



## Trait emotional intelligence profiles, burnout, anxiety, depression, and stress in secondary education teachers



María Carmen Martínez-Monteagudo<sup>a,\*</sup>, Cándido J. Inglés<sup>b</sup>, Lucía Granados<sup>c</sup>, David Aparisi<sup>a</sup>, José Manuel García-Fernández<sup>a</sup>

<sup>a</sup> Department of Developmental Psychology and Didactic, Faculty of Education, University of Alicante, Alicante 03080, Spain

<sup>b</sup> Department of Health Psychology, Area of Developmental and Educational Psychology, Miguel Hernández University of Elche, Avenida de la Universidad s/n, 03202 Elche, Alicante, Spain

<sup>c</sup> Department of Developmental Psychology and Didactic, Faculty of Education, Valencian International University, Valencia 46021, Spain

### ARTICLE INFO

#### Keywords:

Emotional intelligence profiles  
Burnout  
Anxiety  
Depression  
Stress  
Teachers  
Cluster analysis

### ABSTRACT

The objective of this study is to identify the existence of different profiles of emotional intelligence according to their dimensions (Attention, Understanding and Repair). In addition, the study seeks to verify whether there are significant differences between the profiles regarding burnout, anxiety, depression, and stress in teachers. A total of 834 teachers, who completed the Trait Meta-Mood Scale-24, the Maslach Burnout Inventory, and the Depression, Anxiety, and Stress Scales-21, were enrolled. Cluster analysis identified four distinct profiles of emotional intelligence: a group of teachers with a predominance of high emotional attention and low emotional repair, a second group with a profile of high emotional intelligence, a third group with generalized low emotional intelligence, and a fourth group with a predominance of low attention and high emotional repair. Similarly, the results revealed significant differences between emotional intelligence profiles regarding burnout, anxiety, depression, and stress. The teachers in the groups with generalized low emotional intelligence and the group with high attention and low repair obtained higher scores in Emotional Exhaustion, Depersonalization, Anxiety, Depression, and Stress and lower scores in Personal Accomplishment.

### 1. Introduction

At present, teachers face daily challenging demands and working conditions that require a high emotional involvement in their work, regardless of the education level in which they teach (Extremera, Durán, & Rey, 2010; Kyriacou, 2001). When these demands exceed the organizational and/or personal resources that teachers have and this situation becomes chronic over time, it promotes the appearance of disorders and symptoms related to anxiety, depression, stress, and the so-called burnout syndrome.

#### 1.1. Teacher burnout

Burnout syndrome was first defined by Freudenberger (1974). The most accepted and agreed upon proposal by the scientific community is that defended by Maslach and Jackson (1986), who propose that burnout syndrome is composed of three characteristic symptoms: (1) emotional fatigue, i.e., the professional feels unable to give more of

himself, feeling exhausted when trying to face demands that overwhelm him, generating discouragement and frustration; (2) depersonalization, causing the professional to show insensitivity to users (students, parents, teachers, etc.) i.e., when problems that interfere with his or her teaching work continue over time, the teacher will view these users as his or her enemies and consequently will develop defensive strategies to protect himself, which will translate into distancing, cold interactions, etc.; and (3) low personal accomplishment, i.e., the non-achievement of work goals translates into strong feelings of incompetence and failure; the professional perceives that the labour demands exceed this capacities, thus leading to negative self-evaluation.

On the other hand, numerous investigations have found close relationships between burnout and different psychological disorders, particularly teacher depression, anxiety, and stress (Bianchi & Schonfeld, 2016; Calvete & Villa, 2000; Greenglass & Burke, 2003; Matud, García, & Matud, 2002; Schonfeld & Bianchi, 2016). Thus, for example, Matud et al. (2002) report that dissatisfaction with the job role and work pressure correlate with somatic, depressive, anxiety-

\* Corresponding author.

E-mail addresses: [maricarmen.martinez@ua.es](mailto:maricarmen.martinez@ua.es) (M.C. Martínez-Monteagudo), [cjingles@umh.es](mailto:cjingles@umh.es) (C.J. Inglés), [lucia.granados@campusviu.es](mailto:lucia.granados@campusviu.es) (L. Granados), [david.aparisi@ua.es](mailto:david.aparisi@ua.es) (D. Aparisi), [josemagf@ua.es](mailto:josemagf@ua.es) (J.M. García-Fernández).

<https://doi.org/10.1016/j.paid.2019.01.036>

Received 20 October 2017; Received in revised form 28 June 2018; Accepted 23 January 2019

0191-8869/ © 2019 Elsevier Ltd. All rights reserved.

related, and insomnia-type symptoms. In turn, Calvete and Villa (2000) present significant correlation coefficients between emotional exhaustion and symptoms of depression, somatization, anxiety, cognitive difficulties, and interpersonal sensitivity. In the same vein, using a sample of teachers, Schonfeld and Bianchi (2016) find positive and significant correlations between the three factors of burnout and depression.

The aetiology of teacher burnout is diverse (Greenglass & Burke, 2003; Kokkinos, 2007; Maslach & Leiter, 1999), although there is generally a consensus in considering the individual's exposure to internal and external factors as the consequence (Cano-García, Padilla-Muñoz, & Carrasco-Ortiz, 2005; Travers & Cooper, 1997). External factors include those related to the organizational and social context (scarcity of resources, work overload, temporary pressures, lack of professional recognition, etc.) and factors related to educational practice (behaviour problems, lack of student motivation, relationships with other teachers, school climate, etc.). In contrast, internal factors refer to personal factors related to teachers' inherent variables that influence vulnerability to burnout (personality characteristics, self-esteem, locus of control, etc.). The majority of investigations coincide in approaching teacher burnout from an interactionist perspective (Mearns & Cain, 2003; Travers & Cooper, 1997) because it is not the objective conditions themselves that cause burnout; rather, it depends on how they are perceived or interpreted by the teacher. Thus, personal factors may explain why teachers under the same working conditions respond differently to stressors (Byrne, 1994; Mearns & Cain, 2003). The assessment that the person makes of the situation and of his or her response will determine whether he or she experiences burnout. In this line, some research indicates that the personal resources of the teacher play an important role in explaining his or her levels of work stress (Burke, Greenglass, & Schwarzer, 1996; Chan, 2003; Lambert, McCarthy, O'Donnell, & Wang, 2009; Skaalvik & Skaalvik, 2007). According to this approach, people possess, with a certain degree of variability, belief systems, differential personality traits, styles of thinking, and a set of social and emotional competencies that would moderate the negative effect of organizational stressors, making it possible to decrease (or increase) the final impact of the stress response on the individual's physical, psychological, and social health. Thus, these personal variables would play a significant role in the presence/absence of burnout and in the symptomatology experienced by teachers, such as anxiety, depression, and stress (Chan, 2003; Maslach, Schaufeli, & Leiter, 2001). Within these personal variables, the concept of emotional intelligence (EI) stands out.

### 1.2. Emotional intelligence, burnout, anxiety, depression and stress

The different theoretical models existing on EI distinguish between two different construct of EI: trait EI and ability EI (Barchard, Brackett, & Mestre, 2016). First, trait EI considers EI as a set of personality traits and relatively stable aspects of behavior that facilitate the identification, processing and acting on emotive events such as enthusiasm, motivation or optimism (Petrides & Furnham, 2000; Zeidner, Matthews, & Roberts, 2012). On the other hand, ability EI is considered as the adaptive use of emotions whereby an individual can solve problems and effectively adapt to their environment. Thus, this perspective defines EI as the skill set that people have in order to perceive, comprehend, manage and express emotions. These two models use different emotional intelligence measuring instruments. Trait EI is embedded within the framework and is assessed via validated self-report instruments (Barchard et al., 2016). On the contrary, the ability measures evaluate whether or not a person is skillful in a field, with the best way to do so being to analyse their skills through different exercises that compare their responses with predetermined and objective scoring criteria (Petrides & Furnham, 2000). This is a more objective form of evaluation and relies less on the perception of the subjects themselves with regards to their emotional abilities (for example, the real ability to recognize facial emotions).

Mayer and Salovey (1997, p.10) (ability model) define EI as the ability to (a) perceive, value, and express emotions accurately; (b) access and generate feelings that facilitate thinking; (c) understand emotions and have emotional awareness; and (d) regulate emotions and promote emotional and intellectual growth. One of the most widely used questionnaires in the study of EI is the Trait Meta-Mood Scale (TMMS) (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995). The authors empirically identify three dimensions involved in EI: Emotional Attention (the attention that an individual pays to his/her emotions), Emotional Understanding (the ability to understand, identify, and label his/her affective states), and Emotional Repair (the ability to regulate emotions).

