

ANALYSIS OF THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND SELF-EFFICACY AND THEIR POSSIBLE EFFECTS ON ACADEMIC PERFORMANCE(A CASE STUDY)

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Abstract

Constant evaluation of the academic performance of students along academic years and analysis of associated factors form one of the substantial pillars of improvement of the quality of every educational system(Thomas 2009).Academic performance of university students is among the issues that have attracted the attention of leaders and authorities of societies as well as researchers(*Bradberry, et al. 2007*). The present research was aimed to analyze the relationship of emotional intelligence and self-efficacy with academic performance and to predict the effects of emotional intelligence and self-efficacy on the academic performance of students of Islamic Azad University of Urmia from 2013-2014. The statistical population included all students of the Islamic Azad University of Urmia in the 2013-2014 academic year. In order to determine the sample size, the Morgan table was used. Next, using the stratified random sampling method the sample was obtained from different majors presented in the Islamic Azad University of Urmia in proportion to the statistical size of each major. The emotional intelligence scale by Austin et al. (2004) and the general self-efficacy scale (GSES) by Sherer and Adams (quoted by Ibrahimi, 1996) were used to collect data. The academic performance of students was also calculated during a specific period of time in proportion to their academic failure or success. In addition, the validity of the questionnaires was assessed based on the feedbacks of experts. Reliability of questionnaires was also calculated using the Cronbach's alpha within two weeks and with 30 samples randomly selected from the statistical population. In order to analyze the data, the correlation coefficient statistical methods and multivariate regression statistical inference method were used.

Keywords: emotional intelligence, self-efficacy, academic performance

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Introduction

Constant evaluation of the academic performance of students along academic years and analysis of associated factors form one of the substantial pillars of improvement of the quality of every educational system(Thomas 2009). This considerably contributes to the formulation of a better curriculum, qualitative improvement of education, and enhancement of performance of authorities (Shams & Farshbandfar, 1995). Academic performance of university students is among the issues that have attracted the attention of leaders and authorities of societies as well as researchers (Bradberry, et al. 2007). It has always been important to know the factors influencing the academic progress and success of university students as well as the share of each factor (Tabatabai, 1997).

Intelligence, as a substantial characteristic that causes interpersonal differences, has always been considered by humans since the beginning of the written history (Vang & Love, 2003). It was Salovey and Mayer (1999) that for the first time introduced the term “Emotional Intelligence” in response to the following question: Why two individuals with equal intelligence quotients (IQ) can achieve different levels of success and progress? Emotional intelligence refers to the infrastructural traits that are completely different from intellectual ability (Bradberry & Greaves; translated by Ibrahim, 2008).

Emotional intelligence (EI) includes the awareness, regulation and accurate expression of a range of emotions. Hence, the ability to understand, express and control these emotions is one of the important dimensions of emotional intelligence (Shamradloo, 2004). In this regard, Salovey and Maye (1998) stated that possession of emotional intelligence can provide for enhancement of many behavioral functions including academic performance.

Performance standards are standards learned through direct and indirect human experiences. After these standards are learned, they are considered to be a basis of self-evaluation(R. Chiva .J. Alegre , 2008). If someone shows a performance in a particular situation that complies or exceeds his/her standard, he/she considers the performance to be positive. But if the performance is lower than the standards, it is considered to be negative. An example includes the perceived personal efficacy standard or perceived self-efficacy standard that plays an important role in a person’s routine behavior. According to Bandura (2000), since people with higher perceived personal efficacy standards have more control over circumstances, they experience a lower level of self-confidence. Sometimes a person’s perceived self-efficacy does not match his/her actual

self-efficacy. Such a person may find his/her efficacy at a low level while it is actually at a high level, vice versa. Under the most favorable conditions, the person's desires match his/her capabilities. In fact, self-efficacy is a degree of a person's trust in his/her capabilities to accomplish specific tasks. Bandura's self-efficacy theory stresses the role of a person's self-confidence and self-esteem as well as his/her trust in his/her abilities to accomplish the required task (Bandura & Schunk, 2004).

In this regard, Greene, Miller, Crowson and Akey (2004) introduced self-efficacy as an important factor involved in the improvement of academic performance. In addition, Bandura (2000) considers self-efficacy to be a product of a person's determination and abilities which can enhance his/her activities.

Accordingly, based on the effects of emotional intelligence and self-efficacy on academic performance, the following question is raised in this research: What is the relationship of emotional intelligence and self-efficacy with academic performance of university students of the Islamic Azad University of Urmia?

Research Significance and Necessity

Academic performance and its place in educational systems are important issues. As an important educational issue, academic performance has a close relationship with improvement of quality of universities (McDonald, 2001). Academic performance is the basis of assessing achievements of students in a specific period. It is also the first priority in educational development plans all over the world (Lindman, Duke and Wilkerson, 2001).

