

## **Review of competency (knowledge, skills and attitudes) based on emotional intelligence and its implications in B.A. degree of elementary education from the perspective of Iranian educational scientists and psychology practitioners**

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### **ABSTRACT**

*Present study tries to detect scientific evidence about the need for emotional competencies in academic, social, personal performance of elementary education graduates and considers the development of emotional competencies as a basic requirement. Method of this study is of applied and field research; the study examines views of respondents about requirement of elementary educational majors at the undergraduate level to competency related to elements of emotional intelligence. Studied population consisted of all faculty members and instructors in the field of Psychology and Educational Sciences at Tehran University in 90-91 school year and all teachers teaching fifth grade elementary school in Tehran, who were graduated in elementary education. Sample consisted of 377 people based on infinite population and Morgan's sampling table. Data collecting tool in the study is a researcher-built questionnaire which is available for experts and expert teachers after preparation. To ensure its validity, the questionnaire will be so formed that the questions represent content of statements selected for studied subject; thus, content validity is a characteristic of its structure and is a tool simultaneously developed in which there is required concept for test; hence, questionnaire was first designed by reviewing literature using the guidance of faculty advisors; then, content and items of the questionnaire represented to 10 experienced experts in educational sciences and psychology through Delphi. Also, Cronbach test and LISREL diagnostic analysis were used to determine reliability of questionnaire. The results showed that from perspective of people, knowledge required to manage interpersonal relationships in class environment is higher than average for graduates. Also, knowledge required for Graduates to manage stress in class and to manage mood in class is higher than average. The results also showed that in terms of graduates' skills and attitudes, from the perspective of people graduates need skills and attitudes in order to manage stress, mood and interpersonal relationships in the class more than average. It also became clear that knowledge is in higher rank in order to manage stress and interpersonal relationships, skill in order to manage stress and attitude toward managing general mood compared to others. Therefore, this study suggests that pre-service training is a real requirement for professional development of graduates as a preparatory training for this type of learning.*

**Keywords:** competence, emotional intelligence, stress management, mood management, interpersonal relationship management

### **INTRODUCTION**

This Era is of knowledge. Developing a knowledge-based society, which today is considered as an importance, practicality of knowledge and its equality with information in the era of information explosion, drowning in the industry and technology, living in the global village and competitive world with different social options in well-known century of change, also paying attention to "what?", "how?", "when?", "which", and beside it ignoring the

"Who?", all are a warning sign for profound changes in educational system and directing education is a necessity for development based on competency to improve quality and accountability of education to professional, social and personal needs (Polomera et al., 2008). In country's current situation and according to existing theological and social necessity it is a fundamental goal to have skills and attitudes necessary for dealing with social problems and social adjustment of children and adolescents in change process (Melki, 2010). Undoubtedly, in the formal educational system of all countries elementary school is the most basic and most important educational stage in terms of both quantity, i.e. the number of teachers and students and quality, i.e. effect of this period on students' academic success throughout the school life and education and it can be firmly claimed that any of educational courses are not as important as elementary school. Studies show that students, who face with academic failure in elementary school, have difficulty in all academic courses. This is why developed countries have focused on educating students in this course and what is more important is development of students' special skills to emotional and social growth, and their self-perception than their academic achievement. They organize an environment based on human relationships, emotional connections, intimacy, group behavior and sense of attachment to school and this is conscious teachers' task in this period, because if the best and most qualified teachers who have the highest academic qualifications, teach in elementary schools we will achieve a top scientific ranking. They thought glow of people in secondary and university courses is due to the quality of education in elementary school and investment in elementary education should be strengthened; since the prevailing notion was that success of human depends on cognitive development which is measured and reported through a quantitative indicator called intelligence quotient (IQ), and it was because of such an approach dominance that future developments in the social and professional life were regarded due to their profiting of mental and cognitive development and IQ. The consequence of emphasizing on Such a perception and attitude is the neglect of other features and aspects of human talent and consequently establishment of schools and training centers which, as Howard Gardner the founder of multiple intelligences theory claimed, are called 'Uniform school'. The concept of emotional intelligence is one of the psychological issues which attracted attention of many psychologists and education specialists in recent years and typically tries to recognize place of emotions and their role in various rational and intellectual actions of human and has a considerable role in their success (Amini et al., 2009).

