of income, and responsive jobs, have the most positive and negative impact, respectively, on organizational commitment (Cry & Wakefield & Price, 1986). Conceptual model

Factors affecting on conceptual model

Individual factors
Organizational factors
Job-related factors
Environmental factors

![Factors affecting the conceptual model](image)

**Fig1. Conceptual model (Frieman et al, 2010)**

**1.2. Research Purpose**

**The main objective**

Evaluating and ranking the factors affecting on organizational commitment among education employees of Babol city.

**Secondary objective**

1) Determine the effect of organizational factor on organizational commitment and ranking its options
2) Determine the effect of job-related factor on organizational commitment and ranking its options.
3) Determine the effect of environmental factors on organizational commitment and ranking its option
4) Determine the effect of personal factor on organizational commitment and ranking its options

2. RESEARCH METHOD:
The method of present research, based on objective, is of practical research type and it is known as descriptive-survey method, in term of how data are collected Information required to this research is as library from and field study.

The validity and relability of study has been evaluated through professors and experts of human resource management and personnles and also another professionals. Also to determine the reliability of questionanaire, kronbach-alfa test is applied using spss software and its coefficient obtained as 0/8. This value show the reliability of questionnaire.

2.1. Method of data analysis
For statistical analysis, single-sample t-test used to examine test assumtions which are calculated as follow: the impact of each factor is not significant on the organizational commitment H: M < 3

The impact of each factor is significant on the organizational commitment H1: M > 3

To Test the hypothesis. The following statistics are used.

\[ t = \frac{\bar{X} - \mu}{\frac{S}{\sqrt{n}}} \]

2.2. Topsis technique:
Huang vion was the recommender of topsis technique in 1981. This model is one of the best multiple Ahtribute decision-Making method, and is used in many cases. In this method m-option is evaluated using on index. Topsis technique is based on the notion that selected option should has minimum distance from the positive ideal solution (best possible case) and the maximum distance from negative ideal solution (worse possible case). It is assumed that utility of ony index uniformly is increasing or decresing. The soltion of method requires 6 steps: (momeni 2014).

1) Quantifying ans non- scaling the decision matrix (N): To non-scaling Norm method is
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used.

\[ r_{ij} = \frac{a_{ij}}{\sum_{i=1}^{m} a_{ij}} \]

2) obtain weighted non-scaled matrix \((v)\) we multiply non-scaled matrix \((N)\) by diagonal matrix of weights \((W)\): namely \(V = NXWN\)
\[ V = N \times Wn \times n \]

3) Determine a positive ideal solution and a negative ideal solution, they are defined as follow:

\([v = \text{the best value vector of each index}] = \text{positive ideal solution}\]

\([v = \text{the worse value vector of each index}] = \text{negative ideal solution (vj)}\]

(Best values) for positive index are the largest quantities and for negative index are the smallest quantities (worse value) for positive index are the smallest value and for negative index are the largest quantities.

4) Obtain the distance of each option from positive and negative ideals.

Euclidean distance of each option from positive ideal \((+dj)\) and negative ideal \((-dj)\) is calculated based on following formula:

\[ d_{j}^{+} = \sqrt{\sum_{j=1}^{n} (V_{ij} - V_{j}^{+})^{2}} \quad , \quad i = 1, 2, \ldots, m \]

\[ d_{j}^{-} = \sqrt{\sum_{j=1}^{n} (V_{ij} - V_{j}^{-})^{2}} \quad , \quad i = 1, 2, \ldots, m \]

5) Determine the relative closeness \((c_{i})\) of an option to ideal solution

\[ CL_{i} = \frac{d_{i}^{-}}{d_{i}^{+} + d_{i}^{-}} \]

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6) Ranking options: each option with greater cl is better (momeni, 2014)

3. **Research Finding:**

3.1. **t-test**

Test of research hypothesis is obtained as follow:

**Table 1: Result obtained from t-test of organizational commitment factors**

<table>
<thead>
<tr>
<th>Factors</th>
<th>t-value</th>
<th>Mean difference</th>
<th>Apaove or reject the hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational</td>
<td>77/929</td>
<td>3/85</td>
<td>Confirm</td>
</tr>
<tr>
<td>Work-related</td>
<td>74/625</td>
<td>3/5</td>
<td>Confirm</td>
</tr>
<tr>
<td>Environmental</td>
<td>244/394</td>
<td>4/70</td>
<td>Confirm</td>
</tr>
<tr>
<td>Individual</td>
<td>122/398</td>
<td>4/27</td>
<td>Confirm</td>
</tr>
</tbody>
</table>

According to above table, t-value is obtained, and regarding that significance level of test in less than. Then H1 is confirmed, that is factors (organizational, work-related, environmental and individual) have significant influence on increase organizational commitment of education employees.

