



# Trait emotional intelligence as buffer of mood of in-service and pre-service teachers of preschool and elementary education during the impact of COVID-19

Helena Fuensanta Martínez-Saura<sup>1</sup>, María Cristina Sánchez-López<sup>1</sup>, and Juan-Carlos Pérez-González<sup>2\*</sup>

<sup>1</sup> Universidad de Murcia: Departamento de Métodos de Investigación y Diagnóstico en Educación, Murcia (Spain)

<sup>2</sup> Universidad Nacional de Educación a Distancia (UNED): Departamento de Métodos de Investigación y Diagnóstico en Educación II, Madrid (Spain)

**Título:** Inteligencia emocional rasgo como amortiguador del estado de ánimo en docentes de educación infantil y primaria durante el impacto de la COVID-19.

**Resumen:** *Antecedentes:* La Inteligencia Emocional (IE) rasgo es una característica personal que puede actuar como factor protector contra circunstancias vitales desafiantes y ser un predictor del estado de ánimo en situaciones naturales como las derivadas del contexto social de la pandemia COVID-19. El objetivo general fue estudiar la relación entre IE rasgo y los estados anímicos docentes durante el confinamiento. *Método:* Se contó con 478 participantes, 316 docentes de Educación Infantil (EI) y Primaria (EP) de centros públicos de la Región de Murcia y 162 estudiantes de los Grados de EI y EP. Los instrumentos empleados fueron: para evaluar la IE rasgo, el TEIQue-SF; para evaluar los estados de ánimo vividos durante el impacto de la COVID-19 se utilizó una versión breve del POMS. *Resultados:* Los docentes con IE elevada se percibieron más enérgicos y considerados con los demás; así como menos nerviosos, malhumorados, tristes y cansados, justo el patrón contrario al de docentes con perfil de IE baja. Además, las maestras obtienen puntuaciones mayores en los estados emocionales negativos. *Conclusiones:* Si bien el estudio es correlacional, los resultados avalan la idea de la IE rasgo como factor protector frente al estrés, lo que refuerza su papel como promotor del bienestar docente.

**Palabras clave:** Inteligencia Emocional rasgo. Estados de ánimo. Educación infantil. Educación primaria.

**Abstract:** *Background:* Trait Emotional Intelligence (EI) is a personal characteristic that can act as a buffer factor against vital challenging circumstances and be a predictor of mood in a variety of natural situations such as those derived from the social context of the COVID-19 pandemic. The general aim of this research was to study the relationship between trait EI and teacher moods during confinement. *Method:* The study included 478 participants, 316 Preschool teachers and Elementary teachers from public centers in the Region of Murcia and 162 university students of Preschool and Elementary education degrees. The instrument used to assess trait EI was the TEIQue-SF; to assess the moods experienced during the impact of COVID-19, a short version of the POMS was used. *Results:* Teachers with high trait EI were perceived to be more energized and kinder, as well as less nervous, moody, sad and tired, just the opposite pattern of teachers with a low trait EI profile. In addition, female teachers obtained higher scores in negative mood states. *Conclusions:* Although the study is correlational, the results support the idea of trait EI as a protective factor against stress, which reinforces its role as a promoter of teacher well-being.

**Keywords:** Trait Emotional Intelligence. Moods states. Preschool education. Elementary education.

## Introduction

Since the 1990s, there has been a growing interest in the affective world in the educational field (e.g., Pekrun and Linenbrink-Garcia, 2014; Schutz and Pekrun, 2007), this being a topic of special interest due to the implication that emotions have in various fields, such as those highlighted in research according to Uitto et al. (2015): teacher identity and professional learning; emotional exhaustion among teachers; relationships among teachers; teacher emotions in historical-political-social contexts and educational reforms; the impact that teachers have on students' emotions; emotional intelligence (EI), skills and knowledge of teachers; as well as emotional regulation of teachers. Likewise, within this field, it is interesting to highlight as a subject of study within the affective field, e-competences and collective intelligence in virtual environments; both being fundamental strategies for emotional management (Rodríguez et al., 2021).

In terms of health, the WHO in 1948 already included in its definition the concepts of well-being and mental health. In fact, certain studies establish a bidirectional relationship between affective and health variables (Baudry et al., 2018; Buck, 2014; Sarrionandía and Mikolajczak, 2020). This im-

plies focusing our attention to consider the importance of emotions in the field of educational research. Indeed, following Furlong et al. (2014), there are personal factors (especially emotional competencies) that enhance psychosocial adjustment, with trait EI being mostly a health-promoting variable (Piqueras et al., 2019; Sarrionandía and Mikolajczak, 2020).

EI has become a key factor in educational settings, facilitating and contributing to the mental well-being of teachers, and encouraging students to develop their academic skills to the fullest (Cardelle-Elawar and Acedo-Lizarraga, 2010; Pakarinen et al., 2014; Puertas et al., 2019; Trigwell, 2012). However, education professionals are under chronic stress situations on the performance of their teaching work (Veronese and Alessandro, 2014). This stress, which can derive in burnout syndrome, is caused by the demands of many social interactions; the need to learn new skills; or the high workload, sometimes fueling teachers' intentions to quit (Hong, 2010; Madigana and Kim, 2021; Puertas et al., 2019).

Some works study the relationship of teacher emotional exhaustion with social factors (Devos et al., 2012; Grayson and Alvarez, 2008; Mérida-López and Extremera, 2017; Van Droogenbroeck et al., 2014); others point to the relevance of individual factors such as teachers' coping behavior (Chan, 2009; Fernet et al., 2012; Mattern and Bauer, 2014; Parker et al., 2012; Skaalvik and Skaalvik, 2011); while others allude to an interactionist perspective of both (Lackritz, 2004; Skaalvik

\* Correspondence address [Dirección para correspondencia]:

Juan-Carlos Pérez-González. UNED. E-mail: [jcperez@edu.uned.es](mailto:jcperez@edu.uned.es)

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and Skaalvik, 2009). In turn, Maslach et al. (2001) point out three dimensions within this syndrome of being burned out at work: emotional exhaustion, depersonalization, and lack of personal fulfillment. As a reaction against the circumstances that stimulate this syndrome, resilience is conceived as a construct associated with EI, as it allows having personal strategies to adaptively cope with changing or stressful situations (e.g., Callegari et al., 2016; Poloni et al., 2018).

Specifically, because of the COVID-19 pandemic, teachers have experienced an increase in stress in the educational profession, due to situations such as being forced to know how to use information and communication technologies, regardless of their mastery and self-efficacy in them (Košir et al., 2022). For this reason, manuals such as that of Cortes et al. (2021) have emerged with the aim of supporting teachers and pedagogues in the preparation of distance classes of primary and secondary cycles in the context posed by the pandemic of COVID-19.

