



Design and Validation of an Instrument for Assessing Emotional Competences in Primary Education

Sandra Cabello-Sanz*

National Distance Education University (UNED)

Department of Research Methods and Diagnosis in Education II. Faculty of Education

Email: scabello@edu.uned.es

Orcid: <https://orcid.org/0000-0001-7589-8159>

Julian Alfonso Muñoz-Parreño

Isabel I University

Email: r6.julian@gmail.com

Orcid: <https://orcid.org/0000-0002-8072-9787>

Ana González-Benito

National Distance Education University (UNED)

Department of Research Methods and Diagnosis in Education II. Faculty of Education

Email: amgonzalez@edu.uned.es

Orcid: <https://orcid.org/0000-0001-8618-7504>

ABSTRACT

Assessing emotional competencies in primary school students is essential to promoting their comprehensive development. However, existing instruments do not always consider the perspective of families a crucial factor in obtaining a complete picture. For this reason, a questionnaire was designed and validated to assess these competencies from a family perspective. This study presents the design and validation of the Emotional Competence Questionnaire for Primary Education (CCEEP) to assess students' emotional competencies from their families' perspective. Its construction was based on a theoretical matrix derived from a comprehensive review of the literature and regulations. The initial version of the questionnaire underwent a content validation process by expert judgement and was applied to a sample of 551 families. The data obtained were analyzed using Confirmatory Factor Analysis (CFA). The questionnaire showed high levels of content validity and internal consistency, confirming the proposed theoretical structure, as well as significant convergent validity with another similar instrument. The instrument designed is valid and reliable for assessing emotional competencies in primary school students from the perspective of their families.

Keywords: factor analysis, affective development, primary education, assessment, family.

*Corresponding author: scabello@edu.uned.es

Received: 21/04/2025 – Accepted: 22/09/2025

ISSN: 0210-2773

DOI: <https://doi.org/10.17811/rifie.22466>



1. Introduction

Since the mid-20th century, authors such as Maslow (1943) and Rogers (1961) began to address emotions from a humanistic psychological perspective. It was based on the work on Emotional Intelligence (EI) by Salovey and Mayer (1990), and especially with the work of Goleman (1995), that the study and interest in this topic intensified both in the scientific community and in society. EI is a specific part of the broader concept of social-emotional competencies, which includes a diverse set of skills, attitudes, and abilities to effectively manage one's own emotions and interpersonal relationships. This concept is a construct of psychology; however, it is the responsibility of education to apply the findings derived from research to the development of emotional competencies through interaction between the individual and their environment (Agulló et al., 2010; Bisquerra, 2009; Bisquerra and Pérez-Escoda, 2007).

Over more than three decades, different models have been proposed, which are usually grouped into two categories. On the one hand, in the capacity model, EI refers to the ability to identify, express and regulate one's own emotions, as well as to understand and respond effectively to the emotions of others (Fernández-Berrocal and Cabello, 2021). On the other hand, the trait model considers EI to be a set of stable personality characteristics manifested in certain behavioral tendencies and self-perceived abilities (Petrides and Furham, 2001). The development of this area brought with it the need for a new reformulation of measures and instruments that would allow for the assessment of different emotional dimensions.

Scientific literature distinguishes between two main ways of assessing EI. The first includes self-reports and questionnaires, which measure perceived EI and allow individuals to express how they feel and think. Although they may be subject to bias, they are considered useful tools. Among the best-known instruments in this category are: *Trait Meta-Mood Scale* (TMMS) (Salovey et al., 1995), *Emotional Competence Inventory* (ECI), (Boyadis & Sala, 2004), *Schutte Self Report Inventory* (SSRI) (Schutte et al., 1998), *Bar-On Emotional Quotient Inventory Youth Version* (EQ-i:YV) (Bar-On and Parker, 2000), *Trait Emotional Intelligence Questionnaire* (TEIQue) (Petrides, 2009) and *Profile of Emotional Competence* (PEC) (Brasseur et al., 2013). The second form uses skill tests, where subjects perform emotional tasks with objective responses, subsequently comparing their results with certain pre-established scoring criteria. This method assesses actual performance, not personal perception. Within this group, the main instrument for assessing EI is the *Mayer-Salovey-Caruso Emotional Intelligence Test* (MSCEIT) (Mayer et al., 2002).

EI questionnaires are similar to those used to assess emotional competencies. The main conceptual difference between the two is that, in the case of EI, it is conceived as an ability or a trait, based on the two classic approaches to the construct. In contrast, the assessment of emotional competencies is oriented towards their learning and development over time (Bisquerra and López-Cassà, 2021; Bisquerra and Chao-Rebolledo, 2021). It is worth noting the scarcity of validated instruments that assess emotional competencies in the Spanish context in the early stages of education (Bisquerra and López-Cassà, 2021; Pérez-González et al., 2022). Among the most recent are the *Emotional Development Scale in Early Primary Education* (EDEEPI) (Priego-Ojeda et al., 2024), the *Emotional Competence Assessment Questionnaire* (ECAQ) (Bartoli et al., 2022) and the *Emotional Development Questionnaire for Primary Education* (CDE-9-13) (Pérez-Escoda et al., 2021).

This renewed interest in emotional skills is part of a broader framework for developing key life skills, supported by international organizations and recent theoretical contributions. Among the main references are 21st-century skills, which emphasize the need to prepare individuals for changing contexts by strengthening cognitive, intrapersonal and interpersonal competencies, which are essential for both lifelong learning and participation in society (National Research Council, 2012). Along the same lines, the tripartite taxonomy of character proposed by Park et al. (2017) offers a clear and functional organization of these competencies into three key domains—intrapersonal, interpersonal and intellectual—and has proven particularly useful in early childhood education settings by facilitating the design and implementation of social-emotional interventions tailored to students' developmental stages. For its part, the Organization for Economic Co-operation and Development (OECD) assessment framework promotes a systematic and internationally comparable approach to measuring these skills, with the aim of guiding evidence-based educational policies (Kankaras and Suarez-Álvarez, 2019). Also noteworthy is the BESSI (*Behavioral, Emotional, and Social Skills Inventory*) model, developed by Soto et al. (2022) and recently validated in the Spanish population (Postigo et al., 2024), for its integrative vision focused on the empirical measurement of behavioral, emotional, and social skills that are functional in different contexts of human development. Taken together, these approaches agree on the fundamental role of social and emotional competencies in the comprehensive development of the individual from the earliest stages of education. However, most of the instruments derived from these proposals focus on self-assessment or assessment by teachers, which limits the possibility of obtaining a more complete picture of pupils' emotional development. To achieve a more comprehensive assessment of emotional development in primary education, it is essential to consider the perspective that families have on their children's emotional competencies, given their key role as agents of socialization and privileged observers of children's behavior in everyday contexts (Froiland and Davison, 2014). However, the availability of specific instruments aimed at assessing this perspective in the family context is limited. Within this framework, the present study aims to design and validate the CCEEP from the perspective of families. This instrument seeks to complement existing tools, facilitating a more comprehensive assessment by integrating different points of view and minimizing possible biases associated with self-assessment or assessment by teachers alone.

