



An exploration on the relationship between emotional intelligence and staff creativity (Case Study: Iran Khodro Co.)

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Abstract: To remain survived, any organization requires new ideas. When workers are creative in their work, they will be able to suggest new and useful ideas on products, performance, services and events in the organization. Accordingly, the staff creativity greatly contributes to the organizational survival. Therefore, the present paper is an attempt to examine the relationship between emotional intelligence (EQ) and its categories and workers' creativity. The research method is practical in terms of purpose and a survey-correlation study considering the method was used to collect the data. The research population also consists of all Iran Khodro Co. staff, which through Cochran's formula 200 participants were selected through the simple random sampling method. To test the research hypotheses the SPSS software and descriptive –inferential statistics methods were applied. Moreover, the research model was fitted via the Amos software. the obtained results indicate that a meaningful and positive association exists between emotional intelligence and its different dimensions including problem solving, sense of happiness, independency, stress tolerance, self-actualization , self-awareness, realism, interpersonal relations, optimism, self-esteem, impulse control, flexibility, responsibility, empathy and self-presentation) and the staff creativity . Furthermore, aspects of independency, stress tolerance, responsibility, problem-solving, and flexibility showed the highest rate of correlation with the staff creativity.

[Seyed Mehdi Khadem. **An exploration on the relationship between emotional intelligence and staff creativity (Case Study: Iran Khodro Co.)** *Am Sci* 2021;17(6):47-55]. ISSN 15451003 (print); ISSN 23757264 (online). <http://www.jofamericanscience.org> 6.doi:[10.7537/marsjas170621.06](https://doi.org/10.7537/marsjas170621.06).

Key words: emotional intelligence, innovation, independency, stress tolerance, responsibility, problem –solving, flexibility

1- Introduction:

As the modern age has been facing with outstanding transformations and entering organization into the knowledge –based economy, the human resources have found a momentous position. As a matter of fact, the human capital is the most consequential strategic element for increasing organizational effectiveness and efficiency as well and social development (Guenzi,2004). To stay alive, any organization requires new ideas. When workers are innovative in their work, they will be able to suggest new and useful ideas about products, performance, services and events in the organization. Consequently, the staff innovation greatly helps organizational survival (Grebner,2007).

It is indeed, innovation that drives organizational dynamism. Therefore, the ability to

make innovation and creativity in organizations are facing with irregular changes or relatively chaotic conditions, or organizations with diverse products and services fail to compete with rivals can act as drivers of competitive advantage (Cook, 1998).

Organizations and staff creativity matters to the extent that it affects other factors like establishment, survival, organizational development, new products and new ways to provide services as well as increasing their quality , reduction of costs, losses, and waste of human and material resources , increase of job motivation and job satisfaction besides minimizing off desk . Creativity brings innovation and so, this can be the intersection point of competing planning, attraction of resources, marketing, budgeting and other fields (Zandian, 2012).

According to Young (2009) the creative peoples own such characteristics as : 1. tolerance of ambiguity, 2. responsibility, 3. positive self-concept, 4. focusing on the target instead of award, 5. finding problems of new methods, and 6. breaking the boundaries of conventional thinking.

Also, Chambers (1973) describes creativity as a multi-faceted activity of the mutual impact of the organism, and the environment that its results end to appearing noble phenomena (Sarsani, 2005).

Though innovation refers to successful administration of the creative ideas in the organization, creativity is the necessary but not sufficient condition for innovation (Goyal, & Akhilesh, 2007). Nili Aram (1998) reported that in an examination of 453 Japanese top companies in 1980 it was concluded that 23.5 million recommendations were received from the workers that about two thirds of these tips were useful and practical .

Accordingly, having opportunity to be creative not only augments the opportunity for innovative products, but also it affects the staff welfare to improve quality of services, and customers' interests receiving the services (Zandian, 2012).

As Mumford (2002) stated, creativity depends upon individual and environmental variables. One important individual factor in eliciting staff creativity is EQ (Sadeghi Mal Amiri, 2007). As a matter of fact, EQ is the ability to control emotions, understanding the most intimate feelings of others, a composure and wise behavior in interactions, self-discipline, enthusiasm, passion and perseverance. Since the introduction of the EQ, this concept has been investigated in different fields. Indeed, researchers have always been struggled to discover the association of EQ with other effective factors on organizational and professional achievements (Bar-On, 2005).

