

Trait Emotional Intelligence of Greek Special Education Teachers in Relation to Burnout and Job Satisfaction

MARIA PLATSIDOU

Department of Educational and Social Policy, University of Macedonia, Thessaloniki, Greece

ABSTRACT This study investigates perceived emotional intelligence (EI) in relation to burnout syndrome and job satisfaction in primary special education teachers from Greece. EI was measured by the EIS developed by Schutte et al. (1998). Factor analysis revealed that four factors can be identified in the EIS. Results showed that Greek teachers reported fairly high scores in the specific factors and the overall EI. Perceived EI was significantly related to burnout syndrome and job satisfaction, indicating that teachers of high-perceived EI are likely to experience less burnout and greater job satisfaction. Regression analysis revealed that emotional exhaustion can be predicted by satisfaction with the job itself and with the principal subscales; depersonalization is predicted by satisfaction with the job and with prospective promotions; personal accomplishment is predicted by satisfaction with the job itself as well as by an EI factor, optimism/mood regulation and a demographic variable, age. Results are compared to findings from international studies related to teachers and/or other professionals, and the associations of trait EI with burnout and job satisfaction are discussed.

KEY WORDS: burnout; emotional intelligence; job satisfaction; teachers

Introduction

The intensity and the sources of teachers' job-related stress is a subject of growing interest in different educational settings (Chan, 2006; Mearns and Cain, 2003; Platsidou and Agaliotis, 2008). According to some studies, special education teachers are more susceptible to developing high levels of occupational stress than general education teachers – a fact that in some cases may lead to burnout (Wisniewski and Gargiulo, 1997). The burnout syndrome arises in teachers as

School Psychology International Copyright © 2010 SAGE Publications (Los Angeles, London, New Delhi, Singapore and Washington DC), Vol. 31(1): 60–76.
DOI: 10.1177/0143034309360436

a result of their intense interactions with students (Maslach, 1999), especially when the latter exhibit emotional and behavioural disorders and/or poor motivation or if they belong to multiple categories of special needs (Wisniewski and Gargiulo, 1997).

The teachers who are 'burned out' may experience one or more of the three components of the burnout syndrome (Maslach, 1999; Maslach and Schaufeli, 1993). Usually, burnout starts with a feeling of being emotionally overextended and drained by the intense contact with students, parents and colleagues (emotional exhaustion); then, it may lead teachers to negative attitudes and cynical responses toward the students (depersonalization) and a decline in their sense of competence; finally, it results in negative evaluation of teachers' performance and achievement in their job (reduced personal accomplishment).

An increased level of burnout is most likely to result, sooner or later, in job dissatisfaction (Chaplain, 1995; Mearns and Cain, 2003). Job satisfaction has been defined as a pleasurable emotional state which can be related to the appraisal of one's job, an affective reaction to one's job and/or an attitude towards one's job. As Weiss (2002) claims, job satisfaction is an attitude that people form towards their job by taking into account their feelings, beliefs and behaviours.

In the teaching profession, burnout has been negatively associated with satisfaction with various aspects of a teacher's job. Relevant research shows that, in general, teachers report moderate to high levels of satisfaction with their job both in regular (Koustelios, 2001; Kyriakou, 1987) and in special education (Platsidou and Agaliotis, 2008). In attempting to investigate the sources that may affect burnout and job satisfaction in teachers, various factors have been considered which fall into three categories: (a) environmental and contextual elements: workload and time pressure, diversity of job-related tasks, lack of support from administrators or school leadership, low income and poor prospects of promotion, lack of proper staff development, etc. (Borg and Riding, 1991; Goddard et al., 2006; Kyriakou, 1987; Mearns and Cain, 2003); (b) demographic factors such as age, gender, years of experience and family status of the teachers (Borg and Riding, 1991; Kyriakou, 1987) and (c) personality characteristics of the teachers, e.g. it was found that neuroticism is a common predictor of all dimensions of burnout (Kokkinos, 2007), extraversion and agreeableness predict depersonalization and openness and extraversion predict personal accomplishment (Zellars et al., 2000).

In recent years, emotional intelligence (EI) has been seen as important within the teaching profession. Relevant evidence has shown that trait emotional intelligence is likely to be one of the personality characteristics that possibly affect the experience of burnout and job satisfaction in teachers (e.g. Chan, 2004, 2006). The investigation of

this association is one of the aims of the present study. Before proceeding to this aim, the basic research evidence concerning the definition of EI and its association with various aspects of personal and professional life will be outlined.

