

IDENTIFYING AND RANKING FACTORS EFFECTING CREATIVITY AND INNOVATION THROUGH EMPLOYEES TRAINING IN KIAN TIRE INDUSTRIAL PLANT, IRAN

Esfandiar Doshmanziari

Assistant Prof., Faculty of Islamic Azad University, Islamshahr, Theran, Iran

doshmanziari@gmail.com 

Abstract

This study was conducted to identify and rank factors affecting creativity and innovation among employees. Key research questions were: What are the affective factors? How can they be identified? How are they ranked? The statistical population was consisted of all employees of Kian Tire Company. The sample of this study was 20 experts at first who were questioned through the Delphi method. According to the results of the first stage, 18 factors were identified. The motivation and the organizational chart factors account for 90% and 10% of the responses respectively. In the second phase of the Delphi method, two internal and external factors were identified with nine sub factors. Then, 50 employees were selected as the sample with a whole number selection method and were asked for final ranking. Ranking of internal and external factors was done using hierarchical method and the Topsis technique. According to the finding the factors affecting creativity and innovation include some internal and external factors. The internal factors consist of three components of personal talents, performance independence and personal motivation and motivational systems. In addition, external factors consists of work environment, time, assigned tasks, Chance and social values and pressures of the working environment.

Keywords: Innovation, Creativity, Employee development, Ranking

INTRODUCTION

Today, by understanding the dimensions and advancements of human mental functions related concepts, managers are more interested in identifying the growth factors and development of these strengths and important instruments in the organizational growth path. The two related concepts of creativity and innovation are among the third-millennium concepts that attract the attention of the general managers. In scientific texts, creativity is a phenomenon based on the rational order and is a function of the progressive movement of man, which needs an appropriate context to grow so that people's minds and thoughts are free to address new ideas and create new opportunities. In the current situation, necessarily all organizations need fresh ideas and new perspectives for survival. Today with the advent of knowledge and technology and the widespread flow of information, our society needs to train the skills that can help keep pace with the development of science and technology. The goal is to cultivate people who can face and solve problems with a creative brain. People need education of creativity; to take steps towards a prosperous society by creating new ideas. . An increasing amount of information has caused everyone to have any kind of experience and knowledge; therefore, the flow of information consisted of knowledge and experience among humans, is one of the key to success in today's world. Cultural contextualization is one of the influencing factors on the creativity in a society, in which everyone can help each other on the path to growth. Identifying the influencing factors on creativity can provide a new idea and plan for improving and enhancing the quantity or quality of the organization's activities such as increasing productivity, increasing the production and service, reducing costs, and so on (Beyrami and Nezam Abadi, 2016).

If creativity and innovation are considered comprehensively and thoroughly in thought and practice and its determinants are determined correctly, it can contribute to the growth of individuals' talent and individual, occupational, and social success, reduction of the cost and waste of material and human resources (Rezaeian, 2016). However, regarding the existence of production lines and the manner in which the same processes are carried out in industrial factories; it is unclear to anyone that existing the creativity and innovation as the key components of this research, in executing these predetermined and determined jobs in the production line can also increase productivity and improve working conditions. In addition, because of this improvement in the conditions of factory, the level of employee satisfaction increases (Chan and Yon, 2014).

Understanding the key factors affecting creativity certainly leads to more creativity and more innovation, and the improvement of the quality and quantity of services, increased competitiveness, increased efficiency, motivation and so on. According to Wang and Tessay

(2014), the importance of this study is that identifying effective factors in promoting creativity and innovation will strengthen the working morale and institutionalize them in organizational mechanisms.

The main purpose of this study is to identify the factors affecting these two variables; so that it could more enhance the working quality in the target community (Kian Tire Production Plant) and reduce job problems.

Since the title of this research is identifying and ranking the factors affecting creativity and innovation among Kian Tire's employees, therefore, the subject area of this research is only to identify and rank factors affecting creativity in employees and other methods and characteristics of employees that are effective in enhancing organizational productivity will not be studied in this study. Since fieldwork and completion of questionnaires have been completed within a month, the time domain of the study is one month. In this research, the research topic has been specifically discussed among staff and managers of Kian Tire Co. so the field domain of the study is limited to the Kian Tire and its associated people.