2. Method

2.1. Participants

The population consisted of families with children enrolled in primary education. The sample was selected using non-probability sampling based on accessibility and convenience (Golzar et al., 2022). The questionnaire was completed by 572 participants. However, after data cleansing, the total number of valid responses was 555. Subsequently, the anomaly index was calculated, revealing that four subjects represented outliers (> 2), leaving the final sample consisting of 551 participants.

2.2. Instruments

The CCEEP aims to assess the socio-emotional skills of primary school pupils (aged 6-12) from the perspective of their families, providing information observed in different contexts and facilitating a more holistic view of their socio-emotional abilities. The inventory consists of a total of 44 items on a Likert scale with values ranging from 0 (*strongly disagree*) to 10 (*strongly agree*). In its final version, the items are grouped into five factors, coinciding with the competency blocks of the pentagonal model of emotional competencies (Bisquerra, 2016; Bisquerra and Mateo, 2019; Bisquerra and Pérez-Escoda, 2007): emotional awareness, emotional regulation, emotional autonomy, social competence, and life and well-being skills (Table 1).

2.2.1. Questionnaire design (preliminary version)

First, a literature review was conducted on different EI models (Bar-On, 2006; Bisquerra and Mateo, 2019; Goleman, 1995; Petrides and Furnham, 2001, 2003; Salovey and Mayer, 1990), as well as existing questionnaires based on these theoretical models (Pulido-Acosta and Herrera-Clavero, 2019). After reviewing the contributions of significant authors on the development and assessment of EI and emotional competencies, the pentagonal model of emotional competencies was considered the most appropriate. Thus, some of the assessment instruments mentioned above and others included in the systematic review by Sánchez-Camacho and Grane (2022) were used as a basis for the development of this questionnaire, with the CDE (9-13) (López-Cassà and Pérez-Escoda, 2009) being particularly relevant.

Secondly, a theoretical matrix was established, structured into five content blocks, coinciding with the objectives and content of the model. Next, indicators linked to the emotional competencies to be acquired (items) were specified. This resulted in a preliminary questionnaire design consisting of 50 items, ten for each of the emotional competencies considered.

2.2.2. Validation of the questionnaire through expert judgement (second version)

This procedure enabled us to refine the questionnaire and obtain an initial theoretical validity index. To this end, a Google Forms questionnaire was developed to assess the CCEEP, consisting of a rating scale numbered from 1 to 4 (1 = *not at all*, 2 = *a little*, 3 = *quite a bit*, 4 = *very much*), where three aspects were evaluated for each item: clarity, suitability, and relevance (Kit Ng et al., 2024). In addition, space was included for detailed qualitative observations.

Next, 15 experts were selected using non-probabilistic convenience sampling, initially contacting them by email and obtaining affirmative responses from 11 participants. The inclusion criteria were a minimum of 10 years' experience in educational guidance, knowledge of assessment and a link to teaching. After confirming their participation, they received an informed consent form and a form with the CCEEP items to assess their clarity, suitability and relevance. Finally, 10 experts adjusted the items according to their observations, including teachers from various areas and training in psychopedagogy and statistics.

Table 1
Scale factors and items

Factors	Items
Emotional awareness	1. Able to name what they are feeling. For example, I feel sad or happy.
	2. Talks about their emotions with others.
	3. Distinguishes whether an emotion is pleasant (happiness) or unpleasant (fear).
	4. Expresses desires using emotional vocabulary. For example, I would like to hug you.
	5. They can identify the effects of their emotions on their body. For example, if they are afraid, they feel pain in their tummy.
	6. Understand the reasons why you feel sad, angry, happy, etc.
	7. They can draw an emotion.
	8. Can recognize emotions (happiness, sadness, etc.) in others.
	9. Feels discomfort when witnessing suffering in other people.
Emotional regulation	10. Organizes their time, establishing an appropriate plan for their daily life and tasks.
	11. Responds badly when angry.
	12. They know how to recognize when they are about to have an emotional outburst.
	13. Regret their wrongdoings. For example, hitting a classmate.
	14. Knows how to wait for a reward without showing impulsiveness.
	15. When faced with a problem, they evaluate possible solutions using coping skills (stress management, regulation, etc.).
	16. They know how to manage frustration.
	17. They find it very beneficial to relax their body and mind to feel good.
Emotional autonomy	18. If nervous, knows how to calm down (use of certain techniques: relaxation, meditation).
	19. You have an adequate level of satisfaction with your physical appearance.
	20. He likes the way he is and behaves.
	21. He has a positive opinion of himself.
	22. When you manage to solve a problem, you reflect positively on your achievement, thinking I did a great job!
	23. You have an optimistic attitude.
	24. You can see the bright side of things, without focusing solely on the negative.
	25. They successfully face adverse life conditions with a positive attitude.
	26. When you have a problem, you believe it will be resolved favorably.
Competence Social	27. They enjoy trying new and challenging activities without fear of making mistakes.
	28. If someone tells them they have done something wrong, they do not take it negatively, but rather as an opportunity for improvement.
	29. He enjoys working in a group with his classmates.
	30. His classmates play with him and/or invite him to events or birthday parties.
	31. He can understand that everyone has an opinion and that it must be respected.
	32. He is competitive with his classmates.
	33. When his classmates speak, he listens attentively and pays attention.
	34. He acts, such as helping others, without being asked, on his own initiative.
	35. If he upsets a classmate, he apologizes on his own initiative, without anyone having to tell him to.
Life skills and well-being	36. They tend to initiate conversations when they are with their friends.
	37. When playing games, they understand that sometimes you win and sometimes you lose, without getting angry.
	38. They can set realistic and positive goals for themselves, both in the short term (for a day, week or month) and in the long term (a year, several years). For example, I am going to pass an exam.
	39. Make decisions using different mechanisms (logical reasoning, intuition, consulting others, etc.) about personal academic, social, and other situations in your daily life.
	40. Ask for help if needed to complete tasks or other activities of daily living.
	41. Can access available resources (material, technological) appropriate for completing a given task. For example, accessing the Internet and consulting information about a particular country.
	42. Can recognize their rights, developing a sense of belonging to the group. For example, if they are punished by not being allowed to go on a trip because of the inappropriate behavior of some classmates, they usually express their opinion that it is not fair to the group.
	43. They can recognize their duties, considering that effort is very important for success.
	44. He strives to do things in the best possible way, not showing passivity when faced with tasks.

2.2.3. Validation of the questionnaire through a pilot study (final version)

Following validation of the content by expert judgement (Elangovan and Sundaravel, 2021), the questionnaire was administered to a population of families with children enrolled in primary education. The purpose of this pilot study was to identify any dysfunction in the components of the scale. To this end, various school management teams were contacted by email to inform them of the objective and other relevant details of the research and to send them the questionnaire. The results were then analyzed and the final version of the CCEEP was produced.

