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# Emotional wellbeing in teachers

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# ARTICLE INFO

Keywords: Emotional wellbeing Happiness Emotional intelligence Affects Teachers

# ABSTRACT

Wellbeing is determined by happiness and both positive and negative affects. These constructs are, in turn, related to emotional intelligence and play an important role in individual behaviour. This study examined the relationship between happiness, emotional intelligence, and positive and negative affects in a sample of 344 (121 men 35.17 % and 223 women 64.83 %) trainee teachers, with an average age of 22.36 years. Happiness and affects yielded lower values, which may be related to the age of the participants. All variables under study were found to be correlated, which suggests that they are measuring the same construct: subjective wellbeing. Network analysis indicated that the self-regulation of emotions was the axial factor in the relationship. Finally, it was found that only the factor of emotional intelligence that measures the self-regulation of emotion and affects (both positive and negative) can be used to predict happiness. The present investigation reveals that more research is needed that takes more variables into consideration to describe the effect of these variables on personal wellbeing. The study offers empirical support to models that argue for a relationship between happiness, emotional intelligence, and emphasises the need to work on future teachers during their training to address their psychological wellbeing.

# 1. Introduction

Psychological wellbeing refers to the subjective perspective on positive psychological states, such as happiness, satisfaction with life, and sense of purpose. Psychological wellbeing equates with feeling satisfied with oneself and life, having satisfactory relationships and a sense of purpose, and feeling able to cope with life's challenges.

Although psychological wellbeing is an elusive concept, Ryff and Keyes (1995) tried to identify its main characteristics: feeling of selfdetermination; of being in control over the immediate environment; of having the ability for personal development; of having the ability to form satisfactory relationships; and of possessing a purpose in life. Other authors, such as Diener (2000), defined psychological wellbeing as a subjective evaluation of the person's own life, including a wide spectrum of positive experiences, such as happiness, satisfaction, and fulfilment. Most authors agree that a general satisfaction with life, pleasant feelings, and low negative emotions are factors that play a part in psychological wellbeing (Diener et al., 1999). All these elements are connected and work in sync towards fulfilment, wellbeing, and happiness (Seligman & Csikszentmihalyi, 2000). Diener & Seligman (2002), from a positive psychology perspective, defines psychological wellbeing as a convergence of fulfilment and enjoyment. This definition recognises that happiness is determined by positive emotions, pleasure, and a sense of purpose in life, instead of simply by the absence of negative feelings.

# 1.1. Happiness

It can be defined as a personal and global subjective evaluation of the cognitive and emotional quality of one's own life (Diener et al., 1999). A happy person has a positive outlook; tends to see the positive side of things and not to dwell too much on the negative; has friends and people in whom to trust; has the adequate resources to meet personal targets; and copes satisfactorily with stress (Diener & Seligman, 2002). Happiness is a factor in subjective wellbeing, and it has been found to be related to better physical, emotional, and social health (Fredrickson & Braningan, 2005). Subjective wellbeing can be anchored in the past, the present, and the future. When the focus is on the future, this leads to optimism, faith, hope, and confidence; when on the present, it is conducive to balance, joy, and flow (or optimal experience); when on the past, it leads to satisfaction, personal fulfilment, and serenity

https://doi.org/10.1016/j.actpsy.2024.104218

Received 3 January 2024; Received in revised form 1 March 2024; Accepted 11 March 2024 Available online 16 March 2024

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(Seligman & Csikszentmihalyi, 2000). It has been attested that emotional intelligence is an important predictor of subjective happiness (Abdollahi et al., 2019; Carmeli et al., 2009), and the positive correlation between emotional intelligence and subjective happiness has also been pointed out (Cejudo et al., 2016; Extremera et al., 2009), including several studies that targeted teachers (Benevene et al., 2020; Colvin, 2018; Fiorilli et al., 2019; Nozaki & Koyasu, 2018); these studies confirm that this correlation applies regardless of age and gender (Fiori & Vesely-Maillefer, 2018; Kenely, 2019; Kong et al., 2019).

# 1.2. Emotional intelligence

Better personal and emotional skills help to raise teachers' selfconcept, quality of life, and professional performance, and this increases their subjective happiness (Falk et al., 2021; McCallum et al., 2017; Song, 2022). It must be remembered that emotional intelligence has been shown to be an important predictor of mental health (Gloria & Steinhardt, 2016; Zeidner et al., 2012) and a key factor in professional adaptability (Miao et al., 2017; Seligman & Csikszentmihalyi, 2000; Skaalvik & Skaalvik, 2018; Split et al., 2011; Zee & Koomen, 2016). The very concept of emotional intelligence refers to the interaction between emotion and cognition, a central variable for the person's ability to adapt to their environment (Mayer et al., 2016; MacCann et al., 2020; Salovey & Mayer, 1990). In this way, emotional intelligence can be defined as proficiency in the following skills: 1) emotional perception, or the ability to identify emotions, in oneself and others; 2) emotional facilitation, or the ability to use emotion to improve reasoning; 3) emotional comprehension, or the ability to solve problems and identify analogous emotions; and 4) emotional direction, or the ability to understand the implications of social acts on emotions and regulate emotion, in oneself and others (Mayer & Salovey, 1997). Various authors have pointed out the importance of individual predisposition to pay attention to emotions and clearly identify emotions and moods (Boden & Thompson, 2017; Millan et al., 2014; Salovey et al., 1995). The idea that emotional skills are a crucial factor in the operation of the individual in every sphere is core to the very notion of emotional intelligence (Llamas-Diaz et al., 2022; Mikolajczak et al., 2006). It has also been argued that emotional intelligence plays an important role in personal happiness, insofar as it increases the ability to handle emotions, in oneself and others (Abdollahi et al., 2019; Sánchez-Álvarez et al., 2016).

