

Article

Emotional Knowledge in a Sample of University Students

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Abstract: *Background:* One of the current challenges in higher education is the development of students' emotional competencies, and consequently, how these competencies can be trained. Moreover, this must be addressed within the UN framework of inclusive, equitable, quality education (United Nations Agenda 2030; SDG 4). *Methods:* The present study the following objectives: (1) to study the degree of interest and the level of general knowledge that students studying for Education degrees perceive themselves to have; (2) to examine the perception of the participants of variables of emotional knowledge, according to their degree program and year of study; (3) to analyze the relationship between these emotional knowledge variables and perceived emotional intelligence (EI), using Spearman's Rho test; and (4) to study the predictive capacity of the study variables on future teachers' emotional knowledge variables through a linear regression analysis. The study sample contained a total of 434 university students from three degree programs at two universities in Spain. Two instruments were used: an ad hoc questionnaire, which assessed perceived emotional knowledge according to three variables (general knowledge of EI, where the level of training in EI is considered; intrapersonal knowledge of EI; and theoretical/practical knowledge related to teaching), and the Trait Meta-Mood Scale (TMMS-24), which assesses metaknowledge of emotional states (attention, clarity, and repair). *Results:* The results of this study show that there are differences in students' self-perceived knowledge of EI depending on their course and degree, and indicate that students present high interest, while their perceived level of knowledge is low. In addition, emotional clarity is the EI variable that was identified as being important in the emotional knowledge of future teachers, and therefore, a key skill to stimulate in a theoretical/practical way during their initial training. *Conclusion:* This study shows evidence of the importance of social-emotional competencies in initial teacher training.

Keywords: emotional intelligence; scale; higher education; emotional knowledge; teacher training



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1. Introduction

Emotional intelligence (EI) in the educational context is a relevant concept because of the educational implications it entails, in both psycho-educational and social and labor aspects, to promote the emotional well-being of students, as well as that of future and current professionals. It must also be stressed that, in the wake of COVID-19, players involved in the educational process have been immersed in circumstances that have forced them to very quickly respond to a new reality and new educational challenges. Thus, this study addresses the importance of socioemotional competencies in initial teacher training. As pointed out by [1], these are essential to achieve professionals in the educational field who are able to meet the demands of society and contribute to its improvement, in addition to focusing research on the analysis of the effectiveness of the implementation of EI in the educational context, as well as focusing on putting theory into practice and deepening the influence of its components [2]. In this respect, within the professional career of teachers, it is essential that both in-service teacher training and pre-service training address the development of students' emotional competencies, considering that EI is a key competency and an essential resource for an effective educational system [3–8]. All of this

has repercussions, in turn, in the construction of a democratic, multicultural society [9,10]. Developing students' emotional competencies could be an instrument toward achieving the Sustainable Development Goals (SDGs): by working on their emotions, our students are able to develop empathy toward the issues set out in the UNESCO Agenda 2030 (peace, justice, sustainable development). All of this, according to [2], should focus on the analysis of the effectiveness of EI improvement programs, and from the educational context, on the implementation of EI development courses, as well as intervention programs that could be integrated into teaching plans.

Even though success in higher education was formerly assessed in terms of students' acquisition of cognitive aspects, overlooking social–emotional aspects, we now find ourselves in a period of transformation and transition from educational goals focused mainly on knowledge to other educational goals with more weight on affective and emotional components, thus encompassing interpersonal competencies, discipline, classroom management, and self-esteem, among other aspects [11]. Despite this, student formation has not shown evidence of the positive attitudinal change that would address the social–emotional requirements for teacher training [11]. The preparation of future teachers is considered one of the main challenges of our day, where future generations of teachers would be able to apply effective interpersonal interactions to the learning process and to their teaching practice and be capable of responding to any change in the larger context of education [10].

An important consideration is that the development of emotional competence must not be limited to theoretical training, but should take place through practical, active methodologies that encourage student participation and involvement. In other words, adequate resources must be used to stimulate these competencies [12,13]. In this way, the application of emotional competencies would be more easily transferred to one's professional practice. As López-Goñi and Goñi [14] has pointed out, social–emotional competences require more work during the initial training of future teachers so that they have more resources to stimulate EI in their classrooms.

According to Zabalza [15], the professional competencies of future teachers not only include theoretical and experiential knowledge, acquired through practice, but also specialized knowledge, emphasizing direct instruction on how to implement this knowledge in their future professional practice. Despite this, emotional competencies are not considered fundamental in initial teacher training [14], even though research suggests that their development during this aspect is essential to a teacher's professional development and to teaching quality. Initial teacher training is understood to be the foundation on which later in-service training will build [7]. For Cassullo and García [16], the educational context represents a privileged setting for encouraging skills and for developing social–emotional competencies, thus contributing to a positive outlook on individuals' psychological and social well-being.

Bueno et al. [17] indicate that the competency profile of teachers is broad and complex, and they consider EI teaching as being key to managing information and managing conflicts. According to these authors, teachers will have to be expert facilitators of their students' learning, leading them to develop the competency of identifying and managing their own feelings and of coping positively with conflict situations. One line of work that these authors identify is that of sensitizing future teachers to look on social–affective/emotional objectives as competencies to be developed in their students, given that these competencies encourage not only better coexistence but also better academic achievement [18]. This follows the recent findings of Sospedra-Baeza et al. [19], who stress the importance of social–emotional competencies for optimizing university students' achievement.

Results from Peñalva et al. [20] showed that one of every two students training to become Primary Education teachers showed limitations in their personal and interpersonal skills, even though their skills in this area were higher than those of the university population in general [17]. Pertegal-Felices et al. [21] showed that students do not receive whole-person training, in reference to emotional competencies, for their successful incorpo-

ration into the professional world; they lack sufficient skills in teamwork, in working with persons, in adapting to continuous change, controlling their emotions, etc.

In this regard, Extremera et al. [22] recently claimed that new teachers consider the learning and teaching of social–emotional tools to be necessary in both the short and long term, in order to adequately perform their professional work. This is an encouraging fact in relation to teacher attitudes, given that emotional competencies impact their attitude and knowledge for effective teaching practice [23]. In this regard, Vivas [24] proposed the inclusion of programs with emotional education content, where teachers are prepared and trained in how to be (intrapersonal skills) and in how to live with others (interpersonal skills). However, Ruiz-Melero et al. [25] underscored that this training should be implemented using scientifically validated programs and with the joint participation of the whole educational community.

In addition, the development of the emotional knowledge and competencies needed for adequate classroom implementation is a challenge for initial teacher training [26], and the literature has identified several possible shortcomings [27,28]. It is fundamental that teachers work on and stimulate their own emotional skills [5,7,29,30]. The literature proposes pre-service teacher training in these competencies in order to favor quality education, adapted to the new challenges posed by today's society [26,31].

