



Creative Mind (Creativity): Explaining its Role in the Process of Learning Outcomes for Students

Samira Molaei¹, Ali Akbar Sheikhi Fini^{*2}, Mohammad Noor Rahmani¹

1. Department of Educational Management, Bandar Abbas Branch, Islamic Azad University, Bandar Abbas, Iran.

2. Hormozgan University, Bandar Abbas, Iran.

A B S T R A C T

This research examines the role of the creative mind (creativity) in the process of learning outcomes and academic achievement of fifth-grade students. The present study is correlational. The correlation research, which is itself a subset of descriptive (non-experimental) research, is aimed at demonstrating the relationship between variables. The statistical population of the study consisted of all female elementary school students in the fifth grade of the district of Bandar Abbas (Iran) in the academic year of 2017-2018, whose number is 1,368. The results of this study indicate that according to ($R^2 = 0.331$) and ($\beta = 0.776$), and with regard to the significant level ($P < 0.01$), it can be said that having creative minds is significantly have an impact on the learning outcomes ($t = 13.59$).

Keywords: learning outcomes, creative mind, creativity, female students.

INTRODUCTION

One of the distinguishing features of human thinking is creativity, so efforts must be made to flourish this privilege (Albrechts, 2016; Weber, 2016). With the arrival of children in adolescence and high school, and due to the presence of an exam in Iran, people will be more effort and students may suffer from academic and personality problems, which can have adverse effects in having creative thinking (Hosseini & Watt, 2010; Kharkhurin & Samadpour Motalleebi, 2008; Rezvan, Ahmadi, & Abedi, 2006; Tabrizi & Yaacob, 2011). Put up in this regard, the progress of some students shows perfectionism behaviors, which may raise problems in terms of education, or life. Therefore, the study of the relationship between perfectionism and its impact on creativity in students is necessary (Esfahani, Cheraghi, Souri, Movasagh, & Shafigh, 2016; Nordin-Bates, 2015; Plucker, Beghetto, & Dow, 2004); hence, the result of this study will give us valuable information.

Due to the lack of knowledge in the relationship between perfectionism and creativity (Gong, Huang, & Farh, 2009; Kim, Kim, & Yun, 2017), the present study seeks to eliminate this gap. Therefore, the present study is an attempt to clarify the relationship between variables and add this information to the existing knowledge. The result of this study can be considered as a fundamental strategy in increasing and improving the creative thinking of students as a result of innovation and prosperity in Iran.

* . Corresponding Author: Sheikhi Fini. A. K.

DOI: [In pressing](#)

To cite this article: Mullaeei, S., Sheikhi Fini. A. K., Rahmani, M. N. (2018). Creative Mind (Creativity): Explaining its Role in the Process of Learning Outcomes for Students. *Iranian Journal of Positive Psychology*, 4 (1), 22-26.

In general, this study is important in terms of both fundamental and practical applications. The present study aims to investigate the relationship between perfectionism and creativity, and by recognizing the dimensions of perfectionism in students, we can better identify their strengths and weaknesses in students and thus provide better strategies for increasing their creativity and their growth. Therefore, considering the role and importance of creativity in the lives of children and adolescents, it is necessary to determine the personality, educational, cognitive, emotional and motivational characteristics of this group for developing and promoting creative thoughts.

METHODOLOGY

The present study, based on a systematic framework, tries to measure a certain reality, and the researcher looks beyond this fact. Since this research intends to examine the role of having a creative mind with the learning outcomes of students, the research method used to achieve this goal is of a non-experimental quantitative research. The statistical population of the study consisted of all female elementary school students of the fifth grade of Bandar Abbas (Iran) district 1, in the academic year of 2017-2018, whose number is 1368. According to the size of the society and the research method, the sample size was calculated through Cochran's formula of 300 students from fifth grade female students that chosen by simple random sampling. In order to collect research information, the measurement tools were used as follows:

A. Abedi Creativity Scale: This scale is a multi-dimensional paper pencil questionnaire for creativity measurements is based on the theory of Torrance (Farahani, Najafizadeh, Kheyrikhah, & Ebrahimi, 2015). This test has 60 questions in three options: 22 questions on fluid dimension, 11 questions on flexibility, 11 questions on expansion, and 16 questions devoted to the initiative. The final form of the multi-dimensional paper pencil questionnaire of creativity measurement, which was set up in 1992 and used in the Naderi, Abdullah, Aizan, Sharir, and Kumar (2009), has been used in this research. Auzmendi, Villa, and Abedi (1996) studied the reliability of this test using Cronbach's alpha method. The coefficients obtained for fluid, innovation, flexibility and expansion were 0.75, 0.71, 0.72 and 0.78 respectively. Also, using Confirmatory Factor Analysis Method, he showed that this questionnaire had structural validity.

B. Learning outcomes questionnaire: To measure the learning outcomes, self-directed learning questionnaire (SDL) was developed by Fisher, Aldridge, Fraser, and Wood (2001). The questionnaire consists of 40 questions, which include three subsamples. These subscales consist of self-control, willingness to learn, and self-management.

Data were computed using descriptive statistics including standard deviation, percentage and mean, and inferential statistics including analysis of variance and t test using SPSS version 22.

RESULTS

Table 1. Descriptive statistics of the research variables

Variable	Mean	SD
Creative Mind	3.78	0.97
Leaning Style	3.12	0.83

Statistical analysis of one-variable regression analysis was used to determine how to explain the learning outcomes based on having a creative mind. In this analysis, learning outcomes were considered as a criterion variable and having creative mind as a predictor variable. The results of the table 2 indicate that the coefficient of determination is 0.331 ($R^2 = 0.331$). Based on these beta-coefficients, the most important role is played by the creative mind in learning outcomes, so that with each unit, the change in the creative mind, 0.776 in the variance of the learning outcomes was changed.

