





Research Paper

The Relationship between Academic Emotions and Emotional Creativity of Male and Female Sixth Grade Students in Public and Private Elementary Schools

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Abstract

Aim: The present applied correlational study was conducted to assess the relationship between academic emotions and emotional creativity in the sixth-grade elementary school students in the city of Golbahar. A total of 286 sixth graders were selected according to Krejcie and Morgan Table by random cluster sampling method. Data were collected using Pekrun's Academic Emotions (2005) and Averill and Thomas Knowles (1991) Emotional Creativity Questionnaires. The study hypotheses were assessed using Pearson's correlation coefficient and independent t-test. The results showed a significant relationship between students' academic emotions and their emotional creativity. Students' academic emotions were significantly different according to gender and also school type (public vs private). Their emotional creativity was not significantly different for school type, but it was for gender.

Keywords: Emotions, Creativity, Elementary School, Students

Introduction

Emotions increase motivation and affect students' academic achievement during academic life by affecting self-regulation and other regulators. Thus, understanding the functional nature of emotions in educational situations is

especially important (Sheikholeslami & Ghanbari Talab, 2018). Failure to address and manage emotions can cause irreversible damage. One of the ways to deal with negative emotions is to use emotional creativity (Taghavi, 2017). The concept of creativity in emotions was introduced in 1986 with the work of Averill (Nazari Bolani et al, 2019).

Examining the variables and components related to emotional creativity can clarify the nature of this type of creativity more than ever before (Valikhani et al, 2017). Many studies have been conducted on this subject so far, including a study by Husseini et al, (2018) that compared academic emotions of students of public and Shahed private senior elementary schools in the subject of experimental sciences, and a study by Asghari and Sharifi (2017) that analyzed the relationship and distinction between emotional creativity and cognitive creativity based on their factors. Also, Oriol et al, (2016) investigated the relationship of students' emotional creativity with their intrinsic motivation and academic engagement as well as the mediating function of classroom-related positive emotions, and Pekrun et al, (2010) who tested the role of academic emotions in students' self-regulated learning and success.

The present study was conducted to assess the relationship between academic emotions and emotional creativity in the sixth-grade students of public and private elementary school to answer the following questions:

Is there a significant relationship between academic emotions and emotional creativity?

Do academic emotions and emotional creativity levels differ according to gender and type of school?

Methodology

The statistical population of the present correlational study included all male and female sixth grade students of public and private elementary schools in the city of Golbahar. First, 14 rural and urban schools were selected by random cluster sampling. The school type was chosen in proportion to the number of students in public and private schools and based on gender. Finally, 11 sixth grade classes were selected from public schools and three from private ones, from which, 286 students were chosen as samples according to Krejcie and Morgan Table (1970).

The data collection tools included Pekrun's Academic Emotions Questionnaire (2005) designed by Pekrun et al. (2005) with 43 items in seven components (enjoyment, pride, anger, anxiety, shame, hopelessness, and boredom). Kadivar et al. (2009) investigated factor validity and reliability of this questionnaire in 600 male and female students, and reported an acceptable internal consistency. In the present study, reliability of this questionnaire was determined with Cronbach's alpha of 0.89.

Averill and Thomas Knowles Emotional Creativity Inventory (1991): Averill and Thomas Knowles considered four dimensions of novelty, effectiveness, authenticity, and preparedness to assess emotional creativity. This questionnaire contains 30 items in a five-point Likert scale (Averill, 1991). Averill and Gutbezahi (1996) conducted two studies on psychology students using this inventory and reported a high internal consistency. Reliability of this tool was also determined in the present study with Cronbach's alpha of 0.8.

Results

The present correlational study investigated the relationship between academic emotions and emotional creativity in male and female sixth grade students of public and private elementary schools in the city of Golbahar. To answer the first question of the study, the relationship between variables was assessed using Pearson's correlation test.

Table 1: Pearson's correlation test between academic emotions and emotional creativity

	Academic emotions	Emotional creativity
Academic emotions Pearson's correlation	1	0.199**
Emotional creativity Pearson's correlation	0.199**	1

** shows significant correlation at 0.01

According to the results in Table 1, there is a significant relationship between academic emotions and emotional creativity (Sig.=0.001). To answer the second question, independent t-test was used to assess the difference in academic emotions and emotional creativity according to type of school and gender.