Emotional intelligence is defined in a two-fold way (Petrides et al., 2007); one approach reflects ability EI (or information-processing EI) which conceives of EI as a constellation of related abilities including the identification and regulation of emotions, the ability to understand the causes of emotions and the transitions among them and the ability to integrate emotional information into decisions and actions and facilitate thinking (Mayer et al., 1999). Ability EI models concern the measurement of actual abilities using maximum-performance tests; their aim is to explicitly define EI as 'a standard intelligence' (Mayer et al., 2001) and emphasize its relation to cognitive ability as well as those personality dimensions that have a strong affective core. The other approach represents trait (or perceived) EI, which includes a set of non-cognitive emotional and social capabilities and skills, motivational and personality dimensions that influence one's ability to succeed in coping with environmental demands and pressures, social and moral abilities and performance skills (Bar-On, 1997; Petrides et al., 2007). Trait EI models are associated to personality dimensions as they encompass behavioural dispositions and self-perceived abilities measured with self-report tests. Although the two EI approaches seem incongruent at a first glance, it has been pointed out that they tend to be complementary rather than contradictory in defining the nature, components, application fields and research goals of EI in the best possible way (Ciarrochi et al., 2000).

Research evidence has shown that EI is related, directly or indirectly, to better adjustment or success in academic, personal, social or occupational settings. For example, high EI is associated with efficiency in coping with problems and difficulties (Mikolajczak and Luminet, 2008) and with lower levels of anxiety and depression (Bastian et al., 2005). Success at work is connected with various EI dimensions such as empathy, optimism and conflict resolution (Zeidner et al., 2004). A negative relationship is found between EI and occupational stress (Bar-On et al., 2000; Slaski and Cartwright, 2002); in some professions, EI can significantly predict occupational stress such as in mental health professionals (Nikolaou and Tsaousis, 2002). Finally, trait EI was also found to have a weak to modest relationship with job satisfaction (Carmeli, 2003; Kafetsios and Loumakou, 2007).

In the teaching profession, specifically, it was found that positive regulation of emotions is a significant predictor of teachers' perceived self-efficacy toward helping others (Chan, 2004). In relation to predicting burnout, research evidence has suggested that certain components of

EI, such as emotional appraisal and positive regulation of emotions, prevent emotional exhaustion that is likely to lead to depersonalization and a low sense of personal accomplishment (Chan, 2006). Interestingly, personal accomplishment may develop independently from the burnout components through the influence of positive utilization of emotions. As regards job satisfaction, trait EI emerged as an important personality-level predictor in a sample of Greek teachers (Kafetsios and Zampetakis, 2007). In conclusion, research evidence suggests that trait EI dimensions play an important role in the job-related subjective well-being of teachers. The present study aims to further clarify these associations in special education teachers.

Aims of the present study

A number of self-report scales have been designed to measure perceived EI (e.g. Bar-On, 1997; Petrides and Furnham, 2001). Most produce a multi-dimensional measure of EI, but there is not agreement amongst the various studies regarding the number and the nature of the component dimensions derived from the same scale. For this reason, Petrides and Furnham (2000) suggest that researchers should factor-analyse the scale before using it. In considering the above, the aims of the present study were to: (a) identify the component dimensions of a commonly used self-report EI scale (Schutte et al., 2001) in a sample of Greek special education teachers; (b) use this EI scale to assess the different dimensions of teachers' trait EI and (c) examine the role of trait EI in predicting levels of teachers' burnout and job satisfaction.

Methods

Participants

In this study, 123 Greek special education teachers holding full-time positions in urban primary schools participated on a voluntary basis; 47 were males and 76 females. Their ages varied from 23–56 years, with a mean of 39.6 years. The participants' teaching experience in special education ranged from 1–23 years, with a mean of 6.2 years.

Research instruments

Participants were asked to complete a package of self-report questionnaires including the Emotional Intelligence Scale (EIS), the Maslach Burnout Inventory (MBI) and the Employee Satisfaction Inventory (ESI).

Emotional Intelligence Scale. This inventory was developed by Schutte et al. (1998) and consists of 33 self-referencing statements

Table 1 *Principal components factor analysis with varimax rotation of the EI scale*

<i>Items</i>	<i>Factors</i>			
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
Others confide in me easily (EI4)	0.652			
Seek out activities that make me happy (EI14)	0.648			
Arrange events others enjoy (EI13)	0.635			
Expect to do well on most things (EI3)	0.625			
Expect good things to happen (EI10)	0.606			
Use good moods to keep trying (EI31)	0.590			
When faced with challenge, I give up (EI28)	0.538			
Share emotions with others (EI11)	0.474			
Know how to make a positive emotion last (EI12)	0.462			
Compliment others when doing well (EI24)	0.455			
Help others feel better (EI30)	0.454			
Re-evaluated what is important (EI6)		0.658		
See new possibilities when mood changes (EI7)		0.649		
Remember past overcame obstacles (EI2)		0.626		
Problem solving is easy in a positive mood (EI17)		0.580		
Emotions make life worth living (EI8)		0.564		
New ideas when in a positive mood (EI20)		0.558		
New ideas when in a change in emotions (EI27)		0.453		
Aware of others' non-verbal messages (EI25)			0.685	
Know what others feel by looking (EI29)			0.678	
Difficult to understand others' feelings (EI33)			0.649	
Know people's emotions by facial expressions (EI18)			0.646	
Aware of my non-verbal messages (EI5)			0.614	
Know what others feel by their voice tone (EI32)			0.576	
Feel like having experienced others' events (EI26)				
Make good impression (EI16)				
Control over emotions (EI21)				0.686
Know why my emotions change (EI19)				0.612
Know when to speak about my problems (EI1)				0.606
Easily recognize my emotions (EI22)				0.600

Items with factor loading > 0.40 were used as a basis for explaining the four factors. The items are presented in Schutte et al. (1998).

