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The Relationship between Teachers' Emotional Intelligence and Their Self-Efficacy in Greece

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Abstract:
The purpose of the present study was to examine the relationship between emotional intelligence and teachers' self-efficacy among educators from primary and secondary schools in Greece. A total of 430 educators completed the "Teachers Sense of Efficacy Scale" along with the "Trait Emotional Intelligence Questionnaire-Short Form". Findings revealed that there is a significant relationship between teachers' emotional intelligence and their self-efficacy. Regression analysis showed that teaching experience, education level, and exercise were predictors of teachers' self-efficacy. Further research is also required in order to investigate the relationship between teachers' self-efficacy and emotional intelligence.

Keywords: *Emotional intelligence, Self-efficacy, Teachers, Greece*

1. Introduction

1.1. Emotional Intelligence

Emotional Intelligence (EI), as an element of human existence, has spurred the interest of the scientific community in the last two decades, resulting in the formulation of several theories and making dozens of researches by psychologists and sociologists about how it impacts on human development and performance. The first reference to the term is made by Thorndike (1920), which goes beyond the framework of the cognitive abilities of humans and introduces social intelligence in the field of psychology. This term means the ability to understand men and women, boys and girls and socialize and manage human relations wisely. Several decades later, Gardner (1983) formulated the theory of multiple intelligence by including social intelligence as one of the seven different kinds of intelligence. So apart from the social intelligence other types of intelligence include the language, the logical-mathematical, musical, spatial, and the naturalistic and bodily-kinesthetic intelligence. He also referred to two new dimensions of intelligence, interpersonal and intrapersonal, which concerned the perception of the feelings of others and self-knowledge respectively.

In 1990, the first scientific presentation of the EI concept appears, according to which it is the ability to monitor feelings, both his own and other peoples, to make fine distinctions between different emotions and use this information to guide their thoughts and actions (Salovey & Mayer, 1990). The concept of EI however became widely known in 1995 when Daniel Goleman published his first book for EI, which caused great interest to the general public. Studying the literature you can realize there are three dominant models in the EI field. The first model is based on the work of Bar-on (1997), who proposed a model for describing the capacities, which characterize EI and consists of five categories, each of which includes a number of specific skills: 1. The intrapersonal skills include emotional self-awareness, the assertive behavior, self-esteem, confidence in personal abilities and independence 2. Interpersonal skills include empathy, interpersonal relations and social responsibility 3. The adaptability refers to tolerance, anxiety and impulse control 4. Stress management includes problem-solving skills, control of reality and flexibility and 5. The general mood refers to optimism and happiness.

The second model was proposed by Mayer and Salovey (1997) who argued that EI is the ability of expressing emotions and the processing ability of these is to develop and promote thinking. On this theoretical background the researchers placed their model consisting of four main dimensions: 1. Self-esteem and expression of emotions, is related with the ability of people to perceive the deeper feelings and be able to express them in a natural way (Self-Emotion Appraisal). 2. Assessment and recognition of the emotions of others, is related to the individual's ability to perceive and understand the feelings of the people around him (Others' Emotion Appraisal). 3. Self configuration is related to a person's ability to handle his feelings and cope faster with psychological conditions that pose pressure (Use of Emotion). 4. Use of the emotions is the ability of individuals to use their emotions directing them towards constructive activities (Regulation of Emotion).

The third model of Goleman is characterized as a mixed model because it includes elements from the previous two. The emotional competence model proposed for the interpretation of EI encompasses a large number of skills and competencies. In the first version (Goleman 1995, 1998), the model includes five capabilities, which consisted of five skills each (total twenty-five skills). Then the categories of general emotional abilities reduced to four and emotional skills to twenty. Petrides and Furnham (2001) distinguish two types of EI-based on tools used for its assessment, it considers EI as a feature of personality (trait EI) and evaluates it with the method of self-reference and what he considers whereas a person's ability (ability EI) and examine the method of the objective performance. According to researchers EI cannot be assessed objectively, because emotional experience is by nature subjective and there are no objective criteria which may determine the right or wrong answers. The measurement of EI at best can evaluate the knowledge that one has about his feelings, but not the feelings (Mavroveli et al., 2008). Petrides, Furnham, and Frederickson (2004) argue that the two conceptual approaches can coexist and have fifteen faces / manifestations of EI as characteristic (trait): adaptability, assertive behavior, perception of emotions, expression of emotions, managing emotions, regulating emotions, low impulsivity, interpersonal relationships, self-esteem, intrinsic motivation, social perception, stress management, empathy, happiness and optimism (Petrides & Furnham, 2006).

