



Meta-Analysis of the studies on the relationship between emotional intelligence (EQ) and academic success among students in Iran

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Abstract: The present study aimed to conduct a meta-analysis of the studies on the relationship between emotional intelligence (EQ) and academic success among students in Iran. In order to meet the purpose of the study, it was asked how the relationship between emotional intelligence and academic success is in Iran. In order to answer the research question of meta-analysis the studies on the relationship between emotional intelligence (EQ) and academic success among students in Iran, fifteen articles which were reliable based on their research methods were selected from the electronic database of SID for meta-analysis. These articles included sixteen effect size in terms of the relationship between emotional intelligence (EQ) and academic success. Findings of the study indicated that the effect size of the relationship between emotional intelligence (EQ) and academic success in the articles published in SID, Iran was 0.543. Results of meta-analysis showed that the effect size of the relationship between emotional intelligence (EQ) and academic success in Iran based on Cohen's criteria was higher than average which showed the importance of reinforcing emotional intelligence (EQ) among the students.

Keywords: emotional intelligence (EQ), academic success, meta-analysis

Introduction

Statement of the problem

Academic success and preventing academic failure are the most important concerns of teachers, school principals and parents of students (Logan, 2005). Academic success refers to the learned or acquired abilities of a person in academic subjects which is measured through standard test or teacher-developed tests (Navidi, 2013). Generally, this term means the academic learning which can be studied as the general issue of the factors related to personal difference and factors related to school and education system (Soleimannejad and Mehryar, 2001). The opposite point of academic success is academic failure which based on numerous studies has a significant effect in future of a person and also severe costs for family and society (GolshanFumani, 2006).

In Iran, this is one of the most important educational problems and every year ten billions are spend from the national budget and makes the potential forces and human capital of the society useless. Thus, considering the factors leading to academic success and prevents academic failure are significantly important.

Different factors affect the academic success of students which are divided into four groups by the educational experts including: personal, academic, family and social factors (Zahrakar, 2005).

Among the personal factors, the most effective factors on educational performance are the intelligence and mental ability of a person. There have been many definitions suggested for intelligence which can be categorized as below:

1. Definitions emphasizing on compatibility and adaptability with the environment, new condition or various conditions
2. Definitions focusing on learning ability and training in general
3. Definitions emphasizing on the abstract thinking; the ability to use a large number of verbal and numerical concepts and symbols (Phares and Trull).

However, it is obvious that based on these definitions intelligence only includes a limited part of abilities and so their dimensions should be recognized. One of these aspects or known human abilities is emotional intelligence. Goleman (1995) believes that emotional intelligence is another aspect of intelligence which plays more important role in individuals' success in various life dimensions than the cognitive intelligence. This term was first introduced by Salovey and Mayer (1990). Emotional intelligence is a type of ability including the perception capacity, cognitive instruments, application and management of a person excitement and others. Briefly, it can be stated that main competencies comprising emotional intelligence include the excitement perception of the self and others, perceiving the reasoning about excitements and managing them (Bar-on, 2000). Recognizing the importance of effective adaption with others has increased the attractiveness of emotional intelligence. Recently, the term emotional intelligence has been widely developed and there have been many studied in this regard specially in the context of education, personal life, business environment (Mahanian et al, 2006). Nelson and Low (2003) defined emotional intelligence as the intersection of advanced abilities and skills in self-perception and personal strength and weakness, creating effective and healthy relationships, communicating and working effectively with others, effective and healthy counter with the daily demands and pressures.

One of the reasons for dealing with emotional intelligence is the belief that emotional intelligence against the traditional concept of anesthetic is a better predictor of social success (Goleman, 1995). The studies of Brackett and Salovey (2004), Parker et al (2004), Boyle (2012), Nelson and Nelson (2013), Ekins and Low (2012), Oetrides et al (2004), Elias et al (2003), Gumora and Arsenion (2002), Samari and Tahmasbi (2007), Dehshiri (2006) and Besharat et al (2006) showed the relationship between emotional intelligence and academic success and based on the results of the study, one can consider the components of emotional intelligence as the predictors of academic success. However, the relationship between emotional intelligence and academic success is a challenging area which resulted in controversial studies in this regard.