(presented in Table 1); participants are asked to rate the extent they (dis)agree with each of the statements on a five-point scale, ranging from 1 = strongly disagree to 5 = strongly agree. An overall EI score is derived by summing up all the item responses.

Maslach Burnout Inventory (MBI). The Greek version of MBI (form Ed; Maslach et al., 1996) translated and adjusted by Kokkinos (2000)

was used to assess the three dimensions of teachers' burnout syndrome: emotional exhaustion (9 items, e.g. 'I feel emotionally drained from my work'), depersonalization (5 items, e.g. 'I feel I treat some students as if they were impersonal objects') and lack of personal accomplishment (8 items, e.g. 'I feel I am positively influencing other people's lives through my work'). Participants had to rate how frequently they experience these feelings on a seven-point scale, ranging from 0 = never to 6 = daily. Cronbach's α was 0.85 for emotional exhaustion, 0.81 for depersonalization and 0.58 for personal accomplishment (Platsidou and Agaliotis, 2008).

Employee Satisfaction Inventory (ESI). The ESI (version for teachers) was developed by Koustelios and Kousteliou (2001) to measure job satisfaction of Greek teachers. It contains 24 items that assess satisfaction in six job related subscales: work conditions (5 items, e.g. 'My workplace is pleasant'), pay (4 items, e.g. 'I'm paid for what I do'), promotion (3 items, e.g. 'My experience increases my prospects for promotion'), the job itself (4 items, e.g. 'My job is worthwhile'), relationship with the school principal (4 items, e.g. 'The school principal provides support when I need it') and the organization as a whole (4 items, e.g. 'There is too much favouritism at school'). Teachers responded to each item on a five-point scale, with higher scores indicating greater frequency of occurrence of the particular experience or feeling. Internal consistency for the six subscales of ESI is, in general, satisfactory, as the Cronbach's α indicate: 0.82 for work conditions, 0.84 for pay, 0.61 for promotion, 0.73 for the job itself, 0.83 for relationships with the school leadership and 0.72 for the organization as a whole (Platsidou and Agaliotis, 2008).

Results

Emotional intelligence factors

Most factor analytic studies have suggested that the EIS is not unidimensional, as Schutte et al. (1998) proposed, and have identified four interpretable factors in the scale (Chan, 2004; Ciarrochi et al., 2001; Petrides and Furnham, 2000; Saklofske et al., 2003). However, the various factor analytic solutions that were found in those studies are not stable. Therefore, our first aim before using the scale to investigate teachers' emotional intelligence was to factor-analyse it in order to determine its underlying factor structure. First, an exploratory factor analysis using varimax rotation was applied on the 33 items of the scale. Results revealed that the best fitting model was a four-factor solution which accounted for 44.62 percent of the total variance. In that model, three items (EI9, EI15 and EI23) were found to load almost equally on

two factors; therefore, a second factor analysis was run in which the above items were left out. This solution (which is reported in Table 1) accounted for 44.38 percent of the total variance and the four factors were identified as follows (internal consistency of each factor is shown in parentheses): *Optimism/mood regulation* (11 items) refers to an optimistic attitude and positive coping with difficulties in one's own or others' life and to highly developed social skills ($\alpha = 0.84$). The second factor is labelled *Managing self-relevant information* (7 items) ($\alpha = 0.73$) and the third *Managing others' emotions* (6 items) ($\alpha = 0.76$); both of them concerned with perceiving, appraising and managing emotion related information in the self and others, respectively. The *Regulation of emotions factor* (4 items) refers to regulation and utilization of emotions in oneself and others ($\alpha = 0.64$). Further, the means of the item means for each of the emerging factors were computed. Two items (EI16 and EI26) were found to have poor loadings on the four-factor model and were not included in the factors' means. Also, the overall EI mean was obtained, in which all 33 items were included ($\alpha = 0.76$). As the above Cronbach alphas indicate, internal consistency of the specific (factors) and the overall trait EI measures was satisfactory.

In the next step, the means of the item means for each of the four emerging factors were computed and descriptive statistics were estimated for them and the overall EI. According to their self-reports, Greek special education teachers reported fairly high scores in all EI factors: managing self-relevant information ($M = 4.08$, $SD = 0.53$), regulation of emotions ($M = 4.01$, $SD = 0.52$), optimism/mood regulation ($M = 4.01$, $SD = 0.50$) and managing others' emotions ($M = 3.74$, $SD = 0.57$). Also, their overall EI score was moderately high ($M = 3.80$, $SD = 0.32$), according to self-reports.