In recent years, a "Social emotional learning (SEL)" program has been presented in the curriculum. Emotional, scientific and social Learning program was first founded at Yale University by Goleman and now at the University of Chicago; it served to help schools by introducing emotional literature. It performed many Researches on the usefulness of social, emotional learning program; it analyzed 165 studies on school prevention activities and showed that the program significantly reduces students' dropout and absenteeism and causes significant improvements in school performance and behavior (Fitzgerald, 2009). An American Association<sup>1</sup> has been established in order to scientifically connect social emotional learning which covers emotional-social aspects of school for more than two decades. In this regard, a group in European ministry of education studied the problem and tried to identify the most effective way to develop emotional, social skills and conduct a program called "Every Children Matter " in which social correlation of learning skills and children's vitality has been established through emotional, social education. Also, similar programs were implemented in teacher training courses for personal growth in these competencies. Because it is believed that educating a competency is not possible without acquiring it. As a teacher without convenience and comfort cannot increase the quality of teaching; thus, it is recommended that emotional and social intelligence develop in both school and teacher training (Plomera, 2008). Therefore, this study seeks to identify, describe and explain the components that are based on emotional intelligence and identifies knowledge, skills and attitudes which are based on emotional intelligence for the elementary education graduates. The question is, what knowledge, skills, and attitudes teachers must acquire to achieve competencies based on emotional intelligence? The answer to this question will lead to reduced anxiety and stress in class (stress management), dominant joy and happiness (general mood management) in order to achieve educational objectives which are mental, emotional and social growth in students and teacher, and facilitate the process of teaching and learning in the classroom. Thus, in addition to ask experts about emotional intelligence, educational sciences and psychology experts and expert teachers also will be asked. Then by gathering necessary information, we will introduce theoretical framework and curriculum materials for elementary education undergraduates.

Since there are many elements of emotional intelligence review of which is not possible, researcher have chosen several of them.

- 1- Identification of graduates' needs to have knowledge about management of interpersonal relationships in the classroom.
- 2- Identification of graduates' needs to have knowledge about management of stress in the classroom.
- 3- Identification of graduates' needs to have knowledge about management of general mood in the classroom.

- 4- Identification of graduates' needs to have skills for management of interpersonal relationships in the classroom.
- 5- Identification of graduates' needs to have skills for management of stress in the classroom.
- 6- Identification of graduates' needs to have skills for management of general mood in the classroom.
- 7- Identification of graduates' needs to have attitudes toward management of interpersonal relationships in the classroom.
- 8- Identification of graduates' needs to have attitudes toward management of stress in the classroom.
- 9- Identification of graduates' needs to have attitudes toward management of general mood in the classroom.

### **Theoretical basics**

Although the role of emotions and feelings in life has a considerable theoretical backgrounds and it has been pointed out in different thinkers and philosophers works such as "Aristotle", "Espinosa" "Kant" "Dewey", "Bergson" "Russell" and so on (Amini et al., 2009) but it has been scientifically and structurally considered by "Peter Saloway" and "John Mayer" in 1990 as emotional intelligence theory and this concept was appeared in the best-selling book by "Daniel Goleman" in 1995 (Amini, cited in Akbarzade, 2009). In The past two decades a great interest has been shown to the role and connection of emotional vulnerability and emotions in education. Teachers understood the importance of emotions in students' all-round growth and claimed that not only academic growth of students is necessary, but also emotional and social intelligence growth is of importance (Elias, 2003, p.4). This is inconsistent with traditionalists who believe that objective of education is learning "subject-oriented" curriculum and knowledge alone will equip students to deal with life challenges (Morris et al., 2007). Besides, curriculum based on human values does not neglect any of the powers and capabilities of learners; it grows his feeling, heart and reason as being capital. Thus to be a teacher needs overall competencies to provide students with suitable conditions for emotional growing and aestheticism (Melki, 2010).

Currere is one of the different conceptions of curriculum meaning "run in the race" based on which the capabilities and capacities of a person is considered; this process can also be transformed into a social process in which a greater understanding of self, others and the world will be achieved through an interactive reconceptualization. William F. Pinar (cited in Fathi Vajargah, 2009), One of the most prominent reconceptualists in modern studies about curriculum, has argued in his article "Working from the inside" that teachers and students need to work on inner resources to achieve the vision and conception. He believes that one of the neutralizing effects of school education is self alienation and its impact on the character and individuality and conversion of self- leadership to other-conversion. Today, approaches such as humanistic approach, personal fulfillment, artistic and aesthetic approaches, new movements like phenomenology and autobiography in the curriculum are human approaches and need teachers with special abilities, knowledge and skills (Fathi Vajargah, 2009).

Shariatmadari (2001) states that fundamental purpose of academic education is "humanization". In his work, he describes various aspects of the emotional growth that one of them is affective. Emotional aspects of development are influenced by intellectual, physical and social aspects so as emotional aspects influence on each of them. So teacher's task is to help children dominate their emotions in contact with others and avoid expressing emotions which cause resentment. Another task of the teacher is to help children learn to express emotions. Emotional intelligence theory is a new development in understanding the relationship between reason and emotion. Contrary to previous ideas, its unique role is considering thought and emotion as an adaptively and intelligently intertwined entity. Cognitive competencies are defined as understanding self emotions, managing emotions, self-stimulating, recognizing emotions and controlling relationships and in other words, emotional intelligence. Competencies such as:

Intrapersonal; includes characteristics like self-fulfillment, independence and self-awareness.

Interpersonal; includes competencies like social responsibility.

Agreeableness; includes characteristics such as problem solving and reality testing.