It should be noted that the TMMS is a self-report measure; therefore the ability EI model is not the theory underlying this measure (Salovey et al., 1995). Being a self-report, it would fit within the IE trait measures. However, the TMMS was not designed to cover the entire trait EI sampling domain, so the TMMS does not allow obtaining a global score of EI, which should be taken into account when analyzing data and interpreting results (Pérez-González, Petrides, & Furnham, 2004). The objective of this scale is to get an index to evaluate each individual's knowledge of their emotional states. That is, to obtain a personal estimate of the reflective aspects of our emotional experience (Salovey et al., 1995). Salovey, Stroud, Woolery, and Epel (2002) state that the TMMS offers the individual's perception of their own EI (Perceived Emotional Intelligence) rather than the real EI levels, in order to differentiate this evaluation from the EI obtained from ability measures. Although TMMS is interpreted as a narrow self-report of trait EI in the literature (Matthews et al., 2015; Pérez-González et al., 2004; Siegling, Saklofske, & Petrides, 2015), it is the self-report measure most widely used in Spain and Latin America to assess individual differences in EI (Fernández-Berrocal & Extremera, 2008). In addition, the TMMS has demonstrated adequate psychometric properties (Fernández-Berrocal & Extremera, 2008; Fernández-Berrocal, Extremera, & Ramos, 2004) and it has also been translated and adapted into other languages, among them the Spanish version (Fernández-Berrocal et al., 2004), German version (Otto, Döring-Seipel, Greb, & Lantermann, 2001), Portuguese version (Queirós, Fernández-Berrocal, Extremera, Cancela, & Queirós, 2005) and Chinese version (Li, Yan, Yin, & Wu, 2002).

Because one of the characteristics of burnout is that it arises from the social interaction between those who offer their services and those who receive them, examining the teacher's ability to attend, understand, and regulate his or her own and others' negative emotions becomes a key factor among the personal resources for the management of the syndrome. In this sense, recent research has corroborated that adequate management of emotional reactions decreases teachers' work stress levels (Chan, 2006; Karakus, 2013; Pena & Extremera, 2012; Platsidou, 2010); thus, a teacher with a high emotional intelligence, i.e., a high capacity to attend to the emotions originating in his or her work environment, understand the possible causes and consequences of those emotions, and regulate those emotional states, will be more effective when faced with stressful situations in the workplace and less vulnerable to their negative consequences. EI is also not an unalterable personal variable; rather, it is susceptible to improvement through training programmes (Vesely, Saklofske, & Nordstokke, 2014), which makes it a relevant variable in the prevention of burnout (Brackett & Katulak, 2006). In this manner, EI appears to be a possible explanatory variable and, therefore, preventive of teacher malaise.

For example, Platsidou (2010), using a sample of Greek teachers, finds positive correlations between the three components of burnout and IE, confirming that teachers with high EI have less emotional fatigue, lower levels of depersonalization, and higher feelings of personal accomplishment. In the same vein, Karakus (2013) finds that high levels of EI in teachers translate into lower levels of burnout and depression in men and women and lower levels of stress in men. Similarly, different studies have shown that low levels of EI are related to various variables of psychological imbalance such as high depressive symptoms (Salovey

et al., 2002) stress and burnout (Berenbaum, Raghavan, Le, Vernon, & Gómez, 2003; Lizeretti & Extremera, 2011; Salovey et al., 2002).

Thus, the study of emotions in the educational field has increased significantly in the last decade (Uitto, Jokikokko, & Estola, 2015; Yin, Lee, Zhang, & Jin, 2013). Among the most important reasons that generally justify the education of emotional competencies in teachers, on the one hand, there is the need to successfully face the tasks of the profession and the work stress that teachers face in the educational centre, (Dicke et al., 2014; Sutton & Wheatley, 2003) and, on the other hand, the need to educate students' emotional competencies. In this manner, emotionally intelligent teachers, i.e., those with a greater capacity to perceive, understand, and regulate their own emotions and those of others, will not only have the resources to face stressful events in the classroom but will also act as a model for their students' emotional behaviour. Thus, the emotional competence of teachers is necessary, on the one hand, for their own personal wellbeing and for effectiveness and quality in the teaching-learning processes and, on the other hand, to act as a model for the emotional development of their students (Brown, Jones, LaRusso, & Aber, 2010; Nizielski, Hallum, Schütz, & Lopes, 2013; Sutton & Wheatley, 2003; Vesely, Saklofske, & Leschied, 2013).

On the other hand, although research has generally confirmed that high levels of EI are associated with the individual's functioning in different domains (personal, social, and professional) (Chan, 2004; Chan, 2006; Karakus, 2013; Mayer & Salovey, 1997; Pena & Extremera, 2012; Platsidou, 2010) and low levels are related to psychopathology, particularly depression, anxiety, stress, and burnout (Berenbaum et al., 2003; Lizeretti & Extremera, 2011; Salovey et al., 2002), considering the different skills that compose the EI construct, however, these relationships become more complex, with the existence of individual differences in how and the degree to which the different dimensions (attention, understanding, and repair) play different roles that benefit or impair the functioning and wellbeing of the individual. Thus, in general, people with moderate levels of attention and similar levels of understanding and repair present better emotional functioning (Brackett, Palomera, Mojsa-Kaja, Reyes, & Salovey, 2010; Extremera et al., 2010; Mearns & Cain, 2003); however, high levels of attention to feelings unaccompanied by the ability to understand and regulate them are associated with depressive symptoms and burnout (Salovey et al., 1995; Thayer, Rossy, Ruiz-Padial, & Johnsen, 2003). Thus, moderate or low levels of attention to feelings have positive effects when they have mechanisms to discriminate their causes, motives, and consequences and can therefore be understood and regulated appropriately (Extremera & Fernández-Berrocal, 2005). For example, Mearns and Cain (2003) find that US teachers in primary and secondary education, with high expectations concerning the regulation of their negative emotions, use more active coping strategies to cope with stressful work situations, experience fewer negative consequences from stress, and have higher personal achievement scores. In the same line, Brackett et al. (2010) find that secondary school teachers with a greater ability to regulate their emotions have lower burnout and greater job satisfaction. Similarly, Extremera et al. (2010), using a sample of 245 primary and secondary school teachers, find that teachers who have higher professional self-esteem and general positive expectations, show a tendency to not think excessively about their feelings, and have a high understanding of their affective states present lower levels of symptomatology associated with stress. In the prediction of burnout, this research gives more importance to the dimensions related to emotional processing, emphasizing how excessive levels of emotional attention seem to have a detrimental effect on emotional fatigue and on the symptomatology associated with stress.

Therefore, individual differences in the degree to which the different dimensions of EI (attention, understanding, and reparation) are found in different studies and how these differences influence the emotional, social, and professional adjustment of individuals make the existence of different EI profiles doubtful. Thus, research that finds

positive relationships between high levels of EI and social and labour adjustment (Chan, 2006; Karakus, 2013; Pena & Extremera, 2012; Platsidou, 2010) would support the profile of high scores in the three components of EI. In the same vein, studies examining the differential functioning of the three components of EI (high or low levels of attention, understanding, and emotional regulation) and psychosocial adjustment of the teacher (Brackett et al., 2010; Extremera et al., 2010; Extremera & Fernández-Berrocal, 2005; Lischetzke & Eid, 2003; Mearns & Cain, 2003; Salovey et al., 1995; Thayer et al., 2003) would support the profile of low scores in attention and high scores in understanding and regulation, in addition to the profile of high scores in attention and low scores in understanding and regulation. Finally, multiple investigations would support the profile of low scores in the three components of EI, finding positive relationships between low levels in the three factors of EI and burnout, anxiety, depression, and stress presented by teachers (Berenbaum et al., 2003; Lizeretti & Extremera, 2011; Salovey et al., 2002).