In order to predict the academic status of university students, determination of appropriate criteria and variables is among the most important issues in studies involving researchers from education and psychology fields. Numerous studies have been carried out on the prediction of academic performance (Jensen, 1998). Academic performance is influenced by several biological, psychological and social dimensions (Boukartes, 1996). Intelligence is a substantial variable involved in prediction of academic performance of university students. This factor has been under study since a long time ago. In this regard, Extromer and Fernandes (2005) introduce emotional intelligence as a major predictor of improvement of performance of individuals in different aspects of life.

Another important factor that can influence the academic performance of university students is self-efficacy. Bandura (2000) defines self-efficacy as "individuals' beliefs in their own abilities

to accomplish tasks". Armor et al. (1976) for the first time introduced students' self-efficacy as "the limit by which students believe they can control their performances".

In a study, Wollters (2004) indicated that self-efficacy can contribute to the improvement of academic performance of university students.

Therefore, it is necessarily important to consider emotional intelligence and self-efficacy of university students as variables that can provide for enhancement of academic performance of students. This research was also focused on this effect.

Research Objectives

Primary objectives:

- 1- Analysis of the relationship of emotional intelligence and self-efficacy with academic performance of students of the Islamic Azad University of Urmia
- 2- Prediction of the effect of emotional intelligence and self-efficacy, as independent variables, on the academic performance (as the dependent variable) of students of the Islamic Azad University of Urmia

Secondary objectives:

- 1- Analysis of the relationship between emotional intelligence and academic performance of students of the Islamic Azad university of Urmia
- 2- Analysis of the relationship between self-efficacy and academic performance of students of the Islamic Azad University of Urmia
- 3- Determination of the role of emotional intelligence and self-efficacy (as independent variables) on the prediction of academic performance (as the dependent variable) of students of the Islamic Azad University of Urmia

Research Variables

Emotional intelligence: It is the independent variable for this research.

Self-efficacy: It is the second independent variable for this research.

Academic performance: It is the research dependent variable.

Research Questions

Primary questions:

- 1- Is there any relationship between emotional intelligence and self-efficacy on one hand, and academic performance of students of Islamic Azad University of Urmia, on the other hand?

- 2- What roles do emotional intelligence and self-efficacy (as independent variables) play in the prediction of academic performance (as the dependent variable)?

Secondary questions:

- 1- Is there any significant relationship between emotional intelligence and academic performance of students of the Islamic Azad University of Urmia?
- 2- Is there any significant relationship between self-efficacy and academic performance of students of the Islamic Azad University of Urmia?
- 3- Is the relationship of emotional intelligence and self-efficacy with academic performance of students of the Islamic Azad University of Urmia significant?

Research Background

Razavian Shad (2005) carried out a study to analyze the relationship between emotional intelligence and academic performance of 380 male and 180 female students. The students were selected using the multistage random sampling method. Research results revealed that there is a positive relationship between emotional intelligence and academic performance of school students.

Khishtandar (2006) also conducted a study to analyze the relationship of emotional intelligence and social support with life satisfaction among high school students in the Booyin Zahra City. Results indicated that there is a significant relationship between emotional intelligence and life satisfaction among students.

Bakhtiarpour et al. (2009) carried out a study titled "Relationship of Locus of Control, Perfectionism and Self-efficacy with Test Anxiety and Academic Performance in University Students". Results of this study showed that there is a significant relationship between self-efficacy and academic performance of university students.

Amir Mostaqi (2002) studied and compared the relationship of self-efficacy and self-regulation with academic performance.

Carrol (2009) analyzed the relationship between self-efficacy and academic performance. His findings suggested that there is a positive significant relationship between self-efficacy and academic performance.

Chang and Solomon (2010) performed a research to study the relationship of stereotypes, state anxiety, and self-efficacy with academic performance. Research results suggested that there is a positive significant relationship between self-efficacy and academic performance.

Codier, Kamikawa, Barbara, Kooker and Shultz (2009) also found out that emotional intelligence positive influences professional performance.

Thomas (2009), carried out a study titled “Analysis of the Relationship between Emotional Intelligence and Self-Effectiveness in 120 Organizational Staff”. Results of this study showed that there is a positive significant relationship between emotional intelligence and organizational performance of staff.

Materials and Methods

It was an applied research with respect to its objective and was an analytic-descriptive research regarding its analysis method. In this research, the relationship of emotional intelligence and self-efficacy with academic performance was studied. Moreover, the effects of emotional intelligence and self-efficacy on the academic performance of students of the Islamic Azad University of Urmia were also analyzed.

Data Collection Scales: In order to collect data for this research the following scales were employed:

A) Emotional Intelligence Scale

In order to measure emotional intelligence of students, the revised version of the emotional intelligence scale by Austin et al. (2004) was employed. This is a self-report questionnaire formulated based on the 5-point Likert scale. It measures opinions of participants (responders) through 41 questions (Austin et al., 2004).