2.2.4. CDE (9-13)

The instrument used to test convergent validity was the CDE (9-13) for children aged 9 to 13 years old by Pérez-Escoda and Filella (2019). This self-report questionnaire is designed based on the pentagonal model of emotional competencies (emotional awareness, emotional regulation, emotional autonomy, social competence, and life and well-being competencies) (Bisquerra and Pérez-Escoda, 2007), assessing these five competencies, as well as providing an overall EI score. This questionnaire uses a *Likert-type response format, with a scale from 0 (*strongly disagree*) to 10 (*strongly agree*). It consists of 38 items, with an internal consistency index according to Cronbach's alpha coefficient of 0.91 (Bisquerra, 2016; Bisquerra and Mateo, 2019; Bisquerra and Pérez-Escoda, 2007).

2.3. Procedure

After the content of the CCEEP instrument was validated by the group of experts, it was applied to a population composed of families with children enrolled in primary education. The aim of this pilot study was to detect possible dysfunctions in the different components of the scale. To this end, various management teams at schools in northern Spain were contacted, the purpose of the study was explained to them, and they were sent an email with all the relevant information, together with a link to a Google Forms questionnaire to facilitate completion. The instrument was completed by only one parent of each child. Furthermore, no personal data was requested at any time, ensuring the anonymity and confidentiality of the participants.

3. Data analysis

For the data validation analysis using expert judgement, SPSS statistical software version 27 for Windows was used. The consistency between the experts' responses was evaluated using Kendall's test. To determine content validity (adequacy and representativeness of the items), the Content Validity Index (CVI) was calculated using Aiken's V test, analyzing the degree of clarity, suitability and relevance for each of the five study factors.

The results of the pilot study were analyzed using SPSS to obtain descriptive statistics for each item (mean, standard deviation, skewness, kurtosis); Mahalanobis distance statistics were used to purge the sample of multivariate outliers and normality was assessed using the Kolmogorov-Smirnov test. Reliability was assessed using Cronbach's alpha coefficient, supplemented with total-item statistics to assess internal consistency and the relationship of each item to the total score.

Subsequently, JASP software was used to perform a Confirmatory Factor Analysis (CFA) of the proposed structure (Rogers, 2024), using the weighted least squares method (WLSMW), which is suitable for ordinal variables. The CFA evaluated measures of absolute fit (chi-square, RMSEA), incremental fit (CFI, TLI) and parsimony (AIC), providing a comprehensive view of the adequacy of the theoretical model to the empirical data. Finally, a Pearson correlation was performed with the data obtained in the CCEEP and CDE (9-13) applied to primary school children to analyze the convergent validity between the two instruments.

4. Results

4.1. Validation of the questionnaire through expert judgement

To analyze the agreement between the assessments of the participating experts, Kendall's concordance test yielded a value of 0.67, establishing that there was agreement between the experts' responses for the study variables in the form. The asymptotic significance value was also analyzed, with $p = 0.00$, which is below 0.05, thus providing statistically significant evidence that there was agreement between the assessments of the different experts.

In addition, to calculate the CVI, all the responses given by the experts for each criterion (clarity, suitability and relevance) and for each factor (emotional awareness, emotional regulation, emotional autonomy, social competence and life and well-being skills) were analyzed, and the total CVI was obtained using Aiken's V test (Table 2).

Table 2*Content validity index of associated factors and criteria*

Factor	Criteria	CVI	Total CVI-Factor
Emotional awareness	Claridad	0,90	0,90
	Idoneidad	0,91	
	Relevancia	0,90	
Emotional regulation	Claridad	0,88	0,89
	Idoneidad	0,89	
	Relevancia	0,88	
Emotional autonomy	Claridad	0,82	0,83
	Idoneidad	0,83	
	Relevancia	0,83	
Social competence	Claridad	0,89	0,90
	Idoneidad	0,89	
	Relevancia	0,90	
Life and wellbeing skills	Claridad	0,87	0,89
	Idoneidad	0,88	
	Relevancia	0,92	

Note: CVI = Content Validity Index..

Table 2 shows high levels in the CVI for each of the criteria and for each of the factors. The analysis carried out for each of the items did not show a CVI below 0.67 in any case, with this value corresponding to item 40 of the CCEEP social competence. The total mean CVI was 0.88. Therefore, although some qualitative aspects of the form and expression of the statements were reformulated, based on the analysis of the experts' assessments and suggestions to improve the wording and provide greater clarity, it was not necessary to eliminate any items.

4.2. Validation of the questionnaire through a pilot study

First, descriptive analyses of the items were performed, calculating the mean, standard deviation, skewness, and kurtosis (Table 3). Skewness values below three indicated a normal distribution without significant bias. Kurtosis values below ten also suggested a normal distribution, without heavy tails or excessively pointed shapes (Kline, 2011).

Secondly, normality was assessed using the Kolmogorov-Smirnov test. The results indicated a non-normal distribution in all of them ($p < 0.05$). Subsequently, the reliability of the scales used was calculated using Cronbach's alpha coefficient. This analysis yielded an $\alpha = 0.96$, which indicated high internal consistency of the items and reinforced the validity of the instrument. Next, the total-item statistics were calculated to evaluate the relationship of each item with the total score of the instrument (Table 4).