In this context, according to various research, it is known that trait EI predicts lower levels of stress or greater resilience to stress, and, therefore, less deterioration of good mood, both in natural situations, as well as in laboratory situations (Matthews et al., 2015; Mikolajczak et al., 2009). Research indicates that EI is a personal tool that allows teachers to be more aware of their affect and that of others; it confers them skills to regulate their own and others' emotions; and all this presumably makes them more versatile for decision making in everyday situations in teaching environments, but predictably even more so under circumstances of high stress (Pérez-González, Saklofske et al., 2020). This EI-associated virtue could be due to the presumed "positive emotional attentional bias" that people with higher levels of EI seem to show (Lea et al., 2018; Szczygiel and Mikolajczak, 2017).

In Moron and Biolik-Moron's (2021) research on experiences during the early phases of COVID-19, it was observed that people with higher levels of trait EI experienced lower intensity (although not lower frequency) of negative emotions (fear, anxiety, sadness), suggesting, again, a protective effect of trait EI against impaired (hedonic) emotional well-being. Also, in the COVID-19 time frame, Albani et al. (2023) observed that students with higher levels of trait EI experienced less stress despite the circumstances, and achieved better levels of self-regulated learning, concluding from this that trait EI could be helping university students to cope better with psychological distress, by acting as a protective factor against stressful circumstances.

In the Spanish context during COVID-19, Sánchez-Pujalte et al. (2021) also found an inverse relationship between trait EI and experiencing burnout. These results, added to previous literature, reinforce, on the one hand, the hypothesis that EI is a personal tool that promotes well-being and, on the other hand, that because of this, it seems reasonable to encourage teachers to be trained in this type of non-cognitive skills. However, there is still a lack of research in the Spanish context that analyzes the degree to which trait

EI levels were associated with the most common mood state during the COVID-19 pandemic. Our research attempts to fill this gap.

Currently, it is observed that OECD and UNESCO policy documents are focusing on rethinking the teacher education curriculum to increase social-emotional competencies (i.e., "social and emotional learning" or SEL) in our teachers, both in initial and in-service training (Chernyshenko et al., 2018; OECD, 2015). Especially, this trend gains vitality after the experience of COVID-19, categorized as an extreme case of a "VUCA" (volatile, uncertain, complex, ambiguous) world (Hadar et al., 2020). Therefore, the importance of considering teaching uncertainty as something inseparable from teaching and that, in turn, its mismanagement is one of the main causes of teacher anxiety, frustration, burnout and poor teaching (Helsing, 2007) is remarked. However, following Uitto et al. (2015, p.133), "Transferring the research findings in a meaningful way into educational policymaking and leadership from the grassroots level to governmental policies is a great challenge for all actors in the educational field". That is, determining what would be the best methods for emotional teacher education remains a research gap (Uitto et al., 2015).

People with higher trait EI seem to be more sensitive to mood induction in laboratory settings, leading to the thought that perhaps they are more sensitive to mood changes because of life changes resulting from the COVID-19 pandemic (Petrides and Furnham, 2003). In addition, people with higher trait EI have a positive attentional bias that is possibly the key that contributes to them better maintaining their positive mood and, in general, showing higher levels of well-being, health, and happiness (Lea et al. 2018; Martins et al., 2010; Sarrionandia and Mikolajczak, 2020; Sánchez-Álvarez et al., 2016).

In sum, EI appears to be a personal characteristic that can act as a predictor of mood in a wide diversity of situations, experimental or natural. In this case, natural, such as those derived from the social context of the COVID-19 pandemic. Not surprisingly, it has been argued that "EI should be considered as a personal health-promoting factor" (Pérez-González, Yáñez et al., 2020, p.128).

In this paper, we emphasize how, in times of change is when teachers' emotions (such as their resilience and adaptation) become more relevant to their work (e.g., Jones et al., 2022; Saunders, 2013). We also start from the premise that EI is a robust protective factor against burnout and diminished psychological well-being (e.g., Cho and Kyung 2007; Hong-Biao et al. 2013; Pulido-Martos et al. 2016). Therefore, we aimed to explore to what degree the EI level of practicing teachers correlated with their mood states during the COVID-19 pandemic, under the hypothesis that teachers with higher levels of EI would manifest more positive and less negative mood states than their colleagues with lower levels of EI.

Taking these aspects into consideration, the objectives of this research are as follows:

1. To analyze the convergence (correlation) between trait EI and teacher mood states.
2. To analyze whether there are statistically significant differences in teachers' mood states as a function of trait EI profile (high vs. low).
3. To analyze whether there are statistically significant differences in the mood states of teachers according to gender.

## Method

### Participants

The study consisted of a sample of 316 Early Childhood Education (ECE) and Primary Education (PE) teachers from public schools in the Region of Murcia, Spain; and another sample of 162 university students from the ECE and PE degrees of the University of Murcia, the ISEN University Center and the Catholic University San Antonio of Murcia. Both were selected by means of a non-probabilistic sampling of the incidental or accessibility type. The subsample of teachers belonged to centers collaborating with the research group and the subsample of university students were volunteers from subjects taught by the research team. Therefore, there was a total sample size of 478 participants.

The distribution of teachers according to sex was 284 women (89.9%) and 32 men (1.1%). Regarding the educational level, 121 teachers worked in ECE (38.3%) and 195 in PE (61.7%) in schools in the Region of Murcia. Finally, the age range was between 20 and 65 years, with a mean of 44.33 years ( $SD= 11.13$ ).

The distribution of the students according to sex was 146 were women (9.1%) and 16 were men (9.9%). Regarding the specialty, 69 belonged to the Degree of Teacher in Early Childhood Education (42.6%), 78 to the Degree of Teacher in Primary Education (48.1%) and 15 to the double Degree of Teacher in Early Childhood and Primary Education (9.3%). Finally, the age range was between 18 and 49 years, with a mean of 21.50 years ( $SD= 4.03$ ).

### Instruments

For the assessment of EI as a personality trait of teachers and students, we used the Spanish version (Pérez, 2003) of the TEIQue-SF [Trait Emotional Intelligence Questionnaire-Short Form] (Petrides, 2009), a questionnaire considered one of the most comprehensive, reliable and valid assessments of global EI as a set of personality dispositions that facilitate emotionally intelligent behavior (Pérez-Díaz et al., 2022; Pérez-González and Sánchez-Ruiz, 2014).