Stress management; includes controlling impulse and psychological endurance.

General mood; that is happiness and optimism (Haks et al., 2010).

Emotional intelligence correlates as a multidimensional structure with a range of variables and consequences related to life quality. This correlation is related both to interpersonal aspects of emotional intelligence such as better quality of social interactions and intrapersonal aspects such as empathy, management of relations and mood adjustment (Petrides & Furnham, 2000; Saklofske, Austin & Minski, 2003; quoted in Besharat et al., 2008).

Since elementary education has a special importance because of important role of childhood in forming human's character and behavior, considerable studies show the fact that a mature human's character and his lifestyle are largely formed in his initial years of living. Thus, it is suggested that the most skilled and most experienced teachers should take the responsibility of educating elementary students (Aqazadeh, 2005). Competencies of an elementary

education graduate as a teacher include those attitudes, knowledge, and behaviors by which teacher can facilitate physical, intellectual, emotional and social growth of learners in the educating process (Melki, 2010). It has been clear in previous studies that educating is the most stressful profession. Variable, multiple complex tasks which are expected from teacher expose him to high stress (Brotherling, 2002; Barger, 2009). Long hours of work, lack of discipline and respect from students, new curriculum and emphasis on the learner- centered and participatory teaching methods (Barger, 2009, p.1), a clear difference between teacher training and reality of teaching, the lack of performance standards with effective results, increased physical needs, responsibilities and payments, insufficient resources, workplace mental hazards, lack of teacher control in relation to: salary, teaching hours, administrative procedures, class size, student's behavior, necessitate that he learns and practices growing behaviors which are required to deal with stressful stimuli (Darwin, 2010). Emotional skills play a basic role in stress process (Barger, 2009) and emotional intelligence is a key to manage stress and daily life pressures (Darwin, 2010). Since there is a strong relationship between school training and teacher training, development in these both sectors will develop mutually quality of education and base line of teacher training is the quality of his performance when dealing with learners which indirectly affect the quality of student community. Teacher should be responsive to society changes and today he should be completely prepared not only for teaching but also for understanding his students and their parents (Ekhtar, 2009).

Several authors (Romasz et al., 2007) suggested that acquiring skills of emotional and social learning is a prerequisite to acquire school materials. Moreover, others stated that society currently needs more skills related to emotional awareness, decision making, social relationships and resolving conflicts so that it can be possible to achieve a successful life in addition to well-being, subjective and psychological health in adulthood meeting challenges. Thus, education should include both reason and emotion in order to make the best preparations for them in life. Dulark and Weisberg (cited in Palomera, 2008, p. 12) stated that although the link between developmental contexts (scientific, social, and emotional) has not been well established yet, currently an overall analysis of 300 studies showed that emotional, social education not only increases learning in this area but also rises scientific learning. On the other hand, teacher's emotional growth generally both increases quality of teaching and learning process and teacher's well-being (Barger, 2009; Moor, 2007; Sutton, 2003; Morris et al., 2007) and influences on emotional, social growth of students (Sutton, 2003; Kusche, 2001). Darwin et al. (2010) found that emotional learning is a 'transformative' learning model which transforms individual to an effective teacher or a student and gives them power and authority. Emotional learning helps teachers and students in:

1. development of productive and healthy positive relationships
2. problem solving and making true decision
3. adaptation
4. self-management to achieve goals
5. ability to change, when necessary
6. consciously and responsible behavior

In a transformative learning environment, teachers and students are involved in a mutually positive practice. Education is knowledge-centered and conversation is focused. The reference is student's need and such learning influences on development of knowledge, behavior and skills which students can acquire to improve themselves scientifically and professionally and practice based on reason throughout lifetime (Darwin et al., 2010).

Results (Birks et al., 2009) show that development of students' emotional skills causes in effective confrontation with problems and their psychological compatibility.

Goleman (2008), a leading scientist in emotional intelligence studies, pointing out the results of an investigation conducted on 233000 American students, emphasizes that students learning different school lessons parallel to emotional and social skills have positively better performance; decreased Disciplinary problems, absenteeism, struggle with other students; and increasing interest to lessons. Blacksbury (2005) referring to results of an academic research study concludes that emotional intelligence may be a suitable predictive factor of success or failure in students studying mathematics and computational courses. In fact, students whom emotional intelligence is higher, have more self-efficiency, higher self-confidence and better confrontation with problems. Thus, elements of emotional intelligence should be included in curriculum of mentioned courses. Watners and McNulty (2005) showed that educating plan of social and emotional skills have very positive effects on students' educational improvement. Low et al. (2004, cited by Amini et al., 2008) acknowledging important position of emotional intelligence in universities and higher education, designed a curriculum called emotional intelligence curriculum. They claimed that although the most important goal in a higher education institute is scientific development but more important is that in today's highly variable society, students need to be directed toward a healthy, productive life including scientific, professional and personal goals; thus, it is necessary that universities and higher education institutes provide