LITERATURE REVIEW

Theoretical Background

The pace of change and transformation has gone beyond imagination; therefore, creativity and innovation have been accepted as the main constituent of important factors in the survival of organizations. Increasing creativity in organizations can lead to improving the quality and quantity of services, reducing costs, avoiding waste of resources, reducing bureaucracy, increasing competition, increasing efficiency and productivity, motivating, and satisfying employees (Martins and Terblanche, 2003, p 64-74).

Some scholars have defined the principles for determining the boundaries of creativity as follows:

- a) Creativity implies a new answer or conception, or the likelihood of its occurrence is very low. However, it should be noted that being new and original, while being a necessary condition for creativity, is not enough. Once a response could be considered part of a creative process that is consistent with reality in some extent or is in principle real.
- b) Creativity should solve a problem, or either fit with a situation or have a certain purpose.
- c) Real creativity is conditional on the durability of that innovative insight, its evaluation and interpretation, and its development. In a short sentence, one can say, "Many have good ideas, but few do it" (Sborn, 2016, p18).

Many internal and external factors affect the creativity of individuals. The role of the manager in creativity development is mobility and encouragement of employees, delegation of authority to

employees and finding creative minds. The most important techniques for enhancing creative thinking include brainstorming, parallel thinking, and force fitting (Johannessen & Olsen, 2010, p502-511).

One of the most important factors in creativity of each person is his level of intelligence and talent. This causes the person with higher intelligence to show more creativity than others in the same situations. However according to the results of the study of creative people, having a certain amount of intelligence is necessary, but it is not sufficient and intelligent people are not necessarily creative too. On the other hand people with average intelligence can be creative and prominent people. Creativity may be more acquiring than natural, but with proper training, it can be upgraded to a good level in people and can be used in the right way.

So far, numerous definitions of creativity have been made, each of which has somehow been able to clarify some of its important process. Such as: "Creativity is the activity of the mind in situations related to problem design and solving it; Which results in artistic or technical innovations" or "Creativity means the ability to combine ideas in a unique way or to create an affinity between ideas" (Zarei,1993,p37). Creativity means the ability to delineate new combinations of two or more concepts that already existed in mind. From a variety of definitions, a simple and comprehensive definition of creativity can be found: "Creativity is the use of mental abilities to create a new thought or concept" (Rezaeian, 2003, p132).

In general, creativity and innovation have different meanings. In short, their difference is as follows: Creativity is a mental and intellectual activity to create a new and exciting idea. However, innovation is the transformation of creativity (new idea) into action or outcome. In other words, innovation means the realized creative idea. The creative person may not be innovative, that is, he has new ideas but has not the ability to deliver them, but the innovator is often creative.

Experimental background

Rahmanzadeh (2016) studied the factors influencing on creativity and innovation in national media at Islamic Azad University of Tehran. The main question of this study was that: what are the factors affecting the creativity and innovation in national media? In order to test the hypotheses, survey method and questionnaire were used. The statistical population of this study was managers of national media. The findings indicate that management factors, organic structure and rewards for creative and innovative people and employee participation contributed to the promotion of creativity and innovation in national media (Rahmanzadeh,2016, p1-8).

Moshirian (2015) investigates the issue of identifying and prioritizing the influencing factors on creativity in advertising of the Tosee Taavon Bank of Semnan province. In this

research, creativity of three main categories of indicators including individual, internal and external factors were identified as the main factors influencing on the advertising with the help of professors and experts of advertising and marketing. Individual factors were subdivided into thirteen sub-components and each of internal and external organizational factors were divided into three sub-components. Based on the results, using the AHP technique, individual factors with a weight of 0.62 were assigned the highest and external organizational factors with 0.23 and internal organizational factors with 0.13 were in the second and third priority respectively (Moshirian, 2015, p 54).

Talayi (2015) examined the influencing factors on the creativity of the employees of the Asia Insurance Company at the Azad University of Tehran. This was a descriptive study and carried out using a survey method. The statistical population included all 1226 employees of Asia insurance company in 2014. The sample size was determined using Cochran's formula equal to 186 people and was randomly determined. The research tool was a questionnaire. Experts approved content validity of the questionnaires. Reliability of the questionnaires was highly estimated based on Cronbach's alpha coefficient. Descriptive and inferential statistics, single t test, independent t test, and one-way analysis of variance were used in analysis. The findings indicated that all of the transformational leadership factors, organizational structure, organizational learning, social capital, employee participation in decision-making, affect on the creativity of employees in the Asia insurance company. Independent T-test results showed that there was no significant difference between male and female employees' opinions. The results of one-way variance analysis showed that there is no significant difference between employees' opinions about affecting factors on creativity in terms of their work experience. However, there is a significant difference in terms of their age and education (Talayi, 2015, p21).