### 1.3. The present study

Given this scenario, two objectives are established in the present study. First, it is intended to identify, in a sample of teachers, whether there are combinations of different EI dimensions that give rise to different profiles, which will be defined according to the greater or lesser weight of each of the EI dimensions within each profile. Based on the previous empirical evidence, the following EI profiles are expected to be demonstrated as a result of the combination of the three dimensions: (1) a profile with high scores in all three EI components; (2) a profile with high attention scores and low levels of understanding and repair; (3) a profile with low attention and high scores in understanding and repair; and (4) a profile with low scores in the three dimensions of EI. Second, once the EI profiles are found and defined, we will attempt to determine whether there are significant differences between the defined EI profiles and the different dimensions of burnout, anxiety, depression, and stress. Based on the previous research, we expect to find differences in all EI profiles, depending on the different factors of burnout, anxiety, depression, and stress. Specifically, it is expected that the low general EI group and the profile with high scores in attention and low scores in understanding and repair will present higher scores in emotional exhaustion and depersonalization and lower scores in personal accomplishment. Similarly, these same groups are expected to present more anxiety, depression, and stress than the other groups analysed. This second part of the study will support the existence of different profiles constituting a criterial validation of the groups found, corroborating the study's usefulness when designing programmes related to EI in educational contexts.

## 2. Material and methods

### 2.1. Participants

A random sampling by conglomerates (geographical areas of the province of Alicante, Aragon, and the Region of Murcia: centre, north, south, east, and west) was selected, randomly selecting 30 Spanish centres from rural and urban areas, computing an average of 35 subjects per centre. The total number of participants was 1080 teachers, from 1st to 4th grade of compulsory secondary education. Of these, 246 (22.8%) were excluded because of errors or omissions in their answers or because they did not wish to participate in the research. The final sample consisted of 834 teachers (476 men and 358 women). The age range for the total sample was 29 to 65 years ( $M = 45.81$ ;  $SD = 13.35$ ). Participants were informed that their participation in the study would be completely voluntary and anonymous.

The ethnic composition of the sample was: 88.9% Spanish, 6.34% Hispanic, 3.37% other European, 0.75% Asian, and 0.64% Arab. By means of the chi-square test of homogeneity of the frequency

distribution, it was verified that there were no significant differences between the gender x course groups ( $\chi^2 = 3.15$ ;  $p = .368$ ).

## 2.2. Instruments

### 2.2.1. Trait Meta-Mood Scale-24 (TMMS-24; Fernández-Berrocal et al., 2004)

This instrument assumes the Spanish adaptation of the TMMS-48 developed by Salovey et al. (1995) for assessing EI. The Spanish adaptation consists of 24 items that are answered using a 5-point Likert scale (1 = Do not agree at all, 5 = Completely agree). The items are distributed in three scales: Emotional Attention (e.g. I pay much attention to my feelings), Emotional Understanding (e.g. I am rarely confused about how I feel), and Emotional Repair (e.g. Although I am sometimes sad, I have mostly optimistic outlook). The original version of the validated scale (Fernández-Berrocal et al., 2004) has satisfactory internal consistency indexes (Emotional Attention,  $\alpha = 0.84$ ; Emotional Understanding,  $\alpha = 0.82$ ; Emotional Repair,  $\alpha = 0.81$ ). In this study, the reliability ( $\alpha$ ) was 0.86 for Emotional Attention, 0.83 for Emotional Understanding, and 0.83 for Emotional Repair.

### 2.2.2. Maslach Burnout Inventory (MBI; Seisdedos, 1997)

To evaluate burnout, the Spanish adaptation of the MBI by Maslach and Jackson (1986) was used. The 22 items of the questionnaire reflect the three dimensions established by the authors as defining burnout syndrome: Emotional Exhaustion (e.g. I feel emotionally drained from my work), Depersonalization (e.g. I don't really care what happens to some recipients), and low Personal Accomplishment (e.g. I have accomplished many worthwhile things in this job). The worker is considered to have greater burnout when reporting high scores in Emotional Exhaustion and Depersonalization and low scores in Personal Accomplishment. The Cronbach's alpha values for the reliability of the original subscales are 0.90 for Emotional Exhaustion, 0.79 for Depersonalization, and 0.71 for Personal Accomplishment (Maslach & Jackson, 1982). In this study, the various subscales of the inventory demonstrated their adequate reliability with Cronbach's alpha values equal to 0.86 (Emotional Exhaustion), 0.71 (Depersonalization), and 0.74 (Personal Accomplishment).

### 2.2.3. Scales of Depression, Anxiety, and Stress-21 (DASS-21; Bados, Solanas, & Andrés, 2005)

The DASS-21 is the abbreviated version of the original Lovibond and Lovibond (1995) scale for the self-reported assessment of depression, anxiety, and stress. It consists of 21 items divided into three scales (Depression, Anxiety, and Stress). The subscale of Depression considers aspects related to low positive affect such as dysphoria, hopelessness, sadness, anhedonia, devaluation of life, self-contempt, and lack of interest or involvement (e.g. I felt that life was meaningless). The Anxiety subscale evaluates aspects related to psychophysiological activation or autonomic excitation (hand sweating, tremor, etc.) and subjective anxiety experiences (e.g. I felt I was close to panic). For its part, the Stress subscale assesses difficulty in being relaxed, nervous excitement, agitation, irritability, and impatience (e.g. I found myself getting agitated). This test has convergent and discriminant validity for samples drawn from the normal population (Crawford & Henry, 2003; Lovibond & Lovibond, 1995). Reliability, assessed through Cronbach's alpha, has also been shown to be acceptable for all three scales (Bados et al., 2005; Lovibond & Lovibond, 1995). In this study, the reliability of the DASS-21 for the Depression and Stress scales presented alphas of 0.85 and 0.83, respectively, whereas in the Anxiety scale, an alpha of 0.73 was obtained. Overall, the items composing the DASS-21 had an alpha of 0.91.

## 2.3. Procedure

An interview was conducted with the directors of the participating

centres to present the research objectives, describe the evaluation instruments, request permission, and promote their collaboration. The researchers informed the teachers that their participation was strictly voluntary. The questionnaires were administered online, and their completion was anonymous. The importance of not leaving a question unanswered was emphasized. The mean administration times were 15 min (TMMS-24), 15 min (MBI), and 13 min (DASS-21). All study procedures and data collection instruments were reviewed and approved by the lead author's institutional review board. All standards for research with human subjects were respected, in accordance with the ethical principles of the Helsinki Declaration.

## 2.4. Data analysis

To identify EI profiles, cluster analysis (quick cluster analysis) was used. As indicated by different authors (Hair, Anderson, Tatham, & Black, 1998), this method of cluster analysis is a suitable procedure for establishing profiles when using a large sample of subjects.

The profiles were defined from the different combinations of the three EI factors that the TMMS-24 evaluates: Emotional Attention, Emotional Understanding, and Emotional Repair. The criterion followed in choosing the number of clusters was to maximize the inter-cluster differences to be able to establish the largest possible number of groups with different combinations in the EI dimensions. In addition, the theoretical feasibility and psychological significance of each of the groups that represented the different EI profiles were added to this criterion. After establishing the different groups through the cluster analysis, analyses of variance (ANOVAs) were performed to analyse the significance of the differences between groups in the dimensions of burnout. To analyse the magnitude or size of the effect of these differences, the  $\eta^2$  index was used. Subsequently, in the analyses in which the differences were significant, post hoc tests were performed to identify between which groups the differences were established. The Scheffé method was chosen because this test does not require the sample sizes to be the same. Similarly, the effect size  $d$  (Cohen, 1988) was calculated to calculate the magnitude of the observed differences. Its interpretation is simple: small effect size ( $0.20 \leq d \leq 0.49$ ), moderate ( $0.50 \leq d \leq 0.79$ ), and large ( $d \geq 0.80$ ). The data were analysed using SPSS version 23.0.

## 3. Results

### 3.1. Identification of EI profiles

For the decision making on the number of clusters appropriate for our data, both empirical and theoretical aspects were considered. First, whether there was convergence of the solution before the 10 pre-determined iterations for the hypothesized four-group model was observed. Second, the choice of the model, in addition to the criterion of statistical convergence, was based on the theoretical adjustment to the hypotheses formulated.

The three-cluster analysis makes it possible to identify a group of teachers with a predominance of Emotional Repair (cluster 1), a group with low skills in the three dimensions of EI (cluster 2), and a group with high skills in the three dimensions of EI (cluster 3). However, the four-cluster model allows us to identify, to a greater extent, the four groups initially hypothesized (see Fig. 1). Although the three-cluster solution is presented as simpler, the four-cluster solution makes it possible to replicate what was hypothesized, highlighting the differential role played by attention to feelings and emotional regulation. The four-cluster solution is composed of, first, a group of teachers (cluster 1) formed by 281 professionals (33.70% of the participants) characterized by a predominance of high attention and low repair (HALR). The second group (cluster 2), composed of 206 teachers (24.70% of the participants), is characterized by a predominance of high scores in all EI dimensions. This group is defined by a high general EI profile (HGEI).