# 1.3. Affects

Affects are defined dichotomously, positive/negative, and are held to have a hereditary base (Watson & Tellegen, 1985). Positive affects relate to pleasant emotions (motivation, drive, desire to belong, achievement, and success), and negative affects do so to unpleasant emotions (fear, inhibition, insecurity, frustration, and failure) (Barrett & Bliss-Moreau, 2009; Watson et al., 1988). People with strong positive affects are used to feelings of satisfaction, enthusiasm, drive, togetherness, affirmation, and confidence, and tend to be extroverted, optimistic, and resilient. People with strong negative affects experience lack of interest, boredom, sadness, guilt, shame, and envy, and tend to react badly to negative stimuli: vegetative lability, stress, and unfavourable environments (Larsen et al., 2001; Russell, 2017). Affects also play a role in subjective happiness (Lyubomirsky et al., 2005).

### 1.4. Happiness, emotional intelligence, and affects in teachers

Subjective happiness is one of the main aspects of quality of life among teachers, and it is closely tied to emotional intelligence. Teachers are particularly exposed to emotional attrition, low levels of wellbeing and happiness ... as well as to low levels of professional satisfaction, also known as burnout (Hakkanen et al., 2006; Salavera et al., 2024; Skaalvik & Skaalvik, 2010; Zhang et al., 2023).

The professional context, the demands of pupils and their parents/

guardians, lack of material resources, etc. have a direct impact on their performance and can lead to burnout. This emphasises the need to develop tools, such as emotional skills, to cope with their everyday challenges (Collie et al., 2015; Colomeischi, 2015; Kenely, 2019; Willis, 2022). Training in emotional education must begin during their training, including strategies that allow them not only to handle their emotions, understand emotional states, and improve empathy, but also to pass on these skills to their pupils (Bermejo, 2016; Colvin, 2018; Darling-Hammond et al., 2017; Schleicher, 2018).

Given the importance of studying emotional intelligence, affects, and subjective happiness in trainee teachers, not only for their wellbeing but also for their future professional duties, the aim of this study was to analyse the relationship between these three constructs in a sample of trainee teachers in northern Spain.

The two starting hypotheses were as follows:

**H1**. Higher scores in emotional intelligence will correspond with higher scores in subjective happiness.

**H2**. Emotional intelligence and affects will act as predictors of subjective happiness.

#### 2. Method

## 2.1. Participants and protocols

The sample comprised 344 participants (121 men 35.17 % and 223 women 64.83 %), with an average age of 22.36 years (Table 1). The only exclusion criterion was incomplete questionnaires (N = 8). In Ato and Vallejo's (2015) definition, this is a prospective ex post facto survey with a simple descriptive design.

# 2.2. Protocol

After securing the consent of the lecturers, questionnaires were distributed in April and May 2023. All participants were volunteers, and data was handled confidentially and anonymously. Participants were handed questionnaires on emotional intelligence, affects, and subjective happiness, along with a document that explained the purpose of the study and gave instructions to complete the questionnaire, stated the anonymous and for-research-purposes-only nature of the study, and ended with a set of sociodemographic questions (age, sex, educational stage). The purposes of the study were also explained while the questionnaires were being handed over, and the importance of completing all items was emphasised. Participants were given 45 min to complete and sign the questionnaires were introduced in anonymous sealed envelopes.

# 2.3. Instruments

# 2.3.1. Subjective happiness scale (SHS) (Lyubomirsky & Lepper, 1999)

This scale presents a molar average of wellbeing as a holistic psychological phenomenon. The scale goes beyond aggregating positive and negative emotional states and their related cognitive states. Happiness is measured from the perspective of the participant, under the assumption that, although different variables can be used to describe

Table 1		
Sample distribution	(N =	344).

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011)		
Male	121	35.17 %
Female	223	64.83 %
<20 years	129	37.50 %
20-25 years	158	45.93 %
>25 years	57	16.57 %
Pre-school	151	43.90 %
Primary	193	56.10 %
	Male Female <20 years 20-25 years >25 years Pre-school	Male     121       Female     223       <20 years

happiness, each participant will have their own perspective on happiness and the ability to establish whether they are happy or not (Diener & Seligman, 2002). The scale comprises four items and the responses are presented in a Likert scale; scores are aggregated and divided by the total number of items. The scale yielded a high degree of internal consistency (Cronbach's alpha = 0.84).

#### 2.3.2. Schutte's emotional intelligence scale (Schutte et al., 1998)

For this study, the previously validated Spanish version of the scale was used (Salavera & Usán, 2019). The scale comprises 33 items, and responses are presented in a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The scale is divided into six related variables: attention to one's own emotions; attention to the emotions of others; regulation of one's own emotions; expressed emotions; regulation of the emotions of emotions in problem-solving. The scale yielded a high degree of internal consistency (Cronbach's alpha = 0.88); any value above 0.80 is generally regarded as very good.

# 2.3.3. PANAS questionnaire (Watson et al., 1988)

The Positive and Negative Affect Scale PANAS comprises 20 items, ten of which refer to positive affects and ten to negative affects; responses are presented in a Likert scale, ranging from 0 (absence of emotion) to 5 (strong presence of emotion). The Cronbach's alpha value yielded by the positive affect scale was 0.90 and 0.87 for the negative affect scale.