Jokar (2015) examined the relationship between creativity and innovation with job satisfaction of high school and vocational school managers in the fourth district of Shiraz. His study was descriptive-correlational and its method was survey. The statistical sample consisted of 130 high school and vocational school principals in Shiraz fourth district, which were selected by census method. Data collection tools were the creativity questionnaire (Oinel, Abedi, Espil Berger 1992) and the innovation questionnaire (Conter 1988) and job satisfaction questionnaire (JBS) (Smit Candal and Hiolin 1969). Results of the study indicated that there is a positive relation between innovation and creativity of managers and all job satisfaction components. In addition, there was a positive and significant relationship between managers' views about the level of implementation of managers' creativity components. Correlation coefficient between managerial innovation and job satisfaction was not significant. In other words, by increasing or

decreasing the innovation level of managers, there were not any changes created in their job satisfaction (Jokar, 2015, p 104).

Madiano Sutanto (2017) conducted a research on the effects of organizational learning abilities and creativity on inter-organizational innovation for Indonesian East Java universities. The researchers' hypothesis was that creativity and potential learning abilities among employees could influence on the amount of offered innovations. After conducting research and using linear regression methods and collecting information by self-made questionnaire, it was revealed that both organizational learning and creativity factors have both partial and general effects on organizational innovation. There was also no difference between private and public universities about the impact of creativity on innovation (Sutanto, 2017, p25-34).

Chen and Hou (2016) conducted a study in Taiwan to determine the impact of leadership, behavior, and environment on creativity and innovation. In this research, an intermediate management model was used to measure the parameters. The statistical population was the research and development division of various Taiwanese companies. So data were extracted from 291 samples. The results showed that leadership and management behavior had a direct impact on the level of innovation and creativity among R & D staff and the proper management of behavior increases innovation (Chen and Hou, 2016, p1-13).

In a 2016 study, Leopoldino et al. examined the effecting factors on the growth and development of creativity within organizations. According to their results, innovation can be achieved through creativity and through this method; creativity development factors for organizations should be prioritized. A sample of 85 people was selected from the statistical population. By conducting surveys, the following factors were found to affect creativity: Management practices, intra-organizational culture, interpersonal cooperation capacity, mental security, existence of multiple cultures, intellectual diversity and flexible relationships between different departments of the organization (Leopoldino, Daniel, Aguirre González, and Marques Júnio, 2016, p:81-95).

Tsai, Horng, Liu, and Hu (2015) conducted a study about the impact of the work environment and organizational climate on the growth and enhancement of creativity and intra-organizational innovation. In this research, a new model was introduced to examine the effects of creativity and organizational nature. The sample includes 320 people working in the tourism industry in China. The instrument was a questionnaire designed by the researcher. Experts examined its validity, its reliability was calculated with the help of Cronbach's Alpha, and it was equal to 0.795, which was appropriate enough. According to the results, by increasing organizational support for individuals, creativity and innovative ideas will increase in them (Tsai, Horng, Liu, & Hu, 2015, p: 26-35).

RESEARCH METHODOLOGY

This is an applied, descriptive-exploratory study type and with a survey method. The statistical population of the study consisted of 20 experts for using the Delphi method in the first stage and all human resource education managers, and supervisors, and employees of all sections and subdivisions of Kian Tire Industrial Company, which includes 50 people in the second phase. According to the limited statistical population of the study (50 people), a census sampling method (the whole number method) was used.

The Delphi method was first used to identify the factors influencing individuals' creativity and innovation, and the opinions of experts and specialists in this field have been gathered in order to identify the factors influencing creativity. In the next stage, according to the most important factors identified by experts, the questionnaires were prepared and distributed among the members of the statistical population, in order to prioritizing. The validity of the questionnaire was determined using experts' opinion. Then the validity was calculated using the correlation coefficient. Reliability of the questionnaire was determined using Cronbach's alpha coefficient as described in Table 1.