To explore individual differences in teachers' trait EI, a series of ANOVAs was run to check the effects of gender, age, teaching experience and marital status. Only gender was found to be significant in one EI factor, managing others' emotions ($F(1,121) = 8.88$, $p < 0.05$), indicating that women reported a higher ability to manage the emotions of other people than men. No significant effect of age, years of experience and marital status was found on either the specific EI factors or the overall EI.

Emotional intelligence, burnout syndrome and job satisfaction

To pursue the third aim of the study, correlations between all the variables were computed (as reported in Table 2). Overall EI was moderately but significantly correlated with the three burnout dimensions, suggesting that special education teachers who perceive themselves as highly emotionally intelligent are likely to feel less emotionally exhausted, experience low levels of depersonalization and

Table 2 Correlations between overall EI and the four EI factors, the three burnout dimensions, the six subscales of job satisfaction, and two demographic variables, age and years of experience factors

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<i>EI measures</i>																
1. Overall EI	—															
2. Opt./mood reg. and soc. skills	0.767**	—														
3. Managing self-relev. inform.	0.745**	0.535**	—													
4. Managing others' emotions	0.510**	0.351**	0.315**	—												
5. Regulation of emotions	0.593**	0.389**	0.318**	0.347**	—											
<i>Burnout syndrome</i>																
6. Emotional exhaustion	-0.219*	-0.319**	-0.193*	-0.097	-0.113	—										
7. Depersonalization	-0.244**	-0.342**	-0.223*	-0.164	-0.159	0.471**	—									
8. Personal accomplishment	0.423**	0.517**	0.251**	0.254**	0.164	-0.447**	-0.371**	—								
<i>Job satisfaction</i>																
9. Work condition	0.066	0.020	0.150	0.018	0.023	-0.118	-0.173	0.032	—							
10. Pay	-0.041	-0.080	0.000	0.000	-0.006	-0.157	0.017	-0.069	0.208*	—						
11. Promotion	0.134	0.195*	0.185*	0.163	0.080	-0.148	-0.261**	0.185*	0.355**	0.284**	—					
12. Job itself	0.373**	0.345**	0.346**	0.320**	0.251*	-0.452**	-0.282**	0.399**	0.236**	0.069	0.145	—				
13. School principal	0.050	0.062	0.062	0.021	0.035	-0.257**	-0.131	0.109	0.468**	0.091	0.229*	0.174	—			
14. Organization as a whole	0.116	0.152	0.114	0.071	0.120	-0.248**	-0.181*	0.087	0.517**	0.144	0.218*	0.250**	0.700**	—		
<i>Demographic variables</i>																
15. Age	0.110	0.106	0.067	0.104	0.031	0.003	0.015	0.211*	-0.113	-0.354**	-0.026	-0.027	0.091	0.031	-0.111	—
16. Years of experience	0.053	0.104	0.020	0.070	0.165	-0.005	0.029	0.185*	0.179*	-0.041	-0.070	-0.041	0.160	0.203*	0.125	0.565**

** $p < 0.01$; * $p < 0.05$.

have a high sense of personal accomplishment. Regarding the specific EI factors, optimism/mood regulation and social skills had the highest correlations with all the burnout variables, indicating that this is a crucial factor for alleviating burnout. Managing self-relevant information also had significant, although low correlations with the burnout variables. Finally, managing others' emotions correlated solely to the personal accomplishment, whereas regulation of emotions did not have significant correlations with any burnout variables.

Job satisfaction was not extensively correlated with the overall EI nor the specific EI factors. Moderate correlations were consistently found with only one job satisfaction subscale, the satisfaction with the job itself; this suggests that Greek special education teachers who reported high scores of their overall EI and the specific EI factors tend to be more satisfied with their job, in general, than those who reported lower EI scores. Interestingly, the satisfaction with the job subscale also had high correlations with the three burnout dimensions. Finally, no correlations were found between demographic variables, age and experience and trait EI measures.

Predicting levels of burnout

Finally, a series of hierarchical regression analyses (using the stepwise method) was conducted with the aim of examining which of the EI, job satisfaction and demographic variables can significantly predict the three burnout dimensions. First, the job satisfaction subscales were entered in the equation; this was decided because research has shown that low burnout is associated with and even predicted by high job satisfaction (Maslach and Schaufeli, 1993; Platsidou and Agaliotis, 2008). In the second step, the EI factors were entered and, in the third step, the age and years of experience measures were also added. Thus, any statistically significant contribution of the EI or the demographic measures above and beyond the job satisfaction subscales would indicate the added value of any of them in predicting burnout. Table 3 depicts the results from the hierarchical regression analyses in which emotional exhaustion, depersonalization and reduced personal accomplishment were the dependent variables.

With regard to emotional exhaustion, the multiple regression model was significant, $F(2,120) = 18.69$, $p < 0.001$, and it accounted for 24 percent of the explained variance (adj. R^2). It revealed that only the satisfaction with the job and the satisfaction with the school principal subscales were significant predictors of emotional exhaustion, suggesting that higher levels of satisfaction with these two variables were associated with lower levels of emotional exhaustion. The entries of EI factors and demographic measures to the 2nd and 3rd steps of the equation did not make any significant contribution.