#### 2.4. Data analysis

SPSS 26.0 IBM software was used to carry out statistical analyses. Following the results yielded by standard tests (normality, independence, homoscedasticity, and linearity), the use of parametric techniques was chosen. First, descriptive analysis of each variable was carried out, in all cases at the lowest significance level possible; differences with values p < 0.05 were regarded as significant. As prescribed in the questionnaire instructions, analysis was based on direct scores. In addition, JASP, v. 0.10.2 (JASP Team, 2019) software was used to undertake undirected weighted network analysis, with the aim of exploring the structural dynamics between nodes through Fruchterman-Reingold's FR algorithm (Fruchterman & Reingold, 1991). Finally, logistic regression was used to establish equations with which to predict subjective happiness based on emotional intelligence and affects, using the stepwise regression method based on Wald's statistic.

### 3. Results

The scores yielded by the questionnaires are summarised in Table 2. Afterwards, participants were divided into three groups for each item

#### Table 2

Scores in the happiness, emotional intelligence, and affects questionnaires.

Descriptive statistics						
	Average	Standard deviation	Minimum	Maximum		
Happiness	19.87	4.32	4.00	28.00		
Attention to one's own emotions	23.15	2.98	10.00	30.00		
Attention to the emotions of others	10.55	1.90	4.00	15.00		
Regulation of one's own emotions	24.54	3.24	12.00	30.00		
Expressed emotion	14.50	2.50	5.00	20.00		
Regulation of the emotions of others	19.43	2.63	12.00	25.00		
Use of emotions in problem-solving	15.81	2.15	10.00	20.00		
Positive affects	18.27	2.69	9.00	25.00		
Negative affects	13.82	3.25	5.00	23.00		

according to their scores (low, medium, high), averages, and standard deviations (Table 3).

Table 4 presents the partial correlations between the scales. Happiness was found to be correlated with all variables, except attention to the emotions of others. Unsurprisingly, as they are part of the same instrument, the variables of emotional intelligence were found to be closely correlated with one another. On the other hand, positive affects presented positive correlations and negative affects negative correlations.

\*\*p<0.001Network analysis (Fig. 1) revealed correlations between nodes (blue for positive correlations and red for negative correlations). The thickness of the lines illustrates that the strongest correlation linked nodes 1 (happiness) and 4 (regulation of one's own emotions) (r partial = 0.33, p < 0.01); and nodes 4 (regulation of one's own emotions) and 8 (positive affects) (r partial = 0.16, p < 0.01). Node 9 (negative affects) was shown to be negatively correlated with nodes 1 (happiness) (r partial = -0.27, p < 0.01) and 4 (regulation of one's own emotions) (r partial = -0.17, p < 0.01).

Fig. 2 emphasises strength, owing to its greater stability in network models (Bringmann et al., 2019); the highest values correspond to node 7 (regulation of one's own emotions).

Another target of the study was to establish the value of emotional intelligence and affects as predictors of happiness. This was undertaken through multiple linear regression, using factorial scores of emotional intelligence and affects as predictor variables and happiness as criterion variable. Tables 5 and 6 present the steps followed by the models to introduce the explicative variables that were found to be significant for the prediction of happiness. The only factor of emotional intelligence to have an effect on happiness was the ability to regulate one's own emotions, with an effect F = 7.80; p < 0.001. Both positive (F = 2.07; p < 0.001) and negative affects (F = -5.87; p < 0.001) were shown to have a significant effect, and the Durbin-Watson test confirmed independence of errors (1.98). In the regression model used, regulation of one's own emotions and positive and negative affects variables explained 37.0 % of the variance of the dependent variable ( $R^2 = 0.370$ ). The ANOVA of the regression model with these variables indicate that this significantly improves the prediction of the dependent variable (F = 68.62, p <0.001). For the coefficients of the regression model, the t scores indicate that the variables chosen significantly contribute to the prediction model, and therefore that results can be extrapolated to the whole sample. The Variance Inflation Factor (VIF) confirms the absence of multicollinearity (values from 1.27 and 1.49). The following covariables were considered but not included: attention to one's own emotions; attention to the emotions of others; expressed emotions; regulation of the emotions of others; emotions in problem-solving.

Table 3

Distribution of scores in the happiness, emotional intelligence, and affects questionnaires.

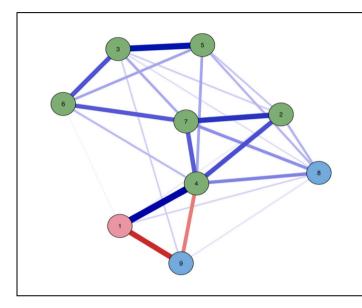
	Low	Medium	High
Happiness	57 (16.57	244 (70.93	43 (12.50
	%)	%)	%)
Attention to one's own emotions	61 (17.73	242 (70.35	41 (11.92
	%)	%)	%)
Attention to the emotions of	38 (11.05	260 (75.58	46 (13.37
others	%)	%)	%)
Regulation of one's own emotions	57 (16.57	223 (64.83	64 (18.60
	%)	%)	%)
Expressed emotion	69 (20.06	240 (69.77	35 (10.17
	%)	%)	%)
Regulation of the emotions of	45 (13.08	257 (74.71	42 (12.21
others	%)	%)	%)
Use of emotions in problem-	52 (15.11	219 (63.66	73 (21.22
solving	%)	%)	%)
Positive affects	49 (14.24	230 (66.86	65 (18.90
	%)	%)	%)
Negative affects	54 (15.70	249 (72.38	41 (11.92
	%)	%)	%)

#### Table 4

Correlations between happiness, emotional intelligence, and affects.