The development of EI theoretical models resulted the simultaneous appearance of scales for evaluation. The Emotional Quotient Inventory (EQ-I) is a self-assessment tool of emotional and social intelligence of the model presented by Bar-On (1997) and first issued to measure such psychological characteristics. Multifactor Emotional Intelligence Scales (MEIS) the Mayer and Salovey (1997) a skill test measurement according to the same failed to give estimates for the third dimension of the model (using emotions to facilitate thinking and behavior).

Among the most known scales that measure the EI are still the Emotional Intelligence Scale (EIS) of Schutte et al. (1998), the Wong Law Emotional Intelligence Scale (WLEIS) of Wong and Law (2002) and Trait Emotional Intelligence Questionnaire (TEIQue) of Retrides and Furnhan (2001). The latter is a self-reference tool that includes 153 recommendations and is divided into fifteen sub-scales, through which examined fifteen faces / manifestations of EI. The TEIQue-Short Form (SF) of Retrides and Furnhan (2006), which will be used in this paper, is a tool based on previous full-form questionnaire and uses two proposals in each sub-scale (a total of 30 proposals) to examine and fifteen aspects of EI. The choice of the particular questionnaire was based on the fact that it is specially designed to (primarily) measure the overall emotional intelligence. So far, the questionnaire has been translated into 15 languages and has been successfully used for the assessment of emotional intelligence in numerous studies (Petrides & Furnham, 2006).

As far as teachers are concerned, the field of education has not remained unaffected by emotional intelligence. Teaching is considered to be a profession of high emotional demands (Hargreaves, 2001). It is indicative that it is included in the list of the ten professions that require high emotional intelligence (Yate, 1997). Apart from what and how they teach, teachers can influence their students through the way they connect with them and act as role models, in order to shape the social and emotional foundations for pupils to develop their character (Jennings & Greenberg, 2009). As research has shown, teachers with high emotional intelligence succeed in creating a safe and constructive framework in their classes, as they develop supportive relationships with their students. Moreover, teachers' attitude can promote respect and proper communications in the classroom motivate the pupils to become actively involved in the educational process and encourage peer cooperation. The daily interaction between teachers and students, but also between teachers and their managers, parents and the educational process itself, entails high emotional demands (Brotheridge & Grandey, 2002).

1.2. Self-efficacy

According to researchers Bandura (1977, 1986, 1997) was the one who laid the foundation for the formulation of the theoretical framework of self-efficacy and appointed as the belief in the abilities of individuals to organize and execute the course of action required to produce achievement (Bandura, 1977). Self-efficacy is the perception of a person's efficiency. It is not an independent, self-existent concept, cut off from the perceptions of the individual, but defined in relation to them. Self-efficacy therefore contains an element of individual perception. It is a motivational structure, which does not reflect the actual capacity, so as assessed externally, but is based on self-assessment capacity (Tschannen-Moran & Woolfolk-Hoy, 2007; Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998). Bandura (1977), referring to self-efficacy, believed that human behavior is influenced by the beliefs of people that can be separated into two expectation categories: the expectation of efficacy and expectation of the outcome. The expectation of the result indicates the assessment of the individual that a particular behavior can lead to concrete results. The expectation of efficacy, indicating the certainty of the individual to be able to shape the behavior successfully necessary to obtain the desired results. These two expectations are different concepts, and mostly determine behavior.

Self-efficacy has been described as a simple idea with significant effects (Tschannen-Moran & Woolfolk-Hoy, 2001). Research has shown that high levels of self-efficacy are associated with a number of positive behaviors. However, self-efficacy may be different in each individual, depending on the situation that appears, it can vary both in size and in the degree of difficulty. Depending on how strong the conditions that someone is in, and accordingly strong self-efficacy is needed (Bandura, 1977). Self-efficacy frames and shapes the human function through these intermediaries, indirect nature processes which affect: a) the objectives and strategies to achieve them, b) the motivation of people across the barriers, c) people's feelings in their efforts to achieve objectives, d) selecting statements from individuals, depending on the challenge level (Brouwers &Tomic, 2000).

Especially in the field of education, teachers' self-efficacy has been associated with a number of important educational variables on school organization, students and of course teachers themselves (Evers, Brouwers, & Tomic, 2002). This concept describes the belief that teachers can affect the students' successful learning, even those who may be "difficult" or unmotivated (Guskey & Passaro,

1994). Tschannen-Moran et al. (1998) provide the following description of the concept of teachers' self-efficacy: "While evaluating their self-perception concerning their teaching ability, teachers compare their personal abilities, such as their skills, knowledge, strategies or personality traits to their personal weaknesses or 'passive' in a particular teaching context". Weighing the resources available and the constraints can shape the teacher's judgment on self-efficacy in a particular learning context. Failure can undermine the teachers' self-efficacy and consequently affect their expectations, as they become negatively predisposed towards future achievements the fear of a new failure being thus instilled (Tschannen-Moran & Woolfolk-Hoy, 2007).