The new sciences have designated that the back bone of many important decisions , the most active organizations, the most satisfying and lucky lives is the EQ not the intelligence or brain power (Trinidad, & Johnson, 2002). A large body of studies have indicated that EQ improves job performance (Bar-On, 2002). Moreover, the role of personal characteristics in formation of entrepreneurial and qualitative development of the entrepreneurial and innovative decisions has been confirmed (Brice, 2002). Accordingly, the main question in the present research is whether rate of the employees' emotional intelligence correlates with the rate of creativity in work place.

Emotional intelligence: several different definitions are introduced for emotional intelligence, but no consensus has been achieved on a unite

definition. The areas of EQ have been increasingly expanded in a way that scholars constantly reconsider their presented definitions of EQ (Dulewicz & Higgs, 2000).

According to Salovey and Mayers (1997) , EQ consists of the ability to understand emotions , acceptance and control of emotions so that they are in consistent with thought . EQ means perceiving emotions, emotional knowledge and intellectual management of emotions through which mental and emotional development occur.

Goleman describes EQ as capacity of knowing about self and others' emotions, to motivate self, and to efficiently manage emotions within self and personal relations. Goleman assumed that all individuals were innately born with a general EQ and this general EQ determines their capacity to learn different skills (Boyatzis, Goleman & Rhee, 2000). According to Goleman , EQ enables the individual to cope with stress, impulses and psychological trauma and distress (Lotfi, 2006).

As Bar-On (1997) states , EQ contains five components as follows:

- 1- The interpersonal categories that indicate the individual's ability in understanding emotions and controlling them that include:
 - a) self-esteem (the ability to self-understanding and self-acceptance and self-respect),
 2. emotional self-awareness (degree the individual knows his/her emotions and understand these emotions),
 3. assertive (expressing feelings, beliefs, thoughts, and defend their rights in an efficient manner),
 4. independence (the ability of self- leadership, intellectual and practical self-control and releasing from emotional dependency),
 5. self-actualization (the ability to recognize the inherent potential and talent of doing the work is not only called for its implementation, but also has the ability to do it and enjoy doing it).
2. Interpersonal categories that contains the individual's ability to get accustomed with others and doing social skills which include:
 1. empathy (the ability to learn about other' emotions and understanding and appreciating those emotions),
 2. social responsibility (the individual's ability in presenting self as a productive and active member with a sense of cooperation in social group),
 3. interpersonal interactions (the ability to make and maintain satisfying relations which emotional closeness and intimacy is one of its features).
3. Adaptation components including:
 1. test of reality (the ability to gauge the

relationship between emotional experience , what the individual feels, and existing objectivity, what lives in the real world), 2. flexibility (the ability to cope with emotions, thoughts and behaviors of others in different conditions and situations), 3. Problem-solving (the ability to recognize, create and apply effective solutions).

4. Components of stress management such as: 1. stress tolerance (the individual's tolerance when encountering unpleasant events, stressful conditions and severe excitements), 2. Impulse control (the individual's ability against stresses, enticement and controlling personal emotions).

5. General mood components like: 1. optimism (the ability to consider the positive aspects of life and keeping the positive attitude even when face with negative and unpleasant emotions), 2. Happiness (the ability to have a sense of satisfaction from self and others, liveliness and expression of positive emotions) (Salehi & Vakili, 2006).

Seyed Kalan (2012) indicate that EQ and its components positively correlates with organizational learning of education office staff.

Also, Keramati (2012) demonstrated that a positive and meaningful association is between EQ and employees' job satisfaction.

Ba Ezat (2012) shows that the components of EQ and the components of spiritual intelligence (SI) can explain variance related to university staff job stress.

Guleryaz (2008) realized that EQ associates well with job satisfaction and organizational commitment.

Hansenne (2012) concluded that although rate of children's creativity affects their educational performance , EQ leaves no impact .

Noorafshan (2013) indicates that two components of EQ like empathy and optimism can predict the individual's creativity in work place.