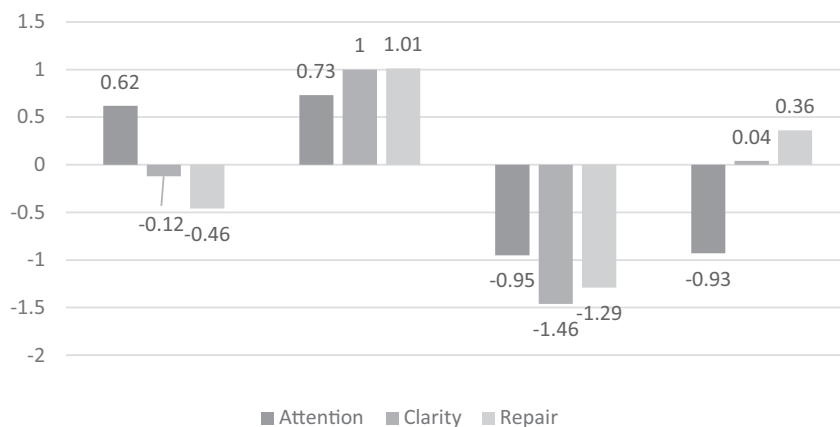


Fig. 1. Graphical representation of the four-cluster model.

Note. Cluster 1 (high attention and low repair), Cluster 2 (high generalized EI), Cluster 3 (low generalized EI), and Cluster 4 (low attention and high repair).

The third group (cluster 3), composed of 122 teachers (14.63% of the participants), is characterized by a predominance of low scores in all dimensions of the scale (profile with low generalized EI, LGEI). Finally, the last group (cluster 4) is composed of 225 participants (26.97% of the teachers) and is characterized by a predominance of low scores in attention and high scores in emotional repair (LAHR).

### 3.2. Intergroup differences in the dimensions of burnout, anxiety, depression, and stress

The results of the ANOVAs indicated significant differences in the dimensions of Emotional Exhaustion, Personal Accomplishment, and Depersonalization. Similarly, significant differences were found in the dimensions of Depression, Anxiety, and Stress (see Table 1).

Regarding the Emotional Exhaustion dimension, the post hoc contrasts indicated that teachers belonging to the group with a high prevalence of HALR and the group with LGEI obtained means significantly higher than the predominantly LAHR group, with the size of the effect of these differences being high ( $p < .001$ ;  $d = 0.83$ ) and moderate ( $p < .001$ ;  $d = 0.63$ ), respectively. On the other hand, the group with HGEI also scored significantly higher in Emotional Exhaustion than the LAHR group, with the size of the effect in this case being moderate ( $p < .001$ ;  $d = 0.63$ ).

Regarding the Personal Accomplishment dimension, it was the group of teachers belonging to the LGEI group that obtained lower mean scores than the rest of the groups, with the size of the effect of these differences being small with respect to the group of teachers with a predominance of HALR ( $p < .001$ ;  $d = 0.48$ ), moderate with respect to the LAHR group ( $p < .001$ ;  $d = 0.79$ ), and large with respect to the HGEI group ( $p < .001$ ;  $d = 0.90$ ). Additionally, the HALR group obtained a significantly lower average score in Personal Accomplishment than the HGEI group; however, the size of the effect of these differences

was low ( $p < .001$ ;  $d = 0.31$ ).

Finally, in regard to the Depersonalization dimension, the post hoc contrasts showed that the group of teachers with a predominance of HALR obtained significantly higher means in this variable than the HGEI group and the LAHR group, with the size of the effect of these differences being moderate ( $p < .001$ ;  $d = 0.72$ ) and high ( $p < .001$ ;  $d = 0.93$ ), respectively. Similarly, the group with a prevalence of LGEI had higher mean values in Depersonalization than the HGEI group, with the size of the effect being moderate ( $p < .001$ ;  $d = 0.67$ ), and the LAHR group, with the size of the effect in this case being high ( $p < .001$ ;  $d = 0.94$ ).

With regard to the dimension of Depression, evaluated by the DASS-21, the post hoc contrasts indicated that the teachers belonging to the group with a predominance of high scores in Attention and low scores in Emotional Repair (HALR) scored higher in Depression than the other groups, with a high effect size with respect to the teachers with a predominance of HGEI ( $p < .001$ ;  $d = 0.84$ ), a moderate effect size with respect to the group with a predominance of LAHR ( $p < .001$ ;  $d = 0.74$ ), and a small effect size relative to the LGEI group ( $p < .001$ ;  $d = 0.30$ ). In addition, the LGEI group had higher mean scores in Depression than the group of teachers with HGEI and the LAHR group, with a moderate effect size in both cases ( $p < .001$ ;  $d = 0.70$  and  $d = 0.55$ , respectively). Similar results were found regarding the Anxiety variable. Thus, the group with predominance of high scores in Attention and low scores in Emotional Repair (HALR) scored higher in Anxiety than the rest of groups, with the size of the effect of these differences being high with respect to the LAHR group ( $p < .001$ ;  $d = 1.00$ ), moderate in relation to the HGEI group ( $p < .001$ ;  $d = 0.66$ ), and small in relation to the group of teachers with LGEI ( $p < .001$ ;  $d = 0.43$ ). Similarly, the LGEI group obtained higher Anxiety values than the LAHR group, with the size of the effect of these differences being moderate ( $p < .001$ ;  $d = 0.76$ ). Finally, the results

Table 1

Means and standard deviations obtained by the four groups and values of the  $\eta^2$  ( $\eta^2$ ) for each dimension of burnout, depression, anxiety, and stress.

	Group 1 HALR		Group 2 HGEI		Group 3 LGEI		Group 4 LAHR		Significance		
	M	SD	M	SD	M	SD	M	SD	$F_{(3,858)}$	p	$\eta^2$
Emotional exhaustion	1.22	0.41	1.15	0.44	1.15	0.45	0.89	0.38	27.39	< .001	0.090
Personal accomplishment	2.47	0.52	2.62	0.42	2.23	0.45	2.54	0.36	21.36	< .001	0.072
Depersonalization	1.88	0.37	1.61	0.38	1.84	0.27	1.55	0.33	47.18	< .001	0.142
Depression	4.74	4.25	1.82	1.99	3.55	3.10	2.13	2.29	44.71	< .001	0.139
Anxiety	4.78	4.38	2.25	2.92	3.06	3.13	1.37	1.50	50.15	< .001	0.153
Stress	8.41	4.28	5.63	3.48	6.54	3.10	4.03	3.40	61.15	< .001	0.181

Note. HALR: high attention, low repair; HGEI: high generalized emotional intelligence; LGEI: low generalized emotional intelligence; LAHR: low attention, high repair.

related to stress were in the same line as the previous variables. Thus, the post hoc contrasts indicated that the teachers belonging to the HALR group scored higher in Stress than the rest of groups, with the size of the effect of these differences being high with respect to the LAHR group ( $p < .001$ ;  $d = 1.12$ ), moderate with respect to the HGEI group ( $p < .001$ ;  $d = 0.70$ ), and small with respect to the LGEI group ( $p < .001$ ;  $d = 0.47$ ). On the other hand, the LGEI group had higher stress scores than the LAHR group, with the size of the effect of these differences being moderate ( $p < .001$ ;  $d = 0.76$ ). Finally, the HGEI group obtained a significantly higher mean in Stress than the LAHR group; however, in this case, the size of the effect was small ( $p < .001$ ;  $d = 0.47$ ).