A fairly large number of studies examine the effect of teachers' self-efficacy on improving the students' performance and their overall success (Gibson & Dembo, 1984). Research has also shown that the sense of self-efficacy renders teachers more efficient in handling problems arising in the class as well as more motivated to improve (Woolfolk, Rosoff & Hoy, 1990). Additionally, according to other studies, teachers' self-efficacy enhances students' efficacy, as the latter try to overcome difficulties. Equally important is the relationship between self-efficacy and the relationships formed in the school environment as well as the manager profile (Hoy & Woolfolk, 1993). An important factor of the effectiveness of the school is the collective sense of effectiveness, as expressed by the teachers' board, namely the teachers' personal opinions concerning their abilities and future achievements. These beliefs can have a positive contribution to student performance (Bandura, 1993). The collective sense of efficiency has a positive impact on teachers' self-efficacy. Research showed that a newly appointed teacher with a low sense of efficacy may be positively affected if the teachers' association has a high sense of collective efficacy and vice versa (Skaalvik & Skaalvik, 2007).

Other studies have examined the relationship between teachers' self-efficacy and their efficiency in implementing educational innovations. The findings showed that there is a very close relationship between self-efficacy and the adoption of innovative teaching methods (Guskey, 1988). In his extensive research review, Ross (1994) brought together 88 research findings, revealing that teachers' self-efficacy is related both to the teaching practices adopted but also the students' performance. Specifically, research has shown that teachers who maintain high self-efficacy beliefs, employ innovative and effective teaching strategies, implementing modern and demanding teaching practices, such as teamwork (Ross, 1994).They are more open to new ideas and more willing to experiment with new methods in order to effectively address their students' needs (Guskey, 1988).

Tschannen-Moran and Woolfolk-Hoy (2001) add that teachers with a strong sense of efficacy are less critical to their students' mistakes, devote more time to those who struggle, teach more enthusiastically and are more likely to remain in the teaching profession (Gibson & Dembo, 1984). Strong self-efficacy beliefs were also linked with a more humane approach to control students and support their autonomy while solving problems in the classroom (Woolfolk, Rosoff & Hoy, 1990), as well as with the teachers' ambitions (Tschannen-Moran & Woolfolk-Hoy, 2001). Conversely, low self-efficacy undermines teachers' expectations of their students' success, resulting in reduced effort, rejection of teaching strategies and unconsidered resignation. Teachers with low self-efficacy are pessimistic, exercise strict control in the classroom and depend on external incentives (Tschannen-Moran & Woolfolk-Hoy, 2007). As reported by Tschannen-Moran and Woolfolk-Hoy (2001), the precise conceptualization of the concept of self-efficacy of teachers is not easy but is accompanied by problem areas, complex issues and controversies related to academia. The consequence of this complex scene is the lack of consensus on how to measure the conceptual structure of the self-efficacy and the establishment of several measurement scales.

1.3. Emotional intelligence and self-efficacy

In the literature there are several studies that have examined the relationship of EI with self-efficacy of teachers. Most of them show a significant positive correlation between the two concepts. Chan (2004) studying the previous relationship in educational secondary school in Hong Kong and using the emotional intelligence scale (EIS) of Shutte et al. (1998) found four of EI factors all had important predictive role in the self-efficacy of teachers. The results showed that teachers with high EI index indicate high self-efficacy, unlike teachers characterized by low EI, demonstrating the relationship of the positive link between these two concepts. Penrose, Perry, and Bell (2007) examining the EI relationship and self-efficacy of teachers of primary and secondary education in Australia led to the same results. Also found a significant relationship between the professional experience of teachers as predictive factor of their self-efficacy, while there was no significant effect of work experience for teachers as a mediating factor between EI and their self-efficacy.

In a more recent investigation Nikoopour, Farsani, Tajbakhsh and Kiyaie (2012), used the TEIQue-Short Form scale (SF) of Retrides and Furnhan (2006) to evaluate emotional intelligence, using a sample of 336 teachers. The results showed a significant correlation between the overall emotional intelligence to the total self-efficacy. Moreover, all the factors of emotional intelligence provided moderate predictive ability in teachers' self-efficacy. As for the demographic characteristics, it was found that the educational experience has an effect on emotional intelligence and self-efficacy. Teachers with greater educational experience received higher scores in emotional intelligence and self-efficacy.

The purpose of the present study was to examine the relationship between emotional intelligence and teachers' self-efficacy among teachers from primary and secondary schools in Greece. Specifically, this study was concerned with: (a) identifying the component dimensions of a commonly used self-efficacy scale (Tschannen-Moran & Woolfolk-Hoy, 2001) in a sample of Greek education teachers; (b) examining the relationship of EI and demographic variables (teaching experience, education level, exercise) in predicting levels of teachers' self-efficacy and (c) investigating possible effect of gender, years of experience and their interactions on Greek teachers EI and Self-efficacy.