It is composed of 30 items, which are answered using a 7-point Likert-type scale, where 1 is completely disagree and 7 is completely agree. Specifically, TEIQue-SF is composed of four factors that report 13 facets. In addition, it has two independent facets that do not fit sufficiently on any factor. In addition, 15 of its items are reversed (items 2, 4, 5, 7, 8,

10, 12, 13, 14, 16, 18, 22, 25, 26 and 28). The factors it comprises are:

- Emotionality: trait empathy, perception of emotion and expression of emotion and relationships.
- Self-control: stress management, low impulsivity, and emotion regulation.
- Sociability: emotion management, assertiveness, and social awareness.
- Well-being: trait happiness, trait optimism and self-esteem.

On the other hand, the independent facets are self-motivation and adaptability. Both factors and facets contribute to the global trait emotional intelligence.

Specifically, the Cronbach's alpha obtained in the study of the teacher sample was .86 for the global trait EI scale, .71 for the Well-being factor, .66 for the Emotionality factor, .58 for the Sociability factor, and .55 for the Self-Control factor. Likewise, in the study of the student sample it was .89 for the global trait EI scale, .83 for the Well-being factor, .65 for the Emotionality factor, .66 for the Sociability factor and .68 for the Self-control factor.

To assess the mood states experienced during the impact of COVID-19 in both samples (teachers and students), the brief Spanish version of the POMS [Profile of Mood States] (McNair et al., 1992), adapted by Andrade et al. (2013), was used. However, in this research, due to foreseeable time constraints in the sample, we only incorporated one item from each of the 6 conceptual dimensions: Anger (item 2. Moody), Fatigue (item 3. Tired), Vigor (item 2. Energetic/Energized), Friendliness (item 5. Kind), Tension (item 2. Nervous) and Depressed State (item 2. Sad). The response format is a 5-point Likert-type scale.

### Procedure

The procedure began by formally requesting a favourable assessment from the Research Ethics Committee of the University of Murcia. Likewise, following the international ethical criteria set out in the Declaration of Helsinki, the appropriate measures were adopted to guarantee the complete confidentiality of the subjects' personal data, in accordance with Organic Law 3/2018, of 5 December, on Personal Data Protection and the guarantee of digital rights.

The instruments were administered anonymously and confidentially, so that informed consent was required for their completion on the information sheet for participants and the declaration of informed consent for adults. They were completed online by the subjects in both samples. Both instruments were applied following the instructions and recommendations included in the online form elaborated using Google Forms. Specifically, the channels of dissemination of the online questionnaires were Email, and groups of teachers of the Region of Murcia in Telegram, Facebook, and WhatsApp.

## Data analyses

A descriptive and inferential study was carried out using a quantitative, non-experimental, exploratory research design. The data were analyzed with the SPSSv.28 statistical package.

For the study of the relationship between mood states and trait EI (objective 1), a correlation analysis was carried out using Pearson's correlation coefficient. For the assessment of the effect size of the correlations, the values presented by Funder and Ozer (2019) were taken into consideration.

In the second objective, the EI variable was recoded into two groups (high trait EI = 75th percentile and low trait EI = 25th percentile) for one subsample (teachers, with their own trait EI mean and SD) and then for another subsample (students, with their own trait EI mean and SD). This division into two subsamples was also done for objective 3 (subsample of female teachers and subsample of male teachers). Mean difference analyses were applied using Student's parametric *t*-test for independent samples. The significance level used in this study was .05. To assess the magnitude of these differences, effect sizes were calculated for each (Cohen's *d* index). The categorization values followed for Cohen's *d* were those indicated by Anaya et al. (2011) and are: 1 = close to zero ( $d \leq .10$ ); 2 = small ( $.11 \leq d \leq .35$ ); 3 = moderate ( $.36 \leq d \leq .65$ ); 4 = large ( $.66 \leq d \leq 1.00$ ); 5 = very large ( $d > 1.00$ ). For the representation of mood states differentiated

according to their trait IE score, the  $\xi$ -score or standard score was used.

## Results

### Objective 1: To analyze the convergence (correlation) between mood states and trait emotional intelligence

Global trait EI manifested positive and significant correlations with a small effect size with the states Energetic ( $r = .17^{**}$ ,  $p < .01$ ) and Kind ( $r = .16^{**}$ ,  $p < .01$ ) (Table 1). Negative and significant correlations with small effect size were obtained for Nervous ( $r = -.15^{**}$ ,  $p < .01$ ), Sad ( $r = -.14^{**}$ ,  $p < .05$ ), and Tired ( $r = -.19^{**}$ ,  $p < .01$ ); and a medium effect size for Moody ( $r = -.22^{**}$ ,  $p < .01$ ).

Nervous showed positive and significant correlations with a very large effect size with Sad ( $r = .49^{**}$ ,  $p < .01$ ), Moody ( $r = .51^{**}$ ,  $p < .01$ ) and Tired ( $r = .42^{**}$ ,  $p < .01$ ); a small effect size with Energetic ( $r = .17^{**}$ ,  $p < .01$ ) and Considerate ( $r = .14^*$ ,  $p < .05$ ).

Sad manifested positive and significant correlations with a medium effect size in Considerate ( $r = .26^{**}$ ,  $p < .01$ ); and a very large effect size with Moody ( $r = .57^{**}$ ,  $p < .01$ ) and Tired ( $r = .43^{**}$ ,  $p < .01$ ).

Moody correlates positively, significantly and with a very large effect size with Tired ( $r = .45^{**}$ ,  $p < .01$ ). Tired correlates positively, significantly and with a small effect size with Kind ( $r = .15^{**}$ ,  $p < .01$ ).

**Table 1**  
Correlation between mood states and trait emotional intelligence

	1	2	3	4	5	6	7
1 EI	-						
2 Nervous	-.15**	-					
3 Sad	-.14*	.49**	-				
4 Moody	-.22**	.51**	.57**	-			
5 Tired	-.19**	.42**	.43**	.45**	-		
6 Energised	.17**	.17**	.10	.10	.04	-	
7 Kind	.16**	.14*	.26**	.50	.15**	.42**	-

Note. EI: Global trait EI.

### Objective 2: Statistically significant differences in the mood states of teachers according to the trait EI profile

With regard to the sample of teachers, in order to explore possible differences in means according to the trait EI profile, two subgroups were created for comparison using Student's *t*-test for independent samples: subsample of teachers with High trait EI ( $n = 81$ ) and subsample of teachers with Low trait EI ( $n = 80$ ). As shown in Table 1, when comparing each emotional state, statistically significant differences were observed according to the trait EI profile in each of the aforementioned mood states. As can be seen,

teachers with High trait EI (P 75) scored higher on the mood states energetic ( $M = 1.81$ ,  $SD = 1.08$ ) and kind ( $M = 2.80$ ,  $SD = 1.15$ ) than teachers with a Low trait EI profile (P 25).