Table 3
Descriptive statistics for each of the CCEEP items

Item	Minimum	Maximum	Me	SD	A	K
1	0	10	7,66	2,32	-0,95	0,44
2	0	10	5,89	2,81	-0,39	-0,63
3	2	10	8,58	1,70	-1,06	0,35
4	0	10	7,13	2,78	-0,79	-0,32
5	0	10	6,63	2,69	-0,67	-0,22
6	0	10	7,32	2,30	-0,76	0,18
7	0	10	6,86	2,66	-0,61	-0,49
8	3	10	8,79	1,47	-1,16	0,68
9	2	10	8,48	1,61	-1,05	0,87
10	1	10	8,26	1,96	-1,17	0,87
11	0	10	4,98	2,95	-0,13	-0,97
12	0	10	7,37	2,52	-1,07	0,64
13	0	10	5,05	3,30	-0,14	-1,23
14	0	10	6,64	2,47	-0,062	-0,05
15	0	10	8,26	2,05	-1,60	2,71
16	0	10	5,37	2,97	-0,17	-0,93
17	0	10	5,10	2,49	-0,10	-0,52
18	0	10	5,00	2,44	-0,26	-0,50
19	0	10	6,83	2,54	-0,66	-0,07
20	0	10	5,11	2,62	-0,25	-0,62
21	0	10	7,85	1,99	-1,05	1,11
22	0	10	7,67	1,99	-0,86	0,55
23	0	10	7,42	2,08	-0,83	0,50
24	0	10	7,72	1,97	-0,73	0,05
25	0	10	7,21	2,25	-0,81	0,41
26	0	10	6,68	2,29	-0,65	0,15
27	0	10	6,33	2,30	-0,50	-0,04
28	0	10	6,32	2,08	-0,51	0,18
29	0	10	6,50	2,67	-0,63	-0,26
30	0	10	5,01	2,53	-0,19	-0,63
31	0	10	7,91	2,25	-1,14	0,79
32	0	10	7,88	2,38	-1,25	1,02
33	0	10	7,16	2,20	-0,79	0,43
34	0	10	6,11	2,95	-0,53	-0,70
35	0	10	6,70	2,36	-0,62	-0,12
36	0	10	7,76	2,19	-1,03	0,74
37	0	10	6,78	2,42	-0,48	-0,38
38	0	10	7,75	2,40	-1,29	1,27
39	0	10	6,50	2,46	-0,51	0,30
40	0	10	6,74	2,29	-0,60	0,19
41	0	10	5,86	2,69	-0,29	-0,70
42	0	10	5,99	2,56	-0,23	-0,60
43	0	10	7,63	2,47	-1,12	0,60
44	0	10	7,61	2,26	-0,86	0,23
45	0	10	7,50	2,05	-0,78	0,52
46	0	10	6,74	2,40	-0,56	-0,27
47	0	10	6,49	2,61	-0,49	-0,54
48	0	10	8,08	2,08	-1,41	2,29
49	0	10	8,64	1,70	-1,49	2,50
50	1	10	8,69	1,58	-1,41	2,09

Note. M = Mean, SD = Standard Deviation, A = Asymmetry, K = Kurtosis.

Table 4
CCEEP total-item statistics. Cronbach's alpha if the item is removed

Ítem	Scale mean if the item has been deleted	Scale variance if the item has been deleted	Corrected total item correlation	Cronbach's alpha if the item is removed
1	340,89	4341,94	0,58	0,95
2	342,65	4285,17	0,63	0,95
3	339,97	4383,54	0,62	0,95
4	341,42	4307,64	0,57	0,95
5	341,92	4378,66	0,39	0,95
6	341,23	4348,94	0,56	0,95
7	341,69	4324,96	0,55	0,95
8	339,75	4421,87	0,52	0,95
9	340,07	4395,28	0,60	0,95
10	340,29	4381,52	0,54	0,95
11	343,56	4256,97	0,67	0,95
12	341,17	4583,75	-0,18	0,95
13	343,50	4667,91	-0,33	0,96
14	341,90	4349,85	0,52	0,95
15	340,29	4396,12	0,46	0,95
16	343,18	4287,07	0,59	0,95
17	343,45	4286,03	0,71	0,95
18	343,55	4306,92	0,66	0,95
19	341,71	4396,73	0,36	0,95
20	343,43	4320,63	0,57	0,95
21	340,70	4375,10	0,56	0,95
22	340,88	4337,52	0,70	0,95
23	341,13	4343,73	0,65	0,95
24	340,83	4357,88	0,63	0,95
25	341,34	4324,63	0,66	0,95
26	341,87	4326,50	0,64	0,95
27	342,22	4310,37	0,69	0,95
28	342,23	4345,08	0,64	0,95
29	342,05	4313,93	0,58	0,95
30	343,54	4322,59	0,59	0,95
31	340,64	4335,13	0,62	0,95
32	340,66	4328,87	0,61	0,95
33	341,39	4325,93	0,67	0,95
34	342,43	4422,42	0,24	0,95
35	341,85	4313,53	0,66	0,95
36	340,79	4353,54	0,58	0,95
37	341,77	4312,48	0,65	0,95
38	340,79	4344,10	0,55	0,95
39	342,05	4367,59	0,46	0,95
40	341,81	4322,66	0,65	0,95
41	342,68	4274,41	0,69	0,95
42	342,56	4276,35	0,72	0,95
43	340,91	4332,21	0,57	0,95
44	340,94	4373,05	0,49	0,95
45	341,04	4384,30	0,50	0,95
46	341,81	4294,69	0,71	0,95
47	342,06	4278,61	0,70	0,95
48	340,46	4342,99	0,65	0,95
49	339,91	4405,86	0,52	0,95
50	339,86	4400,77	0,58	0,95

It was observed that items 12 and 13 had a negative correlation with each other. However, it was decided not to proceed with their elimination, since the reliability of the instrument ($\alpha = 0.96$) exceeded the acceptable threshold of $\alpha = 0.85$. Furthermore, the homogeneity index, according to the criteria of Schmeiser and Welch (2006), indicated that an item is considered sufficiently homogeneous if it exceeds a value of 0.20. In this case, all items met this criterion, except for those mentioned above. Furthermore, according to Izard (2005), if the questionnaire consists of 20 or more items, no modifications are necessary, as the differences between the homogeneity indices of the individual items and the questionnaire as a whole are minimal.

Subsequently, reliability analysis was performed for each factor of the questionnaire (Table 5). The results revealed adequate internal consistency across all factors, with Cronbach's alpha coefficients greater than $\alpha = 0.80$. These findings supported the reliability of the measurements made in each domain evaluated.

Table 5
Reliability analysis for each factor

	Ítem	Scale mean if the item has been deleted	Scale variance if the item has been deleted	Corrected total correlation of items	Cronbach's alpha if the item is removed
Emotional awareness	1	67,94	201,89	0,66	0,86
	2	69,70	191,22	0,67	0,86
	3	67,02	212,22	0,73	0,86
	4	68,47	190,30	0,69	0,86
	5	68,97	209,21	0,45	0,88
	6	68,28	205,46	0,61	0,86
	7	68,74	199,22	0,60	0,87
	8	66,80	221,92	0,62	0,87
	9	67,12	216,26	0,68	0,86
	10	67,34	216,71	0,53	0,87
Emotional regulation	11	54,73	143,09	0,63	0,63
	12	52,34	196,96	-0,09	0,75
	13	54,67	209,16	-0,24	0,80
	14	53,07	157,64	0,52	0,66
	15	51,46	170,18	0,41	0,68
	16	54,35	151,89	0,48	0,66
	17	54,62	147,08	0,71	0,63
	18	54,72	154,38	0,59	0,65
	19	52,88	162,40	0,42	0,67
	20	54,60	150,63	0,60	0,64
Emotional autonomy	21	60,85	251,12	0,60	0,92
	22	61,03	243,50	0,73	0,91
	23	61,27	239,21	0,76	0,91
	24	60,97	248,92	0,64	0,91
	25	61,48	232,75	0,80	0,90
	26	62,02	235,02	0,74	0,91
	27	62,36	231,23	0,80	0,90
	28	62,38	239,55	0,75	0,91
	29	62,20	233,14	0,64	0,91
	30	63,69	238,76	0,60	0,92

