# ASSESSING IRANIAN MIDDLE-SCHOOL PRINCIPALS' CREATIVITY AND ITS ASSOCIATION WITH THEIR JOB PERFORMANCE AND HUMAN RELATIONS

Jafar Moharrami

*Creativity has become a topic of ever-increasing interest in educational settings where principals are responsible for improving schools. In Iran, there is a need for research on evaluating the creativity of school principals due to the importance of their role in improving schools. In this paper we aim to assess the creativity of school principals in schools of Iran and investigate its relationship with their job performance and relations with students and teachers. The effect of age and educational level factors on their creativity were also studied. This is a case study conducted in boys' middle schools of Urmia city located in West Azerbaijan Province of Iran. Participants included 52 schools principals aged between 34-54 years working in the academic year 2012-2013 who were randomly selected using Krejcie and Morgan table. Their creativity (CR), job performance (JP), and human relations (HR) measured using designed Persian-language questionnaires. Collected data were analyzed using statistical tests (mean and standard deviation) and three formulated research hypotheses were tested by applying Pearson's correlation coefficient and one-way ANOVA in SPSS software. Their scores showed that they had a relatively good level of CR, HR and JP. Results of statistical analysis revealed that there was no significant relationship between Iranian school principals' creativity and human relations, but their creativity was significantly related to their job performance. Also, it was found that age and educational level had no significant effect on their creativity.*

**KEYWORDS:** Creativity, Human Relations, Job Performance, School Principals, Middle Schools, Iran

*Jafar Moharrami* ✉
*Research Scholar, Department of Educational Sciences, Tabriz Branch, Islamic Azad University,*
*Islamic Republic of Iran*
*Email: jmoharrami.edu@gmail.com*

## INTRODUCTION

Creativity is now the most important leadership quality for success in business, outweighing competencies such as integrity and global thinking. For a leader to be able to see a new future towards which they will lead their followers, "creativity provides the ability to think differently and see things that others have not seen and thus giving reason for followers to follow" (Nkut, 2011, p.128). Johnson and Johnson (1991) states that a creative leader "is seeking not to control but to free the creative potential of others and is not so much an optimist as a believer that this liberation is possible" (p.29). To promote creativity and innovation, leaders need "to use management initiatives that create a work environment that stimulates the existing staff to be more creative and innovative" (Klemm, 1990, p.449). They should stimulate creativity for two important reasons: "to prevent obsolescence and to increase productivity" (Ibid). Some studies have indicated the existence of the relationship between leadership style and creativity (Oldham and Cummings, 1996; Andripoulos, 2001; Kesting et al. 2015). Some studies have shown how leaders can affect creativity and innovation. For example, Sternberg et al. (2003) argued that leaders' motivation to innovate depends on strategic choices made by leaders based on their perceptions of environmental risks and opportunities. Amabile et al. (2004) showed linkage between leaders behavior and the work environment for creativity. Kesting et al. (2015) found strong indications that different creativity and innovation stages and types raise different demands on leadership. Some studies stressed management strategies that should be used by leaders in structuring, directing, evaluating, and rewarding creative work (Eisenberger and Cameron, 1996; Baer et al. 2003). According to Seidel and Rosemann (2008), different creativity management strategies/actions apply on two different levels: (1) task-level strategies including creativity techniques, knowledge management, resource allocation, allowing latitude/freedom, and incentives/consequences; (2) process level strategies including approval processes/reviewing processes, flexible process automation, and group communication systems. On study of managerial actions that might influence creativity and innovation, Shalley and Gilson (2004) focused on social/organizational influences while Reiter-Palmon and Illies (2003) focused on cognitive influences. Elkins and Keller (2003) stressed the importance of leader technical skills, boundary spanning, and resource gathering. Mumford et al. (2002) indicated the need for creative thinking skills on the part of leaders. There are some suggestive evidence linking leader behaviors to group and individual creative performance (Kim and Yukl, 1995; Scott and Bruce, 1994; Mumford and Licuanan, 2004). Amabile et al. (2004) revealed that leaders'

behaviors can lead to "positive or negative spirals in team dynamics and performance".