Table 1: Reliability examination using the Cronbach's alpha coefficient

Questions	Factors	Components	The Alpha Coefficient
1-4	Personal talents	4	0.642
5-8	Functional independence	4	0.782
9-12	Personal incentives and incentive systems	4	0.748
13-16	Work environment	4	0.658
17-20	Time	4	0.699
21-24	Assigned tasks	4	0.841
25-28	Chance	4	0.740
29-32	Social Values and pressures	4	0.784

Given the obtained Cronbach's alpha coefficient in Table 1, it can be concluded that the reliability of the questionnaire is in the desired level.

FINDINGS

Based on the results of describing the demographic characteristics of the data, 22.4% equal to 11 people were women and 77.6% equal to 38 people were men. Also, in terms of age, 18.4% equal to 9 persons were less than 30 years, 36.7% (18 persons) were 30-35 years old, 24.5%

(12 persons) were 35-40 years, 16.3% (8 persons) were 40 to 45 years old and 1.4% (2 persons) were over 45 years of age. Of these, 20.4% (10 persons) have a diploma, 38.8% (19 persons) have an undergraduate degree, 6.1% (3 persons) have BA degree, and 6.1% (3 persons) have MA degree.

First, according to the Delphi method, a preliminary questionnaire was distributed among 20 experts, managers, and employees of Kian Tire Company, whose results are shown in Table 2.

Table 2: Identifying the influencing factors on the creativity based on the Delphi technique, first step

No.	Factors	Frequency	Frequency %
1	Incentives and incentive systems	18	90
2	Personal talents	17	85
3	work environment	16	80
4	Assigned organizational tasks	16	80
5	Social Values	14	70
6	Chance	12	60
7	Correct training	12	60
8	Intra organizational competition	11	55
9	Functional independence	10	50
10	Time	9	45
11	Achieving higher career levels	7	35
12	Job Satisfaction	6	30
13	Promotion of a position among colleagues	6	30
14	Proper management	5	25
15	Friendly relationships with colleagues	5	25
16	Relations with academic and scientific environments	3	15
17	Family environment	3	15
18	Observe the organizational chart	2	10

As shown in Table 2 in the first stage, the highest percentage, and frequency (90% and 18 persons) are attributed to the motivating factor and incentive systems, and the least (10% and 2 persons) are attributed to the organizational chart factor.

In the second stage, in order to screen and obtain the final opinion of the experts and confirm the importance of each of the factors, we include 12 factors that had a higher percentage and frequency in the second questionnaire and again distribute them among the same 20 persons. The results are presented in Table 3.

Table 3: Descriptive results of the obtained factors in the second step of the Delphi method

Factors	Number	Average	Mod	Standard Deviation	Min	Max
Personal talents	49	3.6939	3.50	0.63792	2.25	5.00
Functional independence	49	3.4746	3.50	0.98853	1.25	5.00
Personal incentives and incentive systems	49	3.6020	3.50	0.89693	1.50	5.00
Internal Factors	49	3.5901	3.75	0.67568	1.75	5.00
work environment	49	3.2857	3.75	0.87202	1.00	5.00
Time	49	3.5510	4.00	0.84776	1.00	5.00
Assigned tasks	49	3.5612	4.25	0.97432	1.00	5.00
Chance	49	3.2245	3.50	0.93297	1.00	5.00
Social Values and pressures	49	2.9694	3.25	0.97846	1.00	5.00
External Factors	49	3.3184	2.40	0.68873	1.15	5.00

As shown in Table 3, the results obtained from the implementation of the second phase of the Delphi method indicate that the average personal talent is 3.69 ± 0.64 , the average of functional independence is 3.47 ± 0.99 , the average of personal incentives and incentive systems is 3.60 ± 0.70 , and the average of internal factors is 3.59 ± 0.68 . The average of work environment factor is 3.28 ± 0.87 , the average of time factor is 3.55 ± 0.85 , the average of Assigned tasks factor is 3.56 ± 0.97 , the average of chance factor is 3.22 ± 0.93 , the average of Social Values and pressures factor is 3.97 ± 0.98 , and the average of external factors is 3.32 ± 0.69 generally.

Next, in order to determine the degree of agreement between experts, the Kendall Coordinating Coefficient was used as reported in Table 4.

Table 4: Kendall Coordinating Coefficient (w)

Sections	Kendall's W	Chi ² statistics	Significance	Coordinating Level
First Stage	0.548	272	0.000	Average
Second Stage	0.712	611	0.000	Optimal

Findings in Table 4 show that the Kendall co-ordination coefficient increased from the first to the second stage and in the second stage, it was 0.712. Given that researchers consider a greater coefficient than 0.7 in order to reach an acceptable agreement, in the second stage, the experts have reached an optimal level of agreement on all questions.

