

The Relationship between Emotional Intelligence and Academic Achievement of Students in Virtual Courses in Iran

Dr. Negin Barat Dastjerdi
Assistant Professor, Faculty of Educational Sciences and Psychology,
University of Isfahan, Iran
dastjerdey@gmail.com

Abstract: The purpose of study was relationship between emotional intelligence and academic achievement of students in virtual courses in Iran. The research method was descriptive and correlation. The study sample was 300 of students that study in virtual university during the academic year of 2010-2011 in of Iran through random sampling method selected. Data was analyzed by SPSS software. The result showed there was significant relationship between emotional intelligence and academic achievement. Result indicated three sub component of emotional intelligence such as optimism and positive attitude, understand own emotions and others and Controlling feelings and emotions were highly correlate with academic achievement but social skills component was not correlate with academic achievement of students. Also there is significance correlation between sex and study of fields and emotional intelligence and no significance correlation between age and emotional intelligence.

[Negin Barat Dastjerdi. **The Relationship between Emotional Intelligence and Academic Achievement of Students in Virtual Courses in Iran.** *J Am Sci* 2013; 9(6): 466-470]. (ISSN: 1545-1003). <http://www.jofamericanscience.org>. 58

Key words: emotional intelligence; academic achievement; virtual courses; students.

1. Introduction:

The issue of individual differences in intelligence as a fundamental characteristic of human beings is the beginning of human history. Of baseline of intelligence often cognitive aspects such as memory and problem solving emphasized. Emotional intelligence combines emotions and intelligence. Salovey and Mayer (1990) defined emotional intelligence as “the ability to monitor one’s own and others’ emotions, to discriminate among them and to use this information to guide one’s thinking and actions”. The definition of Salovey and Mayer (1996) focuses on four abilities: perception, use, understanding and management of emotions. Perception of emotions is the ability of discovering and perceiving emotions in faces, pictures and cultural works. Use of emotions is the ability to use emotions for facilitating cognitive activities such as thinking and problem solving. Understanding emotions is the ability to comprehend the language of emotions and to understand the complex relationships between emotions. Management of emotions means the ability of managing owns emotions and others’ emotions. (Salovey and Grewal, 2005). Especially, the abilities of knowing oneself (self-consciousness), self-management, motivation, empathy, social skills and communication skills are determinative for emotional intelligence. “Self-consciousness” explained as one’s deeper understanding of own emotions, powers, weaknesses, needs and awareness of self-existence whereas “self management” is the liberation from being slave of one’s emotions, namely directing the emotions as desired;

“motivation” is going beyond expectations and not losing the feeling of success even in hard times; “empathy” is the ability to understand emotions and needs of others and thus putting oneself into others’ shoes; “social skill” is the ability to establish relationships with other individuals and to ensure sustainability of such relationships, creating and managing a team and “communication skill” is the ability of expressing yourself clearly and entirely as well as listening to the others attentively and fully, accurately understanding what they say (Goleman , 2004).

Educational psychologist and researchers acknowledged that emotions are central to learning and teaching, and that an understanding of their role in the learner's experience is essential. An emotion expresses an individual's attempt to establish, maintain or change relationship with their environment on a matter of importance to that person (Krause et al, 2003). Intelligence usually refers to rational abilities and excludes the emotions. Additionally, intelligence is commonly used in education where it is linked to paper tests design to measure rational thinking (Matthews, 2006). Emotional intelligence includes the measurement of the following: understanding and managing one’s own emotions, motivating oneself, recognizing emotions in others, and handling a relationship with others (Ashton & Webb, 1986) there has been meager literature regarding students’ emotions (Bar-On, Handley& Fund 2006). Thus one reason for the significance of this study is that it highlights the importance of the under-researched topic; students’

emotions. Being a student can be demanding and involves difficulties with a heavy workload and long hours of study which can result in feelings of frustration. Emotionally intelligent students are better able to place themselves in a positive state of mind. They are likely to know how to avoid dysfunctional emotions and use emotions in adaptive ways to ease feelings of frustration (Birol et al., 2009).