2. Method

2.1. Participants

A sample of 430 Greek teachers participated voluntarily in the study. These teachers had completed their undergraduate studies in different disciplines and were teaching full-time at primary/secondary schools. 108 were men, 320 women, and two did not report their gender. Their mean age was 40.46 years old (*SD* = 8.91, min 25 and max 59) and had been in the teaching profession from 1 to 36 years (*M* = 14.16, *SD* = 7.95) 296 (72 men, 224 women) were teaching in primary school, while 131 (35 men, 96 women) were teaching in secondary school. With regard to teaching subject 188 were in Greek language education, 49 in English, German, or France language education, 28 in mathematics and science education, 68 in personal, social, and humanities education, 25 in technology education, 10 in arts education, and 51 in physical education. Eleven participants did not report their teaching subject area.

2.2. Instruments

2.2.1. Emotional Intelligence

The Trait Emotional Intelligence Questionnaire–Short Form (TEIQue–SF, Petrides & Furnham, 2006) was used to assess emotional intelligence. TEIQue-SF contains 30 items in 7-point Likert scale ranging from 1 (completely disagree) to 7 (completely agree). It is based on Trait Emotional Intelligence Questionnaire-long form (Petrides & Furnham, 2001) containing 153 items in 15 facets. Two items from each of the 15 subscales of the TEIQue were selected for inclusion, based primarily on their correlations with the corresponding total subscale scores. This specific questionnaire has been translated, and adapted in the Greek educational context (Petrides, Pita, & Kokkinaki, 2007).The reliability for the Trait Emotional Intelligence Questionnaire–Short Form (TEIQue–SF) was .87. in the current study.

2.2.2. Teachers' self-efficacy

The Teachers' Sense of Efficacy Scale (TSES) developed by Tschannen-Moran and Woolfolk-Hoy (2001) was used in the present study. The TSES consists of 24 items in 9-point Likert scale ranging from 1 (nothing) to 9 (a great deal) including eight items for each of the three subscales: Efficacy for Instructional Strategies (e.g., To what extent can you provide an alternative explanation or example when students are confused?) measures to what extent teachers believe they can play their part as classroom instructors to facilitate a conducive learning environment and effective learning process. Efficacy for Classroom Management (e.g., How much can you do to control disruptive behavior in the classroom?) measures to what extent teachers believe they can manage students' discipline and behavior problems. Efficacy for Student Engagement (e.g., How much can you do to motivate students who show low interest in schoolwork?) measures to what extent teachers believe they can encourage all the positive attitudes among their students, such as influencing students to get engaged in school activities, or increasing students' motivation. The overall estimate of reliability was .95 and the reliabilities of its three subscales were .89, .93 and .90 respectively in the current study. The factorial structure, validity and reliability of the scale for teachers have been tested on a Greek sample (Tsigilis, Grammatikopoulos, & Koustelios, 2007; Tsigilis, Koustelios, & Grammatikopoulos, 2010).

2.3. Procedure

Participants responded anonymously to two self-report scales assembled in a questionnaire. The two scales were the TEIQue–SF, and the TSES. The Greek versions of these scales were used, as all participants in this study indicated that they had no problems responding in Greece. All participants were assured that the data would be kept confidential and would be used for research purposes only.

3. Results

3.1. Factor Analysis and Reliabilities

Principal components with varimax rotation of the 24-items yielded three factors with eigenvalues greater than one, accounting for 62% of the total variance. A scree test also suggested that three factors should be extracted. The first factor «efficacy for classroom management» explained 47% of the total variance with loadings ranging from .60 to .81, the second factor «efficacy for instructional strategies» explained 9% of the total variance with loadings ranging from .55 to .74 and the third factor «efficacy for student engagement» explained 6% of the total variance with loadings ranging from .56 to .79. (Table 1).

