



Explanation of the Relationship between Creativity and Knowledge Management with Organizational Entrepreneurship in the Education from Principals Point of View

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ABSTRACT

The aim of this study is to explain the relationship between creativity and knowledge management with organizational entrepreneurship in education. The statistical population was the total managers of the high schools in Hormozgan province in academic year of 2012-2013. Among this population 160 persons were selected randomly according to Kergesi and Morgan formula in order to do the study. This investigation was operated in a descriptive and correlative method and in order to collect the data 3 questionnaires of and knowledge management and entrepreneurship, whose Reliability and Validity were confirmed, were provided. For the aim of data analysis, the statistical methods of Pearson correlation coefficient and multiple regression coefficients were used. The results show that there is a significant relationship between the knowledge management with organizational entrepreneurship. Among the different components, only the component of knowledge usage was able to predict the organizational entrepreneurship. Also there is a significant relationship between the creativity with organizational entrepreneurship. And among its components, 3 components of expansion, invention and flexibility were able to predict the organizational entrepreneurship.

Keywords: Knowledge Management, creativity, Organizational Entrepreneurship

INTRODUCTION

One of the most basic characteristics of the smart organization is their emphasis on knowledge and information. Knowledge is a powerful tool which can make great changes in

the world and make the innovations. Knowledge is a concept which is originated from thoughts and only through this way the information can live and convert to wisdom. Parich (mentioned by Adli) believes that knowledge can be understood just through its relation with the data [1]. Data are only raw collected facts which should be put in logical and armful models to produce information. These produced information, are then assessed and interpreted by conceptual models and knowledge is created [1]. Nowadays the organizations which have more competition advantages, can achieve the higher levels of success [2]. Organization of education is one of the organizations which has the most responsibility in the growth of innovation and creativity and the transition from tradition to modernity, because the education is the most important base of the people's personalities and views and therefore it is essential that by changing, provides the condition for growth of creativity. Creativity can be considered as the Paramount level of learning of the human, highest ability of thinking and the final product of human mind and thoughts. Creative people have especial personality and behavior which make them distinguishable from ordinary people. Therefore preparation of the especial programs with the aim of creativity training, in the educational system is necessary [3].

Fast changes of the environments, tense in the competition atmosphere between the companies, rapid growth of the small businesses, decrease in the life cycle of the products, daily increase of the society expectations, has made the entrepreneurship a crucial need for the organizations. As a result, in the recent decades, entrepreneurship has find its way to the organizations and the managers more and more, have paid attention to it to be able to invent, make innovation and commercialize their products [4]. But diverse studies including the results of the study of Mohammadi et al. [5] shows that 56% of the entrepreneurship businesses bankrupt in the first 4 years.

Chen et al. [6] showed in an investigation and assessment of the situation of the student's entrepreneurship in the universities of Argentina that the most important stage for entrepreneurship education is the stage of creativity and innovation education. Badri et al. [7] also studied the relation between the factors of the desire to advance, risk-taking creativity, self- respect and the entrepreneurship in the students of Chamran University of Ahvaz. His study indicated that there is a significant relationship between factors of creativity and the desire to advance and entrepreneurship. Review of literature indicates these hypotheses: There is a significant relationship between the educational management and creativity with organizational entrepreneurship. There is a significant relationship between the components of the educational management with organizational

entrepreneurship. There is a significant relationship between the components of the creativity with organizational entrepreneurship.

MATERIALS AND METHODS

This investigation was operated in a descriptive and correlative method. The statistical population was the total managers of the high schools in Hormozgan province in academic year of 2012 (273 persons).

Among this population 160 persons were selected randomly according to Kergesi and Morgan formula in order to do the study. and in order to collect the data 3 questionnaire, were provided in this way: knowledge management questionnaire: in this research the assessment of the knowledge management was done by a composition of the indices presented in the works of Gold, et al. Lin and Teresa, et al. The similar method was used in the study made by Madhooshi et al. [4].

According to these patterns the questionnaires of the knowledge management have the 3 aspects of the knowledge collection, the knowledge division, and the knowledge use. That is composed of the 22 statements. The calculated stability coefficient with the use of Cronbach's alpha was about 0.57, and for each index of the knowledge collection, the knowledge division, and the knowledge use were 0.66, 0.43 and 0.53 respectively .