According to Salovey and Mayer (1990), Emotional Intelligence is being able to monitor one's own and other's feelings and emotions, to discriminate among them, and to use this to guide one's thinking and actions. Again, Salovey and Mayer (1993) wrote that an emotionally intelligent person is skilled in four areas: identifying, using, understanding, and regulating emotions. Similarly, Goleman also stressed that emotional intelligence consists of five components: Knowing one's emotions (self-awareness), managing them, motivating self, recognizing emotions in others (empathy), and handling relationships.

Brown et al. (2003) indicated that emotional intelligence in the form of empathy, use of emotions, relation management and self-control is positively related to decision-making competence, while use of emotion and self control has a negative relation with commitment. Kaufhold and Johnson (2005) indicated that teachers improving their emotional intelligence emphasized on the values of individual differences and promote the cooperative learning so as to solve problems and guide the students to promote social competence. Academic achievement can be referred here as academic intelligence, by academic intelligence means a typically defined by conventional definition and tests comprising so-called general ability and related abilities (Bar On, 2000). Students' ability to express his or her personality and to enjoy rich and complex social relations depends largely on his mastery of academic matters (Nabeel and Nazir, 2003). Shahzad (2005) proposed to institutionalize a formal counseling program for their personality nourishment. Considerable researches have suggested that motivational dynamic traits are important along with abilities and personalities traits in predicting academic school learning (Boyle et al 1989). Specifically, Finnegan (1998) argued that school should help students learn the abilities underlying the emotional intelligence. This he believes could lead to achievement from formal education years of the child. Likewise, Abisamra (2000) reported that there is a positive relationship between emotional intelligence and academic achievement. He therefore canvassed for inclusion of emotional intelligence in the schools' curricula. Drago (2004) analyzed the relationship between the academic success and

emotional intelligence for nontraditional college students. Some of the students were better prepared for the university environment because of their cognitive abilities. Thus, by studying the role emotional intelligence played in academic success, predictions of success and retention were possible. Students' abilities to identify, use, and handle their emotions resulted in higher academic achievement. Therefore, incorporating emotional intelligence awareness into academic programs may help students obtain higher academic success and potentially lead to their retention and completion of their degree programs. Moafian and Ghanizadeh (2009) concluded that there is significant correlation between emotional intelligence and teachers' self-efficacy. Further analysis by using regression with multiple variables indicated that dimensions of emotional self-awareness, interpersonal relation, and solving-problem are significant predictors of teachers' self-efficacy. Adeyemo (2007) indicated that there is significant relationship between emotional intelligence, educational competence and educational achievement. Parker, Duffy, Wood, Bond, and Hogan (2005) investigated the relationship between selected emotional intelligence skills and the academic success of newly enrolled university students who had left high school within two years. The students in their study were students with demonstrated academic success, achieving 80% or better in their course work, and students who were academically unsuccessful, achieving 59% or less in their course work. Parker et al. (2005) established that students who performed better academically also had higher emotional intelligence skills. Differences were noted between the two groups with the greatest difference revealed in stress management. Academically brighter students displayed increased concentration, was an integral factor of stress management. Lesser differences were yielded in adaptability and intrapersonal ability. Jaeger (2003) analyzed the effects of emotional intelligence training on academic performance. Five groups of graduate-level management students completed initial and post emotional intelligence inventories. Only one of the groups received emotional intelligence instruction during their courses whereas the other four groups received no formal or informal emotional intelligence instruction or discussion. With beginning level of knowledge and teaching effectiveness controlled for, final grades were used to evaluate student academic performance. Jaeger (2003) determined that the group receiving the emotional intelligence curriculum significantly increased their emotional intelligence quotient scores and performed better academically than the four groups of students who did not receive such training. As such, Jaeger (2003) concluded that

