The relationship between teachers' Emotional Intelligence with their female students' educational achievement in sixth grade at primary schools

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ABSTRACT: The current article has reviewed the relationship between Emotional Intelligence in teachers with educational achievement of their female students in sixth grade at primary schools at Tehran City based on teachers' viewpoint. To select sample group, 296 teachers were chosen by means of simple randomized sampling technique. The measurement tool for emotional intelligence is Emotional Intelligence Questionnaire with 33 questions and for variable of educational achievement in students, average or mean scores of lessons among students was used in each classroom. The reliability value of measurement tools was calculated by Cronbach Alpha coefficient as 0.76 in this test. Validity of tools was examined by means of face validity. Then, data were analyzed by correlation tests and stepwise regression where the results of correlation indicated that the variables of self- regulation and self- motivation had positive and significant relationship with educational achievement. Also results of stepwise regression showed that educational achievement is interpreted by variable of self- regulation
Key words: Emotional Intelligence (EI), Self- motivation, Empathy, Social Skill, Self- Awareness, Self- Regulation, Educational Achievement.

INTRODUCTION

It is one of the disclosed mysteries in psychology that despite of their value and importance among the public, lesson scores, Intelligence Quotient (IQ), or results of testing educational aptitude may not definitely predict that who could succeed in life trend. Namely, intelligence could not always predict the success. Under best condition, IQ may play role in prediction of educational and occupational achievement about 20% maximally and the rest 80% is related to Emotional Intelligence (EI) (Goleman, 2004). Concept of emotional intelligence shows why two persons with the same IQ may acquire very different level of success in their life. Emotional intelligence is one of the fundamental elements of human's behavior that acts separately and differently from cognitive intelligence (wisdom) (Bradbury & Greaves, 2007).

One of the advantages of emotional intelligence is exploitation from its acquired dimension that could be easily learned, developed, improved, and adjusted. Despite of this fact that identifying and measurement of emotional intelligence is much more difficult than cognitive intelligence and it could not be mentioned in work background but through identifying the nature of emotional intelligence and finding this point that how can employ it in our life we will be able to use all intelligence, education, and experiences perfectly that we have saved them during several years (Hassanzadeh, Kiadehi; 2011).

Students are trained by aiming at their educational achievement. Study on effective factors on educational achievement is a complicated issue so that it is related to physical, social, cognitive, and emotional growth in students and teachers. Many researchers have emphasized on the impact of mental and cognitive abilities on educational achievement. But it was demonstrated over the time that although mental and cognitive abilities are related to educational achievement to some extent and they may slightly predict educational achievement but they are not deemed as the only key for prediction of educational achievement so for this reason researchers have found a series of non- cognitive factors during recent years that may effect on educational achievement (Goleman, 1995; Bar-On, 2003). Among these non- cognitive factors, one can refer to emotional and social skills and abilities which are known as emotional intelligence and act as strong predictor for educational achievement (Parker et al, 2004; Bar-On, 2003). In other words, social and emotional abilities and competencies are considered as the factors or determinants and effective agents on quality of social relations and success in different life and professional fields (EisenbergET AL. 2000).

If we intend that teachers to be appropriate in terms of effectiveness and efficiency we should use scientific findings and principles in schools

environment so for the sake of students' educational achievement, we have to tend to study toward knowledge about value and importance of emotional intelligence and then developing and growth of this factor and eventually employing its skills in educational context and daily life. With respect to results came from the surveys and studies, it seems that teachers' emotional intelligence, as a very crucial factor, may cause improving their performance in teaching and training of students. In other words, creating skill in emotional intelligence elements and employing these skills including self- awareness, self- regulation, self- regulation, empathy, and social skills, may enhance mental health and educational achievement in students.

Research background

Despite of possessing IQ at high level, many persons could not be so successful in their life but inversely some other ones with average IQ passed through the route of achievement. This trend suggests that the impact of emotional intelligence on life situation at different levels is higher than scientific intelligence. Emotional intelligence is the capacity of perception, expression, understanding, using, and management of emotions in oneself and others (Mayer and Salovey, 1997). Term of emotional intelligence of Intelligence Quotient (IQ) scores was purposed for the first time by two psychologists such as John Mayer and Peter Salovey in 1990s. They expressed that those people who possess higher emotional intelligence may control their own and others' emotions; distinguish between positive and negative consequences of emotions; and use emotional information to guide thinking process and personal measures (Goleman, 1995). Emotional intelligence encompasses self- awareness, control stress- creation, persistence, enthusiasm, motivation, empathy, and social skills that enable person to firstly distinguish his/ her feelings and emotions properly and secondly to employ them duly and to describe them at third place (Mir Kamali, 2010).

