THE SURVEY OF RELATIONSHIP BETWEEN CREATIVITY OF STAFFS AND ORGANIZATIONAL EFFECTIVENESS
(Case study of: The East Azerbaijan province and Ardebil Province Education)

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ABSTRACT

The main objective of this research was to investigate the relationship between employee creativity and organizational effectiveness in educational organizations of East Azerbaijan and Ardabil provinces. This investigation was an applied research using a descriptive methodology with correlation tests. The statistical population for this research included all employees of East Azerbaijan and Ardabil provinces in 2010, comprising 45 and 19 departments, respectively, or a total of 64 departments. Using Morgan table for estimation of sample size, and according to random sampling method, 56 departments (29 and 17 departments, respectively) with 297 employees (179 and 118 employees, respectively) were selected, and were tested using simple random technique. Data collection was performed using two questionnaires, for which validity and reliability testing had been performed previously. The creativity questionnaire was filled by organizational employees, while the organizational effectiveness questionnaire was filled by executives of educational departments. In this research, according to the objectives of the research, descriptive statistics was used for creation of frequency tables and charts and computation of suitable central indices, while the study hypothesis was tested using Pearson’s correlation test. The results of this investigation showed that there is a statistically significant relationship between employee creativity and organizational effectiveness in educational departments of East Azerbaijan and Ardabil provinces (p < 0.05).

Keywords: creativity, organizational effectiveness, Department of Education, employees

1. INTRODUCTION

Nowadays human society is facing with extensive scientific, technological and informational crisis, and anybody is aware of it to some extent. Since overcoming these hurricanes demands a firm resolution on behalf of organizations managers, it is required that authorities pay attention to employee’s creativity capabilities in a dynamic way as one of the useful and effectual ways to confront society current scientific and technological backwardness. And conscious of the fact that interest in survey in the field of creativity has started from second half of twentieth century (Pirkhaefi, 2005). But what is creativity and where does it originate from? From most of geniuses’ perspective, creativity as the most powerful of human abilities exists in human essence from childhood to adulthood. Organizational effectiveness as the most important aim of each organization is a destination that all of organizational attempts are oriented towards its achieving (Asadzadeh, 2009). In addition to this assertion, leadership and management scope thinkers believe that various factors (organizational, environmental, and individual) are related to organization effectiveness that in this line, employees’ behavioral attributes can contribute to increase or decrease of organizational effectiveness (Vaezi, 2009). Since creativity in this arena is considered as a growing factor in scientific meetings and organizations express their greater need for creative and effectual forces. So it is expected that employee’s creativity be one of the useful factors in offices of education effectiveness. Up to now a lot of different
definitions in this field have been formed by various researchers (Mohagheghi, 2008). Finally creativity can be defined as a new, useful, appropriate, accessible and innovative response to solve organization problems (pandey, 2009). It is likely that creativity takes some discussable shapes in the future. In spite of this, all of us know how creativity in organizations, particularly educational ones can lead to organization and its beneficiary’s advantage and can be of great help to the organization manager in organizations profitability and effectiveness. In this current study the relation between creativity and effectiveness and relation between employees’ creativity and organizational effectiveness of Ardabil and eastern Azerbaijan provinces education is considered.

2. PROBLEM EXPRESSION
According to psychologist sayings, creativity is an extendable matter and can grow with individuals self confidence in organizations (seif, 1999) and includes three dimensions of non cognitional (Manteghi, 1999), cognitional and motivational. That generally, hauls a process and starts from preparedness that includes careful attention and focus upon studied issues and its various indexes to solve problem and leads to latency, insistence, insight and perception and investigation stages (Moghimi, 2000). In most of studies it has been seen that various factors influence employee creativity in organizations that personal, motivational and environmental factors have the most statistical impact (Sadeghi, 2007; Mohagheghi, 2007; Moghimi, 2000). Sternberg has said “by creating an environment embracing novel thoughts, exhorting individuals to explore in the environment, spending time for creativity encouragement and instructing individuals to gain their required knowledge, one can reach creativity.” (Moghimi, 2001) With more than two decades research in the field of relation between work environment and creativity during which tens of organizations and hundreds of individuals and groups were studied, one can say that creativity is greatly impressed by business environment. These findings indicates this important point that environment plays a significant role in creativity compared to other factors like individual attributes and talents. Despite the existence of influential factors upon creativity there are multiple ideas in this relation and each of thinkers have introduced techniques to nurture creativity. In proportion to these techniques, that their development can be influential in making organizations individuals creative, there are barriers in organizations that cognitive barrier is one of them and involves components such as habit, lack of adaptability, ambiguities refusal, reliance upon assumptions, and negative thought that each of them produce challenges as their consequences. For example in solving problems, individuals usually apply a method that they know it is successful. This method is repeated in similar cases and individual gradually gets used to that to do his works based on certain instruction, for this sake the possibility of his creativity and finding novel solutions and designs is diminished. In many cases, lack of creativity growth is due to affective barriers like shyness, irritability and giving preference to others view due to lack of self confidence.