higher levels of emotional intelligence could be correlated with improved academic performance. Goleman (1996) have also stated that emotional intelligence increases with age and it can be learned, cultivated and increased in adulthood. In a series of longitudinal studies, it was shown that people can change their emotional intelligence competencies over two to five years (Boyatzis, 2000). Mayer et al. (2000) also showed with a series of studies that emotional intelligence increased with age and experience which qualifies it as ability rather than a personality trait. Wong and Law (2002) working with different samples have found that, age is positively correlated with emotional intelligence across different job situations. Another study examining the long term stability (32 months) of emotional intelligence-related abilities over the course of a major life transition (The transition from high school to university) was reported by Parker, Saklofske, Wood, Eastabrook et al. (2005). During the first week of full time study, a large group of undergraduates completed the EQ-i: short; 32 months later a random subset of these student (N=238), who had started their postsecondary education within 24 months of graduating from high school, completed the measure for a second time. The study found EI scores to be relatively stable over the 32 month time period. Emotional intelligence scores were also found to be significantly higher at time 2; the overall pattern of change in emotional intelligence - levels was more than can be attributed to the increased age of the participants.. The study carried out on medical students by Austin et al. (2005) clarified that emotional intelligence of female students is significantly higher than male students. The study of O'Connor Jr. and Little (2003) examined the relationship between emotional intelligence and academic achievements of university students by using an emotional intelligence scale based on both self-report and skill. The study concluded that regardless of the scale used for measuring the type of emotional intelligence, emotional intelligence is not a powerful indicator of academic achievement. In essence, the importance of emotional intelligence on academic achievement has been found to be very significant .Nevertheless, and in spite of the studies reviewed, there is still a need to further investigate the relationship of emotional intelligence to academic achievement most especially in different environment such as virtual spaces in Iran that this type of education is new. Regarding the contradictory results of different researches, the present research tries to study the relation between emotional intelligence and academic achievement of students in virtual courses in Iran.

The research hypotheses in this study are:

1. There will be no significant relationship between emotional intelligence and academic achievement of students in virtual courses.
2. There will be no significant relationship between sub components of emotional intelligence and academic achievement of students in virtual courses
3. There will be no significant relationship between emotional intelligence and demographic variables such as sex, age and study fields of students in virtual courses.

2. Material and Methods

The research method was descriptive and correlation. 300 of students that study in virtual university during the academic year of 2010-2011 in of Iran through random sampling method as study samples were selected. The Pytraydz and Farnham (2003), emotional quotient inventory (EQ-I) was being used as a tool to collect data .This questionnaire have a 30 questions of which produced any score from 1 to 7 (strongly disagree to strongly agree) awarded. This questionnaire measures of emotional intelligence in the four areas are: 1 - understand own emotions and others 2 - Controlling feelings and emotions 3 - social skills 4 - optimism and positive attitude. Peterayz and Farnham (2003) using internal consistency reliability method of the questionnaire 86% reported it and Coefficient for this questionnaire was calculated using Cronbach's alpha of 84% was obtained. Also, as part of measure, data on academic achievement were collected from the university's record of student's scores in their previous semester. Data was analyzed by SPSS software.

3. Results

The findings obtained from the research are presented according to the sub problems and briefly interpreted as follows.

Table 1. Descriptive Statistics for scores on emotional intelligence and academic achievement

variable	Number	Means	Std. Deviation
emotional intelligence	300	325/76	34/68
academic achievement	300	19/85	1/68

Table 2. Correlation between emotional intelligence and academic achievement

variable	variable	Pearson Correlation	number	sig
emotional intelligence	academic achievement	0/128	300	0/000

As seen in the above table the coefficient of correlation is 0/128 and Sig is 0/000 which is significant at 0.05 level so there is significant relationship between emotional intelligence and academic achievement.

Table 3 indicates descriptive analysis relating to sub components of emotional intelligence of students. According to data of above table, means for optimism and positive attitude is 66/31, understand own emotions and others 47/73, Controlling feelings and emotions 24/98 and for social skills 23/32.