Evidences have shown that leadership is a critical component of school improvement (Bryk et al. 2010). Principals are responsible for improving schools. Studies have linked effective principal leadership to school improvement (Louis et al. 2010; Preston et al. 2016). "School leaders have the ability to provide resources for creative endeavours; to involve teachers and pupils in creating stimulating environments; to tap the creativity of staff, parents and the local community and much more. They have the ability to make a creative art of the staff development programme; to include creativity in everyone's performance reviews; to invite creative people into the school and most important of all, to lead by example" (Morris, 2006, p.7). "Unfortunately, traditional education gives little room for students to develop their creativity and outside-of-the-box thinking beyond predetermined, standardized boundaries. The next generation needs to be prepared to tackle not only the known, but also the unknown problems our world will face. Therefore, we must be forward thinking about how we train and inspire our upcoming generation" (Sommer, 2014). Considering this necessity, Manteghi (2008) in his study suggested training and attracting creative and innovative teachers, taking advantage of modern technology in teaching process, and circulating creative and innovative management at schools and educational regions in Iranian schools. He stated that the educational innovation in Iran should not be limited to study content; it also should include the study content, the teacher, the principle, the school strategy as well as the entire education organization in the country. In this study, we focus on the creativity of school principals in Iran and examine its relationship with their performance with respect to dimensions of performing job and creating relations with teachers and students at boys' middle schools in Urmia city, Iran. We also examined the effect of demographic factors (age and educational level) on their creativity.

## RESEARCH QUESTIONS

The following research questions have been set for the study:

Q1. Does creativity of Iranian school principals influence their relations with teachers and students?

Q2. Does creativity of Iranian school principals affect their job performance?

Q3. Do demographic factors (age and educational level) affect the creativity of Iranian schools' principals?

## KEY CONSTRUCTS

### Creativity

There are many different definitions for creativity. People often use the concept of creativity and innovation in an interchangeable way. "creativity is a prerequisite of innovation" (Ohly et al. 2010, p. 42). Creativity is "a special condition, attitude or state of being that reflects passion for work, independence, goal setting, originality, flexibility, a wide range of interests, average or above-average intelligence and motivation" (Goertz, 1991,  p. 3). "Creativity is the application of knowledge and skills in new ways to achieve a valued goal" (Seltzer & Bentley, 1999, cited by Craft, 2001, p.15). According to Plucker and Beghetto (2004), "Creativity is the interplay between ability and process by which an individual or group produces an outcome or product that is both novel and useful as defined within some social con-text" (p. 156). Creativity is a process which transforms novel ideas into useful products, as interplay between individuals and contexts (Hunter et al. 2007). Creativity is associated with four paradigms: the creative person, the cognitive processes of creativity, environment issues to shape or inhibit creativity, and the product of creative performance (Batey & Furnham, 2006).

### Human Relations

In educational management, human relations indicate the ability of creating human relationship with teachers and staff by accepting the personality characteristics, individual characteristics and all differences that they may have with the principal.

### Job Performance

Performance is an important criterion for organizational outcomes and success. Campbell (1990) and Campbell et al. (1993) describe job performance as an individual-level variable, or something a single person does, and differentiates it from organizational performance which is higher-level variable. According to Campbell (1990), job performance is a means to reach a goal or set of goals within a job, role, or organization. "Performance in a job is strictly a behavior and a separate entity from the outcomes of a particular job which relate to success and productivity" (Jacobs et al. 2013). "Performance antecedents include both direct determinants, such as knowledge, skill, motivation, habits, and situational opportunities and constraints, and indirect determinants, including individual differences in ability and personality and some types of situational variables. The direct determinants are presumed to mediate effects of the indirect determinants on job performance through causal mechanisms that involve capacity to learn, opportunity to learn, motivation to learn, and dispositional fit" (Motowidlo, 2003).

## RESEARCH METHODOLOGY

## STUDY DESIGN AND PARTICIPANTS

This survey study is a descriptive/correlational research. The dependent variable of the study is creativity (CR). This variable is measured based on collected data from human relations (HR), job performance (JP) and demographic factors (age and educational level) of study participants.