After the literature review, the evidence supports the relevance of training future teachers in these types of social–emotional competencies. University education should enable future teachers, from their initial teacher training, to acquire adequate social–emotional competencies, and allow them to become a model of emotional balance, empathy, conflict resolution, etc. In short, their training should be based on equipping them with tools for successful teaching practice. Attitudes such as optimism, perseverance, empathy, engagement, and leadership should be encouraged. These dimensions are all connected with EI [11].

From the previous theoretical perspective, it was considered relevant to select a consolidated model on which to base the assessment of this type of emotional competency. Thus, we have followed the theoretical framework proposed by Mayer et al. (2016) [32], pioneers in the scientific field of EI with clear references from 1990 to the present, who define EI, taking into account their model of the four branches—emotional perception, emotional facilitation, emotional understanding, and emotional regulation—as “the ability to reason effectively about emotions and related information, as well as to use emotions to improve thinking” (Mayer et al., 2016; p. 296) [32]. This represents a consolidated theoretical framework from which to start our study in a sample of university students. Furthermore, as Paramio et al. (2023) [33] note, there has been a clear evolution in terms of the topics addressed in the field of EI over time and a growing increase in the number of scientific publications. In this sense, the topics with the greatest impact have been performance (work and academic), personality, and subjective well-being. One must note, however, that the scientific bibliography that explores EI knowledge and attitudes toward EI is still limited, whether in reference to future teachers or in-service teachers [4,25]. This reality poses a wide-open challenge for research in the field, as they are relevant constructs in the educational context. In this line, the present study has four overall aims which seek to answer our research questions: First of all, we ask ourselves, what is the level of interest and general level of knowledge about EI among prospective teachers? To this end, we aim (1) to study the degree of interest and the level of general knowledge that students in Education degrees perceive themselves to have. Second, what are the differences, if any, between students' self-perceptions of EI variables as a function of their profile? Here, we aim (2) to examine the perceived emotional knowledge, according to their degree program and year of study, in students pursuing a Primary Education degree and students undergoing a double degree in Early Childhood and Primary Education. Thirdly, we ask ourselves, what kind of relationship is there between the two measures of self-perceived EI used in this study? Here, we aim (3) to analyze the relationship between two self-report measures of EI (an ad hoc questionnaire, and the TMMS-24). Fourthly, we ask ourselves, what emotional skills of prospective teachers predict an adequate emotional

knowledge of EI? To this end, we have set out (4) to study the predictive capacity of the study variables on future teachers' emotional knowledge variables.

2. Materials and Methods

2.1. Participants

A total of 434 students from two universities in the Region of Murcia (Spain) made up the participant sample. Their ages were between 18 and 56 years ($M = 20.91$; $SD = 4.36$), and 82.90% were female. The students were enrolled in undergraduate degree programs in Primary Education (54.10%), Early Childhood Education (22.10%), or a double degree in Early Childhood and Primary Education (23.70%). First-year students represented 46.80% of the sample, 24.00% were second-year students, and 29.30% were fourth-year students. The first-year students were enrolled in either Early Childhood Education or Primary Education, the fourth-year students were enrolled in a Primary Education degree, and the second-year students were pursuing the double degree. Sample selection was incidental (questionnaires were administered to the students of the above-mentioned courses who wished to participate) and non-probabilistic, following the ethical requirements for scientific research [34]. We guaranteed the confidentiality and anonymity of the data throughout the research process.

2.2. Instruments

The present study made use of two instruments:

The first instrument was a questionnaire designed ad hoc, whose purpose is to study self-perception of EI knowledge and attitudes toward EI. It also collects certain sociodemographic data and asks some general questions related to the importance of studying EI during initial teacher training.

The questionnaire contains 39 items, with agreement rated on a four-point Likert-type scale, where 1 means "Not at all" and 4 is "Very much". These items enabled the future teachers to rate their theoretical and procedural knowledge of EI, as well as their attitude toward learning EI.

For the present study, in order to further investigate the internal structure of the test, the factor structure of the test was analysed by means of an exploratory principal components analysis. The Kaiser–Meyer–Olkin adequacy measure (KMO) is 0.926 (Bartlett's test of sphericity: $\chi^2 = 6863.340$; $gl = 741$; $p \leq 0.001$), showing adequate values to perform the exploratory factor analysis. In this first analysis, eight factors were obtained that explained 61.784% of the variance. After analyzing the factor weights, the correlation matrix, the distribution of the factors, and the contents of the items themselves, the program was asked to group the different items into four factors, indicating that factor weights of less than 0.35 should be suppressed. The obtained model explained 49.82% of the variance, and through the principal components extraction method and attending to the rotated factorial solution through the varimax method with Kaiser normalization, obtained four factors that explain 49.82% of the variance. Items in the first group related to general emotional knowledge, with six items referring to the future teachers' perceived level of formation in EI. An example item states, "I have knowledge about the purpose of Emotional Intelligence", and explains 32.27% of the variance. A second factor contained five items and was labeled as intrapersonal knowledge about EI. This assesses the teacher's skill in managing and identifying their own emotions, in connection with their future professional practice. An example item for this factor is, "I am able to identify my own emotions and their physiological and cognitive sensations", and explains 7.92% of the variance. A third factor contained 23 items that refer to theoretical/practical knowledge related to teaching; an example item is, "As a future teacher, I have knowledge about how to design an Emotional Education program", and explains 5.39% of the variance. Finally, a fourth factor included the remaining five items, referring to attitudes toward the development of these emotional competencies. This final factor was not considered for

the present study, because the proposed objectives addressed factors relating to emotional knowledge, and explain 4.24% of the variance.

The questionnaire's reliability was analyzed using two statistics for this study. On one hand, Cronbach's alpha produced a result of 0.940. And on the other, the Guttman split-half coefficient yielded a value of 0.881. Both values show adequate internal consistency from a statistical point of view.

The second instrument was the Trait Meta-Mood Scale (reduced version, TMMS-24), designed by Salovey et al. in 1995 [35], Spanish version adapted by Fernández-Berrocal et al. [36].

The scale consists of 24 items on a 5-point Likert scale, from 1 (totally disagree) to 5 (totally agree). The three dimensions and their items are as follows: emotional attention (items 1–8), emotional clarity (items 9–16), and emotional repair (items 17–24). The items associated with emotional attention relate to giving appropriate attention to one's feelings, those related to emotional clarity assess an adequate understanding of one's emotional states, and the emotional repair items refer to the ability to adequately regulate one's emotional states.

Previous studies that used this instrument found adequate reliability values. Angulo and Albarracín (2018) [37] obtained global reliability through a Cronbach alpha of 0.890, and Ruiz-Melero et al. [25] obtained 0.914. For this study, we also obtained adequate reliability for this questionnaire from a statistical point of view, calculating Cronbach's alpha at 0.898.

2.3. Procedure

In order to conduct this study, we first carried out a bibliographic search in different social sciences databases, according to our study objectives. Second, we designed an ad hoc assessment instrument, which was submitted to the judgment of experts in the area of EI. The experts were selected on the basis that they had specific publications in the area of emotional intelligence in the last ten years. The assessment made by the experts was very appropriate, based on the criteria of the clarity, relevance, and appropriateness of the items. Changes in wording aspects were included in ten of the thirty-nine items. The changes proposed were mainly related to simplifying the wording of the items in order to make them easier for higher education students to understand. Third, we selected the sample of participants and administered the questionnaires. We then digitized the results and conducted pertinent data analyses for our objectives using SPSS version 28 for Windows.