However, teachers with Low trait EI (P 25) scored higher on the mood states nervous ( $M = 1.68$ ,  $SD = 1.14$ ), sad ( $M = 1.74$ ,  $SD = 1.15$ ), moody ( $M = 1.25$ ,  $SD = 1.02$ ) and tired ( $M = 1.86$ ,  $SD = 1.26$ ) compared to teachers with a High trait EI profile (P 75). Regarding the magnitude of these differences, a small effect size was observed for energetic ( $d = .344$ ) and considerate ( $d = .341$ ). As well as a moderate effect size for nervous ( $d = .483$ ), sad ( $d = .411$ ), moody ( $d = .647$ ) and tired ( $d = .414$ ).

**Table 2**

Mean (M), standard deviation (SD), Student's t and effect size of mean differences (Cohen's d) as a function of the level of trait EI in teachers.

Mood states	High EI (P 75)		Low EI (P 25)		t(159)	p	d
	M	SD	M	SD			
Nervous	1.16	1.00	1.68	1.14	3.028**	.003	.483
Sad	1.27	1.12	1.74	1.15	2.587**	.011	.411
Moody	.63	.88	1.25	1.02	4.109***	< .001	.647
Tired	1.36	1.15	1.86	1.26	2.649**	.009	.414
Energised	1.81	1.08	1.45	1.00	-2.212*	.028	.344
Kind	2.80	1.15	2.41	1.13	-2.162*	.032	.341

Note. \* p < .05, \*\* p < .01, \*\*\* p < .001; Degrees of freedom of the t test in brackets.

**Objective 3: To test statistically significant differences in teachers' moods as a function of gender**

About teachers, to explore possible differences in means according to gender, two subgroups were created for comparison using Student's t-test for independent samples: a subsample of male teachers (n = 32) and a subsample of female teachers (n = 284).

Following Table 3, when comparing each mood state, statistically significant gender differences were observed only in the nervous mood state. However, we can see that women obtain higher scores in the negative mood states. That is, nervous (M = 1.54, SD = 1.07), sad (M = 1.56, SD = 1.09), moody (M = 1.07, SD = 1.02) and tired (M = 1.74, SD = 1.17). Whereas men score higher on the energetic positive emotional state (M = 1.84, SD = 1.01). Furthermore, both males and females score the same on the kind mood state (M = 2.66, SD = 1.03; M = 2.66, SD = 1.11). Regarding the

magnitude of these differences, a moderate effect size was observed for the nervous mood state (d = .451).

**Table 3**

Mean (M), standard deviation (SD), Student's t and effect size of mean differences (Cohen's d) as a function of the level of sex in teachers.

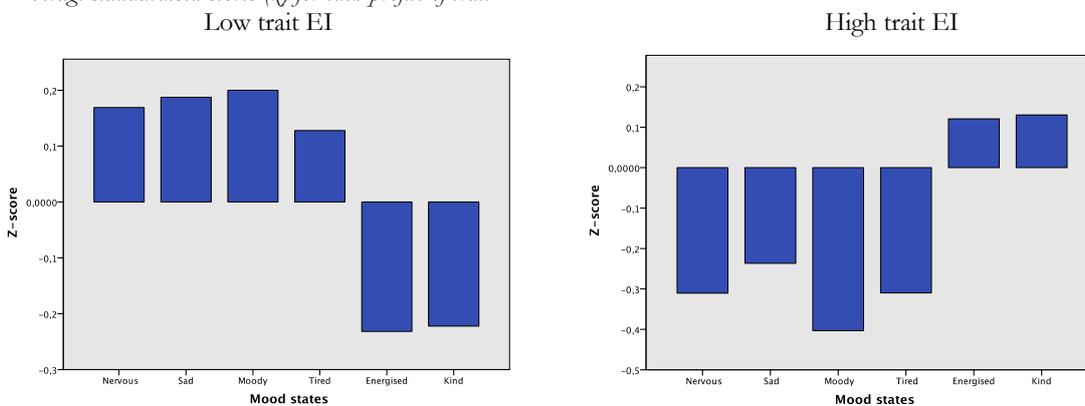
Mood states	Men		Women		t(314)	p	d
	M	SD	M	SD			
Nervous	1.06	.98	1.54	1.07	-2.595*	.013	.451
Sad	1.25	1.07	1.56	1.09	-1.556	.128	.283
Moody	.81	1.03	1.07	1.02	-1.344	.187	.253
Tired	1.50	.88	1.74	1.17	-1.404	.167	.208
Energised	1.84	1.01	1.67	1.03	.899	.374	.164
Kind	2.66	1.03	2.66	1.11	-.011	.991	< .001

Note. \* p < .05, \*\* p < .01, \*\*\* p < .001; Degrees of freedom of the t test in brackets.

Figure 1 shows the mood states differentiated by trait EI score in teachers.

**Figure 1**

Average standardised scores (z) for each profile of trait EI



As can be seen, a differentiating profile is established between teachers with high EI and those with lower EI scores. Teachers with high EI are perceived as energetic and kind, while both variables are reversed in teachers with a low EI profile.

**Discussion**

In this study we assessed trait EI and mood of in-service Early Childhood Education (ECE) and Primary Education (PE) teachers during the year 2020, after home confinement, namely, during the first year of the COVID-19 pandemic. The results unequivocally indicate that, consistent with our

hypothesis, teachers with higher levels of EI felt less nervous, sad, tired, and moody/grumpy, but more energetic and kinder. Also, when distinguishing between high trait EI teachers (75th percentile) versus low trait EI teachers (25th percentile), statistically significant differences were observed in all the mood states assessed, with relevant effect sizes indicating that these differences have a real impact on their lives. With respect to gender, only in the mood state of "nervousness" statistically significant differences were found, with women reporting more nervousness, which could simply be explained by their greater disposition, as a group, to anxiety and rumination (Nolen-Hoeksema, 2004).

Our results are consistent with findings such as those of Moron and Biolik-Moron (2021) and Albani et al. (2023), in that they demonstrate the concurrent validity of trait EI through correlational research with ecological validity, validating our hypothesis that trait EI is a well-being-promoting factor, especially valuable under stressful circumstances such as those associated with the COVID-19 pandemic experience.

Through the present research we have also corroborated theoretical expectations that personality traits can be robust predictors of mood states (Matthews et al., 2015). Specifically, given that trait EI is associated with greater use of positive emotion regulation strategies (Szczygiel and Mikolajczak, 2017), as well as a greater tendency (ascertained psychophysiological) to pay more attention to positively emotionally charged events and less attention to negatively emotionally charged events (Lea et al., 2018), it therefore seemed reasonable to expect that teachers with higher levels of trait EI would have faced the first year of the pandemic with an advantage in better protecting their psychological well-being. Our results empirically support this assumption.