#### 4. Discussion

This work had two objectives. The first was to analyse the different combinations of EI dimensions in a sample of teachers to define EI profiles. Once these profiles were identified, the second objective was to verify whether there were significant differences between the groups obtained according to the dimensions of Burnout, Anxiety, Depression, and Stress. The results showed the existence of profiles with different combinations of EI dimensions. Thus, through the cluster analysis, four different EI profiles were identified: a group with high scores in attention and low scores in repair (HALR), a second group with high scores in the three dimensions of EI (HGEI), a third group with low scores in the three components of EI (LGEI), and, finally, a group with low scores in attention and high scores in emotional repair (LAHR). Although there are few studies that have analysed the different dimensions of EI through cluster analysis, the results are in agreement with the studies that have found high levels in the three dimensions of EI, teachers with a high level of attention and a low level of repair, educators with a low level of attention and a high level of repair, and, finally, teachers with low levels in the three dimensions of EI. In this manner, multiple studies have confirmed how certain teachers show high scores in the three dimensions of EI, which in turn predicts a better psychological and emotional adjustment (Chan, 2006; Karakus, 2013; Pena & Extremera, 2012; Platsidou, 2010). Regarding the cluster characterized by HALR, although it was hypothesized that the teachers would present this profile, they were also expected to present low understanding; thus, although the values in this last dimension were negative, i.e., they presented low values in understanding, they were not low enough to characterize the group with a predominance of low understanding. The same circumstance occurred in the case of the cluster characterized by LAHR; thus, it was expected that these teachers would also present high understanding. However, the levels of understanding in this group were low. These data are in agreement with investigations that have prioritized the relevant role that regulation plays in stressful situations (Brackett et al., 2010; Extremera & Fernández-Berrocá, 2005; Grandey & Melloy, 2017; Lischetzke & Eid, 2003; Mearns & Cain, 2003; Salovey et al., 1995; Thayer et al., 2003). Finally, a cluster with low values in the three dimensions of EI was found. This last cluster is in line with research that has found profiles of teachers with LGEI (Berenbaum et al., 2003; Lizeretti & Extremera, 2011). In addition, other studies have found similar profiles using student samples (García-Fernández et al., 2015; Inglés et al., 2017 [details removed for peer review]). These data, therefore, support the initial hypothesis.

Regarding the second objective, the results reveal significant differences between the groups found in the dimensions of burnout, i.e., Emotional Exhaustion, Personal Accomplishment, and Depersonalization, and in the variables evaluated using the DASS-21, i.e., Anxiety, Depression, and Stress. These data provide validity to the existence of different EI profiles and help understand the relationship between EI, burnout, anxiety, depression, and stress.

Thus, the results generally indicate that teachers with a predominance of HALR and those with a predominance of LGEI have significantly higher scores in Emotional Exhaustion, Depersonalization,

Depression, Anxiety, and Stress and, on the other hand, lower scores in Personal Accomplishment than the rest of the groups. Thus, the results clearly show a more maladjusted profile of these two profiles with respect to the study variables. These results confirm, on the one hand, how presenting low scores in the three dimensions of EI has negative repercussions for the teachers' professional adjustment, which is in agreement with multiple investigations (Berenbaum et al., 2003; Lizeretti & Extremera, 2011; Salovey et al., 2002); on the other hand, these results underscore the relevance of the role played by the different dimensions of EI (particularly the role of Attention and Regulation) in burnout and the appearance of psychopathological symptoms such as anxiety, depression, and stress. Thus, with respect to the Emotional Attention, when the teacher pays too much attention to recognizing his or her emotions, an increase in ruminant thoughts or anxious-depressive moods can occur (Nolen-Heksema, 2000; Salovey, Bedell, Detweiler, & Mayer, 2000). Indeed, multiple studies have found that people with high levels of Emotional Attention report a greater number of physical symptoms and depressive symptoms, more anxiety, and a greater tendency to suppress their negative thoughts or decrease their physical and social functioning (Goldman, Kraemer, & Salovey, 1996; Salovey et al., 1995; Salovey et al., 2002). In contrast, people with a high ability to discriminate and regulate their emotions have less anxiety and fewer depressive symptoms and ruminant thoughts (Martínez-Pons, 1997). For example, Extremera, Fernández-Berrocá, and Durán (2003) corroborate that teachers with a greater tendency to suppress their negative thoughts and less capacity for emotional regulation indicate greater emotional exhaustion, higher levels of depersonalization, and lower scores in health mental. In contrast, teachers with a higher capacity to repair and discriminate their emotional states report higher scores in personal accomplishment. The results of this research, therefore, are in line with what has been previously found by different studies, demonstrating how emotional regulation acts as a mediating variable between teacher performance and personal accomplishment. Individuals with a greater ability to regulate their emotions present a wider repertoire of strategies for maintaining positive emotions and for reducing or modifying negative emotions, both in themselves and in others (Mayer & Salovey, 1997; Sutton & Harper, 2009). In this manner, the ability of teachers to regulate their emotions will help them cope with the stressful work factors that they face during their workday (discipline problems, arguments with parents, excessive numbers of students in class, etc.). These are factors that can provoke negative emotions for teachers; however, if they are able to regulate them properly, it will be possible for them to reduce their levels of occupational stress without reaching problematic levels of burnout. Thus, for example, in the face of the anger or frustration that student behavioural problems can provoke in a teacher, a teacher with high emotional regulation can use this capacity to modify or regulate these affective states and show equanimity and an assertive attitude to solve such problematic situations in the classroom. However, poor emotional regulation, for example, the teacher's showing an attitude of disdain towards the student, can irreparably destroy the teacher's relationship with the student (Brackett et al., 2010). In conclusion, teachers put their emotional regulation skills into practice because they view them as being more effective in achieving academic goals, allowing them to manage the classroom with discipline, achieve more positive relationships in the classroom, and control their negative emotions (Sutton, 2004; Sutton, Mudrey-Camino, & Knight, 2009).

On the other hand, these results show that the most adjusted profiles with respect to burnout, anxiety, depression, and stress correspond to teachers with a predominance of HGEI and those with a predominance of LAHR, which is consistent with previous research (Brackett et al., 2010; Chan, 2006; Extremera et al., 2010; Extremera & Fernández-Berrocá, 2005; Karakus, 2013; Lischetzke & Eid, 2003; Mearns & Cain, 2003; Pena & Extremera, 2012; Platsidou, 2010; Salovey et al., 1995; Thayer et al., 2003). However, the results have also found that teachers with HGEI present more Emotional Exhaustion and more Stress than

teachers with a profile characterized by LAHR, and although the size of these differences has been small and moderate, the important role of regulation is once again underlined.

Finally, it is necessary to note some limitations of this study. The main difficulty lies in the conceptualization of EI and its form of measurement. Currently, research suggests that EI consists of 15 to 25 facets (Mayer, Caruso, & Salovey, 2016; Mayer & Salovey, 1997; Petrides et al., 2016; Petrides & Furnham, 2001); so establishing an EI profile using only the three components of the TMMS may be limited. Thus, the TMMS is not an integral measure of the EI trait, but is generally interpreted as a narrow self-report of trait EI in the literature (Matthews et al., 2015; Pérez-González et al., 2004; Siegling et al., 2015). Thus, future studies could use other measuring instruments where more aspects of the trait EI were collected. Thus, the conclusion of this study on the negative impact of high emotional attention, with respect to the teacher's well-being (burnout, anxiety, depression and stress) should be considered with caution, given that emotional attention has been considered an indicator of high trait EI. Different studies have shown that emotional attention is often more sensitive to transient emotional states than to personality traits. Furthermore, some research has shown that direct objective tests (ability model) of emotional attention may be more valid than self-report measures (Schlegel, Grandjean, & Scherer, 2012). The simplest inference is that people lack accurate knowledge of their own emotional perception skills. Future research should corroborate the results obtained in this study using measures based on the ability EI model, since the trait-based measures are typically poorly correlated with measures based on the ability EI model (Matthews et al., 2015; Sheldon, Dunning, & Ames, 2014; Zeidner, Shani-Zinovich, Matthews, & Roberts, 2005). On the other hand, it is advisable to interpret with caution the relationship between the scale of attention to emotions of TMMS and well-being because it is a curvilinear relationship, that means presenting the form of an inverted U. Thus, an adequate level of emotional attention indicates a certain ability to pay attention to emotions and feelings but very high scores in attention directed towards emotion are related to ruminative strategies, avoidants, emotional decontrol, impulsivity and health problems (Lischetzke & Eid, 2003; Martínez-González, Piqueras, & Inglés, 2011; Saklofske, Austin, Galloway, & Davidson, 2007). The U-shaped relationship between emotional attention and personal well-being cannot be evaluated through the TMMS, being this fact a limitation of the study, it is important to take with caution the results of this study regarding emotional attention. Despite this, according to Ciarrochi, Deane, and Anderson (2002), the TMMS is adequate for the understanding of an individual's emotional and affective aspects and can serve as a predictor of actual competence in EI. Additionally, few studies have addressed the different dimensions of EI using cluster analysis. On the other hand, the data refer to teachers of secondary education; thus, it would be necessary to conduct studies to determine whether the education level in which teaching occurs influences the relationships that are established between the different EI profiles and burnout, anxiety, depression, and teacher stress. Finally, the results should be interpreted with caution due to the relatively low reliability of the data obtained in the Depersonalization, Personal Accomplishment and Anxiety subscales, with values lower than 0.80. Despite these limitations, the results of this work are of special relevance in the educational field because it is emphasized that although EI is related to a worse adjustment of teachers with respect to their levels of burnout, anxiety, depression, and stress, not all EI dimensions contribute equally to this adjustment. Indeed, as demonstrated in this study, teachers with a pattern characterized by HALR tend to present a worse fit with respect to the study variables. In this manner, it would be necessary to promote a profile characterized by a high capacity to regulate emotions properly, with this attribute being considered the most relevant factor for teacher adjustment.