The presence of emotional intelligence elements in individuals leads to their success in different dimensions of life and eventually it leads to type of friendship, sympathy, and ability to live with others, controlling anger and feelings etc. in general, deficiency in emotional intelligence elements during life various periods may lead to irrecoverable damages and numerous problems such as depression, isolation, severe dependence, aggression, committing hostile crimes, anger, constant anxiety, eating disorder, lack of controlling the emotions, lack of relationships with others etc. the noticeable point in emotional intelligence is in that this intelligence could

be learned so it can be trained and consolidated in all individuals. Mayer and Salovey (1999) have identified four components for emotional intelligence: 1) Recognizing emotions in oneself and others; 2) Application of emotion; 3) Ability to perceive and understand emotions; and 4) Management of emotions.

In an investigation, Goleman (2006) introduces elements of emotional intelligence as self- awareness, self- regulation, self- motivation, empathy, and social skills. Eric's findings (2009) signify that achievement will be realized when there is a mutual interaction between different dimensions of intelligence, social, scientific, and emotional perspectives and intellectual intelligence becomes the center of gravity for all intelligence.

Educational system is the key for reviving of a community and act as an impetus for the society that its mission is converting human resources into human capitals and primary school is the basic cornerstone for this holly institution for which in primary schools, seeds of commitment, piety, social adaptation, responsibility, self- control etc. are sown and during secondary schools, these seeds are developed and they are reaped at high schools. Mission of educational system is realized in classroom since all findings inside the classrooms enter into the society and in fact according to modern theories on classroom teaching shall found four pillars of learning and teaching i.e. I) learning how to know; II) learning how to do; III) learning how to live with others; and VI) learning how to develop. Absolutely, emotional intelligence is the centroid and basis for these four missions (Khorshidi, Zolfaghari, 2013).

These two questions are interrelated to each other that how to change attitude and how to expand skills? But both of them could cover development process of emotional intelligence. The other important point is that these changes may not be restricted to role of a teacher. For example, if teacher pay more attention to his/ her students, he or she finds that this behavioral change will be continued in the rest trend of life grounds as well. Teacher with higher emotional intelligence has several characteristics including interaction with students, planning for emotional context, planning for physical experience in students, dealing with students' expectations, recognizing each of students formally, listening to students, knowing of feelings in each of individuals and responding to each of them, answering to students 's comments and questions, recognizing his/ her prejudgments and preferences, non- verbal communication and expression his/ her emotions to students (Mortiboys, 2009). In other words, certainly educational achievement in learners requires the presence of

strong emotional intelligence in their teachers. Teacher's emotional intelligence causes students' achievement in classroom. Goad indicated that On the Job (OTJ) training of teachers and the existing educational curricula lead to increase in teachers' emotional intelligence so in turn it increases students' performance in classroom (Goad, 2005).

Overall, there is a significant and interactive relationship among emotional intelligence and educational achievement since emotional intelligence leads to improving the impact of teaching in developing of training among learners (Eric, 2009). So far, many investigations have shown the positive and significant relationship among emotional intelligence and educational achievement (Difabio and Palazzeschi, 2009; Parker 2004; Woitaszewski and Aalsma 2004; Bar-On 2003' Marquez Et al. 2006; Adeyemo 2007). But, the review on relationship among emotional intelligence and educational achievement in students has been more rarely noticed; thus, with respect to what is mentioned and the importance of emotional intelligence, the present study is mainly intended to test the following hypotheses:

1- There is a direct relationship among variable of self- awareness in teachers with educational achievement in female students in sixth grade at primary schools in educational system at Tehran City.

2- There is a direct relationship among variable of self- regulation in teachers with educational achievement in female students in sixth grade at primary schools in educational system at Tehran City.

3- There is a direct relationship among variable of self- motivation in teachers with educational achievement in female students in sixth grade at primary schools in educational system at Tehran City.

4- There is direct relationship among variable of empathy in teachers with educational achievement in female students in sixth grade at primary schools in educational system at Tehran City.

