


The relationship between organizational creativity and demographic characteristics with the productivity of organizational tasks

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Keywords: <i>Organizational creativity, demographic characteristics, productivity, organizational tasks</i>	Abstract Background and purpose: Achieving sustainable productivity, creativity, innovation, and quality of life depends on efficient, effective, intelligent, committed management and human resources. Therefore, the purpose of this research was to investigate the relationship between organizational creativity and demographic characteristics with the productivity of the organizational tasks of the employees of the General Department of Education of Fars province. Methodology: The current research design is a correlational descriptive one. This research's statistical population was comprised of all the employees of the Education Department of Fars province, whose number is 450 (67 women and 383 men). Among them, 205 people were tested based on Morgan's table and by multi-stage cluster sampling method as the selected sample group using two questionnaires of organizational creativity of Rendsip and a questionnaire of human force productivity. The data were analyzed using descriptive statistics and statistical correlation tests using SPSS21 software. Results: The obtained results showed no significant difference between the average organizational creativity and the productivity of organizational tasks of both sexes, but there is a significant difference between the average organizational creativity and the productivity of organizational tasks according to age, education, and work experience. Conclusion: creativity and fostering the creative process of problem-solving and paying attention to the innovations of people in the organization can increase the quality of employees in organizations.
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Introduction

Undoubtedly, one of the most beautiful human characteristics is the power of creation and creativity. Through this lens, man can flourish his abilities and reach his maximum inner forces and use them to express his deepest feelings and emotions; He helped to complete human achievements and even created a revolution and a new development in different aspects of life and presented the foundation of his existence to the human society. In today's competitive world, where productivity has increased in all fields, only organizations can remain in this turbulent world that uses their resources best and has made the most of them. One of the important organizational resources is creative human resources. All organizations need new ideas and fresh opinions to survive and improve productivity and progress (Marhamati, 2013).

Productivity, in general terms, is the measure of how effective and efficient the consumption of resources as input (institutions) has been for the production of output (facilities) needed by society in the long term. Suppose productivity is considered simplest as the ratio of outputs to data or efficiency or returns. In that case, it is obvious that the lower the denominator or the data, the higher the efficiency. To achieve this goal, it can be done in three ways: 1- by reducing the amount of data and taking the same amount as the previous output, considering increasing the efficiency and improving the performance of the system; 2- By increasing the amount of the output by taking advantage of increasing the efficiency and improving the system performance and the same amount of data as before; 3- By simultaneously increasing the amount of output by taking advantage of increasing the efficiency and improving the performance of the system as well as reducing the amount of data (Akbari, 2009).

In general, productivity estimates the output by spending the minimum amount of energy, money, and time. Productivity is a thought system, a rational attitude to life, and finally, a kind of culture. A culture in which man tries with his thoughts to match his satisfaction with values and realities and also tries to get the best material and spiritual result of his life. In other words, productivity is how to use human and material resources, which has two components: efficiency and effectiveness (Khyabanchi, 2004).

When we talk about effectiveness, we mean "doing the right things." When we think about efficiency, we mean doing things and activities that help us achieve personal, family, group, organizational and national goals. The requirement for economic growth and people's comfort in any country is to raise the level of efficiency and effectiveness of people in any activity (Saatchi, 2011).

Measuring and developing productivity from various aspects has always been of interest. Among the methods of measuring productivity, managers' creativity and organizational health are important. Achieving sustainable productivity, creativity, innovation, and quality of life depends on efficient, effective, intelligent, and committed management and human

resources. One of the obstacles to development and progress, especially in third-world countries, is the need for specialized and properly educated human resources. In the meantime, an organization with more competent management can better fulfill its goals (Haghighatjoo & Nazim, 2008).

There are many models related to the factors influencing the improvement of human resource productivity; in one of these models, the quality of work life, employee empowerment, and incentive system is considered as organizational factors affecting the improvement of human resource productivity. Employee empowerment and productivity: studies conducted on leadership and management skills indicate that activities related to employee empowerment are the main part of managerial and organizational effectiveness activities; empowerment in organizations is known as a tool that facilitates the creation of motivational behavior and behavior that increases productivity. Recently, in the research conducted by Peter and others, decision-making power, autonomy, initiative and creativity, knowledge, and skill have been mentioned as dimensions of empowerment (Sebza Aliabadi, 2009). This research discusses the possible relationship between creativity and productivity and its role in improving productivity. Today, creativity is known as the secret of survival and the key to the success of individuals and organizations. Accelerated global developments in science and technology, industry, management, and values and standards, in general, have made many successful organizations and companies in the world direct their goals, tendencies, and interests in the direction of using creativity. Experts consider creativity the center of the global movement in the 21st century. In the current changing conditions, creativity and innovation are the conditions of survival, and the key to the success of organizations, the necessity of its existence in organizations is such that some sources equate the lack of creativity and innovation with the destruction of the organization in the long run. (Falah-Shams, Khwaja Nobar and Asghari, 2013).