	Factor		
Teachers' sense of efficacy Scale (TSES)	**1**	**2**	**3**
How well can you keep a few problem students from ruining an entire lesson?	.813		
How much can you do to get children to follow classroom rules?	.810		
How well can you respond to defiant students?	.806		
How much can you do to control disruptive behavior in the classroom?	.792		
How much can you do to calm a student who is disruptive or noisy?	.758		
How well can you establish routines to keep activities running smoothly?	.717		
To what extent can you make your expectation clear about student behavior?	.656		
How well can you establish a classroom management system with each group of students?	.603		
How well can you respond to difficult questions from your students?		.737	
To what extent can you gauge student comprehension of what you have taught?		.711	
How well can you provide appropriate challenges for very capable students?		.707	
To what extent can you craft good questions for your students?		.702	
To what extent can you provide an alternative explanation or example when students are confused?		.679	
How well can you implement alternative strategies in your classroom?		.643	
To what extent can you use a variety of assessment strategies?		.641	
How much can you do to adjust your lessons to the proper level for individual students?		.549	
How much can you do to get through to the most difficult students?			.785
How much can you assist families in helping their children do well in school?			.749
How much can you do to get students to believe they can do well in schoolwork?			.630
How much can you do to foster student creativity?			.625
How much can you do to improve the understanding of a student who is failing?			.614
How much can you do to help your students think critically?			.610
How much can you do to motivate students who show low interest in schoolwork?			.588
How much can you do to help your students value learning?			.562
	Eigenvalue	**Cum %**	
Factor 1	11.36	47.34	
Factor 2	2.17	56.40	
Factor 3	1.34	61.99	

Table 1: Factor loading for the TSES

Reliabilities for the teacher efficacy subscales were .89 for instructional strategies, .93 for classroom management, and .90 for student engagement. Means for the three subscales, ranged from 6.87 to 7.01, and are presented in Table 2. Also correlations for the teacher efficacy subscales were .603 (classroom management and instructional strategies), .676 (classroom management and student engagement) and .734 (instructional strategies and student engagement).

	Mean	**SD**	**a**
TSES	7.01	.96	.95
Efficacy for classroom management	7.01	1.17	.93
Efficacy for instructional strategies	7.16	1.01	.89
Efficacy for student engagement	6.87	1.07	.90

Table 2: Means for TSES and its subscales

3.2 Predicting levels of self efficacy

Multiple linear regression analysis was conducted with the aim of examining which of the EI and demographic variables (teaching experience, education level, and exercise) can significantly predict teacher's self efficacy levels. Overall four such analyses were performed, one for the overall self-efficacy and one for each of the three dimensions. Table 3 depicts the results from the linear regression analyses.

Variables	*R*	R^2	*F*	*standardized b coefficient*	*t*	*correlation*
Overall Self efficacy						
EI	.401	.161	80.064**	.385	8.983**	.401
Teaching experience	.488	.238	65.035**	.314	7.371**	.261
Education level	.512	.262	49.227**	-.151	-3.560**	-.110
Exercise	.525	.275	39.425**	-.119	-2.767**	-.117
Efficacy for instructional strategies						
EI	.310	.096	44.562**	.320	7.125**	.310
Teaching experience	.398	.158	39.225**	.249	5.542**	.263
Efficacy for classroom management						
EI	.362	.131	62.856**	.346	7.796**	.362
Teaching experience	.436	.190	48.975**	.277	6.292**	.229
Education level	.459	.211	37.045**	-.139	-3.169**	-.103
Exercise	.472	.222	29.682**	-.111	-2.491*	-.173
Efficacy for student engagement						
EI	.386	.149	73.272**	.367	8.582**	.386
Teaching experience	.457	.209	54.996**	.295	6.936**	.228
Education level	.513	.264	49.621**	-.230	-5.437**	-.193
Exercise	.528	.279	40.119**	-.128	-2.969**	-.199
*Note:*p<0.05*, ** *p*<0.01.						

Table 3: Regression analyses of the EI and demographic variables on the Self efficacy dimensions

With regard to overall self efficacy, the multiple regression model was significant, $R = .53$, F (4, 415) = 39.43, $p < 0.001$, and it accounted for 27.5 % of the explained variance (R^2). All independent variables were significant predictors of self efficacy. Based on the standardized regression coefficients the EI was the strongest predictor following by the teaching experience, education level and exercise. With regard to the efficacy for instructional strategies, EI and teaching experience were again significant. The multiple regression model was significant, $R = .40$, F (2, 417) = 39.23, $p < 0.001$, and it accounted for 16% of the variance in predicting Efficacy for Instructional Strategies. Analysis using efficacy for classroom management as dependent variable indicated that EI, teaching experience, education level and exercise were significant predictors. A total of 22% of the variance (R^2) was accounted for by the regression model, which was significant, R=.47, F (4,415) = 29.68, p< 0.001. Based on the standardized regression coefficients the EI was the strongest predictor following by the teaching experience, education level and exercise.
Finally, with regard to efficacy for student engagement, the multiple regression model was significant, $R = .53$, F (4, 415) = 40.12, p< 0.001, and it accounted for 28% of the explained variance (R^2). All independent variables were significant predictors of self efficacy. Based on the standardized regression coefficients the EI was the strongest predictor following by the teaching experience, education level and exercise.