students with scientific and emotional (affective) development based on a comprehensive model of curriculum. Amini et al. (2009) assuming the role and position of emotional intelligence in development of students' communicational, social and behavioral skills and abilities and considering existing gaps and defects due to insufficient attention to foster these dimensions, emphasizes that curriculums of universities and higher education institutes should be revised in its missions in terms of creating and fostering abilities related to emotional intelligence and existing gaps should be filled through designing and conducting relevant qualitative curriculum. In 2005, elementary schools in England were obliged to implement Social Emotional Academic Learning (SEAL) program through which kids learn how to develop their social and emotional skills. In 2007 the verdict was given for secondary schools. British children now have this curriculum in each academic year and that is not less than a formal governmental approach for the future (Bronson, 2009). A documented valid curriculum<sup>2</sup> have been developed to teach social and emotional skills and it is used as a basic for all; it serves like a field for students providing an opportunity to practice skills so they become more aware of themselves and others (Goleman, 2008).

### **Study questions**

1. To what degree Graduates need to have knowledge about management of interpersonal relationships in class?
2. To what degree graduates need to have knowledge about management of stress in class?
3. To what degree graduates need to have knowledge about management of general mood in class?
4. To what degree graduates need to have skill for management of interpersonal relationships in class?
5. To what degree graduates need to have skill for management of stress in class?
6. To what degree graduates need to have skill for management of general mood in class?
7. To what degree graduates need to have attitudes toward management of interpersonal relationships in class?
8. To what degree graduates need to have attitudes toward management of stress in class?
9. To what degree graduates need to have attitudes toward management of general mood in class?

### **Importance and necessity of study**

Today's teachers live in an era where change is done quickly and demand is rising. On the other hand, physical and psychological problems occur when the ability to respond to warnings is not acquired. Stressful stimuli gradually terminate abilities to encounter and defend against the problems and these stresses influence on students' and teachers' health and efficacy when they are intensified. Then, teacher should be equipped with tools and skills to manage daily stress. Darwin (2010) showed that emotional intelligence controls stress (Barger, 2009).

Because of dominant attitude on Iranian education system, learners' intellectual and cognitive characteristics and dimensions are considered; teaching skills such as self-expression, impulse control, realism, stress tolerance and flexibility are never considered in the curriculum of universities and higher education as a goal or main priority. Experts estimated the cost of educational failure as very high and it causes damage to the national budget; Since most youth inter society and work place with guidance and advice of teachers and social wheels will move by their hands, importance of considering students' physical and mental needs crystallizes in the ability of knowledge, attitude and interpersonal relationships and organizational empathy of teachers (Khanlari, Cheshme Kamreh, 2007). There are 5 million elementary students in Iran; thus competent teachers are required for educating this level so that this increasing population develops successfully and forms a healthy society. Teaching students needs a learning environment which is focused on subjects related to self-knowledge, human relationships, gaps between childhood and adulthood, assumptions, beliefs and approaches. Teachers should discover morality and values sense in order to observe and understand fear and trust, they should be able to influence on people and progress approaches toward cooperation, coordination, empathy and understanding. Teacher should be a messenger to communicate with children and create a fearless and non-judgmental learning environment by different methods (such as theater and innovative performance) (Sedighi, 2009). Therefore, teaching is necessary in emotional competency and both teachers and students take advantage of it. Teachers' mental health creates a secure and desirable environment for students' growth and learning. Conducted studies on psychology cleared that secure atmosphere and creating positive emotions in class cause in students' growth, happiness and calmness. Happiness relates to positive experiences and emotions and negative situations are stressful (Barger, 2009). If positive experiences and emotions are higher than negative emotions, one can be happy and mentally healthy. Today, it is confirmed that positive emotions causes in learning and true interpersonal relationships. It is observed that a school in which atmosphere positively affects on students, increases development of better health, adaptation and learning and decreases incompatible behaviors (Palomera et al., 2008). There are evidence that emotional competency is an important predictor in personal and social performance. The most active study lines are clearance of predicting benefits of emotional intelligence in different aspects of youth life (Fernands et al., 2008).

It is clear that high emotional intelligence decreases incompatible behaviors such as disagreeability and aggressive manners (Bonhert et al., 2003; Rozel, 2002), emotional disorders, interpersonal problems (Besharat et al, 2008), high risk behaviors such as drug abuse and audaciously driving (Bracket, 2004) and it increases accepted behaviors such as increased quality of social relationships and emotional relations (Besharat et al., 2008; Moore, 2007), longer-term memory in educational system, improved scientific educations (Waters, 2005, p.6; Palomera et al, 2008), more satisfaction in life and mental health and it is more able to end negative emotional moods and substituting them with positive ones (Palomera et al, 2008). How can we improve the emotional intelligence is of interest for some researchers. Thus, designing and evaluating skills can be an important school plan to foster it. In such schools, teacher and student endeavor to create desirable relations and true interaction; emotional-skill learning programs help students acquire awareness of emotional moods, improve self-esteem, even obtain better scores in cognitive tests (Birks, 2009).