	1	2	3	4	5	6	7	8
1. Happiness								
2. Attention to one's own emotions	0.325**							
3. Attention to the emotions of others	0.075	0.325**						
4. Regulation of one's own emotions	0.558**	0.531**	0.217**					
5. Expressed emotion	0.164**	0.341**	0.490**	0.382**				
6. Regulation of the emotions of others	0.230**	0.276**	0.434**	0.375**	0.373**			
7. Use of emotions in problem-solving	0.309**	0.534**	0.385**	0.538**	0.319**	0.452**		
8. Positive affects	0.292**	0.382**	0.282**	0.441**	0.320**	0.262**	0.416**	
9. Negative affects	-0.437**	-0.181**	0.033	-0.386**	-0.054	-0.114*	-0.102	-0.044

\*\*p<0.001.



1: Happiness

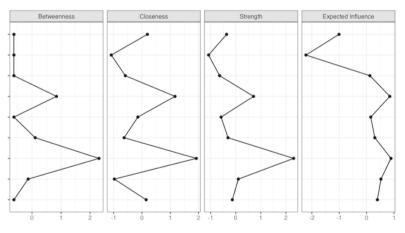
2: Attention to one's own emotions

3: Attention to the emotions of others

- 4: Regulation of one's own emotions
- 5: Expressed emotions
- 6: Regulation of the emotions of others
- 7: Emotions in problem-solving
- 8: Positive affects
- 9: Negative affects

### Fig. 1. Network analysis results.

Note: Lines (edges) represents partial correlations between variables and the thickness denotes magnitude.



- 1: Happiness
- 2: Attention to one's own emotions
- 3: Attention to the emotions of

# others

4: Regulation of one's own emotions

- 5: Expressed emotions
- 6: Regulation of the emotions of others
- 7: Emotions in problem-solving
- 8: Positive affects
- 9: Negative affects

Fig. 2. Centrality graph.

Table 5
Summary of the happiness linear regression model.

Model	R	$\mathbb{R}^2$	Adjusted R <sup>2</sup>	RMSEA	gl1	gl2	р
1	0.00	0.00	0.00	4.32	0	343	
2	0.56	0.31	0.31	3.59	1	342	<.001
3	0.61	0.37	0.37	3.44	1	341	<.001
4	0.61	0.38	0.37	3.43	1	340	.004

# 4. Discussion and conclusions

Concern for the wellbeing of teachers has increased over recent decades (Greenberg et al., 2016; Skaalvik & Skaalvik, 2018; Soini et al., 2010). After the Covid-19 pandemic, the number of sick leaves and dropoffs has increased to worrying levels (Beltman et al., 2022; Vargas & Oros, 2021). Professional demands and high stress levels are compounded by personal and professional exhaustion (Allen, 2010; Salmela-

#### Table 6

Linear regression coefficients.

Mode	el	Non- typified	Standard deviation	Typified	t	р
1	(Intercept)	19.87	0.23		85.27	<.001
2	(Intercept)	1.57	1.48		1.06	.29
	Regulation of one's own emotions	0.75	0.06	0.56	12.44	<.001
3	(Intercept)	9.66	2.03		4.76	<.001
	Regulation of one's own	0.61	0.06	0.46	9.81	<.001
	Negative affects	-0.35	0.06	-0.26	-5.59	<.001
4	(Intercept)	8.64	2.08		4.16	<.001
	Regulation of one's own	0.54	0.07	0.41	7.80	<.001
	Negative affects	-0.37	0.06	-0.28	-5.87	<.001
	Positive affects	0.16	0.08	0.10	2.07	.004

Note. The following covariables were considered but not included: attention to one's own emotions; attention to the emotions of others; expressed emotions; regulation of the emotions of others; emotions in problem-solving.

Aro & Read, 2016; Skaalvik & Skaalvik, 2011). To date, most studies have focused on negative indicators of wellbeing and on their impact on professional performance. This study aimed to focus instead on wellbeing per se, adopting a more positive outlook (Addimando, 2019; Swartz & Perkins, 2016). Wellbeing is not only defined by the absence of negative symptoms, but also by personal success and health in the professional, relational, and social spheres... (Warr, 2007).

The sample included two women for each man, and all participants were under 40 years of age. One in three participants were under 20 years of age, and almost half were between 20 and 25. The number of trainees aiming for primary school was slightly higher than those aiming for pre-school education.

The analysis of the results revealed that the number of participants to yield high happiness scores was fairly low, barely 12.50 %. Scores in the regulation of one's own emotions, emotions in problem-solving, and positive affects items were somewhat higher than in other variables. These results generally agree with the literature, although the variables that relate to good levels of emotional intelligence were higher than is typically the case in studies targeting teachers (Casadiego-Luna & Molero, 2016; Ciarrochi et al., 2001). This could be related to the makeup of the sample, which comprised younger trainee teachers; it has been attested that wellbeing decreases with age (Casas & González-Carrasco, 2019). Concerning affects (both positive and negative), scores were near average but slightly lower than in earlier studies (Rahm & Heise, 2019). It is worth recalling that the affective component of subjective wellbeing is related to the frequency of positive and negative affects. In this regard, positive affects are linked with reward, and fosters learning processes (Esch, 2012), in other words, positive emotional experiences can be used to create personal tools with which to build success and personal growth (Fredrickson, 2001). Negative affects emerge when personal needs and targets are under threat, and this acts as a warning to dodge these hazards (Garland et al., 2010), although some authors argue that excessive negative affects can have deleterious health effects in the long term (Diener et al., 2010). The affect-related scores yielded by the study were lower than in previous studies, showing that the participants are still in the process of shaping and acquiring these affects, likely because of their age.