Also, the third barrier to creativity that is experienced by most of individuals is social barrier and its components are comparison of individuals with the others, fear from lack of social welcome and old customs. (Hosaei, 2000) Despite the fact that creativity makes an impact upon organization and employees, effectiveness as one of the prevalent organizational structures, while it seems inadequately describes relates to all of participants in organizational life. Understanding organization goals is the first step to be taken in organization effectiveness. For effectiveness and maintenance of success in organizations, managers should posses special attributes potential capabilities and efficiencies and long term knowledge and communicational-social skills. And to produce effectiveness in management one should start from goals and also in carrying out programs, managers, in the first place, should depend upon their resources and particularly human force (Daft, 2008). So, organizational effectiveness as the most important goal of each organization is a destination that all of organizational attempts are oriented towards reaching it. Among factors that play role in organizational effectiveness one can refer to organization culture, organization design, superior management and strategic tendency. Besides that, for organization effectiveness, there are various attitudes on behalf of organizations managers that involve different parts in assessment of organization effectiveness that differentiate traditional attitudes from new attitudes (Rabinz, 2008). Also, different attitudes bring about various value paradigms for organizational effectiveness. The question is whether employee’s creativity in education is related to organizational effectiveness or not.

3. RESEARCH THEORETICAL BACKGROUND
From the first of 1950s and so forth, traditional and nonscientific perception and impression of creativity as a genius declined and a new viewpoint, resulted from researches and scientific and systematic probes of creativity authorities included Makin ton and tailor took its place (Sadeghi, 2007). From this point of view creativity is a general and potential talent and can flourish and thrive by recognizing its effective factors. There is no doubt that leaders in the world of education should probe new and creative ways to answer needs of our quickly changing world. New
conception of leadership is not summarized in manager performances, but includes a wide spectrum of people working in education scope. It seems that change is always resisted. This is a serious challenge for all the people playing a role in children education (Amabil, 2003; Ball, 1992). Considering large and quick changes in third millennium technologies, organizations should benefit from competition capability and permanent maintenance, this case is realized if development and novel services take place. Nowadays creativity plays an important role in future development of countries. Studies about creativity emphasize upon this viewpoint that creativity is an important factor in national development and competition capability (Burgelman, 2006; Kanter, 1999), despite this; innovation and creativity are of most importance in education and its thesis. In creativity development and improvement in educational organizations, the factor of creative and novel management is more effective and useful than the others. Since believes of educational managers in creativity and novelty and their attitudes towards it in organization itself can turn education environment in to focus of variations and innovation. Therefore if schools headmasters besides managing skills benefit from knowledge and skill of creativity and innovation, grounds for creativity growth is provided in employees. (Shalley, 2004; Samkhnian, 2000)

Tamson (2000) in his studies, attributes break of hierarchical structures to the open and free communications that this in itself leads to more intra organizational risk and at last creativity increase and this factor makes organization more effectual and leads to more profitability. (Thomson, 2000)

Zhou & Jorge in their studies came to conclusion that presence of creative coworkers has a positive impact upon the other people in organization and when organization managers do not directly control organization employees and express more supportive behaviors this positive effect is more significant upon employees with less creative power (Zhou, 2003).

Shelley and Gilson (2004) carried out a study about effective group, individual and organizational factors of creativity and came to conclusion that time resource, group communication system, and organizational structure has an impact over individuals creativity (Shalley, 2004).

Politis (2005), a research was carried out entitled relation between individual management upon himself and employees leadership and management, by means of organization leadership and its environmental factors that are origins of creativity. Below results were obtained: relation between “different guidance” and incentive dimensions of work environment is appropriate and positive for creativity. The manner in which “different guidance” relates wideness of work environment is a barrier to creativity. These findings apparently have shown that incentive dimensions of work environment have a positive and suitable impact upon creativity and exploitation (Politis, 2005).