In this regard, we formulated our hypotheses as following:

H1. There is a significant relationship between creativity of Iranian school principals and their relations with teachers and students;

H2. Creativity of Iranian school principals has a significant relationship with their job performance;

H3. Age and educational level of Iranian school principals have a significant effect on their creativity.

Statistical population consists of all school principals working in the boys' middle schools located in districts 1 and 2 of Urmia city in Iran (n= 60). Of this, 52 principals who were working in the academic year 2012-2013 were selected to participate in our study using random sampling method and Krejcie & Morgan table (25 principals working in boys' middle schools of district 1 and 27 principals in those located in district 2).

## TOOLS USED

To collect data from the participants to test the hypotheses, two questionnaires were used:

1. Questionnaire A: This inventory measures the creativity of school principals designed by Soltani (1996) in Persian. It has 40 items and scoring is based on 4-point likert scale (1= never, 2= seldom, 3= sometimes, and 4= Almost always). Score range in this questionnaire is 40-160. Using Cronbach's alpha coefficient, its internal consistency was obtained as 0.83 (>7) which shows its good reliability.

2. Questionnaire B: The second Persian-language questionnaire was designed according to similar inventories to measure performance of school principals in terms of job and human relations. It has 25 items and scoring is based on 5-point likert scale (1= No idea, 2= very low, 3= low, 4= high, and 5= very high) and is divided into two sections: Section one contains 12 questions measuring human relations of principals with a score range of 12-60 and Section two includes 13 questions measuring job performance of

principals with a score range of 13-65. Results of Cronbach's alpha coefficient reported a good internal consistency of 0.83 and 0.84 for both sections, respectively.

In order to gather information by using questionnaires, first, address and detailed specifications of the studied schools were collected from the statisticians in districts 1 and 2 of Urmia city and then, with the permission of the Office of Education in districts 1 and 2, we went to the middle schools; while providing the necessary information and justification for principals and teachers, questionnaires were distributed among participants and then the completed questionnaires were collected.

## DATA ANALYSIS

After collecting data, they were analyzed using statistical tests (frequency, percent, mean, standard deviation). To test the research hypotheses, we used Pearson's correlation coefficient and one-way ANOVA in SPSS software. Significance level was set at 0.05.

## RESULTS AND DISCUSSION

### Characteristics of Participants

Data reported that participants were aged between 34-54 years (Median 44) with a mean ± SD of 44.9 ± 5.25. Thirty five of 52 participants (67.3%) had bachelor degree, ten participants (19.2%) had master degree and seven participants (13.5%) had associate degree.

### CR, HR, and JP Scores of Participants

Mean and standard deviation (SD) of participants' CR, HR, and JP scores are presented in Table 1. As can be seen, mean ± SD of their scores in CR, HR, and JP were 116.37 ± 13.13, 42.92 ± 6.09, and 45.06 ± 7.76, respectively. According to scores, we found out that school principals in boys' middle schools of Urmia city have a relatively favorable level of creativity, job performance and human relations with teachers and students.

**Table 1**
**Mean and SD of Participants' Scores for Questions Related to CR, HR, and JP.**

| Variable | N | Min | Max | Mean | SD |
|----------|-----|-----|-----|--------|-------|
| CR | 52 | 85 | 137 | 116.37 | 13.13 |
| HR | 52 | 31 | 59 | 42.92 | 6.09 |
| JP | 52 | 25 | 65 | 45.06 | 7.76 |

**Testing the Research Hypotheses**

For testing research hypotheses using statistical methods, first one sample Kolmogorov-Smirnov (K-S) test was used to test that the normality of data distribution for three variables. Assumptions are H0: the data are normally distributed, and H1: the data are not normally distributed. The K-S test results were obtained as following: CR, Z=1.198 (Sig.=0.113); HR, Z=0.742 (Sig.=0.742); and JP, Z=0.640 (Sig.=0.515). Considering critical value of α=0.05, the significant levels are greater than p-value, so there is no significant difference between variables; therefore, the null hypothesis cannot be rejected and we can say that data has a normal distribution. In this regard, we can use parametric techniques for testing research hypotheses.