2.4. Data Analysis

This study has a quantitative approach, and its methodological design is non-experimental, descriptive, and inferential. The data analyses carried out were, firstly, the descriptive statistics of the study variables; secondly, the normality of the scores was analysed using the Kolmogorov–Smirnov test. Thirdly, frequency analyses were carried out to answer the first objective of the study. Fourth, mean difference analyses were performed using the non-parametric Kruskal–Wallis independent samples test to address the second objective of the study. In addition, post hoc analyses were performed to analyze the statistically significant differences between groups, using Dunn's statistic and including values for estimating the observed power. Fifth, a correlation analysis was performed using Spearman's Rho statistic to address the third objective of the study. And finally, a linear regression analysis was performed, using the "enter" method and assessing the significant contribution of the independent variables to the dependent variables, in order to consider the modification or acceptance of the model, to address the fourth objective of our study. The level of statistical significance considered in this study is a p -value equal to or less than 0.05.

3. Results

To address our proposed objectives, we first collected the descriptive statistics of all variables considered, the variables relating to both perceived emotional knowledge and perceived EI. Table 1 shows that mean scores for the emotional knowledge variables fall into a central distribution, with little dispersion. The highest mean score was in the

general emotional knowledge variable. Similar descriptive data were found for the emotional skill variables, where the mean scores gathered in a central distribution, suggesting an adequate level in each of these. Concerning these emotional skill variables assessed through the TMMS-24, the participants perceived themselves as more competent in attention than in clarity or repair, suggesting that they focus on their emotions. The values obtained for skewness and kurtosis are adequate from a statistical point of view for all the study variables.

Table 1. Descriptive statistics of the study variables (ad hoc EI questionnaire and TMMS-24).

| | Mean | SD | Min. | Max. | Skewness | Kurtosis |
|---|------|------|------|------|----------|----------|
| General emotional knowledge | 2.95 | 0.46 | 1.67 | 4.00 | 0.03 | −0.09 |
| Intrapersonal knowledge | 2.74 | 0.56 | 1.00 | 4.00 | −0.13 | −0.21 |
| Theoretical/practical emotional knowledge | 2.18 | 0.54 | 1.04 | 3.61 | 0.28 | −0.60 |
| Emotional attention, TMMS-24 | 3.65 | 0.72 | 2.25 | 5.00 | −0.07 | −0.88 |
| Emotional clarity, TMMS-24 | 3.11 | 0.91 | 1.25 | 5.00 | 0.23 | −0.64 |
| Emotional repair, TMMS-24 | 3.21 | 0.90 | 1.00 | 5.00 | 0.25 | −0.83 |

Note: TMMS-24: Trait Meta-Mood Scale; Min: minimum; Max: maximum; SD: standard deviation.

The results relating to the objectives set for this work are set out in the following subsections.

3.1. Interest and General Level of Knowledge That Students in Education Degrees Perceive Themselves to Have

To analyze our first objective relating to the study participants' perceived level of EI knowledge, rated on a four-point scale from very low to very high, 66.20% of the participants perceived a low level, while 25.90% consider this knowledge level to be high. Consequently, a high proportion of the sample of future teachers indicated that, in general, their knowledge about emotional intelligence may be limited (see Table 2).

Table 2. Frequencies related to participants' perceived level of knowledge about emotional intelligence.

| Level | Very Low | Low | High | Very High |
|------------|----------|--------|--------|-----------|
| Frequency | 31.00 | 284.00 | 111.00 | 3.00 |
| Percentage | 7.20 | 66.20 | 25.90 | 0.70 |

Along these lines, by analyzing the frequencies, we can observe in Table 3 that the participants' degree of interest in EI training is high: a total of 61.00% indicated high interest in this subject, and 32.50% considered their interest to be very high. The majority of this group, then, assigns great relevance to this variable in the educational sphere.

Table 3. Frequencies of participants' expressed interest in developing their emotional competence.

| Level | Very Low | Low | High | Very High |
|------------|----------|-------|--------|-----------|
| Frequency | 2.00 | 26.00 | 261.00 | 139.00 |
| Percentage | 0.51 | 6.10 | 61.00 | 32.50 |

3.2. Participants' Perceptions of Their Own Knowledge of EI, as a Function of Course and Qualification

Before moving on to the data analyses for meeting our study objectives, we carried out Kolmogorov–Smirnov's test for the normal distribution of the variables considered. The variables did not fit a normal distribution; we opted to use a non-parametric statistic.

Collected below are the obtained results in relation to the second study objective, regarding the participants' perception of their own EI knowledge as a function of their year of study. For this purpose, the Kruskal–Wallis test was used to analyze the differences

between means, and to analyze between which groups these differences occur, post hoc analyses were carried out using the Dunn–Bonferroni statistic.

As observed in Table 4, the first-year students generally obtained the highest means, except in the general EI knowledge variable, where fourth-year students scored slightly higher. In analyzing the significance of the differences of means, we observe that the differences favoring the first-year students, in comparison to second-year and fourth-year students, were statistically significant only in the variable of theoretical/practical knowledge linked to teaching ($H(2) = 24.189; p \leq 0.001$). However, the effect size was very low.

Table 4. Descriptive statistics and difference of means according to year of study, for the emotional knowledge variables, of undergraduate students in Primary Education, Early Childhood Education, or a double degree in Early Childhood and Primary Education.

| | Year of Study | Mean | SD | Min. | Max. | Kruskal–Wallis | Post Hoc ** | Effect Size *** | Power Analyses |
|--|---------------|------|------|------|------|------------------------------------|--------------|------------------------------------|----------------|
| General emotional knowledge (EI) * | First | 2.99 | 0.48 | 1.67 | 4.00 | $H(2) = 5.847;$ $p = 0.054$ | | | −4.794 |
| | Second | 2.84 | 0.36 | 1.67 | 3.67 | | | | |
| | Fourth | 2.92 | 0.43 | 1.67 | 4.00 | | | | |
| Intrapersonal knowledge * | First | 2.80 | 0.59 | 1.00 | 4.00 | $H(2) = 5.824;$ $p = 0.054$ | | | −2.882 |
| | Second | 2.67 | 0.46 | 1.60 | 3.60 | | | | |
| | Fourth | 2.66 | 0.48 | 1.60 | 3.60 | | | | |
| Theoretical/practice emotional knowledge * | First | 2.31 | 0.58 | 1.04 | 3.52 | $H(2) = 24.189;$ $p \leq 0.001$ | 1 > 2; 1 > 4 | 0.063 (IC 95% = 0.022–0.113) | −1.931 |
| | Second | 1.99 | 0.39 | 1.26 | 3.30 | | | | |
| | Fourth | 2.09 | 0.51 | 1.09 | 3.13 | | | | |

Note: Min = minimum; Max = maximum; SD = standard deviation. * Equality of variances not assumed according to Levene’s statistic. ** Statistic used: Dunn–Bonferroni; 1 = first year; 2 = second year; 4 = fourth year. *** Statistic used: eta squared.