Grabner (2007) carrying out a study concluded that the leader support and incitation, freedom, choice, organization resources, less formalization results in encouragement of novel ideas and behaviors. When leaders consider value for employee’s needs and emotions, their creative skills will develop.

Pandey, 2009 carried out a study about effective organizational factors of employee’s creativity and finally concluded that creativity is greatly under the influence of organizational structure, leadership style and reward system in organization. Unfocused structure, revolutionizing leadership style, participation of members in activities, granting rewards that lead to individuals' needs satisfaction are factors that influence subordinates creativity. Ghahreman Tabrizi et al (2005), through a study concluded that correlation between organizational culture and creativity is significant. Also, multi variable regression results showed that subcategories of organization culture power, compatibility with change and convergence of individual and group goals have linear relation with variable criteria and possess qualifications to predict creativity.

Sadeghy (2007), by examining effective factors of creativity of the country research centers employees, found that individual factors like capability, personality attributes, cognitive style, intelligence and challenging , directly, and organizational factors like leadership style, organization structure, organization reward system, organization atmosphere and organization resources, indirectly, influence creativity.

Vaezi in a study examined the relation of education managers’ behavioral components with organization effectiveness. Results are indicative of relation between success oriented, supportive and cooperative behavioral components with organization effectiveness and lack of relation between imperative and position oriented behavioral components with organization effectiveness. Cooperative behaviors of manager have relation with components:
adjustment, compatibility, unity and maintenance of organization entirety. There was no significant relation between education managers’ gender and the extent of organization effectiveness.

According to done studies one can claim that creativity is an appropriate basis for organizations effectiveness. Organization effectiveness model of Talcott Parsonz is a prevalent model in most of educational organizations. Parsonz has considered four dimensions for effectiveness including:

a. Adjustment (compatibility): including indexes: compatibility, growth, creativity and development.

b. Reaching goal: including indexes: success, quality, gaining resource and efficiency.

c. Coherence: including indexes: satisfaction, atmosphere, relations and confliction.

d. Continuance: including indexes: loyalty, main interests of life, motivation and identity. (Mirkamali, 2001)

In current research, due to research goal, organization effectiveness model of Talcott Parsonez was used to measure office of education effectiveness.

In this part according to referred cases in research literature, a conceptual framework, on its basis research assumptions takes form, is dealt.

4. RESEARCH HYPOTHESES
4.1 Main as hypotheses of research
There is a significant relation between employee’s creativity and offices of education effectiveness in provinces of eastern Azerbaijan and Ardabil.

4.2 secondary hypotheses of research
1) There is a significant relation between employees creativity and there compatibility in office of education environment.

2) There is a significant relation between employees’ creativity and their Goal in office of education.

3) There is a significant relation between employees’ creativity and their coherence in office of education.

4) There is a significant relation between employees’ creativity and their maintenance in office of education.

5. RESEARCH METHODOLOGY
In regard to goal, Current research is practical and in regard to method it is descriptive-correlative that is carried out by field method through questionnaire.
Statistical society of current research is comprised of all of the offices of education in provinces of eastern Azerbaijan (45 offices) and Ardabil (19 offices) that totally constitute 64 offices. Using Morgan table of statistical sample volume, 56 offices of education were selected by proportional hierarchical sampling; the number of total employees is 1294. In current study, according to Morgan table 297 employees were tested randomly that is shown in below table.

**Table 1: sample volume according to Morgan table**

<table>
<thead>
<tr>
<th>Province</th>
<th>N</th>
<th>Employee</th>
<th>S</th>
<th>Employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Azarbaijan</td>
<td>45</td>
<td>778</td>
<td>39</td>
<td>179</td>
</tr>
<tr>
<td>Ardabil</td>
<td>19</td>
<td>514</td>
<td>17</td>
<td>118</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>1294</td>
<td>56</td>
<td>297</td>
</tr>
</tbody>
</table>

In current study according to research goals, to collect needed information for testing research assumptions two questionnaire were used. To measure creativity, Rend sip creativity questionnaire (1979) was used that was altered in order to be compatible with office of education. To examine questionnaire validity or reliability test, questionnaire was applied over 30 people of statistical society members and using its cronbach alpha 0/72 was obtained. To measure effectiveness organizational effectiveness questionnaire of Hamidi(1382) was used that is made in the form of a five grade scale inspired from organization effectiveness model of Talcott Parsonze. This questionnaire was answered by 10 managers that its cronbach alpha was obtained 0/93. So one can say that questionnaire had required reliability.