On the other hand, as expected, correlation analysis found partial correlations between items; it was found that happiness was positively correlated with emotional intelligence and positive affects, while negative affects were found to be negatively correlated with happiness and emotional intelligence, that is, the more negative affect the less happiness and emotional intelligence. These results are in line with previous studies and support the idea that good emotional management greatly contributes to wellbeing (Extremera & Rey, 2016; Fiorilli et al.,

# 2019; Greenberg, 2023; Llamas-Díaz et al., 2023).

To our knowledge, this is the first time that network analysis is used to examine the structural relationship between happiness, emotional intelligence, and affects. The systemic interaction between network indicators revealed a strong connection between happiness and the factor of emotional intelligence that regulates one's own emotions, and that the connection between the latter and positive and negative affects is also strong. The data indicates that the most important factor in wellbeing, among those measured in this study, is the ability to regulate one's own emotions. Therefore, it can be argued that trainee teachers value this skill, and this can help them in their future professional tasks, contributing to the psychological wellbeing of both teachers and pupils (Addimando, 2019; Aloe et al., 2014; Ballantyne & Retell, 2020; Bermejo, 2016; Falk et al., 2021; Lee et al., 2023; Soini et al., 2010; Wu et al., 2020).

Regarding the value of affects and emotional intelligence as predictors of happiness, the data showed that both the ability to regulate one's own emotions and positive and negative affects have a significant effect on happiness. Positive affects has a positive impact on happiness, and vice versa. The most important factor in happiness was the ability to regulate one's own emotions, which suggests that this is a crucial variable in subjective wellbeing. It was shown that the ability to regulate one's own emotions and affects can be used to effectively predict happiness, and this agrees with the above noted consideration of psychological wellbeing as wide-spectrum subjective perception of different positive experiences, including joy, self-satisfaction, and personal fulfilment (Diener et al., 2010), in which emotional intelligence plays an important role (Ryff & Singer, 2008; Zeidner et al., 2012).

# 4.1. Limitations of the study

This study has several limitations. Although the sample is statistically significant, the methodology must be used with other social groups, including university students sitting other degrees and nonuniversity students. It would also be desirable to target other age groups (adults, seniors) and to undertake longitudinal and sequential studies to examine the evolution of variables over time and establish links with other demographic (civil status, children, family, work, physical and psychological health) and even structural variables (place of residence, housing status).

# 4.2. Future perspectives

The main novelty of this study was the use of network analysis. This statistical method is still used in few psychometric studies, although it provides the researcher with high-quality data. One of the method's advantages is that the analysis of the associations between variables follows the multivariate control of all elements, adopting a systemic perspective that is eminently suitable to the study of psychological phenomena (Skaalvik & Skaalvik, 2018). Studying the role of wellbeing in future teachers is an important endeavour, because of its role in the learning-teaching process and the impact of teachers on their pupils' wellbeing (Song, 2022; Split et al., 2011; Zee & Koomen, 2016). It is also necessary to address the issue of emotional skills of teachers during their training. This will contribute to decrease their stress levels, and improve their self-efficacy, professional performance and satisfaction, and emotional wellbeing (Darling-Hammond et al., 2017; Frisoli et al., 2013). This should become a social priority, especially in the field of teacher-training, because the wellbeing of teachers depend on context and on the perception that pupils, their parents/guardians, and society have of their performance (Bardach et al., 2022; Burns & Lawrie, 2015; Hascher & Edlinger, 2009; McCallum & Price, 2010; Yin, 2015).

## 4.3. Practical implications

This study can suggest didactic strategies to train future teachers in

their personal and emotional wellbeing. Future research is needed to deepen the complexity of the link between the two, exploring possible variations through different variables that can influence the relationship. The present study reveals as fundamental the training in personal and emotional wellbeing, which must be a lateral component of all the topics involved in the learning of future teachers. Active programs run by psychology professionals can also contribute to this goal. In addition, emotional skills should be included in the curriculum in their own right, which will allow a more direct connection between training and professional needs and the configuration of resources for professional tasks and better address their daily challenges. These results are only a first step, which encourages us to continue researching and continue asking ourselves how we can help future teachers work on their personal, social and emotional development.

#### 5. Conclusions

Although this study is a step in the right direction, it emphasises that more research is needed to address the emotional wellbeing of future teachers. In itself, this is an interesting conclusion, as there is wide agreement about the difficulty to reach firm conclusions in this field. The results presented by previous studies reach contradictory conclusions, depending on the variables used (e.g. age, sex, degree). However, no previous study has examined the role played by affects and emotional intelligence in the happiness of future teachers. As such, wider studies are necessary, both in terms of variables used and temporal range, to establish the effect of these variables on the psychological wellbeing of future teachers, as well as the impact of other personal, professional and structural factors. Working on psychological wellbeing, affects, emotional intelligence, and other constructs during their university training would allow students to adopt better coping strategies and to increase their happiness and quality of life, which would also have a beneficial effect on their future pupils.

#### Funding

This study was supported by research funds provided by the Department of Science and Technology of the Government of Aragon (Spain), and the European Social Fund.

#### Research with humans and/or animals

This study collected self-reported questionnaires from participants. All participants were handed a detailed sheet with details about objectives. Participation was voluntary.

# Informed consent

All participants signed an informed consent form.

# CRediT authorship contribution statement

**Carlos Salavera:** Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Eva Urbón:** Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Data curation, Conceptualization.

# Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### Data availability

Data will be made available on request.