Creativity:

All human beings have the potential for creativity and innovation. So, managers are not the only creative persons. In fact, prevention from the inhibiting factors of creativity matter more than the creativity capacity. Since, in case of freeing the mind from assumptions and chain patterns in short-time can noticeably amplify creativity and application of new ideas (Rezaian, 2009). However, to manifest the true capacity of creativity several obstacles can be identified.

Shell Keras (1993) introduced creativity obstacles as historical, biological, physiological, psychological and social obstacles. Generally speaking, Shell Keras put a great emphasis on the role of psychological factors in weakening and stopping the development of creativity. They mention that though the rest of factors externally affect the individual's creative thinking, the psychological factors are shaped within the individual and undermines his/her creativity . Similarly,

Gilford (1998) stated some personality characteristics such as dominance, negativity, resistance, fear, blame, criticize others, conformism, submission to authority and shyness the obstacles before emergence of creativity (Seyf, 2010).

Jaskyte and Kisieliene (2006) investigated on determining factors of employees' creativity. Their research results showed that employees' creativity positively correlates with cognitive style and intrinsic motivation of individuals.

Hughes (2013) also worked on structure and personality as predictors of creativity. The results of this study showed that components of intelligence (cognition), anger and emotions are some predictors of individuals' creativity.

2- Methods:

The present paper in terms of purpose is a practical study and in terms of method, a descriptive-correlation research.

2-1-Participants:

The research population included all staff at Iran Khodro Co. The Cochran's formula was used to determine the sample size.

$$n = \frac{z^2 pq}{d^2} = 196$$

Where,

p and q= 0.5

z= 1.96

d= 0.07

Finally, 196 participants were selected and maximized to 200 subjects in order to prevent data missing.

2-2-Instrument:

The research variables include emotional intelligence (EQ) and staff creativity. Moreover, the components of EQ such as problem solving, sense of happiness, independency, stress tolerance, self-actualization, awareness, realism, interpersonal relations, optimism, self-esteem, impulse control , flexibility, responsibility, empathy and self-presentation were investigated . The research instrument was a 90 -item questionnaire in form of

15 dimensions on the basis of Bar-On (1999) model. The items were arranged based on Likert scale including (very much, much, average, low, very low) options.

Furthermore, in order to measure the staff creativity, the Randsyp (1979) questionnaire of creativity was used. This questionnaire contains 50 items are arranged on the basis of the Likert scale (very much, much, average, low, very low).

2-3- Validity and Reliability:

For computation of reliability, a pilot study was performed the instruments reliability was measured via the Cronbach's alpha. The reliability value for Bar-On questionnaire obtained 0.85 and for the staff creativity 0.91. To assess the face validity, the experts' opinions on the research instruments were asked and after some modifications, the questionnaires were distributed.

The SPSS and Amos software were applied to analyze the data.

2-4- The research hypotheses:

1. There is a meaningful relationship between EQ and staff creativity of Iran Khodro Co.
2. There is a meaningful relationship between problem solving and staff creativity of Iran Khodro Co.
3. There is a meaningful relationship between sense of happiness and staff creativity of Iran Khodro Co.
4. There is a meaningful relationship between independency and staff creativity of Iran Khodro Co.