To ranking the factors, topsis technique is used as below

**Table 2: Decision matrix of factors affecting on organizational commitment**

<table>
<thead>
<tr>
<th>Experts</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
<th>X7</th>
<th>X8</th>
<th>X9</th>
<th>X10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational</td>
<td>3.67</td>
<td>4</td>
<td>4.44</td>
<td>4.44</td>
<td>4.44</td>
<td>4.67</td>
<td>4.67</td>
<td>4.67</td>
<td>4.82</td>
<td>4.82</td>
</tr>
<tr>
<td>Job-related</td>
<td>3.45</td>
<td>3.64</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4.18</td>
<td>4.18</td>
<td>4.18</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Environmental</td>
<td>4.75</td>
<td>4.88</td>
<td>4.88</td>
<td>4.88</td>
<td>4.88</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Individual</td>
<td>4</td>
<td>4.29</td>
<td>4.71</td>
<td>4.71</td>
<td>4.71</td>
<td>4.86</td>
<td>4.86</td>
<td>4.86</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>weight</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 3: non-scaled matrix with norm method

<table>
<thead>
<tr>
<th>Experts</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
<th>X7</th>
<th>X8</th>
<th>X9</th>
<th>X10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational</td>
<td>0.459</td>
<td>0.473</td>
<td>0.491</td>
<td>0.491</td>
<td>0.491</td>
<td>0.498</td>
<td>0.498</td>
<td>0.489</td>
<td>0.486</td>
<td>0.486</td>
</tr>
<tr>
<td>Job-related</td>
<td>0.431</td>
<td>0.431</td>
<td>0.443</td>
<td>0.443</td>
<td>0.443</td>
<td>0.446</td>
<td>0.446</td>
<td>0.446</td>
<td>0.504</td>
<td>0.504</td>
</tr>
<tr>
<td>Environmental</td>
<td>0.594</td>
<td>0.577</td>
<td>0.54</td>
<td>0.54</td>
<td>0.54</td>
<td>0.553</td>
<td>0.553</td>
<td>0.553</td>
<td>0.504</td>
<td>0.504</td>
</tr>
<tr>
<td>Individual</td>
<td>0.5</td>
<td>0.521</td>
<td>0.521</td>
<td>0.521</td>
<td>0.521</td>
<td>0.518</td>
<td>0.518</td>
<td>0.518</td>
<td>0.504</td>
<td>0.504</td>
</tr>
<tr>
<td>weight</td>
<td>0.459</td>
<td>0.473</td>
<td>0.491</td>
<td>0.491</td>
<td>0.491</td>
<td>0.498</td>
<td>0.498</td>
<td>0.498</td>
<td>0.486</td>
<td>0.486</td>
</tr>
</tbody>
</table>

Table 4: Weighted non-scaled matrix of data

<table>
<thead>
<tr>
<th>Experts</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
<th>X7</th>
<th>X8</th>
<th>X9</th>
<th>X10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational</td>
<td>0.486</td>
<td>0.486</td>
<td>0.498</td>
<td>0.498</td>
<td>0.498</td>
<td>0.491</td>
<td>0.491</td>
<td>0.491</td>
<td>0.473</td>
<td>0.459</td>
</tr>
<tr>
<td>Job-related</td>
<td>0.504</td>
<td>0.504</td>
<td>0.446</td>
<td>0.446</td>
<td>0.446</td>
<td>0.443</td>
<td>0.443</td>
<td>0.443</td>
<td>0.431</td>
<td>0.431</td>
</tr>
<tr>
<td>Environmental</td>
<td>0.504</td>
<td>0.504</td>
<td>0.533</td>
<td>0.533</td>
<td>0.533</td>
<td>0.54</td>
<td>0.54</td>
<td>0.54</td>
<td>0.577</td>
<td>0.594</td>
</tr>
<tr>
<td>Individual</td>
<td>0.504</td>
<td>0.504</td>
<td>0.518</td>
<td>0.518</td>
<td>0.518</td>
<td>0.521</td>
<td>0.521</td>
<td>0.521</td>
<td>0.507</td>
<td>0.5</td>
</tr>
<tr>
<td>weight</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 5: Data negative and positive ideals