Emotional intelligence is a constructive element in education; schools should teach students how to manage controlling emotions. But, contrary to high interest of educational experts to emotional literacy, there are few programs specified for it (Blacksburg, 2005, cited in Davis, 2001). Given the numerous populations of elementary students that are partially two million per year who are trained by teachers, quality of trained teachers' curriculum is highly important because teacher training causes in trained students. However, review of opinions and views of various scholars in the field of emotional intelligence represents its important role in the realm of personal and social life. Thus it is essential that emotional intelligence and development of skill sets and related capabilities are considered seriously in the agenda of educational systems and curricula. Because, as many researchers claimed, training course based on emotional intelligence has almost eight-fold return on investment compared to other areas of education (Sharifi Daramadi, AqaYar, 2005).

### MATERIALS AND METHODS

Method of This study is applied and contextual. It examines respondents' views about competencies which are required for an elementary education graduate in B.A. grade related to emotional intelligence.

Sample is composed of two groups:

1. All faculty members and instructors who teach in the field of educational sciences and psychology at the University of Tehran in school year 20011-2012.
2. All elementary school teachers who are graduate in Elementary Education and teach elementary students in the fifth district of Tehran.

Sample was based on infinite population and Morgan's sampling table including 377 people.

Data collecting tool in the study is a researcher-built questionnaire which is available for experts and expert teachers after preparation. To ensure its validity, the questionnaire will be so formed that the questions represent content of statements selected for studied subject; thus, content validity is a characteristic of its structure and is a tool Simultaneously developed in which there is required concept for test; hence, questionnaire was first designed by reviewing literature using the guidance of faculty advisors; then, content and items of the questionnaire represented to 10 experienced experts in educational sciences and psychology through Delphi. Their comments were considered in revising and inserting content of statements whereby the final questionnaire was designed and prepared. Also, it was used from Cronbach's test and LISERL diagnostic analysis for reliability; the results showed that:

**Table 1. Eign value, explained variance percentage, variance percentage extracted from six factors**

Factors	Eignvalue	Variance percentage	Density percent
Knowledge to manage stress	3.28	9.66	9.66
Knowledge to manage general mood	2.62	7.71	17.36
Knowledge to manage interpersonal relations	2.29	6.76	12.24
Skills to manage stress	2.26	6.67	30.78
Skills to manage general mood	36.65	5.87	1.99
Skills to manage interpersonal relations	42.07	5.42	1.84
Attitudes to manage stress	47.33	5.25	1.78
Attitudes to manage general mood	52.44	5.11	1.71
Attitudes to manage interpersonal relations	1.58	5.02	57.46

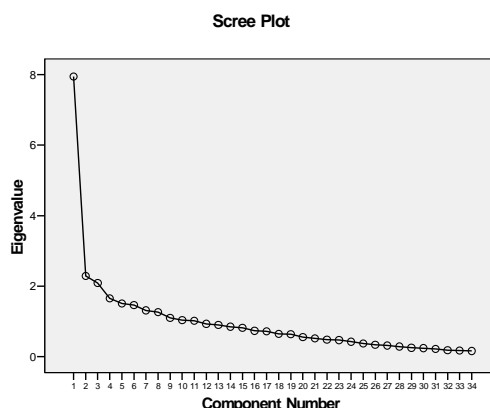
Table shows eignvalue for each factor and explained variance percentage for each variable. 9.66% of variance is explained by the first factor; 17.36% by the first and second factor; 24.12% by the first, second and third factor; 30.78% by the first, second, third and fourth factor; 36.65% by the first, second, third, fourth and fifth factor;

42.07% by the first, second, third, fourth and fifth and sixth factor; 47.33% by the first, second, third, fourth and fifth, sixth and Seventh factor; 52.24% by seven factors and eighth factor; and 57.46% by above nine factors.

**Table 2. KMO and Bartlett's Test**

Sampling efficiency KMO	Df	Chi	Sig
0.764	561	1417.39	0.001

Bartlett's test results show that index of sampling efficiency (KMO) is 764% and this value is significant at 5%  $\alpha$ ; consequently, variance within data can be explained by factors (indices); in fact, it shows that functionality of data is confirmed and provided indices can examine functionality.



Above diagram is extracted from an exploratory factor analysis. The results show that only nine factor can be considered as latent variables.