Also noteworthy is the variable of intrapersonal EI knowledge: although the difference is not statistically significant ($H(2) = 5.824; p = 0.054$), it does approach significant values in distinguishing the first-year students, who again obtained the highest mean score. Based on these results, we might state that the future teachers’ perceived emotional knowledge did not improve on account of their pre-service teacher training, that is, during their undergraduate university studies.

In order to inquire further into these differences among the emotional knowledge variables, we shifted our focus to the study participants’ degree program (Bachelor’s degree in Primary Education, Bachelor’s degree in Early Childhood Education, and double Bachelor’s degree in Early Childhood and Primary Education). In this case, from the descriptive data, students of Early Childhood Education perceived themselves to be more competent in the study variables. Significant differences were observed in the variable of general emotional knowledge ($H(2) = 8.420; p = 0.015$), where students of Early Childhood Education had higher perceived competence than those pursuing the double degree. In the theoretical/practical knowledge variable, statistically significant differences were obtained between the three degree programs ($H(2) = 23.548; p < 0.001$), where students of Early Childhood Education had higher perceived knowledge in this variable than students of Primary Education or of the double degree. Furthermore, differences were also found in this variable between the Primary Education students and the double degree students, in favor of the former. The students’ self-perception, therefore, varied according to the degree they were pursuing, as shown in Table 5. The effect size was medium in the case of the theoretical/practical knowledge variable, while for the general knowledge variable, it was small.

Table 5. Difference in means in the study variables, according to participants' degree pursued.

| | Degree | Mean | SD | Min. | Max. | Kruskal–Wallis | Post Hoc ** | Effect Size *** | Power Analyses |
|---|---------------------------|------|------|------|------|-------------------------------------|---|------------------------------|----------------|
| General emotional knowledge (EI) * | Primary Education | 2.94 | 0.45 | 1.67 | 4.00 | $H(2) = 8.420$; $p = 0.015$ | Double degree < Early Childhood | 0.016 (IC 95% = 0.000–0.044) | –0.348 |
| | Double degree | 2.83 | 0.35 | 1.67 | 3.67 | | | | |
| | Early Childhood Education | 3.02 | 0.49 | 1.83 | 4.00 | | | | |
| Intrapersonal knowledge | Primary Education | 2.74 | 0.55 | 1.00 | 4.00 | $H(2) = 2.393$; $p = 0.302$ | | | –2.882 |
| | Double degree | 2.66 | 0.45 | 1.60 | 3.60 | | | | |
| | Early Childhood Education | 2.67 | 0.55 | 1.60 | 4.00 | | | | |
| Theoretical/practical emotional knowledge * | Primary Education | 2.16 | 0.57 | 1.04 | 3.43 | $H(2) = 23.548$; $p \leq 0.001$ | Primary Ed > Double degree; Early Childhood > Primary Ed; Early Childhood > Double degree | 0.058 (IC 95% = 0.018–0.106) | –0.503 |
| | Double degree | 2.18 | 0.36 | 1.26 | 3.00 | | | | |
| | Early Childhood Education | 3.37 | 0.53 | 1.22 | 3.52 | | | | |

Note: Min = minimum; Max = maximum; SD = standard deviation. * Equality of variances not assumed according to Levene's statistic. ** Statistic used: Dunn–Bonferroni; Primary Ed = Primary Education; Early Childhood = Early Childhood Education; double degree = double degree in Early Childhood and Primary Education. *** Statistic used: eta squared.

3.3. Relationship between Two Self-Report Measures of EI in this Study (ad hoc Questionnaire and TMMS-24)

After analyzing the emotional knowledge variables according to the students' degree and their year in the degree program, and returning to the scientific literature on this topic, one of the variables with the most weight in the future teachers' perceived EI knowledge and its implementation is their own emotional skill. We therefore established a third research objective to analyze the relationship between the participants' emotional skill and their perception of their own emotional knowledge. Toward this end, we conducted a correlational analysis using Spearman's Rho (see Table 6).

Table 6. Correlations between participants' perceived emotional knowledge and their emotional skills.

| | 1 | 2 | 3 | 4 | 5 | 6 |
|---------------------------------------|----------|----------|----------|----------|----------|----|
| 1. General EI Knowledge | -- | | | | | |
| 2. Intrapersonal EI Knowledge | 0.441 ** | -- | | | | |
| 3. Theoretical/practical EI Knowledge | 0.516 ** | 0.572 ** | -- | | | |
| 4. TMMS 24 Attention | 0.239 ** | 0.357 ** | 0.305 ** | -- | | |
| 5. TMMS 24 Clarity | 0.487 ** | 0.635 ** | 0.437 ** | 0.438 ** | -- | |
| 6. TMMS 24 Repair | 0.305 ** | 0.351 ** | 0.288 ** | 0.166 * | 0.452 ** | -- |

** The correlation is significant at level 0.01 (bilateral). * The correlation is significant at level 0.05 (bilateral).

We can observe in Table 6 that the correlations are positive and statistically significant in all cases, with magnitudes from weak to moderate. It should be noted that the relationships between the emotional knowledge variables considered throughout this study show moderate magnitudes at the intra-test level, most notably between theoretical and practical EI knowledge and intrapersonal EI knowledge. If we examine the relationships between these variables and the emotional skills assessed through the TMMS-24, we observe that the emotional clarity variable presents the highest-magnitude correlations with respect to all the perceived emotional knowledge variables. Emotional clarity correlates most strongly with the intrapersonal EI knowledge variable ($r = 0.635$; $p < 0.001$). This may indicate that an adequate understanding of one's own emotions can favor perceived intrapersonal EI knowledge.

3.4. Predictive Ability of the Study Variables on Those of Emotional Knowledge

To address our fourth study objective, to determine the impact of the TMMS-24 emotional skill variables on the future teachers' perceived level of emotional knowledge, Table 7

presents data from the regression analysis. Toward this end, we separately considered the three emotional knowledge variables from the ad hoc questionnaire (general EI knowledge, intrapersonal EI knowledge, and theoretical/practical knowledge of EI related to teaching), because the exploratory factor analysis carried out for this study pointed to three independent factors.