Table 3 Hierarchical regression analyses (with the step-wise method) of the job satisfaction subscales, the EI factors and demographic variables on the burnout dimensions

<i>Variables</i>	<i>R²</i>	<i>Adj R²</i>	<i>ΔR²</i>	<i>ΔF</i>	<i>β</i>	<i>t</i>
Emotional exhaustion						
Step 1						
Satisfaction with the job itself	0.20	0.20	0.20	31.13**	-0.420**	-5.19
Satisfaction with the school principal	0.24	0.23	0.03	5.18*	-0.184*	-2.28
Deprsonalization						
Step 1						
Satisfaction with the job itself	0.08	0.07	0.08	10.43**	-0.248*	-2.89
Satisfaction with promotions	0.13	0.11	0.05	6.80*	-0.225*	-2.61
Pers. accomplishment						
Step 1						
Satisfaction with the job itself	0.16	0.15	0.16	22.91**	0.263**	3.34
Step 2						
Optimism/mood reg. and social skills	0.32	0.31	0.16	28.83**	0.407**	5.14
Step 3						
Age	0.35	0.34	0.03	5.55*	0.175*	2.36

* $p < 0.05$; ** $p < 0.01$.

In predicting depersonalisation, satisfaction with the job itself was again revealed to be significant along with satisfaction with prospective promotions. The multiple regression model was significant, $F(2,120) = 8.86, p < 0.001$, and it accounted for 14 percent of the variance in predicting depersonalization. Neither in this case were the EI factors and the demographic measures significant in predicting the level of the current burnout dimension.

As significant predictors of personal accomplishment were indicated an EI factor, the optimism/mood regulation and social skills, a job satisfaction subscale, satisfaction with the job itself and a demographic measure, age. A total of 35 percent of the variance (R^2) was accounted for by the regression model, which was significant, $F(3,119) = 21.57, p < 0.001$. According to these results, higher levels of optimism/mood regulation and satisfaction with the job as well as proceeding age may be predictors of a high sense of personal accomplishment.

Discussion

Assessment of trait EI dimensions in Greek special education teachers

The first aim of our study was to identify the component dimensions of the EIS and use this scale to assess the different dimensions of teachers' trait EI. Schutte and colleagues' EIS (1998) is a commonly used scale and numerous studies have investigated its factorial structure and validity. However, there is not agreement amongst various studies regarding the number and the nature of the component dimensions derived from the scale (Calkan and Altun, 2005; Keele and Bell, 2008). Following Petrides and Furnham's (2000) suggestion, we applied a series of exploratory factor analyses to identify the underlying structure of EIS in our data. As in most relevant studies, we found four interpretable factors in the scale which bear a resemblance to – but are not identical with – those found in previous studies (Chan, 2004; Ciarrochi et al., 2001; Petrides and Furnham, 2000; Saklofske et al., 2003). Specifically, according to our results, the following four factors were identified in the EIS: optimism/mood regulation refers to an optimistic attitude and positive coping with difficulties in one's own or others' life; managing self-relevant information and managing others' emotions is associated with perceiving, appraising and managing emotion related information in the self and others, respectively; finally, regulation of emotions refers to regulation and utilization of emotions in self and others. The internal consistency of the four factors and the overall trait EI was satisfactory, but the explained variance of the model was relatively low.

It is interesting to note that the four EI factors identified in our study bear some resemblance (in terms of name and content) with the factors identified in other factor-analytic studies. Specifically, in the Petrides and Furnham (2000) study, the emerged EI factors were: optimism/mood regulation, appraisal of emotions, social skills and utilization of emotions; in the Ciarrochi et al. (2001) study the factors were: perception of emotions, managing self-relevant information, managing others' emotions and emotion utilization; finally, in the Chan (2004) study the factors were identified as follows: positive self-regulation, positive utilization of emotions, empathic sensitivity and emotional awareness and appraisal. In conclusion, it is evident that, although the factor solutions emerged in the above studies share some common factors, none was able to fit the data of another study. On the one hand, this fact confirms that it is essential to factor analyse each specific data set addressed to the EIS before using it. On the other hand, the failure to produce a stable factor solution across various studies may put the construct validity of the EIS into question. Thus, these findings may guide future research for further scale adjustment and refinement

to tap more adequately the relevant EI dimensions of Greek special education teachers.

When assessed with EIS, the Greek special education teachers reported quite high scores in the four trait EI dimensions and the overall EI: they perceive themselves as doing well in managing self-relevant information, in regulation of emotions and in optimism/mood regulation, and as doing moderately well in managing others' emotions as well as in overall trait EI. A comparison with the findings obtained by Chan (2004), who has studied the trait EI of secondary school teachers from Hong Kong using the same EI scale, reveals that, in general, teaching professionals perceive their trait EI as quite high both in the Greek ($M = 125,25$, $SD = 11.10$) and in the Chinese sample ($M = 122,15$, $SD = 11.44$).