Hypothesis One stated that there is a significant relationship between creativity of Iranian school principals and their human relations. Pearson's correlation was run to determine the relationship between 52 school principals' CR and HR values. Results presented in Table 2 showed that there was no correlation between CR and HR values (r = 0.23, N=52, Sig. = 0.102 > 0.05).

**Table 2**
**Correlations between CR and HR.**

|  |  | CR | HR |
|---|---|---|---|
| **CR** | Pearson Correlation | 1 | 0.230 |
|  | Sig. (2-tailed) | - | 0.102 |
|  | N | 52 | 52 |
| **HR** | Pearson Correlation | 0.230 | 1 |
|  | Sig. (2-tailed) | 0.102 | - |
|  | N | 52 | 52 |

Hypothesis Two stated that creativity of Iranian school principals has a significant relationship with their job performance. Again, Pearson's correlation was used to examine the relationship between school principals' CR and JP values. According to the results shown in Table 3, we found a small correlation between school principals' CR and JP values (r = 0.286, N=52, Sig. = 0.04 < 0.05).

**Table 3**
**Correlations between CR and JP.**

|  |  | CR | JP |
|---|---|---|---|
| **CR** | Pearson correlation | 1 | 0.286 |
|  | Sig. (2-tailed) | - | 0.040 |
|  | N | 52 | 52 |
| **JP** | Pearson correlation | 0.286 | 1 |
|  | Sig. (2-tailed) | 0.040 | - |
|  | N | 52 | 52 |

Hypothesis Three stated that age and educational level of Iranian school principals have a significant effect on their creativity. Pearson's correlation was run to determine the link between age and creativity of school principals. Results are shown in Table 4. According to results we found no correlation between age and creativity of Iranian school principals (r = 0.097, N=52, Sig. = 0.495> 0.05). To examine the effect of educational level on school principals' creativity values, we used one-way ANOVA to determine whether there are any statistically significant differences between the means of them. Participants were classified into three groups: associate degree, bachelor degree and master degree. Results are shown in Table 5. We can see that the significance value is 0.895 which is higher than critical value 0.05 and, therefore, there is no statistically significant difference between groups of school principals with three associate, bachelor and master degrees (F (2,49) = 0.112). This rejects the hypothesis that educational level of Iranian school principals has a significant effect on their creativity.

**Table 4**

**Correlations Between Creativity and Age.**

|  |  | Creativity | Age |
|---|---|---|---|
| **Creativity** | Pearson correlation | 1 | 0.097 |
|  | Sig. (2-tailed) | - | 0.495 |
|  | N | 52 | 52 |
| **Age** | Pearson correlation | 0.097 | 1 |
|  | Sig. (2-tailed) | 0.495 | - |
|  | N | 52 | 52 |

**Table 5**

**ANOVA Results.**

|  |  | Sum of Squares | df | Mean square | F | Sig. |
|---|---|---|---|---|---|---|
| **Educational Level** | **Between groups** | 39.843 | 2 | 19.992 | 0.112 | 0.895 |
|  | **Within groups** | 8748.214 | 49 | 178.535 | - | - |
|  | **Total** | 8788.058 | 51 | - | - | - |

**DISCUSSION**

The need for innovation in organizations has resulted in a new focus on the role of leaders in shaping the nature and success of creative efforts (Mumford & Licuanan, 2004). In this regard, many studies have indicated the impact of leadership on the nature and success of creative efforts (Oldham & Cummings, 1996; Andripoulos, 2001; Kesting et al. 2015). Among this, there are some studies that have investigated the creativity behavior and individual characteristics of creative leaders (e.g. Klemm, 1990; Mumford et al. 2002; Amabile et al. 2004). Deschamps (2005) suggested that the failure of creativity

and innovation projects is most likely due to ineffective leadership skills. Many studies emphasize the importance of creativity in educational settings as a means of enhancing effectiveness and bringing success to the organization (e.g. Feldman & Benjamin, 2006; Al-Karasneh & Jubran, 2013). Most of these studies have assessed teachers' creativity in classrooms. In our study, we focused on evaluating the creativity of principals, since creativity in education needs effective leadership (Wildy & Louden, 2002). We investigated the association between middle school principals' creativity and their job performance and human relations with teachers and students in Iran. Mumford et al. (2002) argued that a leader's efforts can only influence performance if he can inculcate in others understanding of the task and the relationships among people working on this task which will require persuasion and social intelligence. According to them, leaders must be able to manage interactions among diverse people; so, leaders not only need to be perceptive, but also, they must be flexible.