The "moderate" effect size of differences in mood during the pandemic according to high vs. low trait EI group membership has serious implications for teacher selection and training. For example, in the case of the mood state "moody/grumpy" (dimension of the construct "anger"), the effect size (Cohen's  $d$ ) of the differences in this mood state between teachers with high vs. low trait EI could even be described as moderate to large ( $d = .65$ ). The actual potential impact of this difference in the emotional experience of teachers with high EI and teachers with low EI presumably has a tangible importance in teachers' lives. Note that, according to this sample data ( $d = .65$ ), 74.2% of teachers with high trait EI would experience a level of positive mood above the average level of mood that would be experienced by the group of teachers with low trait EI. Or, put another way, we could translate that effect size ( $d = .65$ ) into the statement that there is a 67.7% probability that a randomly selected teacher from the high trait EI group would show better mood levels than a randomly selected teacher from the low trait EI group.

In terms of teacher selection, it should be noted that high trait EI scores report the potential for a resilient (emotionally stable, rested, energetic), positive (cheerful) and con-

ciliatory (non-irritable, kind) mood profile, all desirable characteristics in a teacher, and even more so in a teacher with leadership responsibilities or ascendancy over other teachers, as in the case of a school principal (Hargreaves, 1998), or also in the case of an educational counsellor (Anaya et al., 2011; García Nieto and Cano Escoriza, 2008), in the latter case, given their relevant role in psycho-pedagogical counselling for teachers.

In terms of training, it is worth noting that low trait EI scores indicate a lack of emotional competence that could guide a teacher emotional training plan. Specifically, low trait EI could lead to a profile of maladaptive emotional reaction to stressful situations, i.e., a profile of emotional fragility, with the consequent increased risk of falling into burnout syndrome or sick leave due to anxiety disorder or depression. Early detection of this risk profile could be key to prevention and the strengthening of teaching career development plans.

An innovative line of continuous teacher training in emotional competences could be to promote networking, facilitating the construction of a "collective intelligence" of the teaching collective, through interaction in virtual communication environments between teachers, as well as through counselling and emotional teacher education actions via telematic means to facilitate the advantages of distance and online education (Cebollero-Salinas et al., 2022; Pérez-González, 2021).

With this study we extend national research on the positive effects of EI on teachers' emotional well-being (e.g., Mérida-López et al., 2020), stressing the need to include training in emotional competence and resilient coping as part of initial and in-service teacher education. In fact, EI has been frequently considered in recent years as a relevant variable for professional practice in our country, given that it seems to reduce mental health problems, as well as favouring attention to diversity, optimising work performance, and increasing self-fulfilment and satisfaction with the work performed (e.g., Bisquerra et al., 2015; Cejudo and López-Delgado, 2017; Cejudo et al., 2015, 2016; Martínez-Saura et al., 2022; Puertas et al., 2018, 2019).

Internationally, EI has recently been identified as one of the key psychological characteristics of teachers on which professional development activities should be articulated for their potential educational benefits and implications (Bardach et al., 2022). Our results provide further evidence in support of this conclusion.

Regarding sex differences, it is worth noting that mood states were found to be more clearly linked to a person's level of trait EI than to their sex, which is consistent with the idea that sex differences in affect, motivation and personality are generally smaller than inter-individual differences or variations within the same sex (Costa et al., 2001).

The main implication of this research is that it provides new empirical support, in a natural and ecological context (real-life COVID-19 pandemic), for the desirability of initial and in-service teacher training initiatives in emotional com-

petencies. In short, this research shows that higher levels of teacher EI are associated with greater teacher ability to take care of their own well-being, which is another endorsement of the urgency of emotional education for teachers that has long been demanded by various researchers inside and outside Spain (Bisquerra et al., 2015; Cejudo and López-Delgado, 2017; Hargreaves, 1998; Pérez-González, Saklofske et al., 2020; Schutz, 2014).

### Limitations and future lines of research

The main limitation is that our sampling was not random, although the sample size is considered appropriate for this type of exploratory research. It should be noted that another limitation of the research was that we did not use the full POMS instrument, but only 6 of its items, which prevents us from assessing the reliability of the mood measure, although the use of a 5-point Likert-type scale for each item ensures some potential variability in the response data. In any case, if conditions are favourable for a somewhat closer examination of teachers' affective experiences, it would be

interesting in the future to be able to replicate the relationships between trait EI and mood in teachers, using full scales of discrete emotions, such as the full version of the POMS, or even scales specific to the teaching population such as the Teachers Emotions Scales (TES) by Frenzel et al. (2016) or the Teacher Emotion Inventory (TEI) by Chen (2016). Likewise, it would be advisable in future research to seek complementarity of instruments, as this would enrich the object of research.

Finally, it is worth suggesting that future research along these lines should also incorporate a qualitative perspective, which would allow for a deeper understanding of the perceived training needs, the daily experiences in their teaching practice, as well as the teachers' own interpretations of the professional, political, and social factors that condition their psychosocial adaptation (Schutz et al., 2020).