<table>
<thead>
<tr>
<th>Experts</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
<th>X7</th>
<th>X8</th>
<th>X9</th>
<th>X10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational</td>
<td>0.594</td>
<td>0.577</td>
<td>0.54</td>
<td>0.54</td>
<td>0.54</td>
<td>0.533</td>
<td>0.533</td>
<td>0.533</td>
<td>0.504</td>
<td>0.504</td>
</tr>
<tr>
<td>Job-related</td>
<td>0.431</td>
<td>0.431</td>
<td>0.443</td>
<td>0.443</td>
<td>0.443</td>
<td>0.446</td>
<td>0.446</td>
<td>0.446</td>
<td>0.486</td>
<td>0.486</td>
</tr>
<tr>
<td>Environmental</td>
<td>0.594</td>
<td>0.577</td>
<td>0.54</td>
<td>0.54</td>
<td>0.54</td>
<td>0.533</td>
<td>0.533</td>
<td>0.533</td>
<td>0.504</td>
<td>0.504</td>
</tr>
<tr>
<td>Individual</td>
<td>0.431</td>
<td>0.431</td>
<td>0.443</td>
<td>0.443</td>
<td>0.443</td>
<td>0.446</td>
<td>0.446</td>
<td>0.446</td>
<td>0.486</td>
<td>0.486</td>
</tr>
<tr>
<td>weight</td>
<td>0.594</td>
<td>0.577</td>
<td>0.54</td>
<td>0.54</td>
<td>0.54</td>
<td>0.533</td>
<td>0.533</td>
<td>0.533</td>
<td>0.504</td>
<td>0.504</td>
</tr>
</tbody>
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Table 6: Distance from negative and positive ideals

<table>
<thead>
<tr>
<th></th>
<th>d1</th>
<th>d2</th>
<th>d3</th>
</tr>
</thead>
<tbody>
<tr>
<td>+d</td>
<td>0.124</td>
<td>0</td>
<td>0.315</td>
</tr>
<tr>
<td>-d</td>
<td>0.214</td>
<td>0.316</td>
<td>0.026</td>
</tr>
</tbody>
</table>

Finally, relative closeness of options is as follow:

Cl1 = 0/399   cl2 = 0/075   cl2 = 1 cl4 = 0/632

According to cls values, in ranking factors, they ranked based on their priority and importance as environmental, individual, organizational and work-related factors: and they obtained first to fourth rank, respectively.

4. DISCUSSION AND CONCLUSION:

Education is among organization that has a particular sensitivity in all communities. This sensitivity is for this reason that its internal operations being publically exposed and judged. Thus the presence of staffs with high organizational commitment is necessary for such system because a human force committed to organization at objective and value is ready to activity beyond his defined duties related to its work and become on important factor in organizational effectiveress. While providing a field to achieve the ultimate goals of organization. Present study seek to identify factors effect on organizational commitment of Babol's Education employee research findings show that there is four factors that have significant effect on organizational commitment of Babol's Education employees: that is: organizational, work-related. Environmental-physical and individual factors their ranking in order id environmental, individual, organizational and work-relates factors findings of present research are consistent previous research and studies. Among the factors and variables that have been examined in previous studies and are similar with present results and findings include occupational interest and attachment in take poor Emami (2010) studies, conflict and man ambiguity of role in moray, porter & steers (1992), Job satisfaction in Hashemi studies (1996), and Batman and steers (1984), staffs and managers relationships in oren et al (2007) studies, Ackoryd et.al (2009) and parrish, kdva lard and Basch (2008) studies. Social sevices
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(as library and sport and recreational Hall) in Hashemi (1997) studies, work environment and conditions in baron and Grinberg studies (1990), education level in studies of cerdy, wake field and price (1986); and demographic variables such as years of service and age at moody research. And results of Backlys yoyner (2006) indicate the effectiveness of individual and work-related factors on organizational commitment that is consistent with finding of this research. Also effectiveness of organizational commitment of improvement of work environment condition and desisability of organizational climate, finding of mc muray, scooter & Ross studies (2004) and management behavior and action of employees affairs, finding of powell (2004) studies and positive image of organization, finding of lee and loam reseach (2008) align with results of present research.

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