**Table 3. Covariance matrix of latent variables**

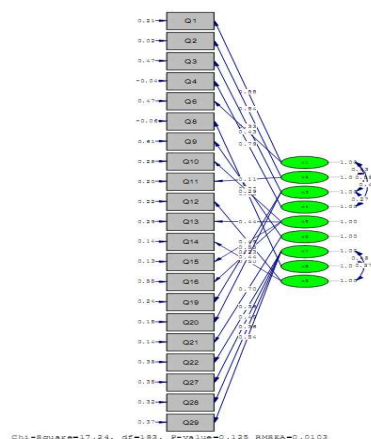
Index	X1	X2	X3	X4	X5	X6	X7	X8	X9
First factor (X1)	1								
Second factor (X2)	0.43	1							
Third factor (X3)	0.59	0.48	1						
Forth factor (X4)	0.43	0.31	0.27	1					
Fifth factor (X5)	0.21	0.21	0.50	0.32	1				
Sixth factor (X6)	0.27	0.08	0.35	0.27	0.30	1			
Seventh factor (X7)	0.29	0.17	0.56	0.23	0.50	0.74	1		
Eighth factor (X8)	0.27	0.18	0.33	0.21	0.45	0.19	0.48	1	
Ninth factor (X9)	0.24	0.06	0.29	0.08	0.75	0.19	0.37	0.36	1

*Above table is related to Covariance matrix between the latent variables.*

**Table 4. Path coefficient of the conceptual model**

No.	Latent variable	Observed variables	t	Significance level	Non-standardized functional weights	Standard error	Standardized functional weights	R <sup>2</sup>
1	X1	Item 1	7.05	0.001	7.44	0.98	0.53	0.59
2		Item 6	6.63	0.001	0.55	0.10	0.77	0.28
3	X2	Item 2	6.55	0.001	0.37	0.09	0.24	0.94
4		Item 11	6.04	0.001	0.58	0.79	0.24	0.17
5	X3	Item 3	7.68	0.001	0.65	0.87	0.29	0.19
6		Item 19	6.74	0.001	0.86	0.12	0.75	0.55
7		Item 20	6.74	0.001	0.86	0.11	0.80	0.56
8	X4	Item 4	7.45	0.001	0.53	0.07	0.10	0.12
9		Item 10	7.30	0.001	0.50	0.068	0.48	0.23
10	X5	Item 13	7.26	0.001	0.35	0.048	0.63	0.40
11		Item 15	7.77	0.001	0.40	0.056	0.81	0.65
12		Item 16	6.11	0.001	0.58	0.079	0.65	0.85
13	X6	Item 9	6.96	0.001	2.08	1.05	0.44	0.19
14		Item 21	6.38	0.001	0.41	0.060	0.88	0.77
15	X7	Item 22	7.48	0.001	0.26	0.039	0.54	0.26
16		Item 27	7.18	0.001	0.36	0.053	0.64	0.41
17		Item 28	6.52	0.001	0.56	0.07	0.32	0.28
18		Item 29	6.07	0.001	0.30	0.046	0.67	0.44
19	X8	Item 8	6.55	0.001	0.25	0.039	0.23	0.18
20	X9	Item 14	6.04	0.001	0.21	0.036	0.75	0.65
21		Item 12	7.68	0.001	0.86	0.11	0.28	0.27

22 items with functional weight were extracted among 30 items designed to identify knowledge, skills and attitudes needed by graduates to manage interpersonal relationships, stress and general mood and 9 items were neglected. Since non-standardized functional weights are at least twice the standard error it can be concluded that estimates are significant at 5%  $\alpha$ . T statistic values in the above table shows values of each test statistic for each coefficient. Here, for each parameter in the model an observed T value is obtained and the results can be interpreted that if observed T is more than 1.96, the relationship is significant with more than 95 percent confidence, because P-value is  $<0.005$ . In conclusion, we can say that items are capable of measuring variables.



### Diagram of path coefficients

In this diagram, the overall relationship between latent variables and non-latent ones is shown together in a model. In the following diagram path coefficients of current study is shown. Numbers on arrows indicate related path coefficients between variables which are obtained using *lizrel*. Circles and squares represent variables and items related to these variables, respectively.

### Examination of fitting goodness index

There are different indices to determine the fitness of model in reality and they are given in the table below.

**Table 5. Fitting index**

statistics of fitness	value
Chi-Square	17.24
degree of freedom (df)	183
root mean square error RMSEA	0.0103
goodness of fitting index GFI	0.92
remained mean square RMR	0.019
GFI	0.91
AGFI	0.88
PGFI	0.86

Square work test shows the difference between observed and expected covariance matrix; According to above model, it is observed that the value of the square work for the model is 17.24 with 182 degrees of freedom which is statistically significance because its significance level is smaller than  $P=0.125$ . We can conclude that Chi-square test confirms accurate fitness of the model with observed data; Because whenever chi-square value is close to zero, indicates that there is little difference between the expected and observed covariance. In fact, when the chi-square is close to zero, probability value (p-value) is greater than 0.05 and this result demonstrates good fitness of the model. It is possible to evaluate model through GFI which is a leading index to evaluate fitness. GFI is an extent of relative value of variance and covariance that is explained commonly by the model and it is similar to  $R^2$  in multivariate regression. In fact, the comparative index value GFI varies between zero and one and greater value of this index, better fitness of the model. As GFI value in the above model is 0.91 we can say the model fitness is acceptable. Prepared value of the root mean square approximation error (RMSEA) is 0.0103 which shows model fitness is good. Root mean square residual RMR index is 0.019 and relatively small which indicates negligible error and acceptable fitness. Fitness was evaluated in terms of multiple characteristics and it was shown that AGFI and PGFI indices are 88% and 86%, respectively, and model fitness is good.