5. There is a meaningful relationship between stress tolerance and staff creativity of Iran Khodro Co.

6. There is a meaningful relationship between self-actualization and staff creativity of Iran Khodro Co.

7. There is a meaningful relationship between awareness and staff creativity of Iran Khodro Co.

8. There is a meaningful relationship between realism and staff creativity of Iran Khodro Co.

9. There is a meaningful relationship between personal interactions and staff creativity of Iran Khodro Co.

10. There is a meaningful relationship between optimism and staff creativity of Iran Khodro Co.

11. There is a meaningful relationship between self-esteem and staff creativity of Iran Khodro Co.

12. There is a meaningful relationship between impulse control and staff creativity of Iran Khodro Co.

13. There is a meaningful relationship between flexibility and staff creativity of Iran Khodro Co.

14. There is a meaningful relationship between responsibility and staff creativity of Iran Khodro Co.

15. There is a meaningful relationship between empathy and staff creativity of Iran Khodro Co.

16. There is a meaningful relationship between self-presentation and staff creativity of Iran Khodro Co.

2-5- The conceptual model

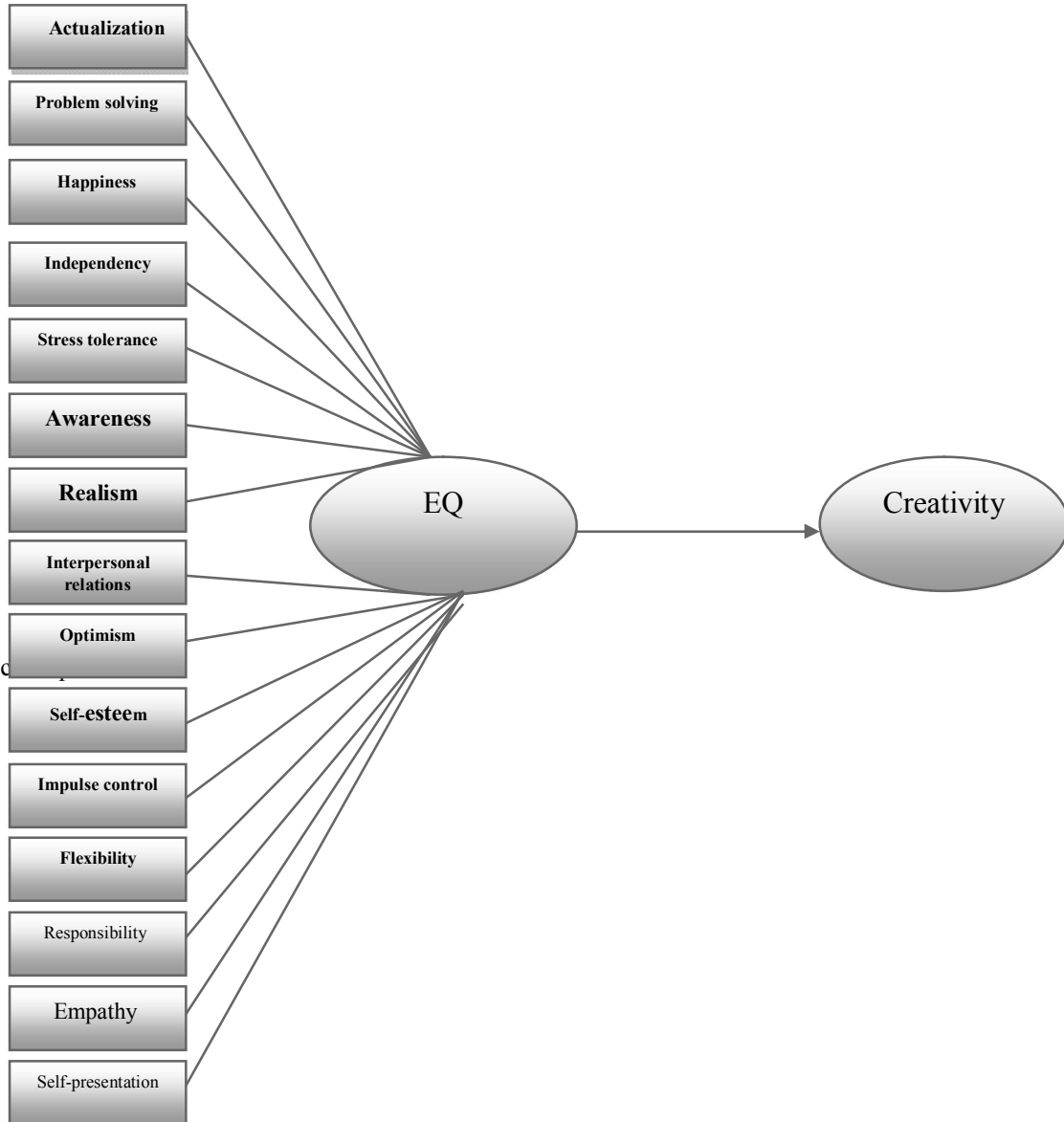


Fig.1: the c

3- Findings:

The demographical data show that 85% of participants are male and 15% are female. Also, 71% of participants are married and 29% are single. Considering the level of education, the subjects' education was in diploma level in average. That is, 60% of staff hold diploma, 25% bachelor of arts and 15% master of arts or higher degrees.