→

	Ítem	Scale mean if the item has been deleted	Scale variance if the item has been deleted	Corrected total correlation of items	Cronbach's alpha if the item is removed
Competition social	31	63,39	202,19	0,68	0,83
	32	63,41	201,72	0,64	0,83
	33	64,14	203,04	0,68	0,83
	34	65,18	223,34	0,21	0,87
	35	64,60	199,37	0,68	0,83
	36	63,54	209,23	0,58	0,84
	37	64,52	200,05	0,65	0,83
	38	63,54	208,90	0,52	0,84
	39	64,79	212,93	0,44	0,85
	40	64,56	204,22	0,63	0,83
Life skills and well-being	41	63,39	202,19	0,68	0,83
	42	63,41	201,72	0,64	0,83
	43	64,14	203,04	0,68	0,83
	44	65,18	223,34	0,21	0,87
	45	64,60	199,37	0,68	0,83
	46	63,54	209,23	0,58	0,84
	47	64,52	200,05	0,65	0,83
	48	63,54	208,90	0,52	0,84
	49	64,79	212,93	0,44	0,85
	50	64,56	204,22	0,63	0,83

The reliability analysis of the questionnaire factors yielded the following results: emotional awareness $\alpha = 0.88$, emotional regulation $\alpha = 0.71$, emotional autonomy $\alpha = 0.92$, social competence $\alpha = 0.85$, and life and well-being skills $\alpha = 0.88$. All of them, except for emotional regulation, indicated good internal consistency, with none of the items showing negative correlations or values below 0.20, suggesting that it was not necessary to eliminate or modify any items to improve the reliability of the factor. Emotional regulation had a Cronbach's alpha coefficient of 0.71, which in this case, below the acceptable threshold of 0.85. It is therefore advisable to consider modifying items 12 (*Answers rudely when angry*) and 13 (*Acts hostilely with gestures or by throwing objects when angry*) to improve the reliability of the factor.

The results obtained in the AFC indicated the need to make certain adjustments to validate the questionnaire. These modifications were carried out in accordance with the theoretical justification of the pentagonal model of emotional competencies. Thus, considering the model's fit indices, the RMSEA value was 0.06, indicating an acceptable fit (Byrne, 1998). For its part, the TLI yielded a value of $\alpha = 0.91$ and the CFI $\alpha = 0.93$, indicating that the data had an acceptable fit (Kline, 2011). Finally, the parsimony fit measure was calculated by dividing the critical chi-square value by the degrees of freedom, yielding a value of 2.98, which is within an adequate range.

The Composite Reliability Indices (CRI) estimated for each of the five factors took values between $\alpha = 0.87$ and 0.95 indicate optimal reliability levels (Table 6).

Table 6
Composite Reliability Index of the factors

		CRI			
		C	Σc^2	$v = 1 - c^2$	$\Sigma c^2 / \Sigma c^2 + \Sigma v$
F1 - EA	I1	0,82	0,68	0,32	
	I2	0,83	0,68	0,32	
	I3	0,83	0,69	0,31	
	I4	0,87	0,76	0,24	
	I5	0,87	0,76	0,24	
	I6	0,89	0,79	0,21	
	I7	0,88	0,77	0,23	
	I9	0,85	0,72	0,28	
	I10	0,81	0,66	0,34	
		7,65	58,52	2,50	61,02
F2 - ER	I11	0,83	0,68	0,32	
	I12	0,53	0,28	0,72	
	I14	0,72	0,52	0,48	
	I15	0,67	0,45	0,55	
	I16	0,59	0,35	0,65	
	I17	0,79	0,62	0,38	
	I18	0,75	0,56	0,44	
	I19	0,75	0,56	0,44	
	I20	0,82	0,67	0,33	
		6,45	41,60	4,31	45,91
F3 - EA	I21	0,59	0,35	0,65	
	I22	0,74	0,55	0,45	
	I23	0,74	0,55	0,45	
	I24	0,67	0,44	0,55	
	I25	0,79	0,62	0,38	
	I26	0,79	0,62	0,38	
	I27	0,83	0,70	0,30	
	I28	0,75	0,56	0,44	
	I29	0,65	0,42	0,58	
	I30	0,62	0,39	0,61	
F4 - SC		7,17	51,40	4,79	56,19
	I31	0,77	0,59	0,40	
	I32	0,80	0,64	0,36	
	I33	0,83	0,69	0,31	
	I34	0,57	0,32	0,68	
	I35	0,80	0,65	0,35	
	I36	0,81	0,65	0,35	
	I37	0,81	0,66	0,34	
	I38	0,73	0,53	0,47	
	I39	0,70	0,48	0,52	
		6,82	46,51	3,78	50,29

→

					CRI
					$\Sigma c^2 / \Sigma c^2 + \Sigma v$
	C	Σc^2	$v = 1 - c^2$	$\Sigma c^2 + \Sigma v$	
F5- CLW	I41	0,75	0,56	0,44	
	I42	0,76	0,58	0,42	
	I43	0,60	0,36	0,64	
	I44	0,61	0,37	0,63	
	I45	0,58	0,33	0,67	
	I46	0,78	0,61	0,39	
	I47	0,80	0,64	0,36	
					0,87

Note. CRI = Composite Reliability Index, F = Factor, EM = Emotional Awareness, ER = Emotional Regulation, EA = Emotional Autonomy, SC = Social Competence, CLW = Competencies for Life and Well-being.

In the validated model (Table 6), the number of items in some factors of the questionnaire was reduced. The eliminations were theoretically justified, prioritizing the validity of the measured construct. Redundant items that affected the accuracy of the questionnaire were eliminated, thus achieving a more efficient version for evaluating the construct (Figure 1).

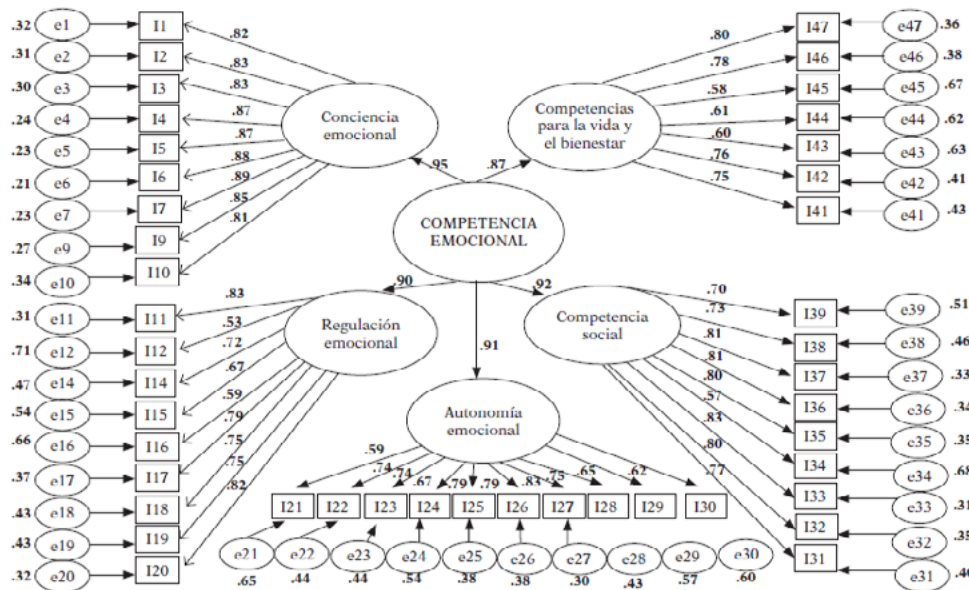


Figure 1. Confirmatory factor analysis of the Emotional Competence Questionnaire for Primary Education

Descriptive statistics and reliability were calculated for the 44 items that make up the final version of the instrument, to provide an accurate estimate of its psychometric properties. These results are presented in Table 7. The total reliability statistic for the 44 items was $\alpha = 0.95$.