According to the results of the current study, we found out that creativity of Iranian principals at boys' middle schools had no association with their relations with teachers and students (p>0.05), but had a small relationship with their job performance (p<0.05). This shows that in order to increase creativity, Iranian school principals should pay more attention to human relations in connection with the educational system and the employees who are working in the system, and should attempt to develop and improve the conditions for creating innovative organization. Our study also showed that, as expected, age and educational level of Iranian school principals had no effect on their creativity (p>0.05).

## CONCLUSION

This study highlighted the relationship between creativity, job performance and human relations of Iranian school principals with teachers and students. We concluded that Iranian school principals' creativity was in almost good level and was related to their job performance but was not to their human relations with teachers and students. Also, their age and educational degree do not affect their creativity-makings in schools. This study was conducted on boys' middle schools of Urmia city in Iran; findings might not be transferable to all stages of education in Iran. Thus, it is recommended that further researches should be conducted on other schools with different gender (e.g. girls' schools) and education stage (e.g. higher schools) and in different cities of Iran for the generalization of findings.

## REFERENCES

Al-Karasneh, S., & Jubran, A. (2013). Classroom leadership and creativity: A study of social studies and islamic education teachers in Jordan. *Creative Education*, *4*(10), 651-662.

Amabile,T.M., Schatzel, E.A., Moneta, G.B., & Kramer, S.J. (2004). Leader behaviors and the work environment for creativity: perceived leader support. *Leadership Quarterly*, *15*,5-32.

Andripoulos, C. (2001). Determinants of organization creativity: A literature review. *Management decision*, *10*, 834-840.

Arad, S., Hanson, M. A., & Schneider, R. J. (1997). A framework for the study of relationship between organizational characteristics and organizational innovation. *Journal of Creative Behavior*, *31*, 42–59.

Baer, M., Oldham, G. R., & Cummings, A. (2003). Rewarding creativity: When does it really matter. *The Leadership Quarterly, 14*, 569–586.

Batey, M., & Furnham, A. (2006). Creativity, intelligence, and personality: A critical review of the scattered literature. Genetic, Social & General Psychology *Monographs*, *132*(4), 355-429.

Bryk, A. S., Sebring, P. B., & Allensworth, E. (2010). *Organizing schools for improvement: Lessons from Chicago*. Chicago: University of Chicago Press.

Campbell, J. P. (1990). Modeling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (pp. 687-732). Palo Alto, CA: Consulting Psychologists Press, Inc.

Campbell, J. P., McCloy, R. A., Oppler, S. H., & Sager, C. E. (1993). A theory of performance: In N. Schmitt & W. C. Borman (Eds.), *Personnel selection in organizations* (pp. 35-70). San Francisco: Jossey-Bass.

Craft, A. (2001). *An Analysis of Research and Literature on Creativity in Education*. Retrieved from http://www.creativetallis.com/uploads /2/2/8/7/2287089/creativity_in_educationrepo rt.pdf.

Deschamps, J. (2005) Different leadership skills for different innovation strategies. *Strategy & Leadership, 33*, 31-38.

Eisenberger, R., & Cameron, J. (1996). Detrimental effects of reward: Reality or myth? *American Psychologist, 51*, 1153–1166.

Elkins, T., & Keller, R. T. (2003). Leadership in research and development organizations: A literature review and conceptual framework. *The Leadership Quarterly, 14*, 587–606.

Feldman, D., & Benjamin, A. C. (2006). Creativity and education: An American retrospective. *Cambridge Journal of Education, 36*(3), 319-336.

Goertz, M. J. (1991). *The relationship of leader effectiveness and selected traits of creativity.* Unpublished Doctoral Dissertation, Flag- staff, AZ: Northern Arizona University.

Hunter, S. T., Bedell, K. E., & Mumford, M. D. (2007). Climate for creativity: A quantitative review. *Creativity Research Journal, 19*(1), 69-90.

