

Effective Factors on Creativity Reinforcement in Shiraz University of Medical Sciences in 2008

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Abstract: Without any doubt creativity is one of the most important characteristic that affects on all part of human life. Fast worldwide evolution in science, technology, industry and management and total values and standards oblige great and successful organizations and firms to put their aims and tendency with regard to creativity use. This research was aimed to study the rate of personal creativity and effective factors on its promotion in Shiraz University of Medical Sciences in 2008. This research was Descriptive. Statistical universe was 280 of personnel in 3 levels (managers, experts, employees) that selected on Stratified Random Sampling. Data was collected with Randcepp Creativity questionnaire. Finding detected creativity rate at the under-mediate level. So, we must pay specific attention to notice creativity and weighty factors on it.

Key words: creativity, creative organization, creative person, creative process.

INTRODUCTION

After universe appeared and social life developed, human has started to invent. His inventions which were resulted from mind appeared according to the needs. Nowadays changes happen widely and deeply and affect all of our lives. Today creativity is known as key of success and survival. So the evolutions in technology, science and management make universal successful organization to act depending on creativity (Shahraray M., 1997). In scientist view, creativity is axle of worldwide movement in 21st (Golestan Hashame S.M., 2004). Creativity is vital in unstable situation. If there is not any creativity, organization will ruin in long time (Zaree Maten H., 1995). It is ability of new and different look at a subject or process of breaking and rebuilding knowledge about a subject and getting new knowledge (Golestan Hashame S.M., 2004). Last researches titled these factors as effective factors on creativity: motivating factor, organizational atmosphere, social communication, managerial role and performance, knowledge management, job nature and intelligence (Amabile Teresa M., 1985; Wong Simon, 2008; Shaykh Eslame R., Razaveye R., 2006; Alavee, S.H.R. and Khesre M., 2004; Melina Rangiaho, 2007; Cindy Wu Yi, 2006; Gorji A., 2006; Rahimi H., 2008; Siadat S.A., 2008; Jing Zhoua, 2003).

In Organizational view creativity is new idea and plan to improve quality and quantity of organizational performance such as development in productivity and services, expenses decrease and creating new and better services (Feghhe Farahmand N., 2003). Creativity is process of developing new ideas (Amabile Teresa M., 1988).

In 1996 Paul Plsek introduced synthesis model of creative process model has 4 general steps: preparation, imagination, development and action. Creative process starts from distinguishing problem or need, and then it will be analyzed by imagination and offering new ideas. Afterward, new ideas will be enforced to omit weakness. At last, compare the chosen idea with expected goal and result so it is conversion from idea to act. The final step is reporting. With respect to it, human always seek problems and new demand to know it and follow creative process (Samadaghaee, 2002). Figure 1: Synthesis model of creative process.

Creativity has deep relationship with human behavior. We are made to pay specific attention to creativity more than past. It is mental process resulted in new and ideal ideas and productions (Louiz G., 2006). Freud knows confliction as creativity resource. He believes that creative one usually accepts new idea and belief whereas common rejects them (Hossaine A.S., 2000). Open organizational environment and accepting changes is suitable for creativity. This is organizational culture that prepares proper atmosphere for growing or destroying it (Faraghat L., 2005; Alavee S.H.R., khesre M., 2004). Executive managers have main role in structural variable to release creativity outbreak. In trustful environment people are encouraged to offer creative idea and preparing

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this environment is managers' duty. If they work gracefully and pay attention to creativity essentially, employees will follow them (Melina Rangiaho, 2007; Cindy Wu Yi, 2006; Gorji A., 2006). Antonio Rosa Jose in 2008 implied 4 main managerial principles that affect creativity in organization. Based on the careful observation and interviews of employees at three companies, and supplemented by cases from the popular business press, a discovery approach is used to derive four management principles that engender creativity and innovation in organizations:

- (1) Manage organizations as their knowledge base is more diverse than what would occur naturally.
- (2) Encourage employees to embrace a collaborative and non-complacent attitude towards work and the organization.
- (3) Make it possible for organization members to engage in the quick testing of ideas and solutions as they emerge.
- (4) Reward employee and supervisor behaviors that support these principles and punish resistance to their implementation. These principles work in companies even if creativity and innovation are not stated organizational objectives, and do not require large investments or disruptions to work processes to yield valuable results (Jose Antonio Rosa, 2008).

Motivational factors especially inner motivation that is affected deeply social environment, have main role in growing creativity. Intrinsic motivation is conducive to creativity and extrinsic motivation is detrimental. Intrinsic job-related motivation which include opportunity for advancement and development, loyalty to employees, appreciation and praise of work done, feelings of being involved, sympathetic help with personal problems and interesting work, are found to encourage employees' risk-taking behavior (Amabile Teresa M., 1985; Shaykh Eslame R., 2006). Fiaz says that proficiency is one of creativity criteria. No one can't act creatively if not learn needful and relative knowledge. It is one of God gift that needs to be grown and enforced with specific new knowledge. It is inevitable (Fiaz E., 2009).