## DISCUSSION

**Question 1:** To what degree Graduates need to have knowledge about management of interpersonal relationships in the class?

**Table 6. Descriptive statistics relating to the knowledge needed for graduates to manage interpersonal relationships**

	mean	standard deviation	mean standard deviation	total
knowledge to manage interpersonal relationships	4.12	0.559	0.029	377

**Table 5. T-test results relating to knowledge needed for graduates to manage interpersonal relationships**

expected mean= 3						
confidence level 95%		means difference	significance level	Df	t	
lower bound	upper bound					
1.07	1.18	1.13	0.001	376	39.11	knowledge to manage relationships

Results show that the observed t is 39.11, and assumption of zero can be rejected. I.e. in the normal curve mean is between the average distance (1.07-1.18) by 95% confidence level and 5%  $\alpha$ . Thus, graduates need higher knowledge than average to manage interpersonal relationships in the class.

**Question 2:** To what degree graduates need to have knowledge about management of stress in class?

**Table 8. Descriptive statistics relating to the knowledge needed for graduates to manage stress**

	mean	standard deviation	mean standard deviation	total
knowledge to manage stress	3.84	0.696	0.035	377

**Table 9. T-test relating to knowledge needed for graduates to manage stress**

expected mean= 3						
confidence level 95%		means difference	Sig	Df	t	
lower bound	upper bound					
0.771	0.912	0.841	0.001	376	23.48	knowledge to manage stress

Results show that the observed t is 23.47, and assumption of zero can be rejected. I.e. in the normal curve mean is between the average distance (0.771-0.912) by 95% confidence level and 5%  $\alpha$ . Thus, graduates need higher knowledge than average to manage stress in the class.

**Question 3:** To what degree graduates need to have knowledge about management of general mood in class?

**Table 10. Descriptive statistics relating to the knowledge needed for graduates to manage general mood**

	Mean	standard deviation	mean standard deviation	total
knowledge to manage general mood	4.19	0.661	0.034	377

**Table 11. T-test relating to knowledge needed for graduates to manage general mood**

expected mean= 3						
confidence level 95%		means difference	sig	Df	t	
lower bound	upper bound					
0.771	1.13	1.26	1.19	0.001	376	knowledge to manage general mood

Results show that the observed t is 35.21, and assumption of zero can be rejected. I.e. in the normal curve mean is between the average distance (1.13-1.26) by 95% confidence level and 5%  $\alpha$ . Thus, graduates need higher knowledge than average to manage general mood in the class.

**Question 4:** To what degree graduates need to have skill for management of interpersonal relationships in class?

**Table 6 Descriptive statistics relating to skills needed for graduates to manage interpersonal relationships**

	mean	standard deviation	mean standard deviation	total
skills to manage interpersonal relationships	4.03	0.605	0.031	377

Results show that the observed t is 33.23, and assumption of zero can be rejected. I.e. in the normal curve mean is between the average distance (0.975-1.18) by 95% confidence level and 5%, alpha. Thus, graduates need higher skills than average to manage interpersonal relationships in the class.

**Table 13. 7T-test relating to skills needed for graduates to manage interpersonal relationships**

expected mean= 3						
confidence level 95%		means difference	significance level	Df	t	
lower bound	upper bound					
0.975	1.18	1.04	0.001	376	33.23	skills to manage relationships

**Question 5:** To what degree graduates need to have skill for management of stress in class?

**Table 14. Descriptive statistics relating to skills needed for graduates to manage stress**

	mean	standard deviation	mean standard deviation	total
skills to manage stress	4.04	0.607	0.607	377

**Table 15. T-test relating to skills needed for graduates to manage interpersonal relationships**

expected mean= 3						
confidence level 95%		means difference	significance level	Df	t	
lower bound	upper bound					
0.983	1.10	1.045	0.001	376	33.42	skills to manage stress

Results show that the observed t is 33.42, and assumption of zero can be rejected. I.e. in the normal curve mean is between the average distance (0.983-1.10) by 95% confidence level and 5%  $\alpha$ . Thus, graduates need higher skills than average to manage stress in the class.

**Question 6:** To what degree graduates need to have skill for management of general mood in class?

**Table 86. Descriptive statistics relating to skills needed for graduates to manage general mood**

	mean	standard deviation	mean standard deviation	total
skills to manage general mood	3.34	0.559	0.028	377

**Table 97. T-test relating to skills needed for graduates to manage general mood**

expected mean= 3						
confidence level 95%		means difference	significance level	Df	t	
lower bound	upper bound					
0.291	0.404	0.347	0.001	376	12.05	skills to manage general mood

Results show that the observed t is 12.05, and assumption of zero can be rejected. I.e. in the normal curve mean is between the average distance (0.291-0.404) by 95% confidence level and 5%  $\alpha$ . Thus, graduates need higher skills than average to manage general mood in the class.