In the next step, the role of demographic variables on trait EI was investigated in order to explore individual differences. Interestingly, only the gender effect was found significant in one EI factor, revealing that women reported a higher ability to manage the emotions of other people than men. In opposition to the above, other studies (e.g. Pau and Croucher, 2003; Schutte et al., 1998) found that females scored significantly higher than males in overall EI, as well as in some of the specific EI subscales. The effects of age, years of experience and marital status were not found significant on either the overall EI or the specific EI factors. This is an unexpected finding, as previous research indicated that trait EI develops with proceeding age (Bar-On, 1997) and, in other professions (e.g. nurses; Humpel and Caputi, 2001), the more experienced employees tend to report higher EI scores.

Trait EI in relation to teachers' burnout and job satisfaction

To explore the association of trait EI with the teachers' burnout and job satisfaction, the intercorrelation matrix among all the above dimensions was obtained. In summary, overall EI was moderately but significantly correlated with the three burnout dimensions and the satisfaction with the job itself subscale. Regarding the specific EI factors, it was clearly shown that optimism/mood regulation had the highest correlations with all the burnout variables, indicating that this is a crucial factor for alleviating burnout. Managing self-relevant information also had significant, although low, correlations, but the other two EI factors had questionable associations with the burnout variables.

The above findings are in line with and strengthen further the results obtained among teachers (Chan, 2006) as well as in other professions (e.g. Bar-On et al., 2000; Slaski and Cartwright, 2002), showing that emotionally competent employees appear to experience less distress and more satisfaction at work than their less emotionally intelligent counterparts (Bar-On, 1997; Nikolaou and Tsaousis, 2002). Also, it was

found that high trait EI individuals exhibit greater self-efficacy to cope with stressful events (Slaski and Cartwright, 2002) and they appraise the stressful situation as a challenge rather than a threat (Mikolajczak and Luminet, 2008). It seems that this is a generalized finding as perceived EI is found to associate with fewer physical symptoms and more adaptive reactions to stressors; furthermore, it is associated with lower levels of social anxiety and greater interpersonal satisfaction, across a variety of methodologies. All the above strengthen the conclusion that high trait EI is important in alleviating occupational stress and preventing professionals from job distress and burnout.

In predicting the levels of burnout dimension, the regression analysis produced some interesting findings. According to these, the levels of emotional exhaustion and depersonalization were significantly predicted only by two job satisfaction subscales; the first being the satisfaction with the job itself for both burnout dimensions, and the second was, respectively, satisfaction with the school principal and satisfaction with promotions. Interestingly, no EI factor was found to make any significant contribution in predicting the above dimensions. In predicting personal accomplishment, the optimism/mood regulation EI factor and age were indicated as significant predictors along with satisfaction with the job itself. These findings are in agreement with the evidence (reviewed in the introduction) which shows that, in the teaching profession, burnout is affected by environmental and job-related contextual elements [such as (dis)satisfaction with the job itself, the school principal and prospects of promotion], demographic variables (such as age) as well as personal characteristics (such as trait EI). However, the various burnout dimensions are related differently to the above predictors, as the regression analysis has shown.

Furthermore, regarding their intercorrelations, personal accomplishment was more closely related to all EI measures (and especially with the optimism/mood regulation factor) compared to the other burnout dimensions; this suggests that emotionally competent individuals tend to have a higher feeling of personal accomplishment. It is interesting to note that other studies (Pau and Croucher, 2003) have also found that optimism/mood regulation is a significant predictor of personal accomplishment. According to Brotheridge and Grandey (2002), personal accomplishment is regarded as a separate dimension of burnout from emotional exhaustion and depersonalization, with different predictors and associations with other psychological constructs.

In addition, the overall and the specific factors trait EI were consistently correlated with only one job satisfaction subscale, satisfaction with the job itself; this suggests that Greek special education teachers who perceive themselves as having a high trait EI tend to be more satisfied with their job, in general, than those who reported lower EI

scores. Similar results were reported in previous studies in which trait EI was found to have weak to modest relationships with job satisfaction (Carmeli, 2003; Kafetsios and Loumakou, 2007) and to be an important personality-level predictor of job satisfaction in Greek teachers (Kafetsios and Zampetakis, 2007).

Conclusions

The present findings suggest that trait EI of Greek special education teachers is invariable across age or teaching experience; also, they imply that teachers' burnout and low job satisfaction that may emerge at some time in their career is likely to be preventable, if they are helped to enhance their EI. This endeavour must take the form of a focused intervention to develop specific dimensions of EI that are connected to burnout and improve their job-related subjective well-being. Intervention programs should be available in both in-service and pre-service teacher education. In Greece, short-term programs on EI development are more likely to be offered for in-service teachers, either freely or at their own expense. In pre-service teacher education, however, there is hardly any place for training programs to address specific EI-related abilities and skills. Findings from this and other studies suggest it is time to begin the design and implementation of such interventions early in prospective teacher education.