The effect of creativity techniques is clear as Kilgour in 2007 at his PhD thesis uploaded it (Kilgour A. Mark, 2007; Shaheni Yailagh M., 2005; Ganji H., 2005). Siadat et al in 2008 studied relationship of creativity and job nature (job value and chances, feedback, job challenges and independence) and showed significant relationship between them (Siadat S.A., 2008). Professor Harvey C Lehman in Ohio studied relationship of creativity and age. A woman maybe physically weaker than man but creativity is not affected from it, Person with no formal education shows creativity more whereas high-educated one dose not. However, development of personality needs social environment and education (Rahimi H., 2008; Hossaine A.S., 2000). Studying researches about traits of creative person introduce these: subtle, curios, flexible, clever, risky, unselfish, accent to other fate, independent, emotionally stable and self confident. On top of them, they enjoy their jobs (Samadaghae J., 2002; Hossaine A.S., 2000; Agae Fishanee T., 1999).

Generally new and complicate world needs human and organizational power focus on achieving foreseen goals. We have creative and clever person whose abilities and talent have been wasted, and the most important reason is disability to distinguish magnitude of creativity and existence of unsuitable environment. We need creativity and creative person to improve in social, economical, cultural and training situations. With regard to 20 year vision, Iran plans to overcome in economy and trade from its neighbors. Therefore economy depending on knowledge must be the most strategic instrument to be organized correctly and beneficially. Consequently, if we want to reach it have to focus and enforce these instruments such as technology, information, learning structure, creative human and intelligent organization. So according to what said and arrogance in public systems we decided to study this research.

2. Method:

Shiraz University of medical Sciences is one of the most successful universities in Iran that has 15000 personnel. Many students graduated in Medicine and Para Clinic yearly. There are 1000 personnel in the central office divided to 3 groups: 100 managers with PhD, 640 experts with bachelor and master degree and, 280 employees below bachelor degree and diploma. This study was descriptive. Total of 400 questionnaires selected on statistical Random sampling were submitted to central office to collect data and 280 questionnaires were returned that all of them included.

Creativity was assessed by Randsepp creativity questionnaire published with 50 items in 1979 to measure personal creativity in organization. Its reliability was 0.81. It was in 5 point Likert-type scale ranging from "I strongly disagree" to "I strongly agree ". Additionally demographic variables included age, sex, education, job type, firing situation and work history time were collected. Data analysis was carried out by using the statistical program packages SPSS. P-value, equal or lower than 0.05, were considered statistically significant.

3. Results:

In the first analysis of demographic characteristics included sex, job type, education and firing situation, the data showed in table 1. Table 1: the frequency and frequency percent of sample viewpoint of demographic variables. The creativity grade was 181.8. So it located at the under-mediate level. Consequently consideration of effective alternatives will be necessary. Data analysis in table 2 showed grade of creativity in each group of demographic variables.

Table 2: creativity grade in each group of demographic variables. Women grade was more than male but both of them were at under-mediate level (170-189). Low difference was between managers' and experts' grade but a little more than employees. We can attribute this to the managers' and experts' authority and independence. Only personnel with PhD and MS degree located at the mediate level (190-209), with BS and under BS were at under-mediate (170-189) and with diploma were at the uncreative level (50-169). With regards to the firing situation, conventional personnel were at the mediate level but formal and contractive personnel were at under-mediate. Formal and contractive Personnel were at the lower level in comparison with the conventional personnel that was attributed to the assurance of job future whereas conventional personnel try more to fix their job status and be permanent.

Amount of R square of creativity in table 3 indicated that there was not any significant relationship between sex, age and work history time. Therefore we can not predict creativity according to these variables.

Table 3: Regression analysis of creativity and sex, age and work history time. One-way variance analysis in relationship between creativity and education, job type and firing situation didn't show any significant relationship (according to the F and Significant level that was more than 0.05). Table 4: one-way variance analysis of creativity and job type, education and firing situation.

Table 1: The frequency and frequency percent of sample viewpoint of demographic variables.

Demographic variables	Frequency	Frequency percent	Demographic variables	Frequency	Frequency percent
Male	149	53.2	Diploma	44	15.7
Female	129	46.1	After diploma	35	12.5
Manager	39	14.6	Bachelor	151	53.9
Expert	158	56.4	Master	21	7.5
Employee	79	27.5	PhD and upper	25	8.9
Formal personnel	59	21.1	Contractive personnel	115	41.1
Conventional personnel	97	34.6	Other personnel	2	0.7

Table 2: creativity grade in each group of demographic variables.

Demographic variables	Rate of creativity	Demographic variables	Rate of creativity
Male	179	Diploma	160
Female	184	After diploma	182
Manager	187	Bachelor	186
Expert	186	Master	190
Employee	171	PhD and upper	191
Formal personnel	185	Contractive personnel	187
Conventional personnel		193	

Table 3: Regression analysis of creativity and sex, age and work history time.