Jacobs, K., Hellman, M., Wuest, E., & Markowitz, J. (2013). *Job performance.* In Encyclopedia of Behavioral Medicine (pp 1132-1133). New York: Springer.

Johnson, D. W., & Johnson, R. T. (1991). *Learning together and alone.* Englewood Cliffs, NJ: Prentice-Hall.

Kesting,P., Ulhøi, J.P., Jiwen Song, L., & Niu, H. (2015). The impact of leadership styles on innovation management - a review and a synthesis. *Journal of Innovation Management, 3*(4), 22-41.

Kim, H., & Yukl, G. A. (1995). Relationships of managerial effectiveness and advancement to self-reported and subordinate reported leadership behaviors from the multiple-linkage model. *The Leadership Quarterly, 6*(3), 361–377.

Klemm, W.R. (1990). *Leadership: Creativity and Innovation: Concepts for Air Force Leadership.* Retrieved from http://www.au.af.mil/au/ awc/awcgate au-24/au24-401.htm.

Louis, K. S., Leithwood, K., Wahlstrom, K. L., & Anderson, S. E. (2010). *Investigating the links to improved student learning: Final report of research findings.* Minneapolis: University of Minnesota.

Manteghi, M. (2008). Investigating educational innovations in Iranian schools. *Quarterly Journal of Educational Innovations, 24,* 57-64.

Morris, W. (2006). *Creativity - It's place in Education.* Retrieved from http://www.jpb.com/creative/Creativity_in_Education.pdf.

Motowidlo, S.J. (2003). Job Performance. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of Psychology: Industrial and organizational psychology.* US: John Wiley & Sons, Inc.

Mumford, M. D., Scott, G. M., Gaddis, B., & Strange, J. M. (2002). Leading creative people: Orchestrating expertise and relationships. *The Leadership Quarterly, 13,* 705–750.

Mumford, M.D., & Licuanan, B. (2004). Leading for innovation: conclusions, issues, and directions. Leadership Quarterly, 15(1),170-189.

Nkut, A. (2011). *Leadership for success: A dynamic model of influence.* USA: Author House.

Oldham G.R., & Cummings A. (1996). Employee creativity: personal and contextual factors at work. *Academy of Management Journal, 39,* 607-634.

Plucker, J. A., & Beghetto, R. A. (2004). Why creativity is domain general, why it looks domain specific, and why the distinction does not matter. In R. J. Sternberg, E. L. Grigorenko, & J. L. Singer (Eds.), *Creativity: From Potential to Realization* (pp. 153-167). Washington DC: American Psychological Association.

Preston, C., Goldring, E., Guthrie, J., & Ramsey, R., Huff, J. (2016). *Conceptualizing essential components of effective high schools. Leadership and Policy in Schools*. Retrieved from http://dx.doi.org/10.1080/15700763.2016.1205198.

Reiter-Palmon, R., & Illies, J. J. (2004). Leadership and creativity: Understanding leadership from a creative problem solving perspective. *The Leadership Quarterly, 15*, 55–77.

Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal, 37*(3), 580–607.

Seidel, S., & Rosemann , M. (2008). *Creativity Management - The New Challenge for BPM*. Retrieved from: http://www.bptrends.com/publicationfiles/Three%2005-08-ART-CreativityManagement-Seidel-and-Rosemann-final.pdf.

Seltzer, K. & Bentley, T. (1999). *The creative age: knowledge and skills for the new economy*. London: Demos.

Shalley, C. E., & Gilson, L. L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *The Leadership Quarterly, 15*, 33-53.

Sommer, L. (2014). *How to Foster More Creativity in 21st Century Education*. Retrieved from http://www.forbes.com/sites/berlinschoolofcreativeleadership/2014/05/21/how-to-foster-more-creativity-in-21st-century-education/#4cc83d26b4dc.

Sternberg, R. J., Kaufman, J. C., & Pretz, J. E. (2003). A propulsion model of creative leadership. *The Leadership Quarterly, 14*, 455–476.

Wildy, H., & Louden, W. (2002). School restructuring and the dilemmas of principals' work. *Educational Management and Administration, 28*, 173-184.