The average age of participants was 35 years old and ranged from 22- 51 years old.

To test the research hypotheses, the Pearson's correlation coefficient test was applied. Table 1 show the Pearson's correlation test for components of EQ and staff creativity of Iran Khodro Co.

Table 1: Correlation between categories of EQ and creativity

components	Pearson's' value	Sig.
Problem solving	.922**	0.00
Happiness	.910**	0.00
Independence	.932**	0.00
Stress tolerance	.924**	0.00
Self-actualization	.907**	0.00
Awareness	.920**	0.00
Realism	.919**	0.00
Interpersonal relationships	.903**	0.00
Optimism	.915**	0.00
Self-esteem	.905**	0.00
Impulse control	.909**	0.00
Flexibility	.921**	0.00
Responsibility	.923**	0.00
Empathy	.914**	0.00
Self-Presentation	.913**	0.00

As Tale 1 shows, a meaningful correlation exists between components of EQ and staff creativity. Therefore, the research hypotheses are confirmed. Among the components of EQ, independency (.932), stress tolerance (.924), responsibility (.923), problem solving (.922), and flexibility (.921) showed the highest correlation with the staff creativity.

Fig. 2 represents the fitted model. The independent variable EQ explains 80% of staff creativity variance.

The fitted model:

As Fig. 2 indicates the qui2 value is equal to 1419.4 in df=10. Other indexes of the fitted model are shown in Table 2.