# References

- Abdollahi, A., Hosseinian, S., Panahipour, H., Najafi, M., & Soheili, F. (2019). Emotional intelligence as a moderator between perfectionism and happiness. *School Psychology International*, 40(1), 88–103. https://doi.org/10.1177/0143034318807959
- Addimando, L. (2019). The effect of positive working conditions on work engagement and teaching classroom practices: A large cross-sectional study in Switzerland. *Frontiers in Psychology*, 10, 2129. https://doi.org/10.3389/fpsyg.2019.02129
- Allen, K. P. (2010). Classroom management, bullying, and teacher practices. The Professional Educator, 34, 1–15.
- Aloe, A. M., Amo, L. C., & Shanahan, M. E. (2014). Classroom management self-efficacy and burnout: A multivariate meta-analysis. *Educational Psychology Review*, 26(1), 101–126. https://doi.org/10.1007/s10648-013-9244-0
- Ato, M., & Vallejo, G. (2015). Diseños de investigación en Psicología. Pirámide.
- Ballantyne, J., & Retell, J. (2020). Teaching careers: Exploring links between well-being, burnout, self-efficacy and praxis shock. Frontiers in Psychology, 10, 2255. https://doi. org/10.3389/fpsyg.2019.02255
- 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, 259–300. https://doi.org/10.1007/s10648-021-09614-9
- Barrett, L. F., & Bliss-Moreau, E. (2009). Affect as a psychological primitive. In M. P. Zanna, & J. M. Olson (Eds.), Vol. 41. Advances in experimental social psychology (pp. 167–218). Academic Press.
- Beltman, S., Hascher, T., & Mansfield, C. (2022). In the Midst of a Pandemic: Australian Teachers Talk About Their Well-Being. *Zeitschrift für Psychologie*, 230(3), 253–263. https://doi.org/10.1027/2151-2604/a000502
- Benevene, P., De Stasio, S., & Fiorilli, C. (2020). Editorial: Well-being of school teachers in their work environment. *Frontiers in Psychology*, 11, 1239. https://doi.org/ 10.3389/fpsyg.2020.01239
- Bermejo, L. (2016). Bienestar docente. Estrategias para una vida emocionalmente más saludable en el trabajo del profesor. Padres y Maestros, 368, 18–23. https://doi.org/ 10.14422/pym.i368.y2016.003
- Boden, M. T., & Thompson, R. J. (2017). Meta-analysis of the association between emotional clarity and attention to emotions. *Emotion Review*, 9(1), 79–85. https:// doi.org/10.1177/1754073915610640
- Bringmann, L. F., Elmer, T., Epskamp, S., Krause, R. W., Schoch, D., Wichers, M., & Snippe, E. (2019). What do centrality measures measure in psychology networks? *Journal of Abnormal Psychology*, 128(8), 892–903. https://doi.org/10.1037/ abn0000446
- Burns, M., & Lawrie, J. (2015). Where it's needed most: Quality profesional development for all teachers. Inter-Agency Network for Education in Emergencies, 162.
- Carmeli, A., Yitzhak-Halevy, M., & Weisberg, J. (2009). The relationship between emotional intelligence and psychological wellbeing. *Journal of Managerial Psychology*, 24(1), 66–78. https://doi.org/10.1108/02683940910922546
- Casadiego-Luna, N., & Molero, D. (2016). Inteligencia emocional percibida, disposición al optimismo-pesimismo, satisfacción vital y personalidad de docentes en su formación inicial. Revista de Investigación Educativa, 34(1), 241–258. https://doi.org/ 10.6018/rie.34.1.220701
- Casas, F., & González-Carrasco, M. (2019). Subjective well-being decreasing with age: New research on children over 8. *Child Development*, *90*(2), 375–394.
- Cejudo, J., Díaz, M. V., Losada, L., & Pérez-González, J. C. (2016). Necesidades de formación de maestros de Infantil y Primaria en atención a la diversidad. Bordón. Revista De Pedagogía, 68(3), 23–39. https://doi.org/10.13042/Bordon.2016.68402
- Ciarrochi, J., Chan, A., & Bajgar, J. (2001). Measuring emotional intelligence in adolescents. *Personality and Individual Differences*, *31*(7), 1105–1119.
- Collie, R. J., Shapka, J. D., Perry, N. E., & Martin, A. J. (2015). Teacher well-being: Exploring its components and a practice-oriented scale. *Journal of Psychoeducational Psychology*, 33(8), 744–756.
- Colomeischi, A. A. (2015). Teachers burnout in relation with their emotional intelligence and personality traits. *Procedia-Social and Behavioral Sciences*, 180, 1067–1073.
- Colvin, R. L. (2018). Supporting the whole teacher: Developing educator's social and emotional skills lays the foundation for success with students. The Aspen Institute.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher profesional development*. Learning Policy Institute.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *The American Psychologist*, 55(1), 34–43. https://doi.org/10.1037/ 0003-066X.55.1.34
- Diener, E., & Seligman, M. E. P. (2002). Very happy people. Psychological Science, 13(1), 81–84. https://doi.org/10.1111/1467-9280.00415
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276–302.
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., et al. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. Social Indicators Research, 97, 143–156. https://doi.org/10.1007/s11205-009-9493-y
- Esch, T. (2012). The neurobiology of happiness: How positive psychology changes medicine. Thieme Verlag.
- Extremera, N., Fernández, P., González, V., & Cabello, R. (2009). Una validación preliminar de la versión española de la Subjective Happiness Scale. In Avances en el

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#### Acta Psychologica 245 (2024) 104218

Estudio de la Inteligencia Emocional; Fernández-Berrocal, P (pp. 39-44). Fundación Marcelino Botín.