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## References

- Albani, A., Ambrosini, F., Mancini, G., Passini, S., & Biolcati, R. (2023). Trait emotional intelligence and self-regulated learning in university students during the COVID-19 pandemic: the mediation role of intolerance of uncertainty and COVID-19 perceived stress. *Personality and Individual Differences*, 203. <https://doi.org/1.1016/j.paid.2022.111999>
- Anaya, D., Pérez-González, J. C., & Suárez, J. M. (2011). Los contenidos de formación de los profesionales de la orientación educativa desde la perspectiva de los propios orientadores [School counselor's training domains from the practitioners' point of view]. *Revista de Educación*, 356, 607-629. <https://doi.org/1.4438/1988-592X-RE-2011-356-053>
- Andrade, E., Arce, C., De Francisco, C., Torrado, J., & Garrido, J. (2013). Versión breve en español del cuestionario POMS para deportistas adultos y población general orientadores [Abbreviated versión in Spanish of the POMS questionnaire for adult athletes and general population]. *Revista de Psicología del Deporte*, 22(1), 95-102. <http://hdl.handle.net/10347/22124>
- Bardach, L., Klassen, R. M., & Perry, N. E. (2022). Teachers' psychological characteristics: Do they matter for teacher effectiveness, teachers' well-being, retention, and interpersonal relations? An integrative review. *Educational Psychology Review*, 34(1), 259-30. <https://doi.org/1.1007/s10648-021-09614-9>
- Baudry, A. S., Grynberg, D., Dassonneville, C., Lelorain, S., & Christophe, V. (2018). Sub-dimensions of trait emotional intelligence and health: A critical and systematic review of the literature. *Scandinavian Journal of Psychology*, 59(2), 206-222. <https://doi.org/1.1111/sjop.12424>
- Bisquerra, R., Pérez-González, J. C., & García, E. (2015). *Inteligencia emocional en educación*. Síntesis.
- Buck, R. (2014). *Emotion: A Biosocial Synthesis*. Cambridge University Press.
- Callegari, C., Bertù, L., Lucano, M., Lelmini, M., Braggio, E., & Vender S. (2016). Reliability and validity of the Italian version of the 14-item Resilience Scale. *Psychology Research Behavior Management* 9, 227-284. <https://doi.org/1.2147/PRBM.S115657>
- Cardelle-Elawar, M., & Acedo-Lizarraga, L. (2010). Looking at teacher identity through self-regulation. *Psicothema*, 22, 293-298. <https://reunido.uniovi.es/index.php/PST/article/view/8904>
- Cebollero-Salinas, A., Bautista, P., Cano, J., & Orejudo, S. (2022). E-competencias e inteligencia colectiva. Propuestas para el desarrollo emocional en las interacciones en línea [E-competences and collective intelligence. Proposals for emotional development in online interactions]. *Revista Internacional De Educación Emocional Y Bienestar*, 2(1), 13-32. <https://doi.org/1.48102/rieceb.2022.2.1.21>
- Cejudo, J., & López-Delgado, M. L. (2017). Importancia de la inteligencia emocional en la práctica docente: un estudio con maestros [Importance of emotional intelligence in the teaching practice: A study with primary education teachers]. *Psicología Educativa*, 23(1), 29-36. <https://doi.org/1.5944/reop.vol.26.num.3.2015.16400>
- Cejudo, J., Díaz, M. V., Losada, M. L., & Pérez-González, J. C. (2016). Necesidades de formación de maestros de Infantil y Primaria en atención a la diversidad [Training needs of early childhood education and primary education school teachers on the treatment of diversity]. *Bordón: Revista de Pedagogía*, 68(3), 23-39. <https://doi.org/1.13042/bordon.2016.68402>
- Cejudo, J., López-Delgado, M. L., Rubio, M. J., & Latorre, J. M. (2015). La formación en educación emocional de los docentes: una visión de los futuros maestros [Training teachers in emotional education: A vision of future schoolteachers]. *Revista Española de Orientación y Psicopedagogía (REOP)*, 26(3), 45-62. <https://doi.org/1.5944/reop.vol.26.num.3.2015.16400>
- Chan, D. W. (2009). The hierarchy of strengths: their relationships with subjective well-being among Chinese teachers in Hong Kong. *Teaching and Teacher Education*, 25(6), 867-875. <https://doi.org/1.1016/j.tate.2009.01.010>
- Chen, J. (2016). Understanding teacher emotions: The development of a teacher emotion inventory. *Teaching and Teacher Education*, 55, 68-77. <https://doi.org/1.1016/j.tate.2016.01.001>
- Chernyshenko, O., Kankaraš, M., & Drasgow, F. (2018). Social and emotional skills for student success and well-being: Conceptual framework for the OECD study on social and emotional skills. *OECD Education Working Papers*, 173. <https://doi.org/1.1787/19939019>
- Cho, H. J., & Kyung, A. P. (2007). The effect of emotional intelligence and self-efficacy on teachers' burnout. *The Journal of Korean Teacher Education*, 24, 251-27. <https://doi.org/1.12973/eu-je9.1.277>
- Costa, P. T., Terracciano, A., & McCrae, R. R. (2001). Gender differences in personality traits across cultures: robust and surprising findings. *Journal of Personality and Social Psychology*, 81(2), 322-331. <https://doi.org/1.1037/0022-3514.81.2.322>
- Devos, C., Dupriez, V., & Paquay, L. (2012). Does the social working environment predict beginning teachers' self-efficacy and feelings of de-