Table 7. Linear regression analysis for the general EI knowledge variable.

| Model | Non-Standardized Coefficients | | Standardized Coefficients | <i>t</i> | Sig. | Tolerance | VIF |
|---------------|-------------------------------|-----------------|---------------------------|----------|-------|-----------|-------|
| | B | Error Deviation | Beta | | | | |
| (Constant) | 1.473 | 0.241 | | 6.107 | 0.000 | | |
| Attention | 0.027 | 0.046 | 0.046 | 0.586 | 0.559 | 0.803 | 1.246 |
| Clarity | 0.175 | 0.041 | 0.365 | 4.228 | 0.000 | 0.664 | 1.506 |
| Repair | 0.082 | 0.038 | 0.173 | 2.155 | 0.033 | 0.082 | 1.302 |
| Year of Study | 0.056 | 0.023 | 0.174 | 2.460 | 0.015 | 0.056 | 1.007 |
| Gender | 0.263 | 0.080 | 0.236 | 3.292 | 0.001 | 0.263 | 1.043 |

First, with regard to the general EI knowledge variable—as well as the independent variables of gender, year of study, degree pursued, and the emotional skills of emotional attention, clarity, and repair (TMMS-24)—the first model obtained showed adequate fit values ($R = 0.543$; adjusted $R^2 = 0.265$) and was statistically significant ($F(6, 142) = 9.891$; $p < 0.001$), but upon analysis of the resulting model, the degree pursued was identified as not seeming to contribute significantly to the perception of general emotional knowledge, so it was eliminated from the regression model. In this way, a second regression model was obtained that presented tighter values (specifically, $R = 0.542$; adjusted $R^2 = 0.269$), and was also statistically significant ($F(5, 143) = 11.871$; $p < 0.001$). These results seem to indicate that the variables considered in this model are adequate to explain the variable of general emotional knowledge, and even though there are other possible influencing factors not considered in this study, 26.90% of the variance was explained by the variables considered here.

These data suggest that the variables included in the model are more adequate to explain students' academic achievement, and despite other factors that also influence students' grades, 37.30% of the variance was explained by the personal variables considered in this study. If we look more specifically at the results obtained, emotional clarity seems to be an important factor in this knowledge variable ($\beta = 0.365$; $t = 4.228$; $p < 0.001$), although other factors also contribute, such as gender ($\beta = 0.236$; $t = 3.292$; $p < 0.001$) and year of study ($\beta = 0.174$; $t = 2.460$; $p = 0.015$). Finally, the TMMS-24 variable of emotional repair also proved to be a significant predictor. The ability to understand and to regulate one's own emotions are therefore variables associated with the perception general emotional knowledge, just as there is a significant, positive influence from gender and year of study, as shown in Table 7. It should also be noted that multicollinearity between the independent variables has been analysed, obtaining that the tolerance values and the variance inflation factor (VIF) are adjusted to appropriate values (Vilá et al., 2019) [38].

Next, in studying the intrapersonal knowledge variable using the same independent variables as in the previous analysis, the obtained model was statistically significant ($F(6, 145) = 17.546$; $p < 0.001$, indicating $R = 0.649$; adjusted $R^2 = 0.397$). But after analyzing the statistical significance of the independent variables, we observed that three of the variables did not significantly seem to influence the dependent variable, namely, year of study, degree pursued, and the emotional attention variable. Consequently, these variables were eliminated in order to identify the most parsimonious model. The regression analysis was then repeated, this time taking the independent variables of gender, emotional clarity, and emotional repair; this second model presented tighter values, obtaining $R = 0.645$ (adjusted $R^2 = 0.404$), and was statistically significant ($F(3, 152) = 36.094$; $p < 0.001$). If we analyze the contribution of each variable, we again find that emotional clarity seems to have the greatest influence on perceived intrapersonal knowledge ($\beta = 0.596$; $t = 8.651$;

$p < 0.001$), although gender also proved relevant in this variable ($\beta = 0.131$; $t = 2.087$; $p = 0.039$). The variables considered in this regression model thus explained 40.40% of the variance. These data again seem to suggest that the skill of understanding one's own emotional states was very important in the participants' perception of intrapersonal knowledge, as is seen in Table 8. It should also be noted that the values obtained suggest that there is no multicollinearity in this regression model (Vilá et al., 2019) [38].

Table 8. Linear regression analysis for the dependent variable, intrapersonal knowledge.

| Model | Non-Standardized Coefficients | | Standardized Coefficients | <i>t</i> | Sig. | Tolerance | VIF |
|-------------------|-------------------------------|-----------------|---------------------------|----------|-------|-----------|-------|
| | B | Error Deviation | Beta | | | | |
| (Constant) | 0.958 | 0.246 | | 3.892 | 0.000 | | |
| Emotional clarity | 0.389 | 0.045 | 0.596 | 8.651 | 0.000 | 0.808 | 1.237 |
| Emotional repair | 0.067 | 0.044 | 0.106 | 1.533 | 0.127 | 0.803 | 1.246 |
| Gender | 0.193 | 0.093 | 0.131 | 2.087 | 0.039 | 0.974 | 1.026 |

Finally, taking theoretical/practical EI knowledge related to teaching as our dependent variable, and including the same independent variables as in the previous regression analyses, a statistically significant model was obtained ($F(6, 119) = 7.152$; $p < 0.001$, with fit values of $R = 0.515$; adjusted $R^2 = 0.228$), indicating that 22.80% of the variance was explained by the independent variables considered. Analyzing the model in more detail, we observed that certain independent variables did not seem to contribute in a statistically significant way to the explication of the EI knowledge variable considered in this case. These independent variables were therefore eliminated from the model, and a second regression model was obtained, with better fit indices, after eliminating the following independent variables: degree program, gender, and emotional repair.

The results obtained from this more parsimonious model showed adequate fit values ($R = 0.488$; adjusted $R^2 = 0.220$; and statistical significance, $F(3, 126) = 13.162$; $p < 0.001$). Consequently, the independent variables considered in this model (emotional attention and year of study) proved to be important variables, adequate for explaining the variable of theoretical/practical knowledge, in this case accounting for 22.00% of the variance. If we look further into the role of each of these variables, we again observe that emotional clarity is what most influences the knowledge variable considered in this case ($\beta = 0.376$; $t = 4.453$; $p < 0.001$), as seen in Table 9, in addition to the emotional attention variable, which contributes significantly to the model obtained ($\beta = 0.168$; $t = 1.991$; $p = 0.049$). Consequently, according to our results, the skill of understanding one's own emotions proved to be a highly relevant variable in the future teachers' perceived emotional knowledge. Finally, it should be noted that the tolerance and VIF values point to the non-existence of multicollinearity between the independent variables (Vilá et al., 2019) [38].

Table 9. Linear regression analysis of the study variables, taking theoretical/practical EI knowledge as a dependent variable.

| Model | Non-Standardized Coefficients | | Standardized Coefficients | <i>t</i> | Sig. | Tolerance | VIF |
|---------------------|-------------------------------|-----------------|---------------------------|----------|-------|-----------|-------|
| | B | Error Deviation | Beta | | | | |
| (Constant) | 0.839 | 0.245 | | 3.416 | 0.001 | | |
| Emotional attention | 0.125 | 0.063 | 0.168 | 1.991 | 0.049 | 0.847 | 1.180 |
| Emotional clarity | 0.237 | 0.053 | 0.376 | 4.453 | 0.000 | 0.847 | 1.181 |
| Year of study | 0.054 | 0.032 | 0.130 | 1.676 | 0.096 | 0.998 | 1.002 |

Upon analysis of these results, the participants' emotional clarity in understanding their own emotional states proved to be the emotional skill that emerged as the most relevant in their perceived emotional knowledge. By contrast, the skill of paying attention

to one's feelings (emotional attention) is shown as the relevant variable only regarding theoretical/practical knowledge related to teaching, thus suggesting that adequate attention to and understanding of one's emotions could favor future teachers' application of emotional knowledge to their professional practice in the classroom. By contrast, the skill of regulating one's emotional states (emotional repair) had a statistically significant influence only on the general knowledge variable, which only includes items related to more theoretical knowledge about emotions. Finally, it should be noted that the gender variable was also relevant to two of the variables considered (general knowledge and intrapersonal knowledge). And the participants' year of study had a significant influence only on the general knowledge variable.