Table 2. Results of regression analysis of learning outcomes variables based on the scores of creative minds

Model	R	R ²	Adjusted R ²	SD
1	0.576	0.331	0.328	0.76

The results of regression analysis in the table 3 show that the variable regression of learning outcomes on the variable of the creative mind is statistically significant and these components explain the part of the variance of learning outcomes. In other words, this result shows Regression coefficients are significant and there is sufficient evidence to confirm the hypothesis. With respect to the value of F, it indicates that at least one of the components of the predictive variable, in predicting the variable of the criterion is significant.

Table 3. Results of analysis of variance of learning outcomes regression based on creative variable scores

model	Source	SS	DF	MS	F	Sig.
1	Regression	3056.32	1	3056.32	231.25	0.001
	Residual	4738.26	198	0.693		
	Total	7794.58	199			

Considering the amount of β contained in the table 4, it can be concluded that the level of explanation of variance of predictive variables on the criterion and having creative minds ($\beta = 0.576$) is significant due to the significant level ($P < 0.01$) the significance of learning outcomes is explained by the amount ($t = 13.59$).

Table 4. Variable prediction of learning outcomes on the variable of creative mind

Criterion Variable	Predictive variable	Non-standardized		Beta	T	Sig.
		B	Error			
1	Constant	2.317	0.263	----	6.37	0.001
2	Creative Mind	0.684	0.059	0.576	13.59	0.001

CONCLUSION

The world today is named the era of creativity and innovation, because of its immensely immutable features. In this period, the processes of creative and entrepreneurial phenomena have greatly influenced human society. Therefore, the fundamental factor in the sustainability of the dynamics and successes of various institutions is the movement based on creativity and innovation. Learning based on the creativity is one of the new ways learning has been able to raise the level of knowledge and information in society, and this society is a knowledge-based society, which has become apparent in many societies today. Children are encouraged to entertain thinking are motivated and self-confidence day by day. They need to be creative to cope with unknown futures. Increasing creativity can help to enrich life and contribute to building a better society. Creative students need creative teachers, but many possible obstacles can to stop creativity.

REFERENCES

- Albrechts, L. (2016). Enhancing creativity and action orientation in planning *The Ashgate Research Companion to Planning Theory* (pp. 233-250): Routledge.
- Auzmendi, E., Villa, A., & Abedi, J. (1996). Reliability and validity of a newly constructed multiple-choice creativity instrument. *Creativity Research Journal*, 9(1), 89-95.
- Esfahani, V., Cheraghi, M., Souri, A., Movasagh, L., & Shafigh, S. (2016). The Relevance of the Dimensions of Creativity with Perfectionism and Goal Orientation at Students, a Cross-Sectional Study. *Imperial Journal of Interdisciplinary Research*, 3(1).
- Farahani, A., Najafizadeh, A., Kheyrikhah, A., & Ebrahimi, M. (2015). Investigating the Association between Emotional Intelligence and Creativity in Students. *Asian J. Med. Pharm. Res*, 5(1), 08-11.
- Fisher, D., Aldridge, J., Fraser, B., & Wood, D. (2001). *Development, validation and use of a questionnaire to assess students' perceptions of outcomes-focused, technology-rich learning environments*. Paper presented at the annual conference of the Australian Association for Research in Education, December, Perth, Western Australia. <http://www.aare.edu.au/01pap/fis01028.htm>.
- Gong, Y., Huang, J.-C., & Farh, J.-L. (2009). Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy. *Academy of management Journal*, 52(4), 765-778.
- Hosseini, A. S., & Watt, A. P. (2010). The effect of a teacher professional development in facilitating students' creativity. *Educational Research and Reviews*, 5(8), 432.
- Kharkhurin, A. V., & Samadpour Motalleebi, S. N. (2008). The impact of culture on the creative potential of American, Russian, and Iranian college students. *Creativity Research Journal*, 20(4), 404-411.
- Kim, S. L., Kim, M., & Yun, S. (2017). What do we need for creativity? The interaction of perfectionism and overall justice on creativity. *Personnel Review*, 46(1), 154-167.
- Naderi, H., Abdullah, R., Aizan, H. T., Sharir, J., & Kumar, V. (2009). Creativity, age and gender as predictors of academic achievement among undergraduate students. *Journal of American Science*, 5(5), 101-112.
- Nordin-Bates, S. M. (2015). *Elite Dance Students' Perceptions of Perfectionism and Creativity: A Qualitative Investigation*. Paper presented at the 14th European Congress of Sport Psychology (FEPSAC). 14th-19th July 2015, Bern Switzerland." Sport psychology-theories and applications for performance, Health and humanity".
- Plucker, J. A., Beghetto, R. A., & Dow, G. T. (2004). Why isn't creativity more important to educational psychologists? Potentials, pitfalls, and future directions in creativity research. *Educational psychologist*, 39(2), 83-96.

- Rezvan, S., Ahmadi, S., & Abedi, M. (2006). The effects of metacognitive training on the academic achievement and happiness of Esfahan University conditional students. *Counselling Psychology Quarterly*, 19(4), 415-428.
- Tabrizi, E. A., & Yaacob, S. N. (2011). Relationship between creative thinking and anxiety among adolescent boys and girls in Tehran, Iran. *International Journal of Humanities and Social Science*, 1(19), 60-66.
- Weber, M. B. (2016). creativity and innovation. *Library Resources & Technical Services*, 60(3), 138.