3.3. Differences in trait EI and self-efficacy according to gender, and years of teaching experience
To investigate possible effects of gender, years of experience and their interactions on Greek teachers' trait EI and Self-efficacy, two-way ANOVA were conducted. The dependent variables were the trait EI and the Self-efficacy, and the independent variables were (a) the gender with two levels and (b) the years of experience with four levels (1-6, 7-12, 13-19, 19 and>). The ANOVA analysis showed a strong effect of gender on teacher's trait EI (F (1, 414) = 13.69, $p < 0.05$, $\eta^2 = 0.032$), as men teachers yielded higher levels of trait EI (M= 5.22, SD= 0.62) than women (M= 5.01, SD= 0.69). Also a strong effect of teaching experience was also noticed (F (3, 414) = 3.25, $p < 0.05$, $\eta^2 = 0.023$). A Scheffe Post-hoc test revealed a statistically significant difference among teachers with1-6 years of teaching experience ($M = 5.73$) and teachers of 19 and above years of teaching experience ($M = 5.07$). Moreover, no strong effect for gender and years of teaching experience and teacher's interaction (F (3, 414) = 1.55, $p = 0.20$, η^2= 0.011) were observed.
The ANOVA analysis also revealed a strong effect of gender on teacher's self-efficacy (F (1, 414) = 12.99, $p < 0.05$, η^2=0.030), as men teachers reported higher levels of self-efficacy ($M = 7.31$, $SD = 0.89$) than women ($M = 6.90$, $SD = 0.95$). Also, a strong effect of teaching experience (F (3,414) =5.52, p<0.05, η^2=0.038). A Scheffe Post-hoc test revealed a statistically significant difference among teachers with 7-12 years of teaching experience ($M = 6.87$) and teachers of 19 and above years of teaching experience ($M = 7.36$). Moreover, no strong effect for gender and years of teaching experience and teacher's interaction (F (3, 414) = 1.55, p=0.20>0.05, η^2= 0.011) were observed.

4. Discussion
The first aim of our study was to identify the component dimensions of the TSES and use this scale to assess the different dimensions of teachers' self efficacy. After analysing, a three-factor model showed satisfactory fit to the data. The selected model is in accordance with Tschannen-Moran and Woolfolk-Hoy's (2001) results, who also found that TSES comprises three factors for in-service North American teachers. The same result reached by Tsigilis, Grammatikopoulos, and Koustelios (2007) when examined the factorial

validity of the Greek version of the TSES for teachers implementing innovative programs and by Tsigilis, Koustelios, and Grammatikopoulos (2010) of teachers from Greek primary and secondary schools.

Specifically, according to our results, the following three factors were identified in the TSES: efficacy for instructional strategies refer to what extent teachers believe they can play their part as classroom instructors to facilitate a conducive learning environment and effective learning process; efficacy for classroom management refers to what extent teachers believe they can manage students' discipline and behavior problems; finally, efficacy for student engagement refers to what extent teachers believe they can encourage all the positive attitudes among their students, such as influencing students to get engaged in school activities, or increasing students' motivation.

To investigate the relationship of EI with the teachers' self-efficacy, the intercorrelation matrix among all the above dimensions was obtained. In summary, EI was moderately but significantly correlated with the three self-efficacy dimensions. Nonetheless, it supports the literature in the sense that there is a significant positive correlation between teachers' EI and their self-efficacy (Gürol, Özercan, & Yalçın, 2010; Nikoopour et al., 2012; Rastegar & Memarpour, 2009). The results of the present study also confirmed the findings of Chan (2004), Moafian and Ghanizadeh (2009), and Penrose, Perry, and Bell (2007) that there was a relationship between teachers' EI and their self-efficacy beliefs. These studies suggested that teachers with high efficacy beliefs and high EI capacities were aware of their potential to motivate students, support them, and engage them in learning activities with a positive relationship in a constructive learning environment. Accordingly, teachers with these abilities might apply them in the classroom setting to improve effective teaching. Therefore, it is important for teacher education programs to develop a stronger sense of efficacy and emotional intelligence among pre-service teachers during their teacher training (Chan, 2004; Tschannen-Moran & Woolfolk-Hoy, 2001).

With regard to regression analyses, positive EI, teaching experience and negative education level, exercise were found to predict general self-efficacy, efficacy for classroom management and efficacy for student engagement, whereas positive EI and teaching experience predicted efficacy for instructional strategies. Thus, it is interesting and beneficial to teacher educators that EI and self-efficacy are positively correlated, since each of them has the capacity to be developed, and each has a positive influence on the other. In other words, development of EI during teacher education programmes can lead to the development of teachers' self-efficacy and vice versa.