Creativity questionnaire: this was a pencil and paper test which was made by Oneil et al. and translated by Kefayat. In this study in order to investigate the stability of the questionnaires the retest method was used. Its total stability was reported 0.73 and for each indices of the processes of making ideas, feasibility study of the idea (performance of the idea) and exploitation of the idea (idea results) were 0.64, 0.59 and 0.76 respectively. For obtaining the justifiability of the research tools the method of the content justifiability was used. In justifiability assessment of the content of the test, the questionnaires were copied and give to several experts of the educational science and the universities professors, and then the comments were collected.

Most of the questions have met the essential agreement. In order to analyze the data, the statistical methods of Pearson correlation coefficient, multiple regression coefficients, and variance analysis and determination coefficient were used.

RESULTS

For studying this hypothesis the method of multivalent regression was used in a step by step mood. First in order to determine whether there is a relation between the variants the Pearson correlation coefficient was used, whose results is shown in the table 1 in the form of the correlation matrix.

Table 1. The correlation matrix between the knowledge management and creativity or the organizational entrepreneurship

| Variables | The knowledge management | Creativity |
|--------------------------|--------------------------|------------|
| The knowledge management | 1 | |
| Creativity | 0.39* | 1 |
| Entrepreneurship | 0.49* | 0.69* |

The mentioned coefficients show that the correlation of the entrepreneurship with the knowledge management and creativity, in the levels of lee than 0.5 is significant. This means that there is a significant relation between organizational entrepreneurship with the knowledge management and creativity. Now in order to clarify that the predicting variant (the knowledge management) can predict the criterion variant (organizational entrepreneurship), the variance analysis, and determination coefficient were used, whose results are shown in table 2.

Table 2. The variance analysis and the statistical properties of the regression

| R | R ² | F | DF1 | DF2 | Sig. |
|------|----------------|-------|-----|-----|-------|
| 0.69 | 0.48 | 13.32 | 2 | 232 | 0.001 |

As it can be seen the value of F is 13.32 this value with (2, 232) degrees of freedom is get significant at the level of 0.001. As the acceptable level of significance is less than 0.05, therefore it can be concluded that at least one of the predicting variant could predict the

criterion variant. On the other hand the squared value of R is 0.48 which means that the predicting variants can totally predict 48% of the changes of the organizational entrepreneurship. Now for determining that each variant can predict how many percent of the changes of the organizational entrepreneurship, the beta coefficient was used, whose results are shown in table 3.

As it can be seen the value of the significance of the beta for the components of the knowledge management and the creativity are less than the acceptable level (0.05). There is a significant relationship between the components of the knowledge management with organizational entrepreneurship. For studying this hypothesis the method of multi variant regression was used in a step by step mood. First in order to determine whether there is a relation between the variants the Pearson correlation coefficient was used, whose results is shown in the table 4 in the form of the correlation matrix.

Table 3. The beta coefficient and its level of significance

| Predicting Variable | B | beta | t | Sig. |
|----------------------|------|------|------|-------|
| knowledge management | 2.78 | 0.26 | 2.59 | 0.01 |
| Creativity | 5.16 | 0.38 | 3.7 | 0.001 |

Table 4. The correlation matrix between the knowledge management and the organizational entrepreneurship

| Variables | Knowledge Management | Knowledge Division | Knowledge Usage |
|----------------------|----------------------|--------------------|-----------------|
| knowledge collection | 1 | | |
| knowledge division | 0.38 * | 1 | |
| knowledge usage | 0.41 * | 0.39 * | 1 |
| entrepreneurship | 0.23 * | 0.39 * | 0.48 * |

The starred correlation coefficients shown in the above table are significant from statistical point of view. And as can be seen there is a significant relationship between the components of the knowledge management with organizational entrepreneurship. . Now in order to clarify that the predicting variant (aspect of the knowledge management) can

predict the criterion variant (organizational entrepreneurship), the variance analysis, and determination coefficient were used, whose results are shown in table 5.