The source of creativity is the human mind, and its nature is the result of one of the potential talents of humans. Creativity is one of the manifestations of the human mind and thought, and it exists in all human beings as a divine gift with different degrees of intensity and weakness (Mal Amiri and Niknam, 2009). In the definition of creativity from an organizational point of view, it is said that creativity means providing new ideas and plans to improve performance and the quantity or quality of organizational activities. Based on this, creativity is a mental/psychological process, and the product of creativity can appear in the form of work (thought, solution, etc.). The product of creativity is a new phenomenon and therefore has value. Creativity can be cultivated and has a direct relationship with the social environment of the creative person (Saatchi, 2010). In the research conducted by John Politis, it was shown that some aspects of the work environment are the source of creativity and, as a result, increase creativity and productivity. In this study, it was shown

that the role of the leader to provide the right environment and situation can be effective on the growth of creativity and productivity (Hikaritjo and Nazim, 2008).

Ernest Dale (1989) believes that having creative and innovative managers is perhaps the best factor in guaranteeing the organization's survival for presenting new and original ideas. Also, Fuksal and Hackett believe that creative and innovative people, by proposing many changes, cause the growth of new opinions and thoughts and look at achieving effectiveness with a broader perspective and probably threaten or eliminate the traditional and accepted framework of regulations. Through this cognitive phenomenon, new and original thoughts and views are breathed into the organization's body like a spirit to save it from nothingness and destruction (Amari and Kozechian, 2002).

Also, several factors affect creativity, one of these factors is demographic characteristics, and the most important characteristics are education, age, educational system, social status, role model, and work experience (Aslani & Farshid, 2011). Due to the importance of human productivity, it is unavoidable to examine the effects of various factors on its improvement or on the opposite of the factors that cause its decrease (Ali, 2009). The most important and unique contribution and good influence of management in the 20th century have been the 50-fold increase in the productivity of manual workers in industrial production; in the same way, the most important contribution and the role that management should play in the 21st century. Increasing the productivity of academic staff and scientific work is the most valuable asset of an institution in the 21st century, both commercial and non-commercial, will be its academic staff and the productivity of those staff (Porkazemi and Navaei, 2004). Undoubtedly, today's organizations are facing extensive international developments and threats. In this context, in order to be able to continue living in today's turbulent world, it is necessary to be creative and innovative, and while recognizing the changes and developments, influence them and give them the desired shape. Due to these rapid changes and developments, creativity and innovation have been accepted as the basic and important principles for the survival of organizations. Based on this, advanced countries place much emphasis on teaching creativity. At this time, the progress of humans, organizations, and society is in the group of creativity and innovation, and knowledge of techniques and methods in order to create the necessary space for growth and development. Omid, Hamidi, Khabeiri and Safari, (2007). The organization is a living system, and it is necessary to acquire information to continue life continuously. Process them and use them in times of need to make appropriate and quick decisions; therefore, measuring an organization's ability to learn, understand, and logical thinking of an organization is necessary to evaluate and improve its productivity (Falah Shams, Khaje Nobar and Asghari, 2009). Therefore, it can be said that the importance of conducting such research in the Department of Education of Fars province is that: since this department is the source of education and training of people, therefore, in order to make their employees more productive, they should try to

cultivate the creativity of people. According to the mentioned materials, this research aims to investigate the relationship between organizational creativity and demographic characteristics with the productivity of employees' tasks.

Methodology

The method of the current research is correlational. Using this method, the distribution and relationships between predictor variables and research criteria will be investigated in society, and finally, the multivariate regression method will be used to predict the criterion variable. The present study's statistical population included all the Fars Education Department employees, whose number was 450 (67 women and 383 men) according to the statistics obtained. Among these, 205 people were selected as the sample group based on Morgan's table and by simple random sampling. In this research, in addition to descriptive statistics (mean, standard deviation, etc.), inferential statistics (correlation coefficient) were used to analyze the data. It should be noted that SPSS 19 software was used for data analysis.

Materials

1-Randesip's Creativity Questionnaire. This questionnaire has 50 questions that are graded based on a five-point Likert scale (completely agree: 5, agree: 4, neutral: 3, disagree: 2, completely disagree: 1). It evaluates the level of creativity of the individual in the organization. To check the validity of the test in the country, Kazemi (2001) used face validity and confirmed the validity of the instrument; Also, in order to check the reliability of this test, it was calculated by Cronbach's alpha and reported as 0.73 (quoted by Julazadeh, 2018). Also, to check the reliability of the mentioned questionnaire, the Cronbach's alpha reliability coefficient was calculated for 30 people (who were selected randomly) and the result of this investigation showed that the Cronbach's alpha reliability coefficient for all questions in the questionnaire is 0.77, which indicates reliability is the measurement tool in this research.