In the next step, the AHP method was used to rank the identified factors. For this purpose, a pair comparison was made between each of the levels of the criteria and using expert choice software, paired comparison questionnaire were analysed and their incompatibility rates were determined. The results are shown in Figure 1.

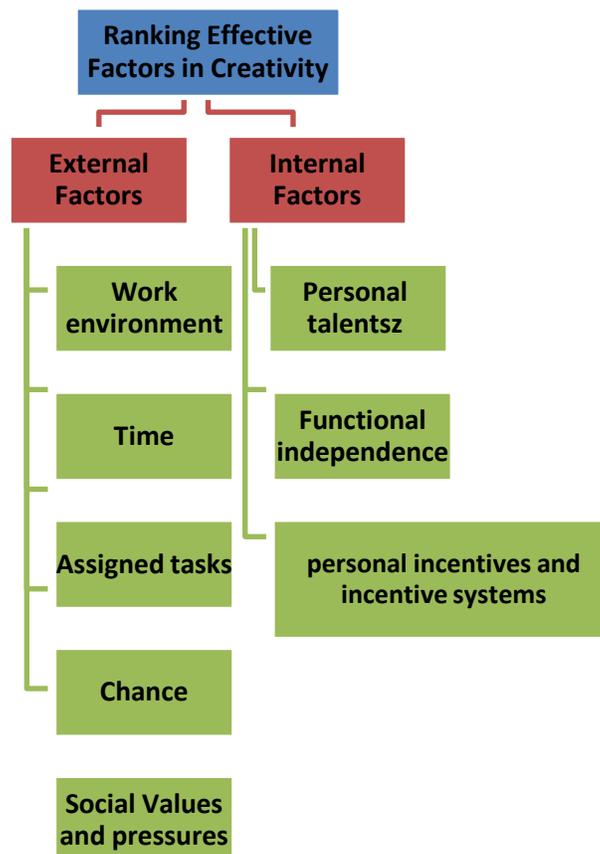


Figure 1: Hierarchical structure of the problem in the AHP method

According to the hierarchical structure of Figure 1, internal factors consist of three components of "personal talents", "functional independence" and "personal incentives and incentive systems". These components were provided to experts through a pair comparison questionnaire and then the results were analyzed using Expert Choice software.

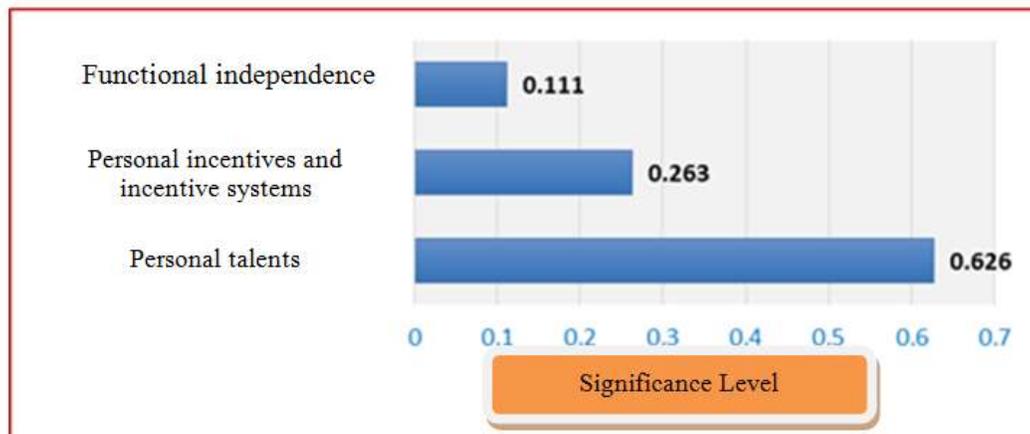


Figure 2: Internal factors ranking results

Findings in Figure 2 show that in the dimension of internal factors, the component of "personal talent" is ranked in the first order with a score of 0.626. The "personal incentives and incentive systems" component with a score of 0.263 is in the second order and the "functional independence" with a score of 0.111 is in the third order.

In accordance with the hierarchical structure in Figure 1, external factors consist of five components of the "work environment", "time", "Assigned tasks", "Chance", and "social values and pressures of the working environment".