Table 2: The results of independent t-test conducted to assess the difference in academic emotions according to type of school and gender

	t	Degree of freedom	Significant level	Standard error difference	95% confidence interval	
					Low	High
Academic emotions	Type of school	2.852	284	0.005	0.096	0.085 0.464
	Gender	3.256	284	0.001	0.060	0.077 0.316

As seen in Table 2, the significance level is <0.01 for both independent t-tests, therefore the null hypothesis is rejected and there is a significant

difference in students' academic emotions in terms of type of school and gender. Mean academic emotions was greater in students of public school (120.32) than that in students of private schools (11.48). Also, mean academic emotions was greater in girls (123.53).

Table 3: The results of independent t-test conducted to assess the difference in emotional creativity of sixth grade elementary school students according to type of school and gender

		t	Degree of freedom	Significant level	Standard error difference	95% confidence interval	
						Low	High
Emotional creativity	Type of school	1.91	284	0.056	0.083	0.004	0.325
	Gender	3.27	284	0.001	0.052	0.068	0.273

Table 3 shows that the significance level is >0.05 in the test of difference in emotional creativity of sixth grade elementary school students, which confirms the null hypothesis, and there is no significant difference in students' emotional creativity in terms of type of school. In addition, the significance level is less than 0.01 in the test of difference in emotional creativity of sixth grade elementary school students, which rejects the null hypothesis, and there is a significant difference in students' emotional creativity in terms of gender. Mean emotional creativity in girls (101.55) was greater than that in boys (97.23).

Discussion and conclusion

According to the results, there is a significant relationship between academic emotions and emotional creativity, which concurs with the results obtained in a study by Taghavi (2016). In answering the second question, the independent t-test results show a significant difference in students' academic emotions depending on their type of school and gender.

No significant difference was found in emotional creativity between public and private schools. However, there was a significant difference in students' emotional creativity in terms of gender. Thus, teachers and principals are recommended to pay attention to students' abilities. Furthermore, given that providing a dynamic, active and diverse environment reduces boredom, anxiety and hopelessness, teachers and principals are recommended to use modern and creative teaching techniques and diverse educational activities such as video display to encourage exploration in students and confront them with a variety of situations.

Reference

- Asghari, D & Sharifi, N. (2017). Analysis of the relationship and the distinction between two types of emotional and cognitive creativity on the basis of their factors. *Journal of psychometric*, 2, 30-49
- Ghadiri Nejadian, F. (2002). *A Preliminary Standardization of Emotional Creativity Inventory (ECI) on Day-time Students of Tehran Universities*, Tarbiat Moallem University, Tehran
- Husseini, S, A. et al. (2019). *The state of students' academic emotions in the experimental science class: Comparison of public and Shahed secondary school students in Sanandaj*. National Conference on Thematic-Educational Knowledge (Content teaching knowledge), Ardabil, Farhangian University, Ardabil Province
- Kadivar, P. Farzad, V. Kavousian, J. Nikdel, F (2009). Validation of Pekran Academic Emotions Questionnaire, *Educational Innovations Quarterly*, Volume 8, Number 32: 7-38.
- Nazari Bolani, G. et al. (2019). Developing a Causal Model of School Well-Being Based on Achievement goals orientation, basic Psychological Needs with the Mediating Role of Emotional Creativity and Self-efficacy; *Modern Psychological Research*, No. 54:199-230
- Oriol, X & Amutio, A & Mendoza, M & Da Costa, S & Miranda, R. (2016). Emotional Creativity as Predictor of Intrinsic Motivation and Academic Engagement in University Students: The Mediating Role of Positive Emotions. *frontiers in psychology*. vol7:1243
- Pekrun, R & Goetz, T & Titz, W & Perry, R (2010). Academic Emotions in Students' Self-Regulated Learning and Achievement: A Program of Qualitative and Quantitative Research. *Educational Psychologist*. Volume 37, Issue 2, pp 91-105
- Sheikholeslami, R & Ghanbari Talab, M. (2018). Relationships between metacognitive knowledge and school well-being: Meditating role of academic emotions, *Quarterly of Applied Psychology*, Vol. 12, No. 3(47), 375-395
- Taghavi, H. (2017). *Investigating the mediating role of academic emotions in relation to emotional creativity and academic motivation of female high school students in Birjand*, Birjand University
- Valikhani, A. et al. (2016). Predicting critical thinking based on emotional creativity in Shiraz University Students, *Educational Research*, No. 33: 46-32.



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