2- Human resource productivity questionnaire. This questionnaire contains a total of 41 items and nine components, which are: ability (1-3-5-6), job recognition (7-8-9-10), job support (12-14-15-16-17) -18), motivation (19-20-22), performance feedback (23-24-25-26-27-28-29), the validity of decisions (11-21-30), an adaptation of employees to natural factors (13-31) -32-33), participation (34-35-36-37-38) and education (2-4-39-40-41). In this questionnaire, each item includes a Likert scale from very high to very low. The validity and reliability of this questionnaire were measured by Hasan Ali Jahid (2015) and the test-retest method was used to measure the validity. The reliability coefficient was 0.87 using Cronbach's alpha method and using SPSS. In order to check the reliability of this questionnaire, Cronbach's alpha reliability coefficient was calculated for 30 people (who

were selected randomly). This investigation showed that Cronbach's alpha reliability coefficient for all questions is 0.83, which indicates the reliability of the measurement tool in this research.

Results

In the current study, the gender of the sample group is 85.22% male and 14.88% female. Also, in the age distribution of the sample group, 81.6% are people between 20 and 30 years old, 50.25 percent for people between 31 and 40 years old, 39.02 percent are people between 41 and 50 years old and 90.3 percent of the sample group are people 50 years old and above. Regarding the education of the statistical sample of this study, 85.5% of the sample group are people with post-graduate degrees, 76.59% are people with bachelor's degrees, and 17.56% of the sample group are people with post-graduate degrees.

Table 1: The relationship between organizational creativity and the productivity of organizational tasks of employees

Variable	Correlation coefficient	Significance Level
Organizational creativity with the efficiency of organizational tasks	0/035	0/05**

In the above table, the Pearson correlation coefficient results show a direct and significant correlation between the organizational creativity of employees and the productivity of their organizational tasks ($r = 0.035, p < 0.05$).

Therefore, in order to answer the first research question, "Is there a relationship between organizational creativity and the productivity of organizational tasks?" The obtained relationship is significant, and with 95% confidence, it can be said that the higher the organizational creativity of the employees, the higher the level of productivity of their organizational tasks. Alternatively, the productivity of organizational tasks is also observed in employees with higher organizational creativity.

Table 2: Comparing the productivity of organizational tasks of male and female employees

Gender	N	Sum of squares	S	Df	t	Significance level
Male	174	85/80	11/73	203	-0/80	0/423
Female	31	86/78	10/96	203		

According to the findings of the above table, in response to the second question of the research, "Is there a relationship between the gender of employees and the productivity of organizational tasks?" The results of the t-test for comparing independent groups show that there is no significant difference between the productivity of organizational tasks of male and female employees (N.S, $t = -0.8 (203)$).

Table 3: Comparison of productivity of organizational tasks of employees according to age

Age	N	Correlation coefficient	Significance Level
20-30	14		

31-40	103		
41-50	80	1/251	0/264
50	8		

Based on the findings of the above table, the results of Pearson's correlation coefficient test show no significant difference between the average productivity of organizational tasks of employees according to age ($P = 0.267$ and $r = 1.251$).

Table 4: Comparing the productivity of organizational tasks of employees according to education

Grade	N	Correlation coefficient	Significance Level
Associate Degree	12		
Bachelor's Degree	157	0/675	0/670
Master's Degree	36		

According to the findings shown in the above table, the results of the Pearson correlation coefficient test show no significant difference between the average productivity of organizational tasks of employees according to education ($P = 0.670$ and $r = 0.675$).

Table 5: Comparing the productivity of organizational tasks of employees according to work history

Work Experience	N	Correlation coefficient	Significance Level
1 to 4 years and 11 months and 29 days	17	0/393	0/001**
5 to 9 years and 11 months and 29 days	33		
10 to 14 years and 11 months and 29 days	51		
15 to 19 years and 11 months and 29 days	49		
20 to 24 years and 11 months and 29 days	39		
25 to 30 years and 11 months and 29 days	16		

The Pearson's correlation coefficient results show a significant difference between employees' average productivity of organizational tasks according to work experience ($P = 0.001$ and $r = 0.393$). So, according to the obtained results, with increasing age, the productivity of organizational tasks of employees also increases.