Woitaszewski and Aalsama (2004) in a study on 39 smart teenagers through regression analysis found that emotional intelligence had no meaningful and significant effect on academic and social success. Based on what discussed and considering the important role of the academic success in preventing the huge economic damages and preventing damages to mental health of the learners and since there was not study published in Iran on meta-analysis of the relationship between emotional intelligence and academic success as studied by the present researcher, the present study to conduct a meta-analysis of the studies on the relationship between emotional intelligence (EQ) and academic success among students in Iran. In order to meet the purpose of the study, it was asked how the relationship between emotional intelligence and academic success is in Iran. The present study would provide a general understanding of the relationship between emotional intelligence and academic success in Iran and provides the condition for planning to increase emotional intelligence to improve the academic success of students.

Research question

Based on the studies conducted, how significant is the relationship between emotional intelligence (EQ) and academic success among students in Iran?

Research Method

Meta-analysis was used in order to meet the purpose of the study. Meta-analysis is a statistical method which is used to investigate the results of the similar but separate studies quantitatively (Sharon and Normand, 1999). Meta-analysis is the analysis of the analyses or analysis of a combination of the studies (Wolf, 1986). Meta-analysis is a statistical action to combine the results in order to find a general pattern (Carr, 2002 and Koretz, 2002).

Today, meta-analysis has a significant place in research area (Azkia and Tavakoli, 2003). Generally, the necessity of using meta-analysis can be summarized as: 1. High and increasing volume of the studies and the need to summarize them, 2. the incompatibilities, conflicts and controversies in results and the necessity to solve them, 3. Determining the effect size of the independent variable on the dependent variable based on each study, 4. Recognizing the modifying variables which affect the relationship between dependent and independent variable, 5. Recognizing the problematic research area, 6- recognizing the previous research studies (Rosenthal, 1991).

Corpus

Corpus of the study included all the articles published in SID journals on the relationship between emotional intelligence and academic success during the last ten years. The sample size in terms of reliability and validity was proper for the study. The key words used to search the articles included emotional intelligence + academic success, emotional intelligence, academic success, emotional intelligence and academic success, academic success +emotional intelligence.

Sample and Sampling

In this meta-analysis, the studies which had the accepted research method were selected as the sample including the articles having inclusive criteria. Inclusive criteria of the study included: 1. the study should be done in Iran, 2. the study should examine emotional intelligence and academic success factors, 3. The study should be a correlational or based on group comparison, 4. Results of the study should report the effect size or the statistics of both variables.

Instrument

In this meta-analysis, following instruments were used in order to collect the data:

First hand resources: in this study the studies having inclusive criteria were used.

Meta-analysis check list: this check list was used for extracting the required data for meta-analysis of the theses, researches and articles with inclusive criteria. The studies were selected which had the know reliability and validity.

Table 1 shows the selected studied for meta-analysis.

Table 1: the selected studied for meta-analysis

Title	Sample size	population	statistics	Statistical value	Sig.	Effect size
Relationship between emotional intelligence, self-concept and self-esteem and academic success (Tamanaiefar et al, 2010).		Female				
The relationship between emotional intelligence and academic performance (Zahrakar, 2007)		Male and female				
The relationship between emotional intelligence and academic performance of students (Dehshiri,		Male and female				

2007)						
The role of emotional intelligence in English language learning and academic success (Pishghadam, Ghonsooli, 2008)		Male and female				
The relationship between emotional intelligence and academic performance of students (Besharat et al, 2006)		Male and female				
Emotional intelligence training, alexithymia, general health and academic success (Nikogoftar, 2008)		Male and female				
Emotional intelligence, alexithymia and interpersonal problems (Besharat et al, 2008)		Male and female				
The relationship between emotional intelligence and academic success (Samari and Tahmasbi, 2007_)		Male and female				
Relationship between academic		Male and female				

activities, motivation, intelligence emotional and context variables and academic success of students (Lavasani et al, 2007)						
The relationship between emotional intelligence and academic success of the smart and normal students (Golestan et al, 2009)		Male and female				
The relationship between emotional intelligence and self-concept with academic success (Reison et al, 2014)		Male and female				
The relationship between emotional intelligence and academic success (LotfiAzimi, 2006)		Male and female				
the relationship between general health, emotional intelligence and nursery students' academic		Male and female				

success (Namazi et al, 2015)						
the relationship between general health, emotional intelligence and medical science students' academic success (Adib et al, 2013)		Male and female				
Relationship between academic activities, motivation, intelligence emotional and context variables and academic success of students (Lavasani et al, 2007)		Male and female				