Table 7*Total statistics for the items in the final analysis*

Ítem	Min	Max	Me	DT	A	C	α
1	0	10	7,66	2,32	-0,95	0,44	0,57
2	0	10	5,89	2,81	-0,39	-0,63	0,63
3	2	10	8,58	1,70	-1,06	0,35	0,60
4	0	10	7,13	2,78	-0,79	-0,32	0,56
5	0	10	6,63	2,69	-0,67	-0,22	0,40
6	0	10	7,32	2,30	-0,76	0,18	0,55
7	0	10	6,86	2,66	-0,61	-0,49	0,55
9	2	10	8,48	1,61	-1,05	0,87	0,57
10	1	10	8,26	1,96	-1,17	0,87	0,53
11	0	10	4,98	2,95	-0,13	-0,97	0,69
12	0	10	4,00	2,62	-0,59	-0,92	0,24
14	0	10	6,64	2,47	-0,062	-0,05	0,51
15	0	10	8,26	2,05	-1,60	2,71	0,45
16	0	10	5,37	2,97	-0,17	-0,93	0,59
17	0	10	5,10	2,49	-0,10	-0,52	0,73
18	0	10	5,00	2,44	-0,26	-0,50	0,69
19	0	10	6,83	2,54	-0,66	-0,07	0,38
20	0	10	5,11	2,62	-0,25	-0,62	0,60
21	0	10	7,85	1,99	-1,05	1,11	0,54
22	0	10	7,67	1,99	-0,86	0,55	0,69
23	0	10	7,42	2,08	-0,83	0,50	0,65
24	0	10	7,72	1,97	-0,73	0,05	0,62
25	0	10	7,21	2,25	-0,81	0,41	0,66
26	0	10	6,68	2,29	-0,65	0,15	0,66
27	0	10	6,33	2,30	-0,50	-0,04	0,71
28	0	10	6,32	2,08	-0,51	0,18	0,65
29	0	10	6,50	2,67	-0,63	-0,26	0,58
30	0	10	5,01	2,53	-0,19	-0,63	0,61
31	1	10	7,07	1,74	-1,19	1,19	0,45
32	0	10	7,13	1,93	-1,18	1,26	0,43
33	0	10	7,16	2,20	-0,79	0,43	0,67
34	0	10	6,11	2,95	-0,53	-0,70	0,23
35	0	10	6,70	2,36	-0,62	-0,12	0,66
36	0	10	7,76	2,19	-1,03	0,74	0,56
37	0	10	6,78	2,42	-0,48	-0,38	0,65
38	0	10	7,75	2,40	-1,29	1,27	0,52
39	0	10	6,50	2,46	-0,51	-0,30	0,47
41	0	10	5,79	2,58	-0,34	-0,66	0,69
42	0	10	5,90	2,42	-0,30	-0,54	0,73
43	0	10	7,30	2,21	-1,16	0,92	0,51
44	0	10	7,30	2,02	-0,92	0,67	0,46
45	0	10	7,28	1,87	-0,79	0,67	0,44
46	0	10	6,56	2,18	-0,61	-0,25	0,68
47	0	10	6,31	2,36	-0,54	-0,45	0,66

Note. Min = Minimum, Max = Maximum, Me = Mean, SD = Standard Deviation, A = Asymmetry, C = Kurtosis, α = Cronbach's Alpha.

Finally, a Pearson correlation was performed with the CCEEP and CDE (9-13) data to verify the convergent validity between the two questionnaires that measure the same factors. The results of this correlation were as follows for each factor: emotional awareness = 0.60 ($p < 0.001$), emotional regulation = 0.66 ($p < 0.001$), emotional autonomy = 0.78 ($p < 0.001$), social competence = 0.67 ($p < 0.001$), life and well-being skills = 0.75 ($p < 0.001$) and total emotional competence = 0.77 ($p < 0.001$). Therefore, the convergent validity of the CCEEP was demonstrated through significant correlations with the same factors as the CDE (9-13), presenting an acceptable level with a convergent validity coefficient greater than 0.60 (Nunnally and Bernstein, 1994).

4. Discussion and conclusions

The aim of this study was to design and validate a specific instrument for assessing the emotional skills of primary school pupils from the perspective of their families. This approach responds to the need for tools adapted to this context that allow the emotional skills of pupils to be measured, providing a complementary view to that obtained in educational settings from the assessment of the pupils themselves (self-report) or by teachers. To this end, the validity and reliability of the instrument were ensured through a two-step refinement process: expert judgement and application to a pilot sample. The results obtained in both processes reinforced the statistical and methodological soundness of the instrument.

In the expert validation, Kendall's concordance index (0.67) reflected a moderate level of agreement among the evaluators, which was statistically significant. The IVC, with an overall value of 0.88, indicated high clarity, suitability, and relevance in the items. These figures highlighted the initial quality and validity of the instrument (Roebianto et al., 2023). Regarding validation through a pilot study, initial descriptive analyses revealed an adequate distribution of the basic characteristics of the items and the overall reliability of the questionnaire, measured using Cronbach's alpha coefficient (0.96), demonstrating high internal consistency, despite specific problems detected in the emotional regulation factor. The negative correlation between items 12 and 13 and coefficients below 0.85 in this factor suggested areas for improvement. CFA supported the validity of the proposed model, with adequate fit indices (RMSEA = 0.06, TLI = 0.91, CFI = 0.93). Adaptations were made to eliminate redundant items, reducing the questionnaire to 44 items without compromising the validity of the construct. Likewise, the high composite reliability indices (between 0.87 and 0.95) consolidate its robustness (Kalkbrenner, 2023). Finally, the convergent validity of the questionnaire was demonstrated by significant correlations with the CCEEP and the CDE (9-13) (Chin and Yao, 2023), with coefficients above 0.60. In short, the CCEEP has proven to be valid and reliable for assessing emotional competencies in primary school students from the perspective of families. The adaptations made during the validation process optimized the clarity and accuracy of the questionnaire, meeting the standards established in previous psychometric research.