Discussion and Conclusion

The research aimed to investigate the relationship between creativity and demographic characteristics with employee productivity. In this context and in order to answer the first research question: Is there a relationship between the organizational creativity of employees and the productivity of organizational tasks? That the results obtained indicated

that there is a positive and significant relationship between the organizational creativity of employees and the productivity of their organizational tasks; These results are in line with the results obtained from the studies of Sabzi Aliabadi (2008); Rahmati Andami and Esfandiari (2009); Haghightajoo and Nazem (2008); Haj Karimi Sari (2004); Ghasemi (2004), Politis (2005) and Carlsen (1990) are consistent and aligned with them.

Therefore, in the explanation of the result, since the creativity and cultivation of the creative process of problem-solving and paying attention to the innovations of the people in the organization can increase the quality of the organization's headquarters. Also, in their turn, as creative actions, by entering the labor market and community-building organizations, these groups have improved the productivity level of related organizations, and by increasing the productivity of human resources, the society has taken a step towards economic growth and development; finally, it will go hand in hand with global changes. Therefore, teaching creativity and its application in organizations is one of the basic needs. This category should be considered in the macro-educational policies of any growing organization, and efforts should be made to promote it. An organization that encourages innovation is an organization that promotes unknown perspectives to problems or unique solutions to solve problems in order to improve work productivity and its employees. In fact, organizational creativity is the process of acquiring creative thought and turning it into a product and a useful operating method in the organization. Thriving organizations encourage creativity and innovation in employees and reward both successes and failures; They gain experience from mistakes and correct their work to improve performance. Therefore, in innovative organizations with creative employees, job security is provided at an excellent level for employees, and people are encouraged to be changeable; Also, when a new idea evolves, the pioneers of change actively and enthusiastically support it and overcome the problems. In addition, they assure the employees that the innovation will be implemented, that the organization's treatment of its creative employees will cause the productivity of the employees' organizational duties, and it will also create job satisfaction and the organization's productivity. Also, in order to answer the second research question: Is there a relationship between the gender of employees and the productivity of organizational tasks? The results showed that there is no significant difference between the gender of the employees and the productivity of the organizational tasks of the two sexes, which is consistent with the results obtained by Hassanzadeh et al. (2013).

According to today's culture ruling society and organizations and according to the fundamental changes that have been made in society's attitude towards the differences between men and women, it can be concluded that both genders have equal opportunities for the growth and flourishing of their various talents in their work and organizational environments. The same permission for the emergence of abilities by both groups causes the growth and productivity of their organizational duties in their work area. Also, to

answer the third research question: Is there a relationship between the age of employees and the productivity of organizational tasks? The results indicated that there is no significant difference between the age of the employees and the productivity of their organizational tasks, which is consistent with the results obtained by Hassanzadeh and his colleagues (2013). Therefore, the prediction that can be made in this case is that even though the general opinion is that younger employees are more able to increase production and productivity due to having higher physical and physical ability. However, the role of older employees, who have gained a lot of experience over the years of work and effort, cannot be underestimated than the role of the young workforce in achieving the goal, because as the age increases and the creativity of each person in his organizational position increases, his ability to develop expertise and theoretical and practical skills will increase and will cause the prosperity and productivity of his organizational duties.

Also, to answer the fourth question of the research, is there a relationship between the education of employees and the productivity of organizational tasks? The results showed no significant difference between the education of employees and the productivity of organizational tasks, which is consistent with the results of Hassanzadeh and his colleagues (2011). In this regard, it can be said that professional advancement, which is provided by a mixture of knowledge and experience and places a person at the peak of professional efficiency, ability and maturity, on the other hand, with the acquisition of knowledge and educated education, it causes the emergence of creativity in positive and practical fields. On the other hand, according to the employees' work experiences and over time, it crystallizes in their work field and causes their prosperity and productivity; This is why the lack of relationship between education and employee productivity is justified. Also, to answer the fifth question of the research: is there a relationship between the work experience of employees and the productivity of organizational tasks? The results indicated a significant difference between work experience and the productivity of organizational tasks, which differs from the results of Hassanzadeh and his colleagues (2011). The explanation given to this question is that the extent of experience, information, and skills in the professional life of the employees of the organizations comes with the increase of their work history; it will provide the reasons for the emergence of organizational creativity of the employees, and after that, it will lead to occupational and organizational successes and the productivity of the organizational tasks of the employees, which can lead to the productivity, practicality, and growth of any organization. Among the limitations of this research are the reluctance of some employees to complete the questionnaires, the strictness and obsession of managers, and in some cases, their non-cooperation to conduct research in the mentioned organization.

Ethics

This research observed ethical standards, including obtaining informed consent and ensuring privacy and confidentiality. Also, while completing the questionnaires while emphasizing completing all the questions, the participants were free to withdraw from the research at any time and provide individual information. They were assured that the information would remain confidential, which was strictly adhered to.

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Conflict of Interest

According to the authors, this article has no financial sponsor or conflict of interest.

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