Extremera, N., & Rey, L. (2016). Ability emotional intelligence and life satisfaction: Positive and negative affect as mediators. *Personality and Individual Differences, 102*, 98–101. https://doi.org/10.1016/j.paid.2016.06.051

- Falk, D., Frisoli, P., & Varni, E. (2021). The importance of teacher well-being for student mental health and resilient education systems. *Forced Migration Review*, 66, 17–20.
  Fiori, M., & Vesely-Maillefer, A. K. (2018). Emotional intelligence as an ability: Theory,
- FIOT, M., & Vesely-Malneter, A. K. (2018). Embridinal intelligence as an ability: Theory, challenges, and new directions. In *Emotional intelligence in education: Integrating* research with practice (pp. 23–47).
- Fiorilli, C., Benevene, P., De Stasio, S., Buonomo, I., Romano, L., Pepe, A., & Addimando, L. (2019). Teachers' burnout: The role of trait emotional intelligence and social support. *Frontiers in Psychology*, 10, 2743. https://doi.org/10.3389/ fpsyg.2019.02743
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology. The broaden-and-build theory of positive emotions. *The American Psychologist*, 56, 218–226. https://doi.org/10.1037//0003-066X.56.3.218
- Fredrickson, B. L., & Braningan, C. (2005). Positive emotions broaden the scope of attention and thought-action repertoires. *Cognition & Emotion*, 19(3), 313–332.

Frisoli, P. S. J., Frazier, J., & Hansen, H. (2013). Teacher motivation, well-being, and profesional development: Teacher networks in Katanga Province. Democratic Republic of Congo. International Conference on Education and Development.

Fruchterman, T., & Reingold, E. (1991). Graph drawing by force-directed placement. Software: Practice and Experience, 21(11), 1129–1164. https://doi.org/10.1002/ spe.4380211102

Garland, E. L., Fredrickson, B., Kring, A. M., Johnson, D. P., Meyer, P. S., & Penn, D. L. (2010). Upward spirals of positive emotions counter downward spirals of negativity: Insights from the broaden-and-build theory and affective neuroscience on the treatment of emotion dysfunctions and deficits in psychopathology. *Clinical Psychology Review*, 30, 849–864. https://doi.org/10.1016/j.cpr.2010.03.002

Gloria, C. T., & Steinhardt, M. A. (2016). Relationships among positive emotions, coping, resilience and mental health. Stress and Health, 32(2), 145–156.

Greenberg, M. T. (2023). Evidence for social and emotional learning in schools. Learning Policy Institute. https://doi.org/10.54300/928.269

Greenberg, M. T., Brown, J. L., & Abenavoli, R. M. (2016). Teacher stress and health effects on teachers, students, and schools. Edna Bennett Pierce Prevention Reseach Center.

Hakkanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43(6), 495–513. https://doi.org/ 10.1016/j.jsp.2005.11.001

Hascher, T., & Edlinger, H. (2009). Positive emotions and well-being in school – An overview of methods and results. *Psychologie in Erziehung und Unterricht*, 56(2), 105–122.

JASP Team. (2019). JASP (version 0.10.2). https://jasp-stats.org/download/ (Computer software).

Kenely, N. (2019). Emotional intelligence, resilience and wellbeing. Perspectives on wellbeing: A reader, 41, 21–34.

Kong, F., Gong, X., Sajjad, S., Yang, K., & Zhao, J. (2019). How Is Emotional Intelligence Linked to Life Satisfaction? The Mediating Role of Social Support, Positive Affect and Negative Affect. *Journal of Happiness Studies, 20*, 2733–2745. https://doi.org/ 10.1007/s10902-018-00069-4

Larsen, J. T., McGraw, A. P., & Cacioppo, J. T. (2001). Can people feel happy and sad at the same time? *Journal of Personality and Social Psychology*, *81*, 684–696.

Lee, E. O., Lacey, H. M., Van Valkenburg, S., McGinnis, E., Huber, B. J., Benner, G. J., & Strycker, L. A. (2023). What about me? The importance of teacher social and emotional learning and well-being in the classroom. *Beyond Behavior*, 0(0). https:// doi.org/10.1177/10742956221145942

Llamas-Díaz, D., Cabello, R., Gómez-Leal, R., Gutiérrez-Cobo, M. J., Megías-Robles, A., & Fernández-Berrocal, P. (2023). Ability emotional intelligence and subjective happiness in adolescents: The role of positive and negative affect. *Journal of Intelligence*, 11(8), 166. https://doi.org/10.3390/jintelligence11080166

Llamas-Diaz, D., Cabello, R., Megias-Robles, A., & Fernández-Berrocal, P. (2022). Systematic review and meta-analysis: The association between emotional intelligence and subjective well-being in adolescents. *Journal of Adolescence, 94*, 925–938. https://doi.org/10.1002/jad.12075

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131(6), 803–855. https://doi. org/10.1037/0033-2909.131.6.803

Lyubomirsky, S., & Lepper, H. A. (1999). A measure of subjective happiness: Preliminary reliability and construct validation. *Social Indicators Research*, 46, 137–155.

MacCann, C., Jiang, Y. X., Brown, L. E. R., Double, K. S., Bucich, M., & Minbashian, A. (2020). Emotional intelligence predicts academic performance: A meta-analysis. *Psychological Bulletin*, 146(2), 150–186. https://doi.org/10.1037/bul0000219

Mayer, J. D., Caruso, D. R., & Salovey, P. (2016). The ability model of emotional intelligence: Principles and updates. *Emotion Review*, 8, 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 implications* (pp. 3–31). New York: Basic Books. McCllure, D. (2010). Mult becknown between the tradeets of the Journal of Studies.

McCallum, F., & Price, D. (2010). Well teachers, well students. The Journal of Student Wellbeing, 4(1), 19–34.

McCallum, F., Price, D., Graham, A., & Morrison, A. (2017). Teacher wellbeing: A review of the literature. Association of Independent Schools of NSW.