Table 2: fitness indexes

PGFI	TLI	CFI	IFI	RFI	NFI	RMR	AGFI	GFI
0.357	0.844	0.865	0.865	0.833	0.856	0.018	0.302	0.466

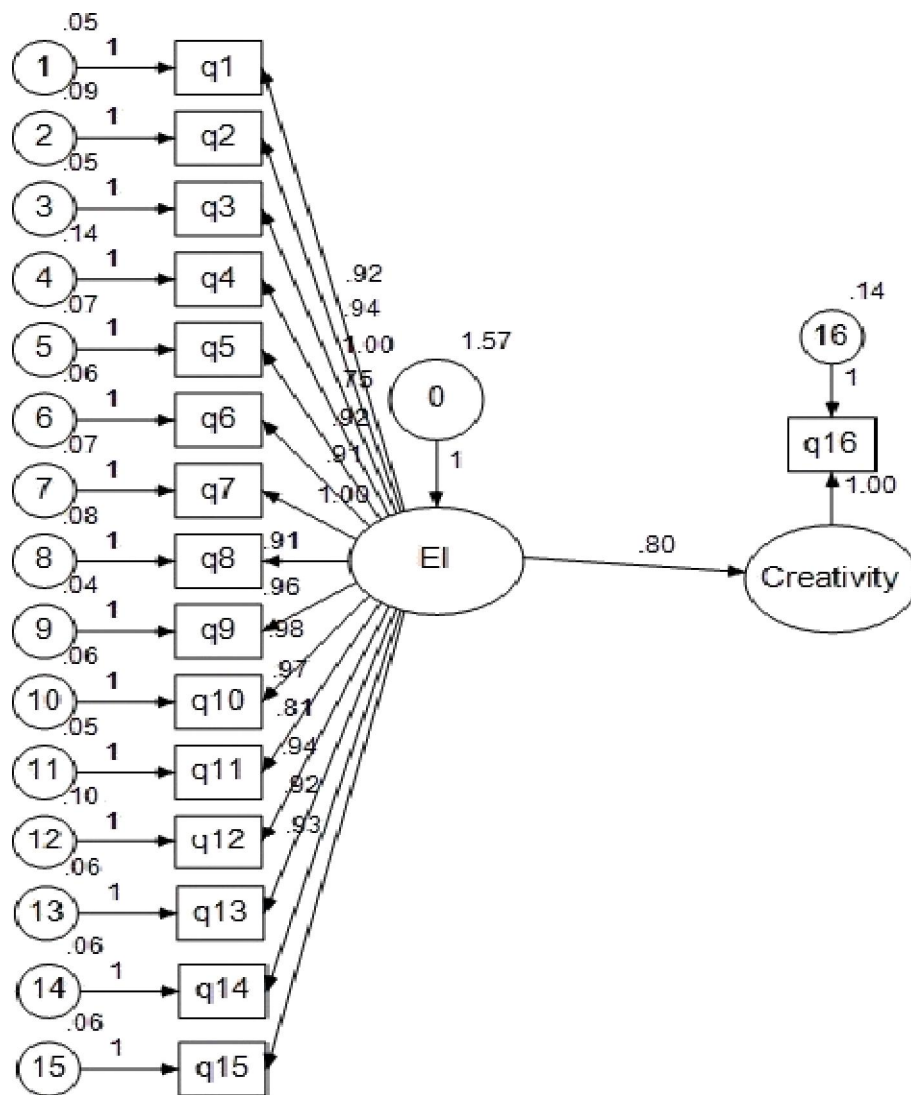


Fig. 2: the fitted model

4- Discussion and conclusion:

Endurance of any organization relies on their regeneration power. This regeneration thus proceeds through coordinating the organizational goals with the temporary situations as well as improvement of the research methods. The global rapid advances of science, technology, management, industry and generally, values and standards have obligated many successful organizations to direct their objectives, trends and interests towards enjoying from creativity and innovation. The 20th century and especially the last two decades should be recalled as the years creativity and innovation have been accelerated. Therefore, in this era also known as age of knowledge age of change, age of continuation and

age of creativity, organizations and firms have to get prepared for hasty management and global deep transformations and benefit from creativity and innovation consequently.

Accordingly, the results obtained by the current research illustrate that EQ as one of the most critical personality characteristics directly and meaningfully correlates with the staff creativity. This means that as the individuals' EQ increases, their creativity augments, either. Moreover, the findings confirm that there is a direct relationship between 15 components of EQ, i.e. problem solving, happiness, independency, stress tolerance, actualization, awareness, realism, interpersonal relations, optimism, self-esteem, impulse control, flexibility,

responsibility, empathy and self-presentation) with the staff creativity.

The present paper also was an attempt to examine the association of EQ and its categories with the Iran Khodro Co. staff creativity. In this regard, the data gathered via two questionnaires were analyzed in order to the relationship gets examined. The value of correlation coefficient for the H1 achieved 0.80 that signifies a direct and meaningful relationship exists between EQ and staff creativity. Furthermore, the H2 through H16 results indicate that the components of EQ including problem solving, happiness, independency, stress tolerance, actualization, awareness, realism, interpersonal relations, optimism, self-esteem, impulse control, flexibility, responsibility, empathy and self-presentation associate with the staff creativity. However, the highest rate of correlation (0.932) was observed between independency and staff creativity. Also, the results of the fitted model showed that the research model is reliable enough for prediction of staff creativity and is properly fitted. Consequently, the present research findings are in accordance with Hughes (2013), and Noorafshan(2013) results , but contradict with Hansenne (2012) results.

Recommendations:

In following some applicable recommendations is provided for the Iran Khodro Co. managers.

1. Considering that EQ is acquired in a way that some part of it evolves through experience, practice, and endeavours, it is possible to maximize EQ via teaching and learning. Therefore, holding a few training courses in order to familiarize the staff with the concept of EQ and its impact on life and required skills is suggested.
2. Since independency showed the greatest rate of correlation with the staff creativity, the employees have to be motivated for self-leadership and self-management so that they have autonomy in making decisions.
3. Moreover, since after independency, stress tolerance is the second important dimension of EQ, it is recommended that a few practice courses are held to increase the staff tolerance in form of training the necessary life skills.
4. It is recommended, too, organization manager through holding monthly or weekly meetings with middle and senior managers and employees and asking their ideas about establishments of think tank collect and review successful and unsuccessful ideas,

strategies and experiences in field of industry.