Thus, the results of this research, together with previous research on teachers' emotional regulation (Sutton, 2004), encourage focusing the

intervention on the training of specific dimensions of EI related to burnout and teacher welfare. In addition, educational policymakers should emphasize the role of teacher emotions, promoting prevention programs and intervention of emotional skills (especially training in emotional regulation). Currently, programs have been implemented, for example, in Belgium (Nelis, Quoidbach, Mikolajczak, & Hansenne, 2009) and the United States (Brackett, Alster, Wolfe, Katulak, & Fale, 2007). In Spain, the research group led by Fernández-Berrocal stands out, implementing EI programs corroborating the great benefit to teachers (Cabello & Fernández-Berrocal, 2016; Fernández-Berrocal & Extremera, 2007; Fernández-Berrocal & Ramos, 2002, 2004). However, there is still insufficient training on the management of work-related emotions in teacher education programs (Yin & Lee, 2012). It may be concluded, therefore, that the emotional skills of teachers must be trained in a specific way. Training on emotional attention consists of recognizing emotional states. Teachers must recognize how certain school situations may cause certain moods and how these moods can influence their behavior. Training on emotional comprehension involves understanding how these emotional states can predict thoughts and behavior. And, finally, training on emotional repair implies that the teacher is able to effectively maintain positive emotional states and repair negative emotional states. As the data from this research suggest, specific training on EI (and emotional repair in particular) will provide teachers with resources to cope with stressful work events and more suitably handle the negative emotional responses that frequently arise in their interactions with co-workers, parents and students. This will undoubtedly affect their well-being and educational practice.

## 5. Conclusions

In conclusion, this study reveals, on the one hand, that there are different EI profiles depending on the greater or lesser weight of their dimensions (Attention, Understanding, and Repair). Thus, four different profiles in a large sample of Spanish teachers are found: a group with high scores in attention and low scores in repair (HALR), a second group with high scores in the three dimensions of EI (HGEL), a third profile with low scores in the three components of EI (LGEI), and, finally, a group with low scores in attention and high scores in emotional repair (LAHR). On the other hand, the results reveal significant differences between the groups found in the dimensions of burnout, i.e., Emotional Exhaustion, Personal Accomplishment and Depersonalization, and in the variables evaluated by the DASS-21, i.e., Anxiety, Depression, and Stress. These results provide validity to the existence of different profiles of EI in the teaching staff and help understand the relationship between IE, burnout, anxiety, depression, and stress. Thus, the results indicate that teachers with HALR and those with an LGEI predominance have significantly higher scores in Emotional Exhaustion, Depersonalization, Depression, Anxiety, and Stress but lower Personal Accomplishment scores than the other groups. Thus, these two profiles clearly present a more maladjusted profile with respect to the study variables, meaning that both having low scores in EI and paying too much attention to feelings without the ability to regulate them adequately may lead to higher teacher burnout, anxiety, depression, and stress. These results have important repercussions in the educational field and should promote intervention programmes that foster teachers' emotional abilities and, in particular, the ability to regulate emotions, which will lead to better adjustment in educators, reducing burnout syndrome, anxiety, depression, and stress and thus ensuring a learning environment that is conducive to teachers and students.

## References

- Bados, A., Solanas, A., & Andrés, R. (2005). Psychometric properties of the Spanish version of Depression, Anxiety and Stress Scales (DASS). *Psicothema*, 17(4), 679–683.
- Barchard, K. A., Brackett, M. A., & Mestre, J. M. (2016). Taking stock and moving