B) Self-Efficacy Scale

The self-efficacy scale was developed by Sherer and Adams (quoted by Bakhtiari, 1996). This questionnaire is composed of 17 items and every participant answers each item based on a five-point Likert scale.

C) Academic Performance

In this research, the academic performance of university students was studied based on their academic failure or success in a specific period.

The validity of scales was assessed based on the feedbacks given by experts. In order to assess the reliability of the questionnaires, Chronbach’s alpha was used along with 30 members of the statistical population within two weeks. The resulting Chronbach’s alpha coefficient was 92%, which showed high reliability of questionnaires.

Statistical Population, Sample Size, and Data Analysis Method

A) Statistical population

The statistical population for this research included all students of the Islamic Azad University of Urmia in the 2013-2014 academic year.

B) Sample and sampling method

The Morgan table was used to determine the required sample size. Next, using the stratified random sampling method samples were taken from each major.

C) Data analysis method

After preparing the questionnaire and collecting completed questionnaire, the correlation coefficient statistical methods as well as multivariate regression statistical inference methods were used to analyze the data at a significance level of 0.05. Data analysis and statistical tests were all performed in the SPSS 19 software. Results of the aforementioned tests and analyses are presented in the following.

Results

The Pearson correlation coefficient was used to measure the linear relation between emotional intelligence and academic performance and a Pearson correlation coefficient of 86% was obtained. The significance level was also 0.000. Hence, it is concluded that at a significance level of less than 5%, the relationships remains significant as shows in table 1. This shows a strong linear relationship between emotional intelligence and academic performance of students of the Islamic Azad University of Urmia. Moreover, the correlation coefficient obtained for self-efficacy and academic performance (as two variables) was 66% at a significance level of 0.01 as show in table 2. Therefore, the relationship between these two variables is significant at a significance level of 0.05. This also indicates a strong linear relationship between self-efficacy and academic performance. Next, in order to predict the effects of emotional intelligence and self-efficacy (as two independent variables) on academic performance (as the dependent variable) the multistage regression method was used. Results of this analysis are also presented below. The correlation coefficient for the regression model was obtained to be 0.95%, which shows that this regression model is suitable for variables. Moreover, the determination factor was obtained to be 0.9025 which shows that the two independent variables are highly capable of predicting the dependent variable.

According to the regression analysis table and the large value obtained for the F statistic (134.34), it is concluded that the regression is highly significant. According to the regression coefficients column, the regression equation is expressed as follows:

$$E(Y|x_1, x_2) = 65/2 + 0/435 x_1 + 1/075x_2$$

As you see in above equation, Beta_0 equal 65/2 which indicates Constant in regression equation. Beta_1 obtained 0/435 which indicates the effect of x_1 in regression predict than less to effect of x_2 which equal 1/075. So the effect of x_2 is more than the effect of x_1 in predict regression models.

According to the weights of the resulting coefficients it is concluded that the role of emotional intelligence in the academic performance of university students is more than the role of self-efficacy.

Table 1

academic performance	Correlation Sig
emotional intelligence	0/86 0/000

Table 2

academic performance	Correlation Sig
self-efficacy	0/66 0/01

Discussion

Emotional intelligence is the skill to display one's own and other people's emotions, to separate between different emotions and label them properly, and to use emotional information to guide intellectual and performance. Self-efficacy is the degree or power of one's belief in one's personal capability to complete tasks and reach goals. Psychologists have studied self-efficacy from several outlooks; this can be seen as the ability to continue and a person's ability to succeed with a task (S.A. Hashemi. 2012). Academic achievement or (academic) performance is the

outcome of education the extent to which a student, teacher or institution has achieved their scholastic aims. Academic success is usually restrained by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important procedural knowledge such as skills or declarative knowledge such as facts (M. Razavian Shad. 2005).

Continuous assessment of the academic performance of students beside academic years and analysis of linked factors form one of the substantial leaders of improvement of the quality of every educational organism. This significantly contributes to the design of a better program, qualitative improvement of education, and enhancement of performance of authorities. Academic performance of university students is among the matters that have concerned the helpfulness of leaders and authorities of societies as well as researchers. It has always been important to know the factors influencing the academic progress and success of university students as well as the share of each factor

In this research was attempt to analyze the relationship of emotional intelligence and self-efficacy with academic performance and to predict the effects of emotional intelligence and self-efficacy on the academic performance of students of Islamic Azad University of Urmia from 2013-2014 and answer to Primary questions that Is there any relationship between emotional intelligence and self-efficacy on one hand, and academic performance of students of Islamic Azad University of Urmia, on the other hand? And what roles do emotional intelligence and self-efficacy (as independent variables) plays in the prediction of academic performance (as the dependent variable)? That The Pearson correlation coefficient 86% was obtained. Next, in order to predict the effects of emotional intelligence and self-efficacy on academic performance the multistage regression method was used.

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