**Question 7:** To what degree graduates need to have attitudes toward management of interpersonal relationships in class?

**Table 18. Descriptive statistics relating to attitudes needed for graduates to manage interpersonal relationships**

	mean	standard deviation	mean standard deviation	total
attitudes to manage interpersonal relationships	3.49	0.695	0.035	377

**Table 19. T-test relating to attitudes needed for graduates to manage interpersonal relationships**

expected mean= 3						
confidence level 95%		means difference	significance level	Df	t	
lower bound	upper bound					
0.421	0.561	0.491	0.001	376	13.71	attitudes to manage relationships

Results show that the observed t is 13.71, and assumption of zero can be rejected. I.e. in the normal curve mean is between the average distance (0.561-0.421) by 95% confidence level and 5%,  $\alpha$ . Thus, graduates need higher attitudes than average to manage interpersonal relationships in the class.

**Question 8:** To what degree graduates need to have attitudes toward management of stress in class?

**Table 20. Descriptive statistics relating to attitudes needed for graduates to manage stress**

	mean	standard deviation	mean standard deviation	total
attitudes to manage stress	3.65	0.661	0.035	377

**Table 21. T-test relating to attitudes needed for graduates to manage stress**

expected mean= 3						
confidence level 95%		means difference	significance level	Df	t	
lower bound	upper bound					
0.592	0.726	0.659	0.001	376	19.35	attitudes to manage stress

Results show that the observed t is 19.35, and assumption of zero can be rejected. I.e. in the normal curve mean is between the average distance (0.592-0.726) by 95% confidence level and 5%, alpha. Thus, graduates need higher attitudes than average to manage stress in the class.

**Question 9:** To what degree graduates need to have attitudes toward management of general mood in class?

**Table 22. Descriptive statistics relating to attitudes needed for graduates to manage general mood**

	mean	standard deviation	mean standard deviation	total
attitudes to manage general mood	3.39	0.607	0.0312	377

**Table 23. T-test relating to attitudes needed for graduates to manage general mood**

expected mean= 3						
confidence level 95%		means difference	significance level	Df	t	
lower bound	upper bound					
0.336	0.459	0.398	0.001	376	12.73	attitudes to manage general mood

Results show that the observed t is 12.73, and assumption of zero can be rejected. I.e. in the curve, normal mean is between the average distance (0.336-0.459) by 95% confidence level and 5%, alpha. Thus, graduates need higher knowledge to manage stress in the class than average.

### **Comparison of graduates' knowledge, skills and attitudes to manage interpersonal relationships, stress and mood**

**Table 24 . Comparison of ratings**

component	average rating
knowledge to manage stress	6.97
knowledge to manage general mood	5.50
knowledge to manage interpersonal relationships	7.32
skill to manage stress	6.61
skill to manage general mood	6.53
skill to manage interpersonal relationships	2.52
attitude to manage stress	2.97
attitude to manage general mood	3.88
attitude to manage interpersonal relationships	2.71

**Table 10. Friedman coefficient**

significance level	Df	Friedman coefficient
0.001	8	1579.25

Friedman test results show that observed chi-square is significant at  $5\alpha$  and assumption of zero is rejected. In other words, a significant difference is observed between knowledge, skills and attitudes needed by graduates to manage moods, interpersonal relations and stress in classes. As can be seen, knowledge to manage interpersonal relationships and stress; skills to manage stress; and attitudes to manage general mood are ranked higher than the other groups.

## **RESULTS**

The results showed that graduates require higher knowledge than average to manage interpersonal relationships in the class. Also, knowledge required for graduates is higher than average to manage stress and to manage mood in class.

In terms of graduates' skills, skills required for graduates is higher than average to manage stress, mood and interpersonal relationships in the class.

Results show that attitudes required for graduates is higher than average to manage stress, mood and interpersonal relationships in the class. In fact, people perspective showed that graduates' knowledge, skills and attitudes are necessary to manage interpersonal relationships, stress and mood in the class and this is consistent with Palomera

(2008), Elias (2003), Fathi Ajargah (2009), Sotoon (2003) and Kasche (2001). Results show that there is a significance difference between knowledge, skills and attitudes required for graduates to manage mood, interpersonal relationships and stress in the class. As shown, knowledge to manage interpersonal relationships and to manage stress; skills to manage stress; and attitudes to manage general mood has a higher rank compared to others. Researcher encountered to these limitations:

- Possible Inappropriate collaboration of some respondents in completing questionnaire.
- Limited validity and accuracy of data gathering tools which is questionnaire in this study.
- Limited information of instructors about emotional intelligence due to limited works available in Iran.
- Limited sample to faculty members and instructors of Tehran universities who teach educational sciences and psychology in 2010-1390
- Limited sample to elementary teachers who are graduate in elementary education in Tehran.
- Limitation of emotional intelligence to several competencies disregarding other aspects.

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