Variables	Multiple R	R ²	Adjusted R ²	F	Significant level
Sex	0.12	0.014	0.001	1.07	0.36
Age	0.12	0.014	0.001	1.07	0.36
Work history time	0.12	0.014	0.001	1.07	0.36

Table 4: One-way variance analysis of creativity and job type, education and firing situation.

Variables	F	Significant level
Job type	0.351	0.70
Education	2.096	0.082
Firing situation	0.32	0.81

4. Discussion:

With respect to the result of data analysis we must consider alternatives to improve and make better creativity quality and its using benefit. Creativity is the superior gift that is put in each person as an organizational cell, the main factor in organization success. Creativity role and importance is proved in achievement to vision, mission and goals. Attendance to different ideas in firms and cooperating personnel in

appointing, performing and evaluating strategic and operational planning and organizational goals induce personnel responsibility to organization and its goal.

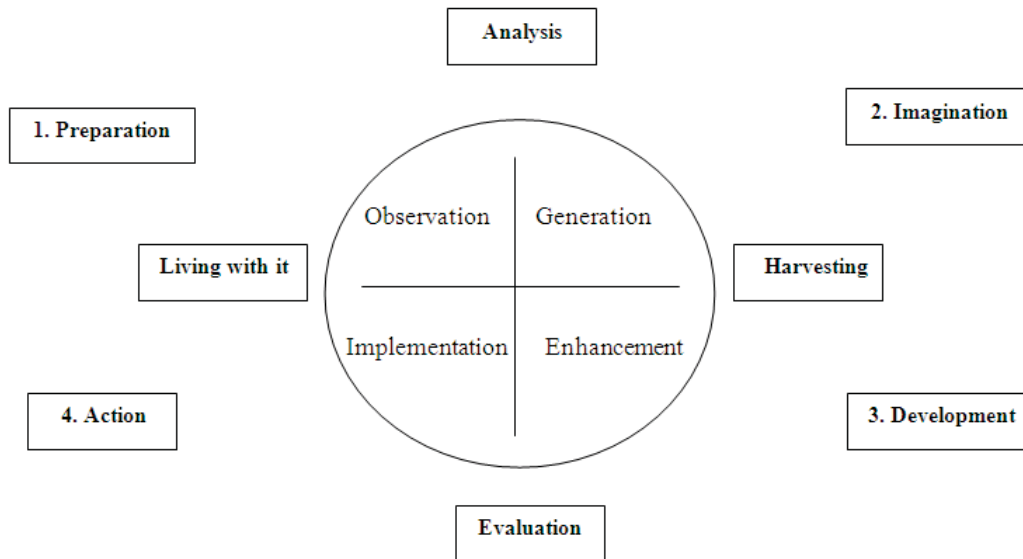


Fig. 1: Synthesis model of creative process.

As Jose said in 2008, one of the main managerial principles is encouraging personnel for having supportive attitude to the organization and its goal. Sharing personnel in decision making and other organizational affairs enforce this attitude. Team working, successful work group, increasing inter-parts cooperation, job safety and dependency sense to the systems all are main steps to reach creative organization. Job ascension motivation is summarized in tendency to change, risk acceptance and curiosity as creative characteristics. Improving and supporting services and work processing teams, knowing and using new technology, sheltering new and unusual ideas and committees such as proposition committee explain and enforce organizational creativity. An appropriate work life quality, glory sense to organization and chances for rising induce personnel's attempt to solve work problems by their mind power. Freud knows confliction as creativity resource. Creative one usually don't succumb principles and laws. They don't follow policies, process and organizational rules. They always want to change process to conflict stability and get new process.

All of these need organizational culture as creativity incentive, participative management and proper managerial performance. In public systems creative managers provide best situation for upbringing creativity. Job cognition, being responsible, failure analysis, strong working communication, fast and suitable reaction to problems, feedback and having effective sense in organization are sensational in organizational creativity improvement and development. Stimulating personnel to do research, asking their questions in work and try to reach their answers and creating idea room with aim to have a proper atmosphere make organization powerful to use beneficially mind power and creativity to achieve prosperity.

All in all, we offer these alternatives for having creative personnel and organization:

1. Improving organizational culture and providing suitable environment for personnel participation in decision making and organizational performance.
2. Encouraging and rewarding personnel that accept positive changes and punishing ones that resist.
3. Endorsing proposition committee to aid new ideas incidence and raise creativity. When an even lower personnel knows that we listen to his idea, experience and proposition and thank them we will get more value and wealth than what we employ.
4. Pay specifically attention to personnel ideas in strategic planning formulation and use their cooperation and evaluation in systems.
5. Sharing personnel is decision making with regard to their new and unusual ideas.
6. Providing situation for personnel progressing by means of performing empowerment fields.

7. Creating specific and proper base for knowledge transmission in and out of organization.
8. Creating and developing self-organized work team and participative management.
9. Acknowledge personnel with creativity and its techniques.

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