Miao, C., Humphrey, R.H., & Qian, S. (2017). A meta-analysis of emotional intelligence and work attitudes. Journal of Occupational and Organizational Psychology, 90, 177–202. doi: 10.1111/ joop.12167. Mikolajczak, M., Luminet, O., & Menil, C. (2006). Predicting resistance to stress: Incremental validity of trait emotional intelligence over alexithymia and optimism. *Psicothema*, 18(Suppl), 79–88.

Millan, A. C., García-Álvarez, D. D. J., & D'Aubeterre, M. E. (2014). Efecto de la Inteligencia Emocional y Flujo en el Trabajo Sobre Estresores y Bienestar Psicológico: Análisis de Ruta en Docentes. *Revista Colombiana de Psicología*, 23(1), 207–228.

Nozaki, Y., & Koyasu, M. (2018). Emotional competence. In Wellbeing in higher education: Cultivating a healthy lifestyle among faculty and students (pp. 30–43).

Rahm, T., & Heise, E. (2019). Teaching happiness to teachers – Development and evaluation of a training in subjective well-being. *Frontiers in Psychology*, 10, 2703. https://doi.org/10.3389/fpsyg.2019.02703

Russell, J. A. (2017). Mixed emotions viewed from the psychological constructionist perspective. *Emotion Review*, 9(2), 111–117.

Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. Journal of Personality and Social Psychology, 69(4), 719–727. https://doi.org/ 10.1037/0022-3514.69.4.719

Ryff, C. D., & Singer, B. H. (2008). Know thyself and become what you are: A eudaimonic approach to psychological well-being. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 9(1), 13–39. https://doi.org/ 10.1007/s10902-006-9019-0

Salavera, C., & Usán, P. (2019). Exploración de la dimensionalidad y las propiedades psicométricas de la escala EIS de inteligencia emocional. *Revista CES Psicología*, 12 (3), 50–66. https://doi.org/10.21615/cesp.12.3.4

Salavera, C., Urbón, E., Usán, P., Franco, V., Paterna, A., & Aguilar-Parra, J.M. (2024). Psychological well-being in teachers. Study in teachers of Early Childhood and Primary Education. Helyion (in press).

Salmela-Aro, K., & Read, S. (2016). Study engagement and burnout profiles among Finnish higher education students. *Burnout Research*, 7, 21–28. https://doi.org/ 10.1016/j.burn.2017.11.001

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. Imagination, Cognition and Personality, 9, 185–211.

Salovey, P., Mayer, J. D., Goldman, S. L., Turvey, C., & Palfai, T. P. (1995). Emotional attention, clarity, and repair: Exploring emotional intelligence using the Trait Meta-Mood Scale. In JW Pennebaker (Ed.), *Emotion, disclosure, and health* (pp. 125–154). American Psychological Association. https://doi.org/10.1037/10182-006.

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, 276–285. https://doi.org/ 10.1080/17439760.2015.1058968

Schleicher, A. (2018). Teachers' well-being, confidence and efficacy. In Valuing our teachers and raising their status: How communities can help. OECD Publishing.

Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a mesure of emotional intelligence. *Personality and Individual Differences*, 25, 167–177.

Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. The American Psychologist, 55(1), 5–14. https://doi.org/10.1037/0003-066X.55.1.5

Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, 26(4), 1059–1069.

- 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, 1029–1038. https://doi. org/10.1016/j.tate.2011.04.001
- Skaalvik, E. M., & Skaalvik, S. (2018). Job demands and job resources as predictors of teacher motivation and well-being. Social Psychology of Education, 21, 1251–1275. https://doi.org/10.1007/s11218-018-9464-8

Soini, T., Pyhältö, K., & Pietarinen, J. (2010). Pedagogical well-being: Reflecting learning and well-being in teachers' work. *Teaching and Teachers*, 16, 735–751. https://doi. org/10.1080/13540602.2010.517690

- Song, K. (2022). Well-being of teachers: The role of efficacy of teachers and academic optimism. Frontiers in Psychology, 12, Article 831972. https://doi.org/10.3389/ fpsyg.2021.831972
- Split, J. L., Koomen, H. M., & Thijs, J. T. (2011). Teacher wellbeing: The importance of teacher-student relationships. *Educational Psychology Review*, 23(4), 457–477.

Swartz, R. J., & Perkins, D. N. (2016). Teaching thinking: Issues and approaches. Routledge. Vargas, N., & Oros, L. B. (2021). Stress and burnout in teachers during times of pandemic. Frontiers in Psychology, 12, Article 756007. https://doi.org/10.3389/

fpsyg.2021.756007

Warr, P. (2007). Searching for happiness at work. Psychologist, 20, 726–729.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality* and Social Psychology, 54, 1063–1070.

Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin*, 98, 219–235.

Willis, A. (2022). Teachers prioritise relationships over curriculum for student wellbeing. *Pedagogy, Culture and Society*. https://doi.org/10.1080/ 14681366.2022.2055116

Wu, X., Gai, X., & Wang, W. (2020). Subjective well-being and academic performance among middle schoolers: A two-wave longitudinal study. *Journal of Adolescence*, 84, 11–22. https://doi.org/10.1016/j.adolescence.2020.07.011

Yin, H. (2015). The effect of teachers' emotional labour on teaching satisfaction: Moderation of emotional intelligence. *Teachers and Teaching: Theory and Practice*, 21 (7), 789–810. https://doi.org/10.1080/13540602.2014.995482

Zee, M., & Koomen, H. M. Y. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40

years of research. Review of Educational Research, 86(4), 981-1015. https://doi.org/ 10.3102/0034654315626801 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), 1e30. https://doi.org/10.1111/j.1758-0854.2011.01062.x

Zhang, Q., Li, W., Gao, J., Sun, B., & Lin, S. (2023). Teachers' professional identity and *poly poly p*