5- There is a direct relationship in variable of social skill among teachers with educational achievement in female students in sixth grade at primary schools in educational system at Tehran City.

MATERIALS AND METHODS

The present research is of applied type in terms of goals, and quantitative in terms of data, and is of correlation type in terms nature and kind of study since we may review its impact on criteria variable without manipulation of the predictor variable.

Statistical population, Sample, and Sampling Technique: The studied statistical population in this survey includes all teachers and their female students in sixth grade from primary schools located in Tehran City Educational areas during academic year 2012-13 that are totally 1300 participants. To select the sample group, a sample comprising of 296 female teachers was selected from educational areas (1-2-4-5-7-8-12-14-15-17-19).

Measurement Tool: In order to gather data, the following tools have been utilized:

Emotional Intelligence Scale: Emotional intelligence is a subsystem of social intelligence that involves in capability of survey and control one's and others' feelings and emotions and distinguishing them and employing this information to lead thoughts and actions (Meyer and Salovey, 2002) so that in Goleman's Model of Competencies, the constituent elements of emotional intelligence are as follows: Self- awareness, self- regulation, self- motivation, empathy, and social skills. To measure emotional intelligence in this survey, including 33 questions with five variables (Self-awareness, self- regulation, self- motivation, empathy, and social skills) has been adapted. In order to acquire validity of this scale in this study, the questions of this questionnaire were examined by exploiting from comments and guidance of advisor teacher. Similarly, some views from several experts regarding this questionnaire were taken into consideration and the given ambiguities were alleviated so this signified the reasonable content validity of the questionnaire. Reliability of this questionnaire was also examined by Cronbach Alpha coefficient where value of Cronbach Alpha coefficient (0.76) expresses internal consistency for questions in this scale.

Similarly, students' educational achievement was measured through average and mean values of lesson scores among the students in any classroom.

RESULTS

Findings of the present study are given in two sections as follows; I) Data description: In this part, descriptive statistics is utilized.

Table1. Descriptive parameters of research variables

Variables	Minimum	Maximum	Mean	Standard deviation	Skewness	Kurtosis
Self- awareness	1.57	4.29	2.9990	0.46696	-0.361	0.082
Self- regulation	1.29	4.86	3.1752	0.58529	-0.357	0.231
Self- motivation	1.29	4.71	2.8900	0.56340	-0.103	0.425
Empathy	1.50	4.33	2.9611	0.54556	-0.131	-0.095
Social skills	1.40	4.60	3.3358	0.65069	-0.643	0.002
Emotional intelligence	1.54	4.09	3.0722	0.43350	-0.538	0.214
Educational achievement	15.00	19.93	18.3123	0.84703	-0.729	0.835

With respect to the above table, distribution of scores in subscales of emotional intelligence (self-awareness, self- regulation, self- motivation, empathy, and social skills) and emotional intelligence as well as educational achievement has negative skewness or cubic sum of its scores from the mean value is a negative figure and scores of most of individuals is lesser than mean value in this scale. Scores distribution for subscale of social skills has the maximum skewness while scores distribution in subscale of self- motivation has the minimum skewness. Scores distribution in subscales of emotional intelligence (self- awareness, self-regulation, self- motivation, and social skills) as well as emotional intelligence in general and educational achievement, has positive kurtosis. This means that scores of most of persons in these scales are close to mean value. Scores distribution of variable of self-motivation has the maximum kurtosis while distribution in subscale of social skills has the minimum kurtosis.

II) Data analysis: In this part, correlation tests and regression have been used.

Initially, correlation between variables is examined.

Table 2. Correlation among research variables

Item	Emotional intelligence	Self- awareness	Self- regulation	Self- motivation	Empathy	Social skills
Educational Achievement	0.22	0.034	0.24	0.14	0.007	0.032

As it could be seen in the above table, the relationship among self- regulation and self-motivation with educational achievement is significant at level (0.05) and as self- regulation and self-motivation increase in teachers, the educational achievement is improved in students. But variables of self- awareness, empathy, and social skills are not significantly to educational achievement. In the following, stepwise regression was utilized to review whether emotional intelligence variables could predict educational achievement. While according to rate of their dependence, variables (self- regulation and self-motivation) enter into this model along with educational achievement and other variables did not enter to this model for which variables of self-awareness, empathy, and social skills are not significantly related to educational achievement.