6-ANALYSIS OF DATA

6.1 demographic variables of research

Of 56 managers who answered questionnaire questions one person (1/8 percent) was female and 55 persons (98/2 percent) were male. According to the variable age, average age of managers was 41. From extent of education point of view, 36 persons (64/3 percent) had BA degree and 20 persons had MA and higher degrees. So most of managers had BA degrees and according to work background approximately 98 percent of them had more than 10 years background.

Also of 297 employees of the offices of education, 255 persons (86 percent) were male and the rest 42 persons (14 percent) are female that their age average was 36 year. From the extent of education point of view 15/8 percent had upper diploma degree, 61/7 percent had BA, and 22/5 percent had MA degree, so most of them had BA degree. From the job background point of view 13/2 percent had less than 5 years background, 41/6 percent had between 5 and 10 years background and 45/2 percent had more than 10 years background.

6.2 examinations of research hypotheses

This part deals with analytical examination of assumptions and tests that are considered part of research goals. To examine extent and intensity of relation between two variables correlation tests are used. In this study since we are going to examine relation between two variables of creativity and effectiveness, using Pearson correlation coefficient with respect to criteria level that in both of variables scales are with distance and quantitative; its significance level was examined, on the basis of above information, obtained results are like this;

**First secondary hypothesis test:** there is a significant relation between employees’ creativity and their compatibility in offices of education environment.

Present results show that there is no significant relation between employees creativity and their compatibility or adjustment with office of education environment. In other words, discussed varying dimensions don’t produce significant changes in organization environmental adjustment. This fact led to rejection of hypothesis 1 at significance level of 0/05. In fact it can be argued that offices of education can fulfill their duties efficiently only if they are creative and active organizations and according to Mailz organizational health is endurance and maintenance of organization in its environment and compatibility with it and improvement and development of personal capability for more compatibility that is complete adjustment with environment so organizations that are completely compatible with environment can bring about creativity in employees and in this way increase effectiveness.
Second secondary hypothesis test: there is a significant relation between employees’ creativity and realization of their goals in office of education. Present results show that there is a significant relation between employees’ creativity and realization of their goals in office of education at reliability level of 99 percent. The value of Pearson correlation coefficient between employees creativity by studying organization goals equals to 382. From one hand, presence of positive mark in obtained coefficient for this variable is indicative of this relation being positive. In other words, with an increase in employees’ creativity this fact makes greater contribution to organization goals realization. This case led to acceptance of research hypothesis 2. So there exists a positive and significant relation between employees’ creativity and realization of their goals in office of education.

Third secondary hypothesis test: there exists a significant relation between employees creativity and coherence in office of education. Present results show that there exists a significant relation between employees creativity and coherence in office of education at reliability level of 95 percent. The value of Pearson correlation coefficient between employees creativity and organization coherence equals to 0.347. On one hand the presence of positive remark in obtained coefficient is indicative of this relation being positive. In other words; the more creative employees are the more cohesive are the organizations. This fact led to acceptance of hypothesis 3. Meaning: there is a positive and significant relation between employees’ creativity and their goals realization in office of education.

Fourth secondary hypothesis test: there is a significant relation between employees’ creativity and their endurance in office of education. Present results show that there exists a significant relation between employees’ creativity and their endurance in office of education at reliability level of 99 percent. The value of Pearson correlation coefficient between employees’ creativity and organizational coherence is 0.453. On the other hand the existence of positive mark in obtained coefficient for this variable indicates this relation being positive. In the other words, the more creative employees are the more contributive is this fact in realizing organization endurance. This fact led to acceptance of research hypothesis 4. Meaning: there is a positive and significant relation between employees’ creativity and their endurance in office of education.