In relation to this study and along similar structural lines to the CCEEP, various studies have published scales or questionnaires designed to assess students' emotional competencies from the perspective of families, highlighting the relevance of this approach in educational contexts. It is remarkable the *Social and Emotional Aspects of Learning for Families Questionnaire* (SEAL-FQ) by Humphrey et al. (2010), which focuses mainly on the analysis of emotional awareness, emotional regulation and social competence.

In the Spanish-speaking context, studies such as those by Dámasio et al. (2017) and Martínez-González et al. (2021) have worked on validating instruments that include the perspective of families to assess emotional awareness and regulation, highlighting their importance in intervention programs. In general, although these questionnaires contribute to the study of emotional competencies from a family perspective, none of them fully aligns with the five dimensions proposed by the pentagonal model of emotional competencies.

Therefore, the CCEEP is presented as an innovative tool, as it is specifically designed to assess the five dimensions of the pentagonal model of emotional competencies (emotional awareness, emotional regulation, emotional autonomy, social competence, and life and well-being competencies). Thus, unlike other instruments that address only some of these dimensions, the CCEEP offers a comprehensive assessment from a family perspective, making it a significant contribution to the field of emotional competence measurement in educational contexts.

Despite the positive results, limitations have been identified. The pilot sample, although useful in this initial phase, may not be representative, suggesting that studies with larger and more diverse samples should be conducted. Furthermore, the study focuses on a single educational agent, limiting the evaluation to the family's perspective. Future research will include student self-assessment and teacher perception, allowing for a more comprehensive view in line with the 360° assessment approach (Bisquerra and López-Cassà, 2021; Gutiérrez-de-Rozas and Carpintero-Molina, 2021).

From an applied perspective, the CCEEP allows for the early identification of both strengths and difficulties in the emotional sphere of students, which facilitates the implementation of educational interventions that are more tailored to individual needs and the school context. In this sense, the inclusion of the family perspective in the assessment process helps to strengthen family involvement and consolidate collaboration between the various educational agents, a key element in the development of social-emotional learning programs (Zhu et al, 2024).

This scale also provides valid and reliable indicators that can be used to assess the effectiveness of programs and strategies aimed at emotional development in primary education. This type of evidence is key to informing pedagogical decision-making and designing educational policies that prioritize the socio-emotional well-being of students as a necessary condition for their comprehensive development and academic performance. Furthermore, the availability of the CCEEP opens up new possibilities for empirical research in the field of emotional competencies during childhood, facilitating the construction of more inclusive, equitable and evidence-based educational models.

References

- Agulló, M. J., Filella Guiu, G., García Navarro, E., López Cassà, E., and Bisquerra, R. (Coords.). (2010). *Emotional education in practice*. Horsori-ICE.
- Bar-On, R., and Parker, J. (2000). *The emotional quotient inventory. Youth Version: Technical manual*. Multi-Health System.
- Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, 18, 13-25.
- Bartoli, M., Angulo-Brunet, A., Bosque-Prous, M., Clotas, C., and Espelt, A. (2022). The Emotional Competence Assessment Questionnaire (ECAQ) for children aged from 3 to 5 years: validity and reliability evidence. *Education Sciences*, 12(7) 489. <https://doi.org/10.3390/educsci12070489>
- Bisquerra, R. (2009). *Psychopedagogy of emotions*. Síntesis.
- Bisquerra, R., and Lopez Cassà, E. (2021). Assessment in emotional education: tools and resources. *Aula Abierta*, 50(4), 757–766. <https://doi.org/10.17811/rifie.50.4.2021.757-766>
- Bisquerra, R. (2016). *10 key ideas. Emotional education*. Graó.
- Bisquerra, R., and Mateo, J. (2019). *Emotional competencies for a paradigm shift in education*. Horsori-ICE
- Bisquerra, R., and Pérez-Escoda, N. (2007). Emotional competencies. *Educación XX1: Journal of the Faculty of Education*, 10, 61–82.
- Bisquerra, R., and Chao-Rebolledo, C. (2021). Emotional education and well-being: towards evidence-based practice. *International Journal of Emotional Education and Well-being (RIEEB)*, 1(1), 9-29. <https://doi.org/10.48102/riieb.2021.1.1.4>
- Boyadis, R. E., & Sala, F. (2004). The Emotional Competence Inventory (ECI). In G. Geher (Ed.), *Measuring emotional intelligence: Common ground and controversy* (pp. 147–180). Nova Science Publishers.
- Brasseur, S., Grégoire, J., Bourdu, R., & Mikolajczak, M. (2013). The Profile of Emotional Competence (PEC): Development and validation of a self-reported measure that fits dimensions of Emotional Competence Theory. *PLoS One*, 8(5), e62635. <https://doi.org/10.1371/journal.pone.0062635>
- Byrne, B. M. (1998). *Structural equation modelling with Lisrel, Prelis and Simplis: Basic concepts, applications and programming*. Lawrence Erlbaum.
- Chin, CL., and Yao, G. (2023). Convergent Validity. In F. Maggino (Ed.), *Encyclopedia of Quality of Life and Well-Being Research*. Springer. https://doi.org/10.1007/978-3-031-17299-1_573
- Damáio, B. F., & Educação, G. S. (2017). Measuring socioemotional skills of children and adolescents: Development and validation of battery. *Trends Psychology*, 25(4), 2043-2050. <https://doi.org/10.9788/TP2017.4.24Pt>
- Elangovan, N., and Sundaravel, E. (2021). Method of preparing a document for survey instrument validation by experts. *MethodsX*, 8, 101326. <https://doi.org/10.1016/j.mex.2021.101326>
- Fernández-Berrocá, P., & Cabello, R. (2021). Emotional intelligence as the foundation of emotional education. *International Journal of Emotional Education and Well-being*, 1(1), 31–46. <https://doi.org/10.48102/riieb.2021.1.1.5>
- Froiland, J. M., Davison, M. L. (2014). Parental expectations and school relationships as contributors to adolescents' positive outcomes. *Social Psychology of Education*, 17, 1-17. <https://doi.org/10.1007/s11218-013-9237-3>
- Goleman, D. (1995). *Emotional intelligence*. Bantam Books.
- Golzar, J., Noor, S., & Tajik, O. (2022). Convenience sampling. *International Journal of Education & Language Studies*, 1(2), 72–77.
- Gutiérrez-de-Rozas, B., and Carpintero-Molina, E. (2021). Analysis of the evaluation of emotional education and motivation programmes in secondary education. *Educational Research Journal*, 39(2), 503–525. <http://dx.doi.org/10.6018/rie.442341>
- Humphrey, N., Lendrum, A., & Wigelsworth, M. (2010). *Social and emotional aspects of learning (SEAL) programme in secondary schools: National evaluation. Research Report DFE-RR049*. UK Government, Department for Education.
- Izard, C. E. (2005). The development of emotions and emotion-cognition relations. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 218–238). Guilford Press.
- Kalkbrenner, M. T. (2023). Alpha, omega, and H internal consistency reliability estimates: Reviewing these options and when to use them. *Counselling Outcome Research and Evaluation*, 14(1), 77–88. <https://doi.org/10.1080/21501378.2021.1940118>
- Kankaras, M., & Suarez-Álvarez, J. (2019). Assessment framework of the OECD study on social and emotional skills. *OECD Education Working Papers*, 207. <https://doi.org/10.1787/5007adef-en>
- Kit Ng, D. T., Wu, W., Lok Leung, J. K., Fung Chiu, T. K., & Wah Chu, S. K. (2024). Design and validation of the AI literacy questionnaire: The affective, behavioural, cognitive and ethical approach. *British Journal of Educational Technology*, 55(3), 1082-1104. <https://doi.org/10.1111/bjet.13411>
- Kline, R. B. (2011). *Principles and Practice of Structural Equation Modelling*. Guilford Press.
- López-Cassà, E., and Pérez-Escoda, N. (2009). CDE Emotional Development Questionnaire (9-13) [Conference Communication]. II International Conference on Emotional Intelligence. Santander, 16-18 February 2009.
- Martínez-González, R. A., Iglesias-García, M. T., and Pérez-Herrero, M. H. (2021). Validation of the emotional and social parenting skills scale for mothers (ECPES-M). *Social Pedagogy. Interuniversity Journal*, 37, 143–158. https://doi.org/10.7179/PSRI_2021.37.04
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396. <https://doi.org/10.1037/h0054346>
- Mayer, J. D., Salovey, P., & Caruso, D. (2002). *Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) User's manual*. MHS Assessments. National Research Council (2012). *Education for life and work: Developing transferable knowledge and skills in the 21st century*. The National Academies Press. <https://doi.org/10.17226/13398>