Finally, the role of demographic variables (gender and teaching experience) on EI and self-efficacy was investigated in order to explore individual differences. Interestingly, the gender effect was found significant in EI and self-efficacy, revealing that men reported a higher ability of women. In opposition to the above, other studies (Schutte et al., 1998) found that females scored significantly higher than males in overall EI, while other studies found no difference in EI and self-efficacy among teachers of different gender (Chan, 2004; Gürol, Özercan, & Yalçın, 2010; Moafian & Ghanizadeh, 2009; Nikoopour et al., 2012; Rastegar & Memarpour, 2009). This finding may reflect social constructions regarding gender which affect teacher's perception of how effective it is in the classroom.

Also the effects of years of teaching experience found significant in EI and self-efficacy but no strong effect for gender and years of teaching experience and teachers interaction. These findings were in line with those reported by Chester and Beaudin (1996) who found that beliefs are mediated by the teachers' age and prior experience; that is, age and prior experience were associated with changes in newly hired teachers' self-efficacy beliefs. According to their study, older novices were more self-assured and certain of their commitment to teaching than were younger novices. They believed that teaching allows them to contribute to the success of the community and to the future of the world at large by positively affecting learners.

While the findings of this study suggest certain links between general emotional intelligence and specific components of self-efficacy beliefs, the precise mechanisms and pathways of possibly bi-directional influence remain an important topic for further exploration in future studies. The major limitation of this study is the cross-sectional design which do not permit to firm conclusion about the causal relations among the examined variables. Another limitation pertains to the use of only self-report data to assess EI and self-efficacy, do. Although a very widely used method, self-reports could be susceptible to self presentation biases and faking, or might inflate the strength of the relationships among measures due to common method variance (Chan, 2004). On the other hand, it is argued that the assessment of the above constructs by self-reports should be appropriate, as only the individual himself or herself can provide an accurate knowledge and perception of him or herself (Ciarrochi, Chan, & Caputi, 2000; Petrides et al., 2007). Based on the results of this research it will be possible to design effective educational interventions to improve emotional intelligence and self-efficacy of teachers, in order to create an atmosphere in which teachers will have a positive mental and emotional attitude to their work.

5. References

i. Bandura, A. (1977). Social Learning Theory. New York: General Learning Press.
ii. Bandura, A. (1986). Social Foundations of Thought and Action: A Social Cognitive Theory. Englewood Cliffs: Prentice-Hall.
iii. Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. Educational Psychologist, 28(2), 117-148.
iv. Bandura, A. (1997). Self-Efficacy: The Exercise of Control. New York: Freeman.
v. Bar-On, R. (1997). Bar-on emotional quotient inventory technical manual. Toronto: Multi-Health Systems.
vi. Brotheridge, C., & Grandey, A. (2002). Emotional labor and burnout: Comparing two perspectives of "people work". Journal of Vocational Behaviour, 60, 17-39.
vii. Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. Teaching and Teacher Education, 16(2), 239-253.