Table 2: Correlation test between creativity and Organizational Effectiveness

<table>
<thead>
<tr>
<th>Variables name</th>
<th>Coefficient correlation</th>
<th>Significance value</th>
<th>significant relation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Effectiveness</td>
<td>0.400</td>
<td>0.003</td>
<td>There is</td>
</tr>
<tr>
<td>compatibility</td>
<td>0.073</td>
<td>0.6</td>
<td>There is</td>
</tr>
<tr>
<td>Goal</td>
<td>0.382</td>
<td>0.004</td>
<td>There is not</td>
</tr>
<tr>
<td>coherence</td>
<td>0.347</td>
<td>0.01</td>
<td>There is</td>
</tr>
<tr>
<td>maintenance</td>
<td>0.453</td>
<td>0.001</td>
<td>There is</td>
</tr>
</tbody>
</table>

Research main hypothesis test: there exists a significant relation between employees’ creativity and offices of education in provinces of eastern Azerbaijan and Ardabil.

Obtained results from Pearson correlation coefficient shows that there exists a significant relation between employees creativity and organization effectiveness at reliability level of 99 percent. The value of correlation coefficient between employees creativity and organization innovation is 0.4. On the other hand presence of positive mark in the obtained coefficient for this variable indicates this relation being positive. In the other words, the more creative the employees are the more effective are their organizations. This fact led to acceptance of research main hypothesis meaning: there exists a significant relation between employees creativity and organization effectiveness.

6.3 comparisons of creativity and effectiveness in provinces of eastern Azerbaijan and Ardabil

In this part to compare creativity and effectiveness extents in offices of education in provinces of eastern and western Azerbaijan we use average comparison test the results of this test is shown in table 3.
Table3: comparison of average values of creativity and effectiveness in provinces of Ardabil and Eastern Azerbaijan

<table>
<thead>
<tr>
<th></th>
<th>Creative test for equality of variances</th>
<th>T test to compare mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Significant number</td>
</tr>
<tr>
<td>Creativity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assume equality of variance</td>
<td>0.462</td>
<td>0.517</td>
</tr>
<tr>
<td>Assume Inequality of variance</td>
<td>-1.777</td>
<td>0.088</td>
</tr>
<tr>
<td>Effectiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assume equality of variance</td>
<td>1.989</td>
<td>0.164</td>
</tr>
<tr>
<td>Assume Inequality of variance</td>
<td>-1.565</td>
<td>0.125</td>
</tr>
</tbody>
</table>

Taking this in to consideration that F (criteria for comparison of two society variance) for both provinces is bigger than 0, 05, therefore this hypothesis that variances are equal cannot be rejected. In this case we compare two societies average assuming two variances as equal.

Taking this in to consideration that the significance value of two societies average comparison for both of provinces is bigger than 0,05, so there exists no significant difference in creativity and effectiveness values of two provinces of Ardabil and eastern Azerbaijan. In other words it can be concluded that in two provinces of eastern Azerbaijan and Ardabil, employees’ creativity is equal statistically and these organization managers’ conclusions are equal in regard to organization effectiveness.

7. CONCLUSION

Since existence of creativity and innovation in today volatile world seems necessary and according to sayings key effectiveness is missing especially in educational organizations, organizations can not fulfill solely mechanical duties, growing trend of technology and intense competition in different industries and organizations have necessitated creativity and innovation. Now the question is to what extent employees’ creativity in offices of education can contribute to organization effectiveness through improving employees’ performance. An answer to two descriptive questions showed that employees’ creativity in offices of education is at mean level, so, these organizations effectiveness results at ordinary level is higher than medium or mean but in the status of comparison, organization effectiveness of eastern Azerbaijan province offices of education is greater compared to Ardabil province offices of education.

Answering research main hypothesis: there exists a relation between creativity of offices of education employees and their organizational effectiveness in provinces, eastern Azerbaijan and Ardabil. Results showed that there exists a positive and significant relation between creativity of offices of education employees and organizational effectiveness. But in answering a research secondary hypothesis, there exists a relation between employees’ creativity and their adjustment in offices of education environment, results showed no significant relation.

In answering research second secondary hypothesis, there exists a relation between employees creativity and their goals realization in offices of education, results showed positive and significant relation.

In answering research third secondary hypothesis, there exists a relation between employees creativity and coherence in offices of education, results showed positive and significant relation. Answering forth secondary hypothesis, there exists a relation between employees creativity and their endurance in offices of education, results showed positive and significant relation. According to research results, correlation intensity between employees creativity and organization effectiveness is 0/38 that is indicative of direct relation between two variances. The more creative are employees in offices of education the higher are these organizations effectiveness.

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