This study has several limitations (e.g. small sample size), but the major one is the use of only self-report data to assess trait EI, burnout and job-satisfaction, which makes the findings questionable. 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 et al., 2000; Petrides et al., 2007).

References

- Bar-On, R. (1997) *The Emotional Quotient Inventory (EQ-i): A Test of Emotional Intelligence*. Toronto: Multi-Health Systems.
- Bar-On, R., Brown, J. M., Kircaldy, B. D. and Thomé, E. P. (2000) 'Emotional Expression and Implications for Occupational Stress: An Application of the Emotional Quotient Inventory', *Personality and Individual Differences* 28: 1107–18.
- Bastian, V. A., Burns, N. R. and Nettelbeck, T. (2005) 'Emotional Intelligence Predicts Life Skills, But Not as Well as Personality and Cognitive Abilities', *Personality and Individual Differences* 39: 1135–45.
- Borg, M. and Riding, R. J. (1991) 'Stress in Teaching: A Study of Occupational

- Stress and its Determinants, Job Satisfaction and Career Commitment among Primary School Teachers', *Educational Psychology* 11: 59–76.
- Brotheridge, C. M. and Grandey, A. A. (2002) 'Emotional Labor and Burnout: Comparing Two Perspectives of "People Work"', *Journal of Vocational Behavior* 60(1): 17–39.
- Calkan, M. and Altun, S. A. (2005) 'Adaptation of Emotional Intelligence Scale for Turkish Educators', *International Education Journal* 6(3): 367–72.
- Carmeli, A. (2003) 'The Relationship Between Emotional Intelligence and Work Attitudes, Behavior and Outcomes: An Examination among Senior Managers', *Journal of Managerial Psychology* 18: 788–813.
- Chan, D. W. (2004) 'Perceived Emotional Intelligence and Self-Efficacy among Chinese Secondary School Teachers in Hong Kong', *Personality and Individual Differences* 36: 1781–95.
- Chan, D. W. (2006) 'Emotional Intelligence and Components of Burnout among Chinese Secondary School Teachers in Hong Kong', *Teaching and Teacher Education* 22: 1042–54.
- Chaplain, R. P. (1995) 'Stress and Job Satisfaction: A Study of English Primary School Teachers', *Educational Psychology* 15: 473–90.
- Ciarrochi, J., Chan, A. Y. C. and Bajgar, J. (2001) 'Measuring Emotional Intelligence in Adolescents', *Personality and Individual Differences* 31: 1105–19.
- Ciarrochi, J., Chan, A. and Caputi, P. (2000) 'A Critical Evaluation of the Emotional Intelligence Construct'. *Personality and Individual Differences* 28: 539–61.
- Goddard, R., O'Brien, P. and Goddard, M. (2006) 'Work Environment Predictors of Beginning Teacher Burnout', *British Educational Research Journal* 32: 857–74.
- Humpel, N. and Caputi, P. (2001) 'Exploring the Relationship Between Work Stress, Years of Experience and Emotional Competency Using a Sample of Australian Mental Health Nurses', *Journal of Psychiatric and Mental Health Nursing* 8(5): 399–403.
- Kafetsios, K. and Zampetakis, L. A. (2007) 'Emotional Intelligence and Job Satisfaction: Testing the Mediatory Role of Positive and Negative Affect at Work', *Personality and Individual Differences* 44: 712–22.
- Kafetsios, K. and Loumakou, M. (2007) 'A Comparative Evaluation of the Effects of Trait Emotional Intelligence and Emotion Regulation on Affect at Work and Job Satisfaction', *International Journal of Work Organisation and Emotion* 2(1): 71–87.
- Keele, S. M. and Bell, R. C. (2008) 'The Factorial Validity of Emotional Intelligence: An Unresolved Issue', *Personality and Individual Differences* 44: 487–500.
- Kokkinos, C. (2000) 'Factor Structure and Psychometric Properties of the Maslach Burnout Inventory-Educators Survey among Elementary and Secondary School Teachers in Cyprus', *Stress and Health* 22(1): 25–33.
- Kokkinos, C. (2007) 'Job Stressors, Personality and Burnout in Primary School Teachers', *British Journal of Educational Psychology* 77(1): 229–43.
- Koustelios, A. (2001) 'Personal Characteristics and Job Satisfaction of Greek Teachers', *International Journal of Educational Management* 15(7): 354–58.
- Kyriakou, C. (1987) 'Teacher Stress and Burnout: An International Review', *Educational Research* 29: 146–52.
- Maslach, C. (1999) 'Progress in Understanding Teacher Burnout', in R. Vandenberghe and A. M. Huberman (eds) *Understanding and Preventing Teacher Burnout: A Sourcebook of International Research and Practice*,