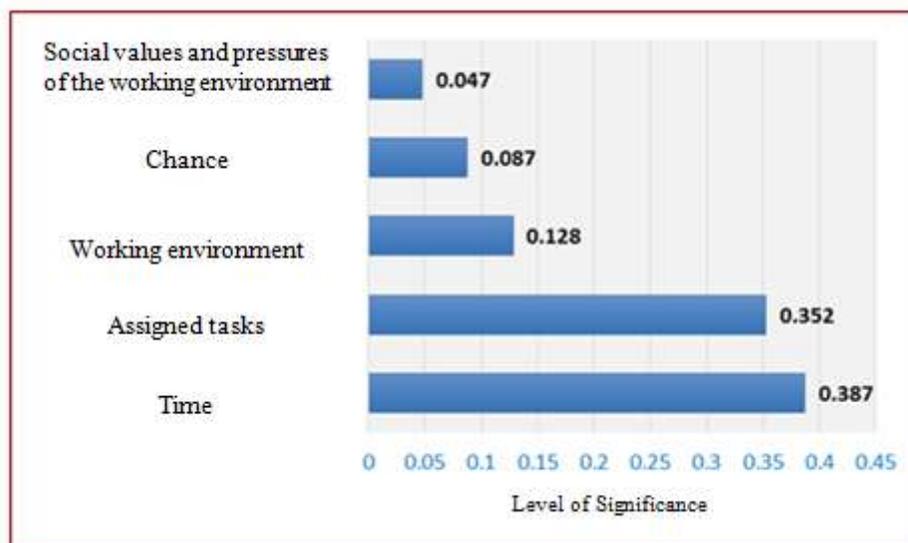


Figure 3: Results of external factors ranking

The findings in Figure 3 show that in the dimension of external factors, the time component with the coefficient of 0.387 is ranked in the first order. The "assigned task" component with the

coefficient of 0.352 is in the second order and the “Working environment” component is in the third order. The component of “Chance” and “social values and pressures of the working environment” with coefficient of 0.087 and 0.047 are in the fourth and fifth order respectively. Finally, the TOPSIS technique was used to compare the ranking results, and the results are shown in Table 5 and Figure 4.

Table 5: Factors' Ranking

Factors	Coefficient of proximity	Ranking
Personal talents	0.3486	5
Functional independence	0.3400	6
Personal incentives and incentive systems	0.3229	7
work environment	0.3849	3
Time	0.3681	4
Assigned tasks	0.1584	8
Chance	0.5673	2
Social Values and pressures	1	1

According to Table 5, the ranking of factors is shown in Figure 4 according to their priority.



Figure 4: Ranking of Effective factors on creativity and innovation in the organization

According to Figure 4, the "Social Values and Pressures" factor is ranked in the first order with the coefficient of proximity of 1, the "Chance" factor with coefficient of proximity of 0.567 is in the second order and the "working environment" with coefficient of proximity of 0.358 is in the third order. The "Assigned tasks" factor in the last order with lowest degree.

CONCLUSION AND SUGGESTIONS

The main objective of this study is to identify and rank the effective factors on creativity and innovation among Kian Tire's employees. Therefore, based on their rankings, the results could be applied and used in planning. The results of calculating the descriptive indexes of eddective factors indicated that the average of "personal talents" factor is 3.96 ± 0.64 , the average of "functional independence" factor is 3.47 ± 0.99 , the average of "personal incentives and incentive systems" factor is 3.60 ± 0.70 and the average of internal factors is 3.59 ± 0.68 generally. The average of "work environment" factor is 3.28 ± 0.87 , the average for the "Time" factor is 3.55 ± 0.85 , the average of the "Assigned tasks" factor is 3.56 ± 0.97 , the average of the "Chance" factor is 3.22 ± 0.93 , the average of the "Social values and pressures" factor is 3.97 ± 0.98 and the average of external factors is 3.22 ± 0.69 generally. These results indicate that the identified factors are capable of generalizing to the target community and can justify the reliability of the application of the results at a desirable level. Based on the calculation of Kendall's coordination coefficient to determine the degree of agreement between expert opinions in the Delphi method and that the findings indicate a coordination of increased coefficients from first to second step (0.712), so it can be said that the results are at a reliable sufficiently. Researchers consider the coefficient to be greater than 0.7 in order to reach an acceptable (desirable) agreement; so in the second phase, the experts reached a level of agreement on all questions. According to hierarchical structure, internal factors consist of three components of "personal talents", "functional independence" and "personal incentives and incentive systems." The findings show that in the dimension of internal factors, the "personal talent" component is ranked first with the coefficient of 0.626. This result demonstrates the need of creativity and innovation to an inherent capacity in the first phase and those who have enough talent can improve in this field. The "personal incentives and incentive systems" is in the second order with the coefficient of 0.263 and indicated the attention to the person's mental status for innovation and creativity. Therefore, it is suggested that managers should consider the internal dimensions of individuals and employees in proportion to their ability and function. The "functional independence" factor is in the third order with the coefficient of 0.111. In addition, according to the hierarchical structure of external factors, there are five components of the "work environment", "time," "assigned tasks", "Chance" and "social values and pressures of the working environment." In the