Table 5. The variance analysis and the statistical properties of the regression

| R | Squared R | F | df1 | df2 | Sig. |
|------|-----------|-------|-----|-----|--------------|
| 0.39 | 0.15 | 17.46 | 3 | 231 | 0.001 |

As it can be seen the value of F is 17.46 this value with (3, 231) degrees of freedom is get significant at the level of 0.001. As the acceptable level of significance is less than 0.05, therefore it can be concluded that at least one of the predicting variant could predict the criterion variant. On the other hand the squared value of R is 0.15 which means that the predicting variants can totally predict 15% of the changes of the organizational entrepreneurship. Now for determining that each variant can predict how many percent of the changes of the organizational entrepreneurship, the beta coefficient was used, whose results are shown in table 6.

Table 6. The beta coefficient and its level of significance

| predicting variant | B | beta | t | level of significance |
|----------------------------|-------|-------|------|-----------------------|
| the knowledge usage | 0.505 | 0.216 | 2.33 | 0.001 |

As it can be seen the value of the significance of the beta for the components of the knowledge usage is less than the acceptable level (0.5), and the components of the knowledge division and the knowledge collection cannot predict the organizational entrepreneurship.

Third hypothesis: There is a significant relationship between the components of the creativity with organizational entrepreneurship.

For studying this hypothesis the method of multi variant regression was used in a step by step mood. First in order to determine whether there is a relation between the variants the Pearson correlation coefficient was used, whose results is shown in the table 7 in the form of the correlation matrix.

Table 7. The correlation matrix between the creativity and the organizational entrepreneurship

| Variants | The fluid | the expansion | The innovation | The flexibility | entrepreneurship |
|------------------|-----------|---------------|----------------|-----------------|------------------|
| The fluid | 1 | | | | |
| the expansion | 0.18 * | 1 | | | |
| The innovation | 0.32 * | 0.31 * | 1 | | |
| The flexibility | 0.15* | 0.48* | 0.32* | 1 | |
| entrepreneurship | 0.03 * | 0.27 * | 0.35 * | 0.40* | 1 |

The starred correlation coefficients shown in the above table are significant from statistical point of view. And as can be seen there is a significant relationship between the components of the knowledge management with organizational entrepreneurship. . Now in order to clarify that the predicting variant (aspect of the knowledge management) can predict the criterion variant (organizational entrepreneurship), the variance analysis, and determination coefficient were used, whose results are shown in table 8.

Table 8. The variance analysis and the statistical properties of the regression

| R | Squared R | F | df1 | df2 | level of significance |
|-------|-----------|-------|-----|-----|-----------------------|
| 0.483 | 0.23 | 14.18 | 3 | 231 | 0.0001 |

As it can be seen the value of F is 14.18 this value with (3, 2321) degrees of freedom is get significant at the level of 0.001. As the acceptable level of significance is less than 0.05, therefore it can be concluded that at least one of the predicting variant could predict the criterion variant. On the other hand the squared value of R is 0.23 which means that the predicting variants can totally predict 23% of the changes of the organizational entrepreneurship.

Now for determining that each variant can predict how many percent of the changes of the organizational entrepreneurship, the beta coefficient was used, whose results are shown in table 9.

Table9. The beta coefficient and its level of significance

| The predicting variable | B | Beta | T value | Sig. |
|-------------------------|------|-------|---------|-------|
| the expansion | 1.05 | 0.411 | 3.91 | 0.001 |
| The innovation | 1.13 | 0.44 | 2.92 | 0.003 |
| The flexibility | 0.60 | 0.495 | 9.06 | 0.001 |

As it can be seen the value of the significance of the data for the components of the expansion the innovation and the flexibility less than the acceptable level (0.5), and the other components cannot predict the organizational entrepreneurship.