- Nunnally, J. C., and Bernstein, I. H. (1994). *Psychometric theory*. McGraw-Hill.
- Park, D., Tsukayama, E., Goodwin, G. P., Patrick, S., & Duckworth, A. L. (2017). A tripartite taxonomy of character: Evidence for intrapersonal, interpersonal, and intellectual competencies in children. *Contemporary Educational Psychology*, 48, 16–27. <https://doi.org/10.1016/j.cedpsych.2016.08.001>
- Pérez-Escoda, N., Alegre-Rosselló, A., & López-Cassà, È. (2021). Validation and reliability of the Adult Emotional Development Questionnaire (CDE-A35). *Educatio Siglo XXI*, 39(3), 37–60. <https://doi.org/10.6018/educatio.422081>
- Pérez-Escoda, N., and Filella, G. (2019). Emotional education for the development of emotional skills in children and adolescents. *Praxis & Saber*, 10(24), 23–44. <https://doi.org/10.19053/22160159.v10.n25.2019.8941>
- Pérez-González, J. C., Jiménez-Cantón, G., Rodríguez-Donaire, A., and Cejudo-Prado, J. (2022). Handbook for the comprehensive assessment of social and emotional learning and emotional intelligence. In N. Pérez-Escoda, and E. López-Cassà (Eds.), *Challenges for social and emotional well-being* (pp. 247–271). Wolters Kluwer.
- Petrides, K. V. (2009). Psychometric Properties of the Trait Emotional Intelligence Questionnaire (TEIQue). In C. Stough, D. H. Saklofske, and J. D. A. Parker (Eds.), *Assessing Emotional Intelligence. Theory, Research, and Applications* (pp. 85–101). Springer.
- Petrides, K. V., and Furnham, A. (2001). Trait emotional Intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality*, 15, 425–448. <https://doi.org/10.1002/per.416>
- Priego-Ojeda, M., López-Cassà, È., Pérez-Escoda, N., and Filella-Guiu, G. (2024). Construction and validation of the emotional development scale in early primary education (EDEEPI-28). *Educación XXI*, 27(2), 253–281. <https://doi.org/10.5944/educxx1.38358>
- Postigo, Á., González-Nuevo, C., García-Fernández, J., García-Cueto, E., Soto, C. J., Napolitano, C. M., Roberts, B.W., and Cuesta, M. (2024). The Behavioural, Emotional, and Social Skills Inventory: A Spanish adaptation and further validation in adult population. *Assessment*, 31(7), 1525–1547. <https://doi.org/10.1177/10731911231225197>
- Pulido-Acosta, F., and Herrera-Clavero, F. (2019). Predicting Children's Academic Performance through Emotional Intelligence. *Educational Psychology*, 25(1), 23–30. <https://doi.org/10.5093/psed2018a16>
- Roebianto, A., Savitri, S. I., Aulia, I., Suciyana, A., & Mubarakah, L. (2023). Content validity: Definition and procedure of content validation in psychological research. *TPM. Testing, Psychometrics, Methodology in Applied Psychology*, 30(1), 5–18. <https://doi.org/10.4473/TPM30.1.1>
- Rogers, C. (1961). *On becoming a person: My therapeutic technique*. Paidós.
- Rogers, P. (2024). Best practices for your confirmatory factor analysis: A JASP and lavaan tutorial. *Behaviour Research Methods*, 56(7), 6634–6654. <https://doi.org/10.3758/s13428-024-02375-7>
- Salovey, P., & Mayer, D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211. <https://doi.org/10.2190/DUGG-P24E-52WK-6CDG>
- 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 J. Pennebaker (Ed.), *Emotion, Disclosure and Health* (pp. 125–154). American Psychological Association. <https://doi.org/10.1037/10182-006>
- Sánchez-Camacho, R., and Grane, M. (2022). Emotional Intelligence Assessment Instruments in Primary Education: A Systematic Review. *Journal of Psychology and Education*, 17(1), 21–43. <https://doi.org/10.23923/rpye2022.01.214>
- Schmeiser, C. B., and Welch, C. J. (2006). Test development. In R. L. Brennan (Ed.), *Educational Measurement*. American Council on Education and Praeger Publishers.
- 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 measure of emotional intelligence. *Personality and Individual Differences*, 25(2), 167–177. [https://doi.org/10.1016/S0191-8869\(98\)00001-4](https://doi.org/10.1016/S0191-8869(98)00001-4)
- Soto, C. J., Napolitano, C. M., Sewell, M. N., Yoon, H. J., & Roberts, B. W. (2022). An integrative framework for conceptualising and assessing social, emotional, and behavioural skills: The BESSI. *Journal of Personality and Social Psychology*, 123(1), 192–222. <https://doi.org/10.1037/pspp0000401>
- Zhu, X., Dou, D., & Karadias, T. (2024). Parental influence on child social and emotional functioning. *Frontiers in Psychology*, 15, 1096359. <https://doi.org/10.3389/fpsyg.2024.1392772>