- forward: 25 years of emotional intelligence research. *Emotion Review*, 8(4), 289. <https://doi.org/10.1177/1754073916650562>.
- Berenbaum, H., Raghavan, C., Le, H. N., Vernon, L., & Gómez, J. (2003). A taxonomy of emotional disturbances. *Clinical Psychology: Science and Practice*, 10, 206–226. <https://doi.org/10.1093/clipsy.bpg011>.
- Bianchi, R., & Schonfeld, I. S. (2016). Burnout is associated with a depressive cognitive style. *Personality and Individual Differences*, 100, 1–5. <https://doi.org/10.1016/j.paid.2016.01.008>.
- Brackett, M. A., Alster, B., Wolfe, C., Katulak, N., & Fale, E. (2007). Creating an emotionally intelligent school district: A skill-based approach. In R. Bar-On, J. Jacobus, G. Maree, & M. J. Elias (Eds.), *Educating people to be emotionally intelligent* (pp. 123–137). Westport, CT: Praeger.
- Brackett, M. A., & Katulak, N. A. (2006). Emotional intelligence in the classroom: Skill-based training for teachers and students. In J. Ciarrochi, & J. D. Mayer (Eds.), *Applying emotional intelligence: A practitioner's guide* (pp. 1–27). New York: Taylor & Francis.
- Brackett, M. A., Palomera, R., Mojsa-Kaja, J., Reyes, M. R., & Salovey, P. (2010). Emotion-regulation ability, burnout, and job satisfaction among British secondary-school teachers. *Psychology in the Schools*, 47(4), 406–417. <https://doi.org/10.1002/pits.20478>.
- Brown, J., Jones, S. M., LaRusso, M. D., & Aber, J. L. (2010). Improving classroom quality: Teacher influences and experimental impacts of the 4rs program. *Journal of Educational Psychology*, 102(1), 153–167. <https://doi.org/10.1037/a0018160>.
- Burke, R. J., Greenglass, E. R., & Schwarzer, R. (1996). Predicting teacher burnout over time: Effects of work stress, social support, and self-doubts on burnout and its consequences. *Anxiety, Stress, and Coping*, 3(3), 261–275. <https://doi.org/10.1080/10615809608249406>.
- Byrne, B. M. (1994). Burnout: Testing for the validity, replication and invariance of causal structure across elementary, intermediate and secondary teachers. *American Educational Research Journal*, 31(645), 676. <https://doi.org/10.3102/00028312031003645>.
- Cabello, R., & Fernández-Berrocal, P. (2016). Programas para enseñar la inteligencia emocional en las escuelas. Ideas para una adecuada implementación [Programs to teach emotional intelligence in schools. Ideas for an adequate implementation]. *Journal of Parents and Teachers*, 368, 11–17.
- Calvete, E., & Villa, A. (2000). Burnout y síntomas psicológicos: modelo de medida y relaciones estructurales [Burnout and psychological symptoms: Measurement model and structural relations]. *Ansiedad y Estrés*, 6, 117–130.
- Cano-García, F. J., Padilla-Muñoz, E. M., & Carrasco-Ortiz, M.Á. (2005). Personality and contextual variables in teacher burnout. *Personality and Individual Differences*, 38, 929–940. [https://doi.org/10.1016/S0742-051X\(03\)00023-4](https://doi.org/10.1016/S0742-051X(03)00023-4).
- Chan, D. W. (2003). Hardiness and its role in the stress-burnout relationship among prospective Chinese teachers in Hong Kong. *Teaching and Teacher Education*, 19, 381–395. [https://doi.org/10.1016/S0742-051X\(03\)00023-4](https://doi.org/10.1016/S0742-051X(03)00023-4).
- 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. <https://doi.org/10.1016/j.paid.2003.07.007>.
- Chan, D. W. (2006). Emotional intelligence and components of burnout among Chinese secondary school teachers in Hong Kong. *Teaching and Teacher Education*, 22, 1042–1054. <https://doi.org/10.1016/j.tate.2006.04.005>.
- Ciarrochi, J., Deane, F., & Anderson, S. (2002). Emotional intelligence moderates the relationship between stress and mental health. *Personality and Individual Differences*, 32, 197–209. [https://doi.org/10.1016/S0191-8869\(01\)00012-5](https://doi.org/10.1016/S0191-8869(01)00012-5).
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. New York: Academic Press.
- Crawford, J., & Henry, J. (2003). The Depression Anxiety Stress Scale (DASS): Normative data and latent structure in a large non-clinical sample. *British Journal of Clinical Psychology*, 42, 111–131. <https://doi.org/10.1348/014466503321903544>.
- Dicke, T., Parker, P. D., Marsh, H. W., Kunter, M., Schmeck, A., & Leutner, D. (2014). Self-efficacy in classroom management, classroom disturbances, and emotional exhaustion: A moderated mediation analysis of teacher candidates. *Journal of Educational Psychology*, 106(2), 569–583. <https://doi.org/10.1037/a0035504>.
- Extremera, N., Durán, A., & Rey, L. (2010). Recursos personales, síndrome de estar quemado por el trabajo y sintomatología asociada al estrés en docentes de enseñanza primaria y secundaria [Personal resources, burnout syndrome and symptomatology associated with stress in primary and secondary teachers]. *Ansiedad y Estrés*, 16(1), 47–60.
- Extremera, N., & Fernández-Berrocal, P. (2005). Inteligencia emocional percibida y diferencias individuales en el meta-conocimiento de los estados emocionales: Una revisión de los estudios con el TMMS [Perceived emotional intelligence and individual differences in meta-knowledge from emotional states: A review of the TMMS literature]. *Ansiedad y Estrés*, 11(2–3), 101–122.
- Extremera, N., Fernández-Berrocal, P., & Durán, A. (2003). Inteligencia emocional y burnout en profesores [Emotional intelligence and burnout in teachers]. *Encuentros en Psicología Social*, 1, 260–265.
- Fernández-Berrocal, P., & Extremera, N. (2007). Inteligencia emocional y salud. [Emotional intelligence and health]. In J. M. Mestre, & P. Fernández-Berrocal (Eds.), *Manual de inteligencia emocional [Emotional intelligence manual]* (pp. 173–187). Madrid: Pirámide.
- Fernández-Berrocal, P., & Extremera, N. (2008). A review of trait meta-mood research. *International Journal of Psychology Research*, 2, 39–67.
- Fernández-Berrocal, P., Extremera, N., & Ramos, N. (2004). Validity and reliability of Spanish modified version of the Trait Meta-Mood Scale. *Psychological Reports*, 94, 751–755. <https://doi.org/10.2466/pr.94.3.751-755>.
- Fernández-Berrocal, P., & Ramos, N. (2002). *Corazones inteligentes [Intelligent hearts]*. Barcelona: Kairós.
- Fernández-Berrocal, P., & Ramos, N. (2004). *Desarrolla tu inteligencia emocional [Develop your emotional intelligence]*. Barcelona: Kairós.
- Freudenberger, H. (1974). Staff burnout. *Journal of Social Issues*, 30, 159–165. <https://doi.org/10.2466/pr.94.3.751-755>.
- García-Fernández, J. M., Inglés, C. J., Suriá, R., Lagos-SanMartín, N., González-Maciá, C., Aparisi, D., & Martínez-Monteaquedo, M. C. (2015). Profiles of emotional intelligence and learning strategies in a sample of Chilean students. *European Journal of Psychology of Education*, 30, 437–455.
- Goldman, S. L., Kraemer, D. T., & Salovey, P. (1996). Beliefs about mood moderate the relationship of stress to illness and symptom reporting. *Journal of Psychosomatic Research*, 41, 155–178. [https://doi.org/10.1016/0022-3999\(96\)00119-5](https://doi.org/10.1016/0022-3999(96)00119-5).
- Grandey, A., & Melloy, R. C. (2017). The state of the heart: Emotional labor as emotion regulation reviewed and revised. *Journal of Occupational Health Psychology*, 22(3), 407–422. <https://doi.org/10.1037/ocp0000067>.
- Greenglass, E. R., & Burke, R. J. (2003). Teacher stress. In M. F. Dollard, A. H. Winefield, & H. R. Winefield (Eds.), *Occupational stress in the service professions* (pp. 213–236). New York: Taylor and Francis.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Inglés, C. J., Martínez-Monteaquedo, M. C., Pérez-Fuentes, M. C., García-Fernández, J. M., Mercader, I., Suriá, R., & Gázquez, J. J. (2017). Emotional intelligence profiles and learning strategies in secondary school students. *Educational Psychology*, 37(2), 237–248.
- Karakus, M. (2013). Emotional intelligence and negative feelings: A gender-specific moderated mediation model. *Educational Studies*, 39, 68–82. <https://doi.org/10.1080/03055698.2012.671514>.
- Kokkinos, C. M. (2007). Job stressors, personality and burnout in primary school teachers. *British Journal of Educational Psychology*, 77, 229–243. <https://doi.org/10.1348/000709905X90344>.
- Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53, 27–35. <https://doi.org/10.1080/00131910120033628>.
- Lambert, R. G., McCarthy, C., O'Donnell, M., & Wang, C. (2009). Measuring elementary teacher stress and coping in the classroom: Validity evidence for the classroom appraisal of resources and demands. *Psychology in the Schools*, 46(10), 973–988. <https://doi.org/10.1002/pits.20438>.
- Li, C., Yan, J., Yin, X., & Wu, Z. (2002). A primary study of the application of the Trait Meta-Mood Scale in military medical students. *Chinese Journal of Clinical Psychology*, 10, 202–203.
- Lischetzke, T., & Eid, M. (2003). Is attention to feelings beneficial or detrimental to affective well-being? Mood regulation as a moderator variable. *Emotion*, 3, 361–377. <https://doi.org/10.1037/1528-3542.3.4.361>.
- Lizeretti, N., & Extremera, N. (2011). Emotional intelligence and clinical symptoms in outpatients with Generalized Anxiety Disorder (GAD). *Psychiatric Quarterly*, 82, 253–260. <https://doi.org/10.1007/s1126-011-9167-1>.
- Lovibond, S., & Lovibond, P. (1995). *Manual for the Depression Anxiety Stress Scales*. Sydney: Psychology Foundation.
- Martínez-González, A. E., Piqueras, J. A., & Inglés, C. J. (2011). Relaciones entre inteligencia emocional y estrategias de afrontamiento ante el estrés [The relationships between emotional intelligence and coping strategies in the face of stress]. *Revista Electrónica de Motivación y Emoción*, 14(37), 1–24.
- Martínez-Pons, M. (1997). The relation of emotional intelligence with selected areas of personal functioning. *Imagination, Cognition and Personality*, 17, 3–13. <https://doi.org/10.2190/68VD-DFXB-K5AW-PQAY>.
- Maslach, C., & Jackson, S. (1982). Burnout in health professions: A social psychological analysis. In G. Sanders, & J. Suls (Eds.), *Social psychology of health and illness* (pp. 227–251). Hillsdale: LEA.
- Maslach, C., & Jackson, S. (1986). *Maslach Burnout Inventory Manual* (2nd ed.). Palo Alto, California: Consulting Psychologists.
- Maslach, C., & Leiter, M. P. (1999). Teacher burnout: A research agenda. In R. Vandenberghe, & A. M. Huberman (Eds.), *Understanding and preventing teacher burnout: A sourcebook of international research and practice* (pp. 295–303). Cambridge, UK: Cambridge University Press.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397–422. <https://doi.org/10.1146/annurev.psych.52.1.397>.
- Matthews, G., Pérez-González, J. C., Felner, A. N., Funke, G. J., Emo, A. K., Zeidner, M., & Roberts, R. D. (2015). Individual differences in facial emotion processing: Trait emotional intelligence, cognitive ability, or transient stress? *Journal of Psychoeducational Assessment*, 33(1), 68–82. <https://doi.org/10.1177/0734282914550386>.
- Matud, M. P., García, M. A., & Matud, M. J. (2002). Estrés laboral y salud en el profesorado: Un análisis diferencial en función del género y del tipo de enseñanza [Work stress and health in teachers: A differential analysis as a function of gender and type of work]. *International Journal of Clinical and Health Psychology*, 2, 451–465.
- Mayer, J. D., Caruso, D. R., & Salovey, P. (2016). The ability model of emotional intelligence: Principles and updates. *Emotion Review*, 8(4), 290–300. <https://doi.org/10.1177/1754073916639667>.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey, & D. Sluyter (Eds.), *Emotional intelligence and emotional intelligence: Educational implications* (pp. 3–31). New York: Perseus Books Group.
- Mearns, J., & 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. <https://doi.org/10.1080/1061580021000057040>.
- Nelis, D., Quoidbach, J., Mikolajczak, M., & Hansenne, M. (2009). Increasing emotional intelligence: (How) is it possible? *Personality and Individual Differences*, 47, 36–41. <https://doi.org/10.1016/j.paid.2009.01.046>.