4. Discussion

The results of our study in relation to our first objective, in which we analysed Education students' interest and perceived level of general EI knowledge, it is notable that the students express a high level of interest, while their perceived level of knowledge is low. As for the importance that students attribute to their initial training in EI, they identify EI as a key competency for their development and formation as future teaching professionals, in line with the indications of Bueno et al. [17] and Pacheco-Salazar [12]. Extremera et al. [22] also indicate that inexperienced teachers consider the learning and teaching of different social-emotional resources to be fundamental for them to be able to effectively address the more frequent stressors of teaching. Concerning our finding that students' perceived level of EI knowledge was low, a number of authors have indicated the need for training in this type of social-emotional competence—a need that is perceived by the students [20,21].

Regarding the second objective, to analyze certain perceived emotional knowledge variables (general EI knowledge, considering one's level of EI training; intrapersonal EI knowledge; and theoretical/practical EI knowledge related to teaching), according to the degree pursued and year of study, our results show that there is generally a very positive assessment on the part of the participants. In a similar sense, Sospedra-Baeza et al. [19] obtained adequate levels of EI in first-year undergraduate students in Education, Psychology, Speech Therapy, and Social Work. On the one hand, when considering the participants' degree programs, our results indicated that the undergraduate students in Early Childhood Education claimed a greater knowledge of EI than did their peers pursuing a double degree in Early Childhood and Primary Education. By contrast, García-Vila et al. [39] reported that undergraduate students in Early Childhood Education perceived themselves as having lower emotional competencies than did students under a Primary Education degree. As for the year of study, the data indicate that first-year students obtained the highest means, except in the case of general EI knowledge, where the fourth-year students obtained a slightly higher score. Differences between the first-year students and the second- and fourth-year students were statistically significant only for the variable of theoretical/practical knowledge related to teaching, in favor of the first-year students. In a similar line, Maureira et al. [40] studied a sample of Physical Education undergraduates and were able to identify small improvements in the students over their four years in higher education, but the differences were not significant. However, unlike our case, Porras et al. [41] affirmed that students in their fourth year of an Education degree had better perceived intrapersonal emotional skills than those in first year.

Regarding our third objective, to analyze the relationship between emotional knowledge variables and perceived emotional intelligence, the EI variable of emotional clarity presented the highest-magnitude correlations with all the variables of perceived emotional knowledge. Thus, the present study offers empirical evidence of the relationship between future teachers' emotional clarity and their perceived level of EI knowledge. In this regard, Extremera and Berrocal [42] noted that the emotional clarity dimension is characteristic of persons with high levels of intrapersonal emotional understanding. Likewise, different studies reveal emotional intelligence to be related to the adequate management of one's emotions in the realm of teaching practice, and it contributes both to the optimization of

the teaching–learning process [26,43,44] and to teachers' work satisfaction and personal well-being [45].

Finally, our data concerning the study variables' ability to predict future teachers' emotional knowledge variables lead us to conclude that future teachers' emotional skills are clearly relevant in their perception of their own emotional knowledge, and their ability to understand how they feel is a skill that must be worked on explicitly within their pre-service training and beyond, with the ultimate aim of favoring the development of emotional intelligence in their students. In this regard, Ruiz-Melero et al. [25] indicate that emotional understanding in future teachers is fundamental to their perception of emotional competence for working with students in the classroom. In our study, emotional attention and repair also proved to be important skills in undergraduate Education students' perception of their own emotional competence. Similar results were obtained by Hernández-Vargas et al. [46], who indicated that the higher the level of emotion recognition and management in university students, the higher their level of dedication in their initial training.

Certain limitations of our study, on the one hand, are due to its local nature. On the other hand, being a pilot study, it addressed only three degrees related to the educational field. It would therefore be interesting to be able to compare different degree programs in the field of education, and different national and international contexts, to analyze whether the obtained results corroborate our study, and to be able to further explore the emotional profile of educational professionals in different countries and in different degree programs within this field.

In short, given the limited literature on the variables considered in this study, especially perceived EI knowledge, it would be interesting to further explore this line of EI research in future studies, with both pre-service and in-service teachers. Moreover, given the evidence from previous studies revealing the benefits of EI in these professionals' development—that teachers' EI has a favorable influence on their teaching effectiveness and competence [4,47]—it would be interesting to further explore this line by including other variables and through systematic educational practices in both the short and long term. Authors Hen and Sharabi-Nov [5] also indicate that future lines of research could focus on a further exploration of the benefits of this type of training. For example, they could explore strategies for optimizing emotional skills in education professionals, the appropriate EI training for obtaining the maximum benefit, and for the transfer of training to educational practice. Other interesting aspects linked to future lines of research could be the use of, in addition to self-perception instruments such as those used in this study, other instruments that assess EI as a skill, in order to enrich the understanding of the emotional profile of future teachers, extend the sample size, and take into account other educational levels or delve into the long-term impact of the development of EI on the quality of teaching. Thus, future studies would inquire further into the emotional knowledge that teachers should acquire during their teacher training, as an instrument for meeting the Sustainable Development Goals (SDGs). Specifically, SDG 4, quality education, is the main focus to help people achieve a more sustainable and healthy lifestyle. It aims to ensure inclusive, equitable, and quality education and promote lifelong learning opportunities for all.

5. Conclusions

The general conclusion of this work, the relevance of initial and ongoing teacher training in the development of socio-emotional competences for their future and adequate professional performance, as well as for that of their students, is evident. This has an impact on quality teaching, appropriate to the demands of today's society, constituting, therefore, one of the greatest educational implications for future generations of teachers. It is the knowledge and learning of EI of our trainee teachers that is one of the main challenges currently facing higher education.

The findings regarding our first research question, on what is the level of interest and general knowledge about EI among prospective teachers, indicate that, on the one hand,

students are very interested in acquiring more knowledge about EI, while if we look at the level of self-perceived knowledge, they consider that there are some deficiencies and gaps in their initial training, especially in relation to the practical application of EI in the classroom. On the other hand, it should be noted that this type of initial training in EI is fundamental for their personal development, as well as for their training as future teachers. These types of socio-emotional skills help to prevent and manage abnormal behavioral problems and aggression and reduce school dropout rates, among others.