viii. Chan, D.W. (2004). Perceived emotional intelligence and self-efficacy among Chinese secondary school teachers in Hong Kong. Personality and Individual Differences, 36(8), 1781-1795.
ix. Chester, M.D., & Beaudin, B.Q. (1996). Efficacy beliefs of newly hired teachers in urban schools. American Educational Research Journal, 33(1), 233-257.
x. Ciarrochi, J., Chan, A., & Caputi, P. (2000). A Critical Evaluation of the Emotional Intelligence Construct. Personality and Individual Differences, 28(1), 539-561.
xi. Evers, W.J.G., Brouwers, A., & Tomic, W. (2002). Burnout and self-efficacy: a study on teachers' beliefs when implementing an innovative educational system in the Netherlands. British Journal of Educational Psychology, 72(2), 227-243.
xii. Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. New York: Basic Books.
xiii. Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. Journal of Educational Psychology, 76(4), 569-582.
xiv. Goleman, D. (1995). Emotional Intelligence. New York: Bantam Books.
xv. Goleman, D. (1998). Working with Emotional Intelligence. New York: Bantam Books.
xvi. Gürol, A., Özercan, M. G., & Yalçın, H. (2010). A comparative analysis of pre-service teachers' perceptions of Self-efficacy and emotional intelligence. Procedia Social and Behavioural Sciences, 2(2), 3246-3251.
xvii. Guskey, T. R. (1988). Teacher efficacy. Self-concept, and attitudes toward the implementation of instructional motivation. Teaching and Teacher Education, 4(1), 63-69.
xviii. Guskey, T.R. (1981). Measurement of responsibility teachers assume for academic successes and failures in the classroom. Journal of Teacher Education, 32(3), 44-51.
xix. Guskey, T.R., & Passaro, P.D. (1994). Teacher efficacy: a study of construct dimensions. American Educational Research Journal, 31(3), 627-643.
xx. Hargreaves, A. (2001). The emotional geographies of teaching. Teachers' College Record, 103(6), 1056-1080.
xxi. Hoy, W. K., & Woolfolk, A. E. (1993). Teachers' sense of efficacy and the organizational health of schools. The elementary School Journal, 93(4), 355-372.
xxii. Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. Review of Educational Research, 79, 491-525.
xxiii. Mavroveli, S., Petrides, K. V., Shove, C., & Whitehead, A. (2008). Investigation of the construct of trait emotional intelligence in children. European Child and Adolescent Psychiatry, 17(8), 516-526.
xxiv. Mayer, J.D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey, & D.J. Sluyter (Eds), Emotional Development and Emotional Intelligence: Educational Implications (pp. 3-34). New York: Basic Books.
xxv. Moafian, F., & Ghanizadeh, A. (2009). The relationship between Iranian EFL teachers' emotional intelligence and their self-efficacy in Language Institutes. System, 37(4), 708-718.
xxvi. Nikoopour, J., Farsani, M. A., Tajbakhsh, M.. & Kiyaie, S. H. S. (2012). The Relationship between Trait Emotional Intelligence and Self-efficacy among Iranian EFL Teachers. Journal of Language Teaching and Research, 3(6), 1165-1174.
xxvii. Penrose, A., Perry, C., & Bell, I. (2007). Emotional intelligence and teacher self-efficacy: the contribution of teacher status and length of experience. Issues in Educational Research, 17, 107-126.
xxviii. Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. European Journal of Personality, 15(6), 425-448.
xxix. Petrides, K. V., & Furnham, A. (2006). The role of trait emotional intelligence in a gender-specific model of organizational variables. Journal of Applied Social Psychology, 36(2), 552-569.
xxx. Petrides, K. V., Furnham, A., & Frederickson, N. (2004). Emotional intelligence. The Psychologist, 17, 574-577.
xxxi. Petrides, K. V., Pérez-González, J. C., & Furnham, A. (2007). On the Criterion and Incremental Validity of Trait Emotional Intelligence. Cognition and Emotion, 21, 26-55.
xxxii. Petrides, K. V., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. British Journal of Psychology, 98(2), 273-289.
xxxiii. Petrides, K. V., Sangareau, Y., Furnham, A., & Frederickson, N. (2006). Trait emotional intelligence and children's peer relations at school. Social Development, 15(2), 537-547.
xxxiv. Rastegar, M., & Memarpour, S. (2009). The relationship between emotional intelligence and self-efficacy among Iranian EFL teachers. System, 37(4), 700-707.
xxxv. Rose, J. S., & Medway, F. J. (1981). Measurement of teachers' beliefs in their control over student outcome. Journal of Educational Research, 74(3), 185-190.
xxxvi. Ross, J. A. (1994). Beliefs that make a difference: The Origins and Impacs of Teacher Efficacy. Paper presented at the Annual Meeting of the Canadian Association for Curriculum Studies. Calgary, Alberta, Canada.
xxxvii. Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. Imagination, Cognition and Personality, 9(3),185-211.
xxxviii. Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. Personality and Individual Difference, 25(2), 167-177.
xxxix. Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. Journal of Educational Psychology, 99(3), 611-625.
xl. Thorndike, E. L. (1920). Intelligence and its uses. Harper' s magazine, 140, 227-235.

xli. Tschannen-Moran, M., & Woolfolk-Hoy, A. (2001). Teacher efficacy: Capturing an elusive concept. Teaching and Teacher Education, 17(7), 783-805.
xlii. Tschannen-Moran, M., & Woolfolk-Hoy, A. (2007). The differential antecedents of self-efficacy beliefs on novice and experienced teachers. Teaching and Teacher Education, 23(6), 944-956.
xliii. Tschannen-Moran, M., Woolfolk-Hoy, A., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. Review of Educational Research, 68(2), 202-248.
xliv. Tsigilis, N., Grammatikopoulos, V., & Koustelios, A. (2007). Applicability of the Teachers' Sense of Efficacy Scale to educators teaching innovative programs. International Journal of Educational Management, 21(7), 634-642.
xlv. Tsigilis, N., Koustelios, K., & Grammatikopoulos V. (2010). Psychometric properties of the Teachers' Sense of Efficacy Scale within the Greek educational context. Journal of Psychoeducational Assessment, 28(2), 153-162.
xlvi. Wong, C. S., & Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. The Leadership Quarterly, 13, 243-274.
xlvii. Woolfolk, A. E., Rosoff, B., & Hoy W. K. (1990). Teaches sense of efficacy and their beliefs about managing students. Teaching and Teacher Education, 6, 137-148.
xlviii. Yate, M. J. (1997). Career smart: Jobs with a future. New York: Ballantine.