- Nizielski, S., Hallum, S., Schütz, A., & Lopes, P. N. (2013). A note on emotion appraisal and burnout: The mediating role of antecedent-focused coping strategies. *Journal of Occupational Health Psychology, 18*(3), 363–369. <https://doi.org/10.1037/a0033043>.
- Nolen-Heksema, S. (2000). The role of rumination in depressive disorders and mixed anxiety/depressive symptoms. *Journal of Abnormal Psychology, 109*, 304–311. <https://doi.org/10.1037/0021-843X.109.3.504>.
- Otto, J. H., Döring-Seipel, E., Greb, M., & Lantermann, E. D. (2001). Entwicklung eines Fragebogens zur Erfassung der wahrgenommenen emotionalen Intelligenz Aufmerksamkeit auf, Klarheit und Beeinflussbarkeit von Emotionen [Development a questionnaire to capture the perceived emotional intelligence attention, clarity and responsiveness of emotions]. *Diagnostica, 4*, 178–187.
- Pena, M., & Extremera, N. (2012). Perceived emotional intelligence in primary school teachers and its relationship with levels of burnout and engagement. *Revista de Educación, 359*, 604–627.
- Pérez-González, J. C., Petrides, K. V., & Furnham, A. (2004). Measuring trait emotional intelligence. In R. Schulze, & R. D. Roberts (Eds.). *Emotional intelligence. An international handbook* (pp. 181–201). Cambridge, MA: Hogrefe & Huber.
- Petrides, K. V., & Furnham, A. (2000). On the dimensional structure of emotional intelligence. *Personality and Individual Differences, 29*, 313–320. [https://doi.org/10.1016/S0191-8869\(99\)00195-6](https://doi.org/10.1016/S0191-8869(99)00195-6).
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality, 15*, 425–448. <https://doi.org/10.1002/per.416>.
- Petrides, K. V., Mikolajczak, M., Mavroveli, S., Sánchez-Ruiz, M. J., Furnham, A., & Pérez-González, J. C. (2016). Developments in trait emotional intelligence research. *Emotion Review, 8*(4), 335–341. <https://doi.org/10.1177/1754073916650493>.
- Platsidou, M. (2010). Trait emotional intelligence of Greek special education teachers in relation to burnout and job satisfaction. *School Psychology International, 31*, 60–76. <https://doi.org/10.1177/0143034309360436>.
- Queirós, M. M., Fernández-Berrocá, P., Extremera, N., Cancela, J. M. C., & Queirós, P. S. (2005). Validação e fiabilidade da versão Portuguesa modificada da Trait Meta-Mood Scale [Validation and reliability of the modified Portuguese version of Trait Meta-Mood Scale]. *Revista de Psicologia, Educação e Cultura, 9*, 199–216.
- Saklofske, D. H., Austin, E. J., Galloway, J., & Davidson, K. (2007). Individual difference correlates of health-related behaviours: Preliminary evidence for links between emotional intelligence and coping. *Personality and Individual Differences, 42*(3), 491–502. <https://doi.org/10.1016/j.paid.2006.08.006>.
- Salovey, P., Bedell, B., Detweiler, J. B., & Mayer, J. D. (2000). Current directions in emotional intelligence research. In M. Lewis, & J. M. Haviland-Jones (Eds.). *Handbook of emotions* (pp. 504–520). (2nd ed.). New York: Guilford Press.
- Salovey, P., Mayer, J. D., Goldman, S., Turvey, C., & Palfai, T. (1995). Emotional attention, clarity, and repair: Exploring emotional intelligence using the Trait Mood Scale. In J. W. Pennebaker (Ed.). *Emotion, disclosure and health* (pp. 125–154). Washington, DC: American Psychological Association.
- Salovey, P., Stroud, L. R., Woolery, A., & Epel, E. S. (2002). Perceived emotional intelligence, stress reactivity, and symptom reports: Further explorations using the Trait Meta Mood Scale. *Psychology and Health, 17*, 611–662. <https://doi.org/10.1080/08870440290025812>.
- Schlegel, K., Grandjean, D., & Scherer, K. S. (2012). Emotion recognition: Unidimensional ability or a set of modality and emotion specific skills? *Personality and Individual Differences, 53*, 16–21. <https://doi.org/10.1016/j.paid.2012.01.026>.
- Schonfeld, I., & Bianchi, R. (2016). Burnout and depression: Two entities or one. *Journal of Clinical Psychology, 72*, 22–37. <https://doi.org/10.1002/jclp.22229>.
- Seisdedos, N. (1997). *Inventario "Burnout" de Maslach [Maslach burnout inventory]*. Madrid: TEA.
- Sheldon, O. J., Dunning, D., & Ames, D. R. (2014). Emotionally unskilled, unaware, and uninterested in learning more: Reactions to feedback about deficits in emotional intelligence. *Journal of Applied Psychology, 99*, 125–137. <https://doi.org/10.1037/a0034138>.
- Siegling, A. B., Saklofske, D. H., & Petrides, K. V. (2015). Measures of ability and trait emotional intelligence. In G. J. Boyle, D. H. Saklofske, & G. Matthews (Eds.). *Measures of personality and social psychological constructs* (pp. 381–414). San Diego: Academic Press.
- 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. <https://doi.org/10.1037/0022-0663.99.3.611>.
- Sutton, R. E. (2004). Emotional regulation goals and strategies of teachers. *Social Psychology in Education, 7*, 379–398. <https://doi.org/10.1007/s11218-004-4229-y>.
- Sutton, R. E., & Harper, E. M. (2009). Teachers' emotion regulation. In L. J. Saha, & A. G. Dworkin (Eds.). *The new international handbook of teachers and teaching* (pp. 389–401). New York: Springer.
- Sutton, R. E., Mudrey-Camino, R., & Knight, C. (2009). Teachers' emotion regulation and classroom management. *Theory Into Practice, 48*, 130–137. <https://doi.org/10.1080/00405840902776418>.
- Sutton, R. E., & Wheatley, K. F. (2003). Teachers' emotions and teaching: A review of the literature and directions for future research. *Educational Psychology Review, 15*(4), 327–358.
- Thayer, J. F., Rossy, L. A., Ruiz-Padial, E., & Johnsen, B. H. (2003). Gender differences in the relationship between emotional regulation and depressive symptoms. *Cognitive Therapy and Research, 27*, 349–364.
- Travers, C. H., & Cooper, C. (1997). *El Estrés de los Profesores. La Presión en la Actividad Docente. [Stress in teachers. Pressure in the teaching profession]*. (Barcelona: Paidós).
- Uitto, M., Jokikokko, K., & Estola, E. (2015). Virtual special issue on teachers and emotions in Teaching and Teacher Education (TATE) in 1985–2014. *Teaching and Teacher Education, 50*, 124–135. <https://doi.org/10.1016/j.tate.2015.05.008>.
- Vesely, A. K., Saklofske, D. H., & Leschied, A. D. W. (2013). Teachers. The vital resource: The contribution of emotional intelligence to teacher efficacy and well-being. *Canadian Journal of School Psychology, 28*(1), 71–89. <https://doi.org/10.1177/0829573512468855>.
- Vesely, A. K., Saklofske, D. H., & Nordstokke, D. W. (2014). EI training and pre-service teacher wellbeing. *Personality and Individual Differences, 65*, 81–85. <https://doi.org/10.1016/j.paid.2014.01.052>.
- Yin, H., Lee, J. C., Zhang, Z., & Jin, Y. (2013). Exploring the relationship among teachers' emotional intelligence, emotional labor strategies and teaching satisfaction. *Teaching and Teacher Education, 35*, 137–145. <https://doi.org/10.1016/j.tate.2013.06.006>.
- Yin, H. B., & Lee, J. C. K. (2012). Be passionate, but be rational as well: Emotional rules for Chinese teachers' work. *Teaching and Teacher Education, 28*(1), 56–65. <https://doi.org/10.1016/j.tate.2011.08.005>.
- Zeidner, M., Matthews, G., & Roberts, R. D. (2012). The emotional intelligence, health, and well-being nexus: What have we learned and what have we missed? *Applied Psychology. Health and Well-Being, 4*, 1–30. <https://doi.org/10.1111/j.1758-0854.2011.01062.x>.
- Zeidner, M., Shani-Zinovich, I., Matthews, G., & Roberts, R. D. (2005). Assessing emotional intelligence in gifted and non-gifted high school students: Outcomes depend on the measure. *Intelligence, 33*, 369–391. <https://doi.org/10.1016/j.intell.2005.03.001>.