- pression? *Teaching and Teacher Education*, 28(2), 206-217. <https://doi.org/1.1016/j.tate.2011.09.008>
- Fernet, C., Guay, F., Senecal, C., & Austin, S. (2012). Predicting intraindividual changes in teacher burnout: the role of perceived school environment and motivational factors. *Teaching and Teacher Education*, 28(4), 514-525. <https://doi.org/1.1016/j.tate.2011.11.013>
- Frenzel, A. C., Pekrun, R., Goetz, T., Daniels, L. M., Durksen, T. L., Becker-Kurz, B., & Klassen, R. M. (2016). Measuring teachers' enjoyment, anger, and anxiety: The Teacher Emotions Scales (TES). *Contemporary Educational Psychology*, 46, 148-163. <https://doi.org/1.1016/j.cedpsych.2016.05.003>
- Funder, D. C., & Ozer, D. J. (2019). Evaluating Effect size in psychological research: Sense and nonsense. *Advances in Methods and Practices in Psychological Science*, 2(2), 156-168. <https://doi.org/1.1177/2515245919847202>
- Furlong, M., Dowdy, E., Carnazzo, K., Boverly, B. L., & Kim, E. (2014). Covitality: Fostering the building blocks of complete mental health. *Communique*, 42(8), 1-28.
- García Nieto, N., & Cano Escoriaza, J. (2008). Aproximación al perfil del orientador en la ESO de Aragón [Approaching to the school counselor's profile in the secondary obligatory education in Aragón]. *REOP - Revista Española de Orientación y Psicopedagogía*, 19(3), 303-315. <https://doi.org/1.5944/reop.vol.19.num.3.2008.11431>
- Grayson, J. L., & Álvarez, H. K. (2008). School climate factors relating to teacher burnout: a mediator model. *Teaching and Teacher Education*, 24(5), 1349-1363. <https://doi.org/1.1016/j.tate.2007.06.005>
- Hadar, L., Ergas, O., Alpert, B., & Ariav, T. (2020). Rethinking teacher education in a VUCA world: student teachers' social-emotional competencies during the Covid-19 crisis. *European Journal of Teachers Education*, 43(4), 573-586. <https://doi.org/1.1080/02619768.20.2.1807513>
- Hargreaves, A. (1998). The emotional politics of teaching and teacher development: With implications for educational leadership. *International Journal of Leadership in Education*, 1(14), 315-336. <https://doi.org/1.1080/1360312980010401>
- Helsing, D. (2007). Regarding uncertainty in teachers and teaching. *Teaching and Teacher Education*, 23(8), 1317-1333. <https://doi.org/1.1016/j.tate.2006.06.007>
- Hong, J. Y. (2010). Pre-service and beginning teachers' professional identity and its relation to dropping out of the profession. *Teaching and Teacher Education*, 26(8), 1530-1543. <https://doi.org/1.1016/j.tate.2010.06.003>
- Hong-Biao, Y., John, C., & Zhong-Hua, Z. (2013). Exploring the relationship among teachers' emotional intelligence, emotional labor strategies and teaching satisfaction. *Teaching and Teacher Education* 35, 137-45. <https://doi.org/1.1016/j.tate.2013.06.006>
- Jones, N. D., Camburn, E. M., Kelcey, B., & Quintero, E. (2022). Teachers' time use and affect before and after COVID-19 school closures. *Aera Open*, 8. <https://doi.org/1.1177/23328584211068068>
- Košir, K., Dugonik, Š., Huskić, A., Gračner, J., Kokol, Z., & Krajnc, Ž. (2022). Predictors of perceived teachers' and school counsellors' work stress in the transition period of online education in schools during the COVID-19 pandemic. *Educational Studies*, 48(6), 844-848. <https://doi.org/1.1080/03055698.202.1833840>
- Lackritz, J. R. (2004). Exploring burnout among university faculty: incidence, performance, and demographic issues. *Teaching and Teacher Education*, 20(7), 713-729. <https://doi.org/1.1016/j.tate.2004.07.002>
- Lea, R. G., Qualter, P., Davis, S. K., Pérez-González, J. C., & Bangee, M. (2018). Trait emotional intelligence and attentional bias for positive emotion: An eye tracking study. *Personality and Individual Differences*, 128, 88-93. <https://doi.org/1.1016/j.paid.2018.02.017>
- Madigana, D., & Kim, L. E. (2021). Towards an understanding of teacher attrition: A meta-analysis of burnout, job satisfaction, and teachers' intentions to quit. *Teaching and Teachers Education*, 105. <https://doi.org/1.1016/j.tate.2021.103425>
- Martínez-Saura, H. F., Sánchez-López, M. C., & Pérez-González, J. C. (2022). Competencia emocional en docentes de Infantil y Primaria y estudiantes universitarios de los Grados de Educación Infantil y Primaria. *Estudios sobre Educación*, 42, 9-33. <https://doi.org/1.15581/004.42.001>
- Martins, A., Ramalho, N., & Morin, E. (2010). A comprehensive meta-analysis of the relationship between emotional intelligence and health. *Personality and Individual Differences*, 49(6), 554-564.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397-422. <https://doi.org/1.1146/annurev.psych.52.1.397>
- Mattern, J., & Bauer, J. (2014). Does teachers' cognitive self-regulation increase their occupational well-being? The structure and role of self-regulation in the teaching context. *Teaching and Teacher Education*, 43, 58-68. <https://doi.org/1.1016/j.tate.2014.05.004>
- Matthews, G., Pérez-González, J. C., Fellner, 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/1.1177/0734282914550386>
- McNair, D. M., Lorr, M., & Droppleman, L. F. (1992). *Profile of Mood States: Manual*. EDITS.
- Mérida-López, S., & Extremera, N. (2017). Emotional intelligence and teacher burnout: A systematic review. *International Journal of Educational Research*, 85, 121-13. <https://doi.org/1.1016/j.ijer.2017.07.006>
- Mérida-López, S., Sánchez-Gómez, M., & Extremera, N. (2020). Leaving the teaching profession: Examining the role of social support, engagement and emotional intelligence in teachers' intentions to quit. *Psychosocial Intervention*, 29(3), 141-15. <https://doi.org/1.5093/pi2020a10>
- Mikolajczak, M., Petrides, K. V., Coumans, N., & Luminet, O. (2009). The moderating effect of trait emotional intelligence on mood deterioration following laboratory-induced stress. *International Journal of Clinical and Health Psychology*, 9(3), 455-477. <http://www.redalyc.org/articulo.oa?id=33712038007>
- Moron, M., & Biolik-Moroń, M. (2021). Trait emotional intelligence and emotional experiences during the COVID-19 pandemic outbreak in Poland: A daily diary study. *Personality and Individual Differences*, 168. <https://doi.org/1.1016/j.paid.202.110348>
- Nolen-Hoeksema, S. (2004). *Mujeres que piensan demasiado* [Women who think too much]. Paidós.
- OCDE (2015). Skills for social progress: The power of social and emotional skills. *OECD Publishing*. <http://dx.doi.org/1.1787/9789264226159-en>
- Pakarinen, E., Aunola, K., Kiurub, N., Lerkkanen, M. K., Poikkeus, S., Siekkinen, M., & Nurmi, J. E. (2014). The cross lagged associations between classroom interactions and children's achievement behaviors. *Contemporary Educational Psychology*, 39(3). <http://dx.doi.org/1.1016/j.cedpsych.2014.06.001>
- Parker, P. D., Martin, A. J., Colmar, S., & Liem, G. A. (2012). Teachers' workplace wellbeing: exploring a process model of goal orientation, coping behavior, engagement, and burnout. *Teaching and Teacher Education*, 28(4), 503-513. <https://doi.org/1.1016/j.tate.2012.01.001>
- Pekrun, R., & Linnenbrink-Garcia, L. (2014). *International handbook of emotions in education*. Routledge.
- Pérez, J. C. (2003). Sobre la validación de constructo de la Inteligencia Emocional [On the construct validity of emotional intelligence]. *Ensayos en Psicología Social*, 1, 252-257.
- Pérez-Díaz, P. A., Manrique-Millones, D., García-Gómez, M., Vázquez-Suyo, M. I., Millones-Rivalles, R., Fernández-Ríos, N., Pérez-González, J. C., & Petrides, K. V. (2022). Invariance of the trait emotional intelligence construct across clinical populations and sociodemographic variables. *Frontiers in Psychology*, 13. <https://doi.org/1.3389/fpsyg.2022.796057>
- Pérez-González, J. C. (2021). La formación en habilidades blandas: Un desafío para la educación abierta, a distancia y en línea [Soft skills training: A challenge for open, distance and online education]. In J. A. Leal, C. A. García, F. Cervantes, A. Sánchez-Elvira, M. Morocho, L. Alba-Juez, M. J. Ruibio, & E. A. Hoyos (Comp.), *Visiones en educación sin barreras ni fronteras. Un homenaje al Maestro Lorenzo García Areño*. Universidad Nacional Abierta y a Distancia / AIESAD. <https://hemeroteca.unad.edu.co/index.php/book/issue/view/486>
- Pérez-González, J. C., & Sánchez-Ruiz, M. J. (2014). Trait emotional intelligence anchored within the big five, big two and big one frameworks. *Personality and Individual Differences*, 65, 53-58. <https://doi.org/1.1016/j.paid.2014.01.021>
- Pérez-González, J. C., Saklofske, D. H., & Mavroveli, S. (2020). Trait emotional intelligence: Foundations, assessment, and education. *Frontiers in Psychology*, 11(608), 1-4. <https://doi.org/1.3389/fpsyg.202.00608>