DISCUSSION

The purpose of this research is the Explanation of the Relationship between Creativity and Knowledge Management with Organizational Entrepreneurship and the results obtained indicate that: there is a significant relation between the Knowledge Management with Organizational Entrepreneurship, and among the different components, only the component of the knowledge usage has the ability to predict the Organizational Entrepreneurship. Also there is a significant relationship between the creativity with organizational entrepreneurship, and among the different components, only 3 components of the expansion, the innovation and the flexibility can predict the organizational entrepreneurship. The results of this research are in agreement with the results obtained from many other researchers that were mentioned in the section of the literature review. For example in the first hypothesis it is in accordance with results of the works of Madhooshi et al [4]. One of the answers to the environmental is the entrepreneurship. Economic situation of the county and the population composition of our society makes us more and more in need to the pioneering fields in the economy and for achieving this goal we need appropriate models, patterns and solutions in order to teach grow and optimized use of the active and entrepreneurship forces. Some of the experts think about the creativity and entrepreneurship as a vital. That in the case of its cutting the organization will destroy [8].

During the time work and the cooperation for the decisions, the staffs and the principles can present the new ideas and with more dialogue and discussion find the new opportunities among the presented ideas and in this way, they can present new product or a new service.

In the explanations of the results associated to the significant relation between the creativity and its components with the entrepreneurship, as the investigation of the results shows that there is an overlap between the characteristics of the creative people and those who are known as entrepreneurs. Some of the researchers believe that the creative people don't have any fear to do the extra ordinary services for the group, or present an idea which is not acceptable in the group, or make rare and unique conclusions [9]. The creative people have a profound desire for advancement, they are very curious, and love a lot to get order to the affairs. They also have the ability to express themselves and they are very self-independent. They have an unconventional character and behave in an informal manner. They are hardworking and disciplined. And they have vast knowledge and independence in their work [10, 11, 12, 13 and 14].

Therefore according to the results obtained from this study, the principles and authorities of the educational system of the country try to know and improve the knowledge management and the creativity in the schools, more and more. Also, individual growth of the schools principles must be paid attention, and hold the educational stages in the form of the in-service courses, in order to familiarize them with this concept. The other thing that must be mentioned is that the wise, skillful, innovative and creative principles must be preserved and supported comprehensively by the educational system of the country. In order to change the knowledge and insight of the existing staff in the educational system, the authorities should promote modernism and encourage the staffs by applied education and usage of the encouraging items.

REFERENCES

1. Adli, F. 2005. Knowledge management: moving beyond the knowledge. Tehran, Frashenakhti andisheh publications.
2. McMillan, I. & Low, M. 2004. Entrepreneurship: past research and future challenges. Journal of management, 14, 2, 34-52.

3. Mehtarpour M. 2010. The investigation of the relation between the character with the job advancement and the creativity among the elementary school principles of Rudan. MSc thesis, faculty of psychology and training science of the Azad University of Marvdasht.
4. Madhooshi, M. & Sadati A. 2011. The investigation of the knowledge management of the organizational entrepreneurship (the case study: the average and the small business of the east of Mazandarn). *Journal of the entrepreneurship development*, 3, 12, 7- 26.
5. Mohammadi, F., Asghari, M., & Mohammadi, D. 2008. The knowledge management (comprehensive approach), Tehran: Poya.
6. Chen, J. Zhu, Z.A. (2005). A system model for corporate entrepreneurship", *International Journal of Manpower*, 26, 6, 34-43.
7. Badri M. Abedi, M. & Ja'fari S.E. 2006. A survey on the abilities of Isfahan University students". *Research and plan in high educations*, year 12, 2, 40-44.
8. Ghahramani, M. Pardakhtchi, M. & Hosseinvadeh, T. 2010. Organizational culture and its relation with the organizational entrepreneurship", *journal of the governmental management insight*, no 1, 25- 29.
9. Wilson, J. 1999. How Information Technology Entrepreneurship has changed the world? <http://www.jackmwilson.com/eBusiness/ITE.htm>.
10. Rahimi H. & Najafi, M. 2007. The knowledge management in the educational organizations", Javdane publication.
11. Seyfolahi, N. Davoudi, M. 2008. The knowledge management in the organizations, Free book publication.
12. YeganehDeljoo, F. 2005. The entrepreneurship duty of the universities, article series of the first international congress of Nehzat.
13. Karamipour, M. 2003. The teacher end the knowledge management and the education", *journal of the management development*, no 49.

14. Mostafanejad, J. 2011. The investigation of the relation between the creativity and the citizenship behavior with the entrepreneurship among the elementary schools teachers, the first national conference of the education in Iran, 1404, presentation in poster form.