- pp. 211–22. Cambridge: Cambridge University Press.
- Maslach, C., Jackson, S. E. and Leiter, M. P. (1996) *Maslach Burnout Inventory Manual*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C. and Schaufeli, W. (1993) 'Historical and Conceptual Development of Burnout', in W. Schaufeli, C. Maslach and Marek, T. (eds) *Professional Burnout: Recent Developments in Theory and Research*, pp. 1–16. Washington, DC: Taylor and Francis.
- Mayer, J. D., Caruso, D. and Salovey, P. (1999) 'Emotional Intelligence Meets Traditional Standards for an Intelligence', *Intelligence* 27: 267–98.
- Mayer, J. D., Salovey, P., Caruso, D. R. and Sitarenios, G. (2001) 'Emotional Intelligence as a Standard Intelligence', *Emotion* 1: 232–42.
- Mearns, J. and Cain, J. E. (2003) 'Relationships Between Teachers' Occupational Stress and Their Burnout and Distress: Roles of Coping and Negative Mood Regulation Expectancies', *Anxiety, Stress and Coping* 16: 71–82.
- Mikolajczak, M. and Luminet, O. (2008) 'Trait Emotional Intelligence and the Cognitive Appraisal of Stressful Events: An Exploratory Study', *Personality and Individual Differences* 44: 1445–53.
- Nikolaou, I. and Tsaousis, I. (2002) 'Emotional Intelligence in the Workplace: Exploring its Effects on Occupational Stress and Organization Commitment', *The International Journal of Organizational Analysis* 10(4): 327–42.
- Pau, A. K. and Croucher, R. (2003) 'Emotional Intelligence and Perceived Stress in Dental Undergraduates', *American Dental Education Association. Journal of Dental Education* 67(9): 1023–28.
- Petrides, K. V. and Furnham, A. (2001) 'Trait Emotional Intelligence: Psychometric Investigation with Reference to Established Trait Taxonomies', *European Journal of Personality* 15: 425–48.
- Petrides, K. V. and Furnham, A. (2000) 'Gender Differences in Measured and Self-Estimated Trait Emotional Intelligence', *Sex Roles* 42: 449–61.
- Petrides, K. V., Pérez-González, J. C. and Furnham, A. (2007) 'On the Criterion and Incremental Validity of Trait Emotional Intelligence', *Cognition and Emotion* 21: 26–55.
- Platsidou, M. and Agaliotis, I. (2008) 'Burnout, Job Satisfaction and Instructional Assignment-related Sources of Stress in Greek Special Education Teachers', *International Journal of Disability, Development and Education* 55(1): 61–76.
- Saklofske, D. H., Austin, E. J. and Minski, P. S. (2003) 'Factor Structure and Validity of a Trait Emotional Intelligence Measure', *Personality and Individual Differences* 34: 1091–100.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J. and Dornheim, L. (1998) 'Development and Validation of Emotional Intelligence', *Personality and Individual Difference* 25: 167–77.
- Schutte, N. S., Malouff, J. M., Bobik, C., Coston, T. D., Greeson, C. Jedlicka, C., Rhodes, E. and Wendorf, G. (2001) 'Emotional Intelligence and Interpersonal Relations', *Journal of Social Psychology* 141(4): 523–36.
- Slaski, M. and Cartwright, S. (2002) 'Health, Performance and Emotional Intelligence: An Exploratory Study of Retail Managers', *Stress and Health* 18(2): 63–68.
- Weiss, H. M. (2002) 'Deconstructing Job Satisfaction: Separating Evaluations, Beliefs and Affective Experiences', *Human Resource Management Review* 12: 173–94.
- Wisniewski, L. and Gargiulo, R. M. (1997) 'Occupational Stress and Burnout among Special Educators: A Review of the Literature', *The Journal of Special Education* 31: 325–46.

- Zeidner, M., Matthews, G. and Roberts, R. D. (2004) 'Emotional Intelligence in the Workplace: A Critical Review', *Applied Psychology: An International Review* 53(3): 371–99.
- Zellars, K. L., Perrewe, P. L. and Hochwarter, W. A. (2000) 'Burnout in Health Care: The Role of the Five Factors of Personality', *Journal of Applied Social Psychology* 30(8): 1570–98.

Maria Platsidou is an Assistant Professor of Developmental Psychology, at the University of Macedonia, Greece. She received her BA and MA degrees from the Aristotle University of Thessaloniki, Greece. She completed her PhD in Psychology in 1994, at the same Institute (Dissertation title: 'Information Processing System: Structure, Development and Interrelations with Cognitive Abilities'). She teaches courses on developmental psychology at the undergraduate and postgraduate level. In 1991 she was a Visiting Scholar at the Max-Planck Institute for Psychological Research in Munich, and in 2005 she was a Visiting Scholar at the Fuller School of Psychology, USA. Her current research interests include emotional intelligence and life quality, burnout and job satisfaction and learning processing, styles and strategies. **Address:** Department of Educational and Social Policy, University of Macedonia, Egnatia 156, 54006 Thessaloniki, Greece. Email: platsidu@uom.gr