- Pérez-González, J. C., Yáñez, S., Ortega-Navas, M. C., & Piqueras, J.A. (2020). Educación emocional en la educación para la salud: Cuestión de salud pública [Emotional education in health education: A matter of public health]. *Clínica y Salud*, 31(3), 127-136. <https://dx.doi.org/1.5093/clysa2020a7>
- Petrides, K. V. (2009). *Technical manual for the Trait Emotional Intelligence Questionnaires (TEIQue)*. London Psychometric Laboratory.
- Petrides, K. V., & Furnham, A. (2003). Trait emotional intelligence: Behavioural validation in two studies of emotion recognition and reactivity to mood induction. *European Journal of Personality*, 17, 39-57. <https://doi.org/1.1002/per.466>
- Piqueras, J. A., Mateo, O., Cejudo, J., & Pérez-González, J. (2019). Pathways into psychosocial adjustment in children: Modeling the effects of trait emotional intelligence, social-emotional problems, and gender. *Frontiers in Psychology*, 10(507). <https://doi.org/1.3389/fpsyg.2019.00507>
- Poloni, N., Zizolfi, D., Lelmini, M., Pagani, R., Caselli, I., Diurni, M., Milano, A., & Callegari, C. (2018). A naturalistic study on the relationship among resilient factors, psychiatric symptoms, and psychosocial functioning in a sample of residential patients with psychosis. *Psychology Research and Behavior Management*, 11, 123-131. <https://doi.org/1.2147/PRBM.S159571>
- Puertas, P., Ubago, J. L., Moreno, R., Padial, R., Martínez, M. A., & González, G. (2018). La inteligencia emocional en la formación y desempeño docente: una revisión sistemática [Emotional intelligence in training and teaching labor performance: a systematic review]. *Revista Española de Orientación y Psicopedagogía*, 29(2), 128-142. <https://doi.org/1.5944/reop.vol.29.num.2.2018.23157>
- Puertas, P., Zurita, F., Ubago, J. L., & González, G. (2019). Influence of Emotional intelligence and burnout syndrome on teachers well-being: A systematic review. *Social Sciences*, 8(185), 1-12. <http://dx.doi.org/1.3390/socsci8060185>
- Pulido-Martos, M., López-Zafra, E., Estévez-López, F., & Augusto-Landa, J. M. (2016). The moderator role of perceived emotional intelligence in the relationship between sources of stress and mental health in teachers. *The Spanish Journal of Psychology*, 19, 1-12. <https://doi.org/1.1017/sjp.2016.8>
- Rodríguez, A., Cebollero, A. B., Cano, J., & Cortés, M. P. A. (2021). Retos de la e-comunicación y e-orientación: Aplicaciones educativas para su desarrollo [Challenges of e-communication and e-guidance: Educational applications for development]. In *Aula virtual o cómo plantear las clases a distancia y no morir en el intento* (127-147). Wolters Kluwer España.
- Sánchez-Álvarez, N., Extremera, N., & Fernández-Berrocal, P. (2016). The relation between emotional intelligence and subjective well-being: A meta-analytic investigation. *The Journal of Positive Psychology*, 11(3), 276-285. <https://doi.org/1.1080/1743976.2015.1058968>
- Sánchez-Pujalte, L., Mateo, D. N., Etchezahar, E., & Gómez Yepes, T. (2021). Teachers' burnout during COVID-19 pandemic in Spain: Trait emotional intelligence and socioemotional competencies. *Sustainability*, 13(13), 7259. <https://doi.org/1.3390/su13137259>
- Sarrionandia, A., & Mikolajczak, M. (2020). A meta-analysis of the possible behavioural and biological variables linking trait emotional intelligence to health. *Health Psychology Review*, 14(2), 220-244. <https://doi.org/1.1080/17437199.2019.1641423>
- Saunders, R. (2013). The role of teacher emotions in change: Experiences, patterns and implications for professional development. *Journal of Educational Change*, 14(3), 303-333. <https://doi.org/1.1007/s10833-012-9195-0>
- Schutz, P. A. (2014). Inquiry on teachers' emotion. *Educational Psychologist*, 49(1), 1-12. <https://doi.org/1.1080/0046152.2013.864955>
- Schutz, P. A., & Pekrun, R. (2007). Introduction to emotion in education. In P. A. Schutz & R. Pekrun (Eds.), *Emotion in Education* (pp. 3-10). Elsevier.
- Schutz, P. A., Hong, J., & Francis, D. C. (2020). *Teachers' goals, beliefs, emotions, and identity development: Investigating complexities in the profession*. Routledge.
- Skaalvik, E. M., & Skaalvik, S. (2009). Does school context matter? Relations with teacher burnout and job satisfaction. *Teaching and Teacher Education*, 25(3), 518-524. <https://doi.org/1.1016/j.tate.2008.12.006>
- Skaalvik, E. M., & Skaalvik, S. (2011). Teacher job satisfaction and motivation to leave the teaching profession: relations with school context, feeling of belonging, and emotional exhaustion. *Teaching and Teacher Education*, 27(6), 1029-1038. <https://doi.org/1.1016/j.tate.2011.04.001>
- Szczygiel, D., & Mikolajczak, M. (2017). Why are people high in emotional intelligence happier? They make the most of their positive emotions. *Personality and Individual Differences*, 117, 177-181. <https://doi.org/1.1016/j.paid.2017.05.051>
- Trigwell, K. (2012). Relations between teachers' emotions in teaching and their approaches to teaching in higher education. *Instructional Science*, 40, 607-621. <https://doi.org/1.1007/s11251-011-9192-3>
- 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(1), 124-135. <https://doi.org/1.1016/j.tate.2015.05.008>
- Van Droogenbroeck, F., Spruyt, B., & Vanroelen, C. (2014). Burnout among senior teachers: investigating the role of workload and interpersonal relationships at work. *Teaching and Teacher Education*, 43, 99-109. <https://doi.org/1.1016/j.tate.2014.07.005>
- Veronese, G., & Alessandro, P. (2014). Sense of coherence mediates the effect of trauma on the social and emotional functioning of Palestinian health providers. *American Journal Orthopsychiatric*, 84, 597-606. <https://doi.org/1.1037/ort0000025>