Procedure

The research procedure included: problem statement, 2. stating the inclusive criteria, 3. searching the studies on the relationship between emotional intelligence and academic success for meta-analysis, 4. Coding the studies, 5. Evaluating the studies, 6. Developing research questions and hypotheses for meta-analysis, 7. Descriptive analysis, 8. Calculating effect size, 9. Describing and interpreting the effect size, and 10. Classifying the results of meta-analysis

Data Analysis

Since none of the researches related to the relationship between academic success and emotional intelligence collected for meta-analysis reported the effect size, in this meta-analysis, research statistics were converted and then calculated effect was interpreted size to R index using Cohen's Essential Guide to Effect Sizes for the index R with Hunter and Schmidt approach.

Results

Research questions: Based on the studies conducted, how significant is the relationship between emotional intelligence (EQ) and academic success among students in Iran?

Table 2 shows the statistical index of the effect size of the relationship between emotional intelligence and academic success.

Table 2: the statistical index of the effect size of the relationship between emotional intelligence and academic success

Statistical index	Number	of	Mean	effect	Standard	Standard	Z
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Dependent variable	Independent variable	studies N	size R	deviation of effect size SDR	error of effect size SDR	
Emotional intelligence	Academic success	15	0.543	0.410	0.011	44.02

Based on the data in table 2, the best estimation of the predicting variable (emotional intelligence) on criteria variable (academic success of student) was 0.543 which based on the Cohen's Essential Guide to Effect Sizes is more than average. Thus, it can be stated that based on meta-analysis, academic success has a significant relationship with emotional intelligence higher than average.

Conclusion

The fact that what factors would affect the academic success of the students has always been interested by the educational experts and psychologists. Of course, a series of individual and environmental factors and cognitive and non-cognitive factors affect student success. Development of research findings and the related results at the level of higher education denies any simple thinking for academic success. In explaining this finding, it is noteworthy that the structures associated with academic success are related to cognitive functions and memory capacities and related personal learning, while emotional intelligence is more related to individual success in interpersonal relationships (Kohsar et al, 2008). Goleman (2008) believes that there is no relationship between academic intelligence and emotional conditions. The smartest students may fail against nervous and impulsive instincts and those with high IQ may be incredibly in the wrong direction in their private life. Thus, although good performance in the field of the emotional intelligence can predict the success, emotional intelligence cannot be the only measures of progress and many factors affect the academic success of students.

About the obtained results and positive correlation between emotional intelligence and academic performance of students, it should be noted that due to the high emotional intelligence, mental health are socially productive and indicate better understanding of themselves and others feelings and emotions, better management of their emotions and others, to sympathize with others and good relationship with them, to motivate self and consider the self as valuable and capable of knowing and finally, having a positive attitude to life, satisfaction and enjoyment. It can have a positive correlation with academic performance.

In conclusion it can be stated that many researchers now believe that, if a person's emotion is empowered, he can better face the challenges of life. The emotional competence plays a major role in diagnosis of appropriate emotional responses in the face of everyday events, expanding the scope of insight and positive attitude about the events and emotions. Therefore, people who have emotional skills, have social support, satisfaction, mental health and academic success.

That is why in the past two decades, the industrialized countries have paid much attention to emotional intelligence and a lot of researches have been done on this topic and teaching social and emotional skills has been begun in learning environments and their work have demonstrated the importance of the subject. In our country, it is necessary to have sufficient attention to the issue in addition to education staff training and social skills training which are necessary for the success of each individual. The experts should make the teachers and school administrators aware of the importance of emotional intelligence and provide the knowledge necessary to help them consider emotional intelligence skills directly and indirectly in the curriculum and to teach them to students at schools.

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