Table 3. Descriptive statistics relating to sub components of emotional intelligence of students

Components of emotional intelligence	Number	Means	Std. Deviation
optimism and positive attitude	300	66/31	15/02
understand own emotions and others	300	47/73	10/58
Controlling feelings and emotions	300	24/98	9/32
social skills	300	23/32	5/45

Table 4. Correlation between sub components of emotional intelligence and academic achievement

components	emotional intelligence	optimism and positive attitude	understand own emotions and others	Controlling feelings and emotions	social skills	Student's scores
emotional intelligence	1 300					
optimism and positive attitude	0/142* 0/14 300	1 300				
understand own emotions and others	0.066 0/259 300	0/277** .000 300	1 300			
Controlling feelings and emotions	0.128* 0.026 300	-0.051 0.380 300	0.394** .000 300	1 300		
social skills	0.239** .000 300	-0.089 0.125 300	0.182** .002 300	0.091 .115 300	1 300	
student's scores	.007 .900 300	-.036 .531 300	.024 0.675 300	-.038 .510 300	.059 .308 300	1 300

Table 4 showed Correlation between sub components of emotional intelligence and academic achievement. According to data three sub component of emotional intelligence such as optimism and positive attitude, understand own emotions and others and Controlling feelings and emotions were highly correlate with academic achievement but social skills component was not correlate with academic achievement of students.

Table 5. Correlation between emotional intelligence and demographic variables (sex, age and study fields).

variables	Sum of Squares	Mean Square	df	F	sig
sex	99.936	33.312	1	1.520	./210
age	9.781	9.781	3	./446	./505
Study fields	393.961	196.981	4	8.988	./000

According to data of table 5, there is significance correlation between sex and study of fields and emotional intelligence but no significance correlation between age and emotional intelligence.

4. Discussion

Today, the importance of emotional intelligence is gradually being acknowledged and the number of studies made in this field is increasing gradually. The main objective of this study was determined relationship between emotional intelligence academic achievements of students in virtual courses. The results of this study showed that there is significant relationship between emotional intelligence and academic achievement. This result goes line with the findings of Drago (2004), Adeyemo (2007), Parker, Duffy, Wood, Bond, and Hogan (2005), O'Connor Jr. and Little (2003). Another result indicated three sub component of emotional intelligence such as optimism and positive attitude, understand own emotions and others and Controlling feelings and emotions were highly correlate with academic achievement but social skills component was not correlate with academic achievement of students. Also there is significance correlation between sex and study of fields and emotional intelligence. This result goes line with the findings of Bender (2006), Austin

et al. (2005), Although Goleman (1996), Mayer et al. (2000), Wong and Law (2002) claims that there is relationship between age and emotional intelligence, but the findings of this study confirmed that no significance correlation between age and emotional intelligence .

Corresponding Author:

Assistant Professor, Faculty of Educational Sciences and Psychology,
University of Isfahan, Iran.dastjerdey@gmail.com

References:

1. AbiSamra N. The relationship between Emotional Intelligent and Academic Achievement in Eleventh Graders. *Research in Education* 2000; 661.
2. Adeyemo D A. *Psych Develop Soc* 2007; 19 (2):199-213.
3. Ashton P T, Webb R B. Teachers' Sense of Efficacy, Classroom Behavior, and Student Achievement. New York & London: Longman1986; 125-144.
4. Ashton P T, Web RB, Making a difference, New York: Longman 1986; 23.
5. Austin E J, Saklofske D H, Egan V. Personality, well-being and health correlates of trait emotional intelligence. *Personality and Individual Differences* 2005; 38: 547–558.
6. Bar-On R. Emotional and social intelligence: Insights from the Emotional Quotient Inventory, (EQ-i), in: Bar-On R. and Parker J.D.A., (Eds), *Handbook of emotional intelligence*. Jossey-Bass, San Francisco 2006; 123.
7. Bar-On R. The emotional intelligence inventory (EQ-I): Technical manual, Multi-Heath Systems, Inc. Toronto, Canada2000; 45.
8. Birol C , Atamturk H, Silman F, Sensoy S. Analysis of the emotional intelligent level of teachers. *Proceeded Social. Behavior* 2009; 1: 2606–2614.
9. Boyatzis R, Goleman D, Rhee K. Clustering competence in emotional intelligence: Insights from the emotional competence inventory. In R. Bar-On & J. Parker (Eds.), *the handbook of Emotional Intelligence: Theory, development, assessment, and application at home, school, and in the workplace* San Francisco, CA: Jossey-Bass 2000; 343-362.
10. Brown C, George-Curran R, Smith M. The role of emotional intelligence in the career commitment and decision-making process. *Journal of Career Assessment* 2003; 11(4): 379-392.
11. Drago J M. The relationship between emotional intelligence and academic achievement in non-traditional college students. Doctoral Dissertation, Walden University 2004; 79-82.
12. Goleman D. *Emotional intelligence*. Bantam Books, New York, 1996.
13. Goleman D. *Emotional intelligence: Why it can matter more than IQ*. New York, NY: Bantam Books 1996; 43-50.
14. Goleman D. *Primal leadership: Realizing the power of emotional intelligence*. Boston, MA: Harvard Business School Press, 2002.
15. Jaeger A J. Job competencies and the curriculum: An inquiry into emotional intelligence in graduate professional education. *Research in Higher Education* 2003; 44: 615-639.
16. Kaufhold J A, Johnson L R. The analysis of the emotional intelligence skill and potential problem areas of elementary educators. *Education* 2005; 125 (4): 615-626.
17. Matthews B. *Engaging Education: Developing Emotional Literacy, Equity and Co-Education*, Open University Press, England, 2006.
18. Mayer J D, Salovey P, Caruso D. *Instruction manual for the MSCEIT: Mayer-Salovey-Caruso Emotional Intelligence Test*. Toronto, Canada: Multi-Health Systems, 1999.
19. Mayer J D, Salovey P, Caruso D. Emotional intelligence: Theory, findings, and implications. *Psychological Inquire* 2004; 15:197-215.
20. Moafian F, Ghanizadeh A. The relationship between Iranian EFL teachers' emotional intelligence and their self-efficacy in Language Institutes *System* 2009; 37(4): 708-718.
21. Nabeel T, Nazir M. Relationship between Intelligence and Academic Achievement. *Journal of .Education* 2003; 1: p.52.
22. O'Connor J R, Little I S. Revisiting The Predictive Validity of Emotional Intelligence: Self-Report Versus Ability-Based Measures. *Personality and Individual Differences* 2003; 35: 893–1902.
23. Parker J D A. Emotional intelligence and academic success: Examining the transition from high school to university. Presentation at the annual meeting of the Canadian Psychological Association, Quebec City, Quebec, 2002.
24. Parker J D A, Duffy J M, Wood L M, Bond B J, Hogan M J. Academic achievement and emotional intelligence: Predicting the successful transition from high school to university. *Journal of the First-Year Experience & Students in Transition* 2005; 17(1): 67-68.
25. Petrides K V& Furnham A. The Role of Trait Emotional Intelligence in a Gender-Specific Model of Organizational Variables. *Journal of Applied Social Psychology* 2006; 36: 552–569.
26. Salovey P, Mayer, J D. Emotional intelligence, Imagination, Cognition and Personality 1999; 9: 185–211.
27. Shahzad K. *A Comprehensive Orientation to Guidance and Counseling*, Shakeel Sons, Rawalpindi, Pakistan, 2005.
28. Vela R. The role of emotional intelligence in the academic achievement of first year college students. Unpublished doctoral dissertation, Texas A&M University-Kingsville 2003; 9 (3):185-211.
29. Wong C S, Wong P M, Chau S L. Emotional Intelligence, Students' Attitudes towards Life and The Attainment of Education Goals: An Exploratory Study in Hong Kong. *New Horizons in Education* 2001;44: 1 – 11.