With regard to whether there is a difference between the self-perception of the students in the EI variables based on their profile and according to their course and degree, we can conclude that there is evidence of a generally positive assessment of the students' knowledge of EI. Students of Early Childhood Education were those who identified themselves with a greater emotional knowledge than those of a double degree in Early Childhood Education and Primary Education. Due to the importance of this emotional skill at the first instructional levels, its explicit training is emphasized as a cross-cutting content in the curriculum of the Early Childhood Education degree compared to the other degrees considered in this study.

In terms of the year, it is the first-year students who perceive themselves as having a higher level of knowledge of EI. This may be due to the fact that this type of student, not having completed internships in educational centers, is not as objective when assessing their knowledge of EI, whereas in higher grades, having more experience and knowledge about this emotional skill would lead students to be more aware and realistic in assessing what they know and the practical strategies they have, as well as the knowledge they still need to acquire in order to be more competent and effective in implementing this type of skill in the classroom.

As for our third research question, what kind of relationship there is between the two measures of self-perceived EI used in this study, our findings would confirm that it is the emotional clarity variable, as opposed to attention and repair, that shows the strongest relationship with the self-perceived level of EI knowledge of prospective teachers. This dimension is a key characteristic of people with high levels of intrapersonal emotional understanding. It is emotional clarity that favors an adequate management of emotions in the professional teaching environment, favoring the teaching–learning process.

In response to our final research question, what emotional skills of prospective teachers predict an adequate emotional knowledge of EI, emotional clarity is the skill that contributes the most to predicting the emotional knowledge of future teachers. Therefore, it is a key skill to be promoted in initial teacher education in comparison to emotional attention and emotional repair. Despite this, these three emotional skills contribute to and favor the development of emotional intelligence in children in the classroom.

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References

1. Dávila, Z.B. La inteligencia emocional en la educación superior. Una experiencia preliminar. *Rev. Cuba. Educ. Super.* **2019**, *38*, 1–15.
2. García Morales, E. ¿Qué papel tiene la inteligencia emocional en el contexto clínico, laboral y educativo? *Escr. Psicol.* **2023**, *15*, 148–158. [[CrossRef](#)]
3. Bisquerra, R. La educación emocional en la formación del profesorado. *Rev. Interuniv. Form. Profr.* **2005**, *19*, 95–114.
4. Cejudo, J.; López-Delgado, M.L. Importancia de la inteligencia emocional en la práctica docente: Un estudio con maestros. *Psicol. Educ.* **2017**, *23*, 29–36. [[CrossRef](#)]
5. Hen, M.; Sharabi-Nov, A. Teaching the teachers: Emotional intelligence training for teachers. *Teach. Educ.* **2014**, *25*, 375–390. [[CrossRef](#)]
6. Mora, N.; Martínez-Otero Pérez, V.; Santander Trigo, S.; Gaeta González, M.L. Inteligencia emocional en la formación del profesorado de educación infantil y primaria. *Perspect. Educ.* **2022**, *61*, 53–77. [[CrossRef](#)]
7. Palomera, R.; Fernández-Berrocal, P.; Brackett, M.A. La inteligencia emocional como una competencia básica en la formación inicial de los docentes: Algunas evidencias. *Electron. J. Res. Educ. Psychol.* **2008**, *6*, 437–454. [[CrossRef](#)]
8. Vesely-Maillefer, A.K.; Saklofske, D.H. Emotional Intelligence and the Next Generation of Teachers. In *Emotional Intelligence in Education: Integrating Research with Practice*; Keefer, K.V., Parker, J.D.A., Saklofske, D.H., Eds.; Springer: New York, NY, USA, 2018; pp. 377–402. ISBN 978-3319906317.
9. Ariza-Hernández, M.L. Influencia de la inteligencia emocional y los afectos en la relación maestro-alumno, en el rendimiento académico de estudiantes de educación superior. *Educ. Educ.* **2017**, *20*, 193–210. [[CrossRef](#)]
10. Muhina, T.; Aboimova, I.; Kulagina, A.; Trophimov, V.; Chigarov, E. Development of emotional intelligence of students as a condition of successful adaptation to training. *Int. Electron. J. Math. Educ.* **2016**, *11*, 3463–3467.
11. Rojas, F.I.; Escalante, D.T.; Bermúdez, L.N.; Arnáiz, C.A. Competencias socioemocionales de los docentes en formación. *Acción Pedagógica* **2017**, *26*, 120–129.
12. Pacheco-Salazar, B. Educación emocional en la formación docente: Clave para la mejora escolar. *Cienc. Soc.* **2017**, *42*, 107–113. [[CrossRef](#)]
13. Teruel, M.P. La inteligencia emocional en el currículo de la formación inicial de los maestros. *Rev. Interuniv. Form. Profr. RIFOP* **2000**, *38*, 141–152.
14. López-Goñi, I.; Goñi, J.M. La competencia emocional en los currículos de formación inicial de los docentes: Un estudio comparativo. *Rev. Educ.* **2012**, *357*, 467–489.
15. Zabalza, M.A. *Las Competencias Docentes Del Profesor Universitario. Calidad Y Desarrollo Profesional*; Narcea S.A. de Ediciones: Madrid, Spain, 2003; ISBN 9788427713994.
16. Cassullo, G.L.; García, L. Estudio de las Competencias Socio Emocionales y su Relación con el Afrontamiento en Futuros Profesores de Nivel Medio. *Rev. Electrón. Interuniv. Form. Profr.* **2015**, *18*, 213–228. [[CrossRef](#)]
17. Bueno García, C.; Teruel Melero, M.P.; Valero Salas, A. La Inteligencia Emocional en alumnos de Magisterio: La percepción y comprensión de los sentimientos y las emociones. *Rev. Interuniv. Form. Profr.* **2005**, *19*, 169–194.
18. De Souza, L.; Carbonero, M.Á. Formación inicial docente y competencias emocionales: Análisis del contenido disciplinar en universidades brasileñas. *Educ. Pesqui.* **2019**, *45*, 1–16. [[CrossRef](#)]
19. Sospedra-Baeza, M.; Martínez-Álvarez, I.; Hidalgo-Fuentes, S. Inteligencias múltiples, emociones y creatividad en estudiantes universitarios españoles de primer curso. *Rev. Digit. Investig. Docencia Univ.* **2022**, *16*, 1153. [[CrossRef](#)]
20. Peñalva, A.; López, J.J.; Landa, N. Competencias emocionales del alumnado de Magisterio: Posibles implicaciones profesionales. *Rev. Educ.* **2013**, *362*, 690–712. [[CrossRef](#)]
21. Pertegal-Felices, M.L.; Castejón-Costa, J.L.; Martínez, M.Á. Competencias socioemocionales en el desarrollo profesional del maestro. *Educ. XX1* **2011**, *14*, 237–260. [[CrossRef](#)]
22. Extremera, N.; Mérida-López, S.; Rey, L.; Peláez-Fernández, M.Á. Programa “CRECIENDO” (Creando Competencias de Inteligencia Emocional en Nuevos Docentes): Evidencias preliminares y su utilidad percibida en la formación inicial del profesorado de Secundaria. *Know Share Psychol.* **2020**, *1*, 201–210. [[CrossRef](#)]
23. Ramírez-Asís, M.; Esquivel, S.; Naranjo-Toro, M. Inteligencia emocional, competencias y desempeño del docente universitario: Aplicando la técnica mínimos cuadrados parciales SEM-PLS. *Rev. Electrón. Interuniv. Form. Profr.* **2020**, *23*, 99–114. [[CrossRef](#)]
24. Vivas, M. Las competencias socio-emocionales del docente: Una mirada desde los formadores de formadores. In *I Jornadas Universitarias Sobre Competencias Socio-Profesionales de Las Titulaciones de Educación*; UNED: Madrid, Spain, 2004.
25. Ruiz-Melero, M.J.; Sainz-Gómez, M.; Jiménez-Carmona, B.; Bermejo, R. Conocimiento y percepción emocional en una muestra de futuros docentes. *Rev. Complut. Educ.* **2023**, *34*, 519–528. [[CrossRef](#)]
26. Bisquerra, R.; García, E. La educación emocional requiere formación del profesorado. *Particip. Educ.* **2018**, *5*, 15–27.
27. Costa-Rodríguez, C.; Palma-Leal, X.; Salgado, C. Docentes emocionalmente inteligentes. Importancia de la Inteligencia Emocional para la aplicación de la Educación Emocional en la práctica pedagógica de aula. *Estud. Pedagog.* **2021**, *1*, 219–233. [[CrossRef](#)]
28. Suberviola-Ovejas, I. Auto-percepción del profesorado sobre su formación en educación emocional. *Vivat Acad.* **2012**, *117*, 1154–1167. [[CrossRef](#)]
29. Cabello, R.; Ruiz-Aranda, D.; Fernández-Berrocal, P. Docentes emocionalmente inteligentes. *REIFOP* **2010**, *13*, 41–49.
30. Torrijos, P.; Martín, J.F.; Rodríguez, M.J. La educación emocional en la formación permanente del profesorado no universitario. *Profr. Rev. Currículum Form. Profr.* **2018**, *22*, 579–597. [[CrossRef](#)]