dimension of external factors, the time component with the coefficient of 0.387 is ranked first. In other words, to implement creativity and innovation, the time should be considered as appropriate to work and mental conditions of the staff. The “assigned tasks” factor with the coefficient of 0.352 is in the second order and the “working environment” with the coefficient of 0.128 is in the third order. The “Chance” and “Social values and pressures” are in the fourth and fifth order with the coefficients of 0.087 and 0.047 respectively. Subsequently, all factors were ranked using the TOPSIS technique. The results show that the "social values and pressures" factor with the coefficient of proximity of 1 is ranked first, the “chance” factor is in the second order with the coefficient of proximity of 0.567 and the “working environment” with the coefficient of proximity of 0.358 is in the third order. The “assigned tasks” factor is in the last order with lowest coefficient. At the same time, due to the lack of similar research, it was not possible to compare the results of the study.

In general, based on obtained results and relatively adequate and scientific statistical tests used to identify and rank the effecting factors on creativity and innovation, it is suggested that industry professionals, especially managers, should consider the results seriously so that appropriate planning should be done to create necessary frameworks for influencing identified factors on employees’ creativity and innovation. It is also suggested that, in the next studies, the documentary investigation method should be used in accordance with studies and experts’ opinion instead of survey method.

REFERENCES

- Alegre, J., Chiva, R. (2011). "Assessing the Impact of Organizational Learning Capability on Product Innovation Performance: An empirical test", *Technovation*, Vol.28, p.p.315-326,
- Beyrami, H, Nezamabadi.A, 2016, what is the proper innovation model for your organization? , the World of Economy newspaper, p: 12-17(in persian).
- Chan, S., & Yuen, M. (2014). Personal and environmental factors affecting teachers’ creativity-fostering practices in Hong Kong. *Thinking Skills and Creativity*, 12, 69–77.
- Chen, A. S.-Y., & Hou, Y.-H. (2016). the effects of ethical leadership, voice behavior and climates for innovation on creativity: A moderated mediation examination. *The Leadership Quarterly*, 27(1), 1–13.
- Lajimi.A, (2016), Analysis of Creativity and Effective Factors on it between Students at the School of Medicine at Islamic Azad University of Shahrood, p: 1-8 (in persian).
- Mohammadi.N, (2005), Creativity and Innovation: Definition, Concepts and its Management, The Hamshahri Newspaper, No 3730, p:1-5 (in persian).
- Moshirian.A, (2015), Identification and Prioritization of the Effective Factors on Creativity in advertisements of the Tosee Taavon Bank of Semnan Province using AHP, Shahrood Azad University (in persian).
- Rahmanzadeh.S, 2016, Influencing Factors on Creativity and Innovation in the National Media, *Quarterly Journal of Innovation and Creativity in the Humanities*, 3, p: 1-9 (in persian).
- REzaeian,A, (2016), Principles of Management, 27th Edition, Samt, p:1-5 (in persian).
- Sborn Alex.S (2016). Fostering universal creativity and innovation, Translated by Ghasemzadeh.H, p: 18 (in persian).

Sutanto, E. M. (2017). The influence of organizational learning capability and organizational creativity on organizational innovation of Universities in East Java, Indonesia. *Asia Pacific Management Review*.

Wang, C.-J., & Tsai, C.-Y. (2014). Managing innovation and creativity in organizations: an empirical study of service industries in Taiwan. *Service Business*, 8(2),313.

Zarei.H, (1997), Creativity and Innovation, *Managent science*, no 24, p: 1-12 (in persian).