References:

- Ba Ezat, F., Sharif Zadeh, H., (2012), relationship between EQ and SI with university staff job stress, journal of professional and organizational counseling, No. 13, winter, p.55
- Bar-on, R. (1999), The Emotional Quotient Inventory (EQ-I): A test of emotional intelligence, Toronto, Canada, Multi-Health
- Bar-On, R. (2002). Bar-On EQ-i:S technical manual. Toronto: Multi-Health Systems.
- Bar-On, R. (2005), "The Bar-On model of emotional-social intelligence", *Psicothema*, Vol. 18 No. 1, pp. 13-25.
- Brice J. (2002), The Role of Personality Dimensions and Occupational Preferences on the formation of Entrepreneurial Intentions. Mississippi: The Mississippi State University Press.
- Cook, P. (1998). The creativity advantage- is your organizing the leader of the patch? *Industrial and Commercial Training*, 30(5), 179-184.
- Goyal, A., & Akhilesh, K. B. (2007). Interplay among innovativeness, cognitive intelligence, emotional intelligence and social capital of work teams. *Team Performance Management*, 13(8), 206-226.
- Grebner, I. (2007). Managing organizational creativity motivational aspects of management control systems for creative. 16 th Summer Academic, soreze nance.
- Guenzi P. Pelloni O.(2004), The impact of interpersonal relationships on customer satisfaction and loyalty to the service provider, *international journal of service industry management*, Vol. 15 No.4 pp.350-380
- Guleryaz, G., Guney, S., Miski Aydin, E., Asan, (2008). The mediating effect of Job satisfaction between emotional intelligence and organizational commitment of nurses: A questionnaire survey. *International Journal of nursing studies*. Ns: 1304, No of pages 11.
- Hansenne Michel, Jessica Legrand, Creativity, emotional intelligence, and school performance in children, *International Journal of Educational Research*, Volume 53, 2012, Pages 264-268
- Hughes David J., Adrian Furnham, Mark Batey, The structure and personality predictors of self-rated creativity, *Thinking*

- Skills and Creativity, Volume 9, August 2013, Pages 76-84
- Jaskyte, K., & Kisieliene, A. (2006). Determinants of employee creativity: A survey of Lithuanian nonprofit. *Voluntas*, 17, 133–141.
 - Keramati, M., Alah Yari, R., Shahbazi, B., (2012) study of relationship between EQ and staff job satisfaction of governmental offices, Quchan city, *journal of educational leadership and management*, Year 6, No. 4, winter, pp.117-136.
 - Mal Amiri, M., (2007), creativity a systematic approach: individual, group, organization, Imam Hussein publication : 1st edition
 - Mumford, M. D., Scott, G. M., Gaddis, B., & Strange, J. M. (2002). Leading creative people: orchestrating expertise and relationship. *The Leadership Quarterly*, 13, 705-750.
 - Nili Aram, A., (1998), creativity and innovation in organization, *Tadbir journal*, No. 85, pp. 30-32.
 - Noorafshan Leaila, Bahram Jowkar, The Effect of Emotional Intelligence and Its Components on Creativity, *Procedia - Social and Behavioral Sciences*, Volume 84, 9 July 2013, Pages 791-795
 - Rezaian, A.,(2009), *Organizational and management basics*, Tehran: Samt publication
 - Sarsani, R. M. (2005). *Creativity in education*. Published by Sarup & Sons, P: 2
 - Seyed Kalan, M., Sour, S., Avarsin, S., (2012), examination of relationship between EQ and organizational learning of education office staff, *journal of educational leadership and management*, Year 6, No. 4, winter, pp. 45-60.
 - Seyf, A., (2010), *modern educational psychology*, *journal of learning and teaching psychology*, Tehran: Agah publication
 - Shell Keras, D., (1993), *training of creative behavior and talents in students*, translated by Mojtaba Javadian, Tehran: Razavai publication
 - Trinidad, D. R., & Johnson, C. A. (2002). The association between emotional intelligence and early adolescent tobacco and alcohol use. *Personality and Individual Differences*, 32, 95-105.
 - Young, L. P. (2009). *Imagine creating rubrics that develop creativity*. *English Journal*, 99(2), 74-79.
 - Zandian, H., Abas pour, A., Rahimian, H., examination of relationship between organizational and individual factors influential on staff creativity of INPC, *journal of organizational/industrial psychology studies*, Year 3, No. 11

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