Table3. Summary of regressive analysis on educational achievementTable

Variables entered at this step	R	R^2	ΔR^2	Adjusted R^2	ΔF	Significance level
Self- regulation	0.219	0.048	0.048	0.037	4.245	0.042
Self- motivation	0.228	0.052	0.004	0.029	0.359	0.550

Thus, with respect to values listed in the above table, variable of self- regulation may interpret variance of educational achievement about 5% that is significant value. At the next step, variable f self-motivation is added to the analysis so it necessitates calculating growth of variance. Component indicates difference of value acquired in the new order along with at next step or in other words exclusive at any order separately. As it observed, value varies with entering variable of self- motivation and value id 0.052 so this value is not significant. Namely, self- motivation may not predict educational achievement and value of such interpretation is not significant.

In the following, One- Way Analysis Of Variance (ANOVA) test is used in order to examine significance of regression namely whether predictor variables (self-regulation and self- motivation) may effect on prediction of variable of educational achievement or not. The results of this test are given in the following table.

Table 4. The results of one-way ANOVA relating to predictor factors

Model		Sum of squares	d.f	Sum of squares	F- value	Significance level
	Regression	2.236	1	2.236	4.245	0.042
1	**Error**	44.241	84	0.527		
	Total	46.774	85			
	Regression	2.427	2	1.213	2.286	0.108
2	**Error**	44.051	83	0.531		
	Total	46.774	85			

As it seen in Table 4, the given F- value is significant only in the first model at level (0.05) and only variable of self- regulation plays important and significant role in prediction of educational achievement.

Table 5. Regression coefficients for educational achievement

Model		β	error	Beta	t- value	Significance level
1	Fixed value	2.289	0.454	--	5.037	0.001
	Self- regulation	0.271	0.131	0.219	2.060	0.042
2	Fixed value	2.406	0.496		4.851	0.001
	Self- regulation	0.310	0.148	0.252	2.103	0.039
	Self- motivation	0.078	0.131	0.72	0.599	0.550

As it observed in the above table, variable of self-regulation is related significantly to educational achievement but relation among variable of self-motivation and educational achievement is not significant so with respect to the given coefficients in the table, the following regression equation could be written for criterion variable (educational achievement) as follows:

$$\hat{y} = \text{constant value a} + b_1 x_1$$

Educational Achievement = 2.406 + 0.31 (Self-regulation)

Thus, it can be concluded that variable of self-regulation may play significant role in prediction of variable of educational achievement.

DISCUSSION

With respect to the acquired results from administration of emotional intelligence questionnaire, it was characterized that there is a significant relationship among emotional intelligence and educational achievement; namely, rate of educational achievement for students is at higher level with teachers who have greater emotional intelligence. In other words, the higher emotional intelligence teachers have, the greater level of educational achievement exists in their students. As a result, the findings of this study based the existing relationship (the presence of relation among emotional intelligence and educational achievement) is complied with the results of studies done by Bar-On (2003), Adeyemo et al (2007), Parker et al (2004), and in the same direction.

In study on the relationship among variables of emotional intelligence and performance, it was indentified that variables of self- regulation and self-motivation has significant relationship with educational achievement so that those teachers for which these variables are further observed may have students with higher performance; however, the relationship among variables of self- awareness, empathy, and social skill was not significant with style of educational achievement.

Self- regulation is significantly related to educational achievement. In other words, teachers with higher scores in variable of self- regulation may have students with higher performance. Self-

motivation is also related to educational achievement significantly. Namely, teachers who acquired higher scores in variable of (emotional) self- motivation may have students with higher performance.

But, variable of empathy is not significantly related to educational achievement and this result is not complied with study results from Lopez (2003). Lack of relationship among social skill with educational achievement is not also in line with the studies done by Lopez (2003).

The results of stepwise regression for variable of educational achievement indicate that variable of self-regulation may interpret about 6% of variance in educational achievement that is significant value. But, variable of self- motivation played no important and significant role in interpretation of educational achievement. The result of this study along with the previous investigation shows the importance of training emotional intelligence among teachers. So in recruitment of teachers particularly primary school teachers with measurement of volunteers' emotional intelligence, it is recommended to elect persons as teachers who possess emotional intelligence at high level since teachers with high emotional intelligence can monitor freely their emotions and feelings and make their tasks easier and simpler by employing it properly and cause to improve performance of their students.

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