31. Rueda, P.M.; Filella, G. Importancia de la educación emocional en la formación inicial del profesorado. *Intercambio/Échange* **2016**, *1*, 212–219. [[CrossRef](#)]
32. Mayer, J.D.; Caruso, D.R.; Salovey, P. The ability model of emotional intelligence: Principles and updates. *Emot. Rev.* **2016**, *8*, 290–300. [[CrossRef](#)]
33. Paramio, A.; Romero-Moreno, A.; González, C. La investigación sobre la inteligencia emocional en los últimos 20 años (2001–2021). *Know Share Psychol.* **2023**, *4*, 31–55. [[CrossRef](#)]
34. Hernández, J.M.; García-Sanz, M.P.; Mancheño, M.A.; Sánchez, A. Trabajos empíricos. In *Guía Práctica Para La Realización De Trabajos Fin De Grado Y Trabajos Fin De Máster*; García-Sanz, M.P., Martínez-Clares, P., Eds.; Editum: Murcia, Spain, 2012; pp. 247–284. ISBN 9788483719756.
35. Salovey, P.; Mayer, J.D.; Goldman, S.L.; Turvey, C.; Palfai, T.P. Emotional attention, clarity, and repair: Exploring emotional intelligence using the Trait Meta-Mood Scale. In *Emotion, Disclosure, & Health*; Pennebaker, J.W., Ed.; American Psychological Association: Washington, DC, USA, 1995; pp. 125–154. Available online: <https://psycnet.apa.org/doi/10.1037/10182-006> (accessed on 21 June 2023).
36. Fernández-Berrocal, P.; Extremera, N.; Ramos, N. Validity and reliability of the Spanish modified version of the Trait Meta-Mood Scale. *Psychol. Rep.* **2004**, *94*, 751–755.
37. Angulo, R.; Albarracín, A.P. Validez y confiabilidad de la escala rasgo de metaconocimiento emocional (TMMS-24) en profesores universitarios. *Rev. Lebrer* **2018**, *10*, 61–72.
38. Vilà, R.; Torrado, M.; Reguant, M. Multiple linear regression analysis with SPSS: A practical example. *REIRE Rev. D'innovació I Recer. Educ.* **2019**, *12*, 1–10. [[CrossRef](#)]
39. García-Vila, E.; Sepúlveda-Ruiz, M.P.; Mayorga-Fernández, M.J. Las competencias emocionales del alumnado de los Grados de Maestro/a en Educación Infantil y Primaria: Una dimensión esencial en la formación inicial docente. *Rev. Complut. Educ.* **2022**, *33*, 119–130. [[CrossRef](#)]
40. Maureira, F.; Flores, E.; Sepúlveda, S.; Lagos, B.; Contreras, S.; Maureira, G.; González, V. Inteligencia emocional en estudiantes de Educación Física. *Rev. Cienc. Act. Física UCM* **2023**, *24*, 1–12. [[CrossRef](#)]
41. Porrás, S.; Pérez, C.; Checa, P.; Luque, B. Competencias emocionales de las futuras personas docentes: Un estudio sobre los niveles de inteligencia emocional y empatía. *Rev. Educ.* **2020**, *44*, 80–95. [[CrossRef](#)]
42. Extremera, N.; Fernández-Berrocal, P. Inteligencia emocional percibida y diferencias individuales en el meta-conocimiento de los estados emocionales: Una revisión de los estudios con el TMMS. *Ansiedad Estrés* **2005**, *11*, 101–121.
43. García-Domingo, B. Competencia emocional en maestros de educación infantil y primaria: Fuentes de variabilidad y sugerencias de mejora. *Rev. Electrón. Interuniv. Form. Profr.* **2021**, *24*, 1–15. [[CrossRef](#)]
44. Pincay-Aguilar, I.; Candelario-Suarez, G.; Castro-Guevara, J. Inteligencia emocional en el desempeño docente. *Psicol. Unemi* **2018**, *2*, 32–40. [[CrossRef](#)]
45. García-Domingo, B.; Quintanal, J. Inteligencia Emocional como Predictor de Satisfacción en Docentes de Infantil y Primaria. *REICE Rev. Iberoam. Sobre Calid. Efic. Cambio Educ.* **2022**, *20*, 51–68. [[CrossRef](#)]
46. Hernández-Vargas, C.I.; Llorens-Gumbau, S.; Rodríguez-Sánchez, A.M.; Chambel, M.J. Inteligencia emocional y engagement en estudiantes de medicina: Un estudio comparativo en tres países. *Rev. Psicol.* **2021**, *30*, 44–56. [[CrossRef](#)]
47. Valente, S.; Veiga-Branco, A.; Rebelo, H.; Lourenço, A.A.; Cristóvão, A.M. The relationship between emotional intelligence ability and teacher efficacy. *Univers. J. Educ. Res.* **2020**, *3*, 916–923. [[CrossRef](#)]

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