

Relationship between socioemotional skills and social cognitive processes in Primary School students: A systematic review

DOI: 10.66615/04csmq67

Odilis Sierra Viloría

<https://orcid.org/0009-0006-7425-0848>

odilissierra.est@umecit.edu.pa

Estudiante del Doctorado en ciencias de la educación con énfasis en investigación, formulación y evaluación de proyectos educativos
Universidad Metropolitana de Educación, Ciencia y Tecnología
Panama

Abstract

Keywords: *Socio-emotional competencies, social cognitive processes, Elementary School, systematic review.*

This systematic review aimed to analyze and synthesize research published during the last decade (2015-2025) on the relationship between socioemotional and sociocognitive aspects in Primary Education students. Following PRISMA guidelines, a thematic analysis was carried out to examine the scientific production published between 2015 and 2025 in the Dialnet, Scopus and ScienceDirect databases. From a total of 1,592 initial records, 21 articles were selected that met the following inclusion criteria: articles published in English or Spanish, articles in which socio-emotional and socio-cognitive aspects are related, articles that work with the Primary School child population, and articles developed in the educational context. The exclusion criteria were: articles not related to the topic, articles that consider other age groups (adolescents, adults, older people), articles that evaluate people with disabilities or mental disorders, and non-original articles. The results of this review revealed a predominance of studies carried out in Europe (mainly Spain and Italy) and a growing publication trend in the last five years (2021-2025). The most studied socioemotional variables were self-regulation and empathy, which showed significant links established through evaluation before and after pedagogical interventions and identification of statistical correlations, mostly, with sociocognitive processes such as cooperation and problem solving.

INTRODUCTION

In the current educational context, the comprehensive development of Primary Education students transcends the mere acquisition of academic knowledge, positioning socio-emotional skills and social cognitive processes as fundamental pillars for well-being and school success (Collie et. al., 2024). During the childhood stage, infants experience critical transformations in the way they understand their own emotions and those of others, as well as in the way they interact with their peers in the school environment (Carpendale et. al., 2025).

Recent literature shows a growing interest in addressing problems such as antisocial behavior in the educational context from a formative and preventive perspective. Studies carried out in countries with vulnerable contexts, such as Colombia and Mexico, suggest that the promotion of socio-emotional competencies and the integration of these in teaching planning are key strategies to mitigate violence and strengthen prosocial behaviors in schools (Munevar et. al., 2019; Santoyo-Reyes, 2023; Villa-Gómez et. al., 2016). However, despite the existence of pedagogical interventions and focal studies on specific variables such as empathy, self-regulation or cooperation, there is a need to systematize the available evidence to understand in greater depth how socio-emotional skills are intrinsically related to social cognitive processes.

The present systematic review arises with the objective of analyzing and synthesizing the research published during the last decade (2015-2025) on the relationship between socioemotional and sociocognitive aspects in Primary Education students. Through a thorough search in recognized databases such as Dialnet, Scopus and ScienceDirect, and following PRISMA guidelines, studies have been identified that link socio-emotional aspects – predominantly self-regulation and empathy – with socio-cognitive processes such as cooperation, problem solving and communication.

This review not only aims to present the current state of the matter, but also to identify the main methodologies, instruments and findings that characterize the field of study around the world. By integrating these findings, this article seeks to offer a framework that guides future educational interventions and lines of research, highlighting the importance of a holistic approach that articulates the emotional and the cognitive to promote harmonious school coexistence and the prosocial development of childhood.

MATERIALS AND METHODS

A systematic review was conducted with thematic analysis allowing synthesis of mixed studies following the Preferred Reporting Items for Systematic Reviews and PRISMA meta-analysis guidelines. The search strategy was developed in the Dialnet, Scopus and ScienceDirect databases with restriction on the year of publication from 2015 to 2025, with restriction on English or Spanish language and with free access articles.

The search strategy was conducted in November 2025 and included the following keywords: socioemotional competencies AND social cognitive processes AND (primary education OR children). The search strategy was adapted to the specific language of each database.

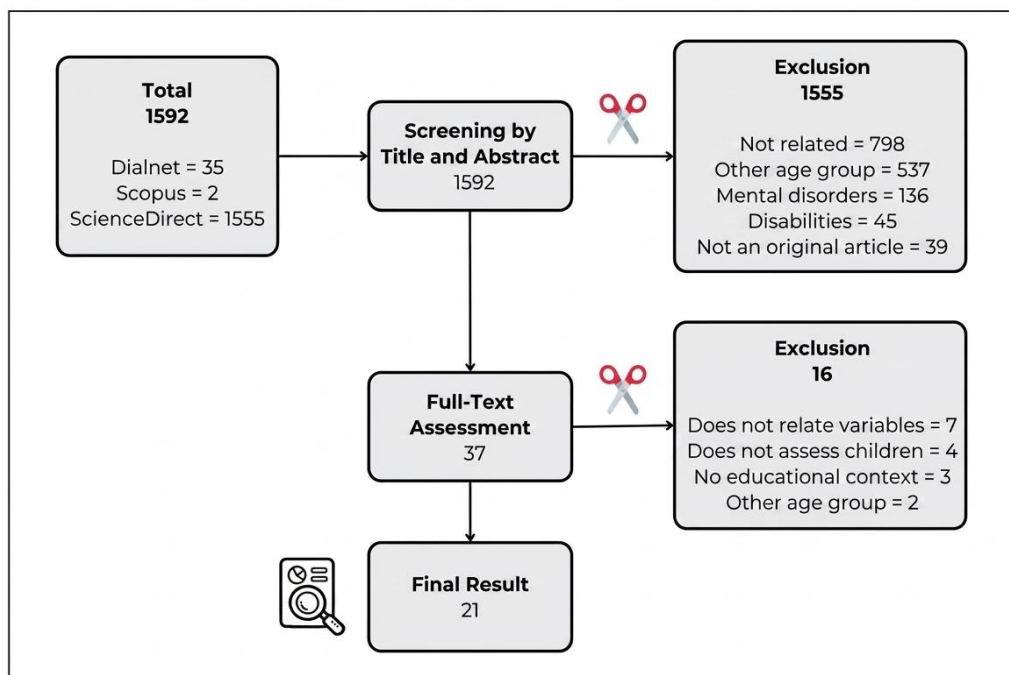
Study selection criteria

All research articles published in English or Spanish that consider the evaluation and

relationship between variables associated with socioemotional competencies and social cognitive processes in children, specifically, in the school context, of Primary School students, were included. A total of 1592 articles were retrieved for review. Then, the study selection process was carried out independently according to PRISMA guidelines (Page et al., 2021), following two phases: title and abstract review and full-text review. To select the articles, the following inclusion and exclusion criteria that appear in Figure 1 were taken into account. The inclusion criteria were: articles that relate socioemotional and sociocognitive aspects, population of primary school students, and articles developed in the educational context. The exclusion criteria were: articles not related to the topic, articles that consider other age groups (adolescents, adults, older people), articles that evaluate people with disabilities or mental disorders, and non-original articles.

Figure 1.

Inclusion and exclusion criteria for the review of articles.



Study coding process

The author synthesized the data from all the studies included in a matrix to extract the main characteristics of each article: country where the study was developed, year of publication, reference, characteristics of the sample (size, gender distribution and ages), socioemotional and sociocognitive aspects considered, methodology implemented and main findings.

RESULTS

A total of 21 research articles were collected that met the inclusion criteria and their general characteristics and distribution are described in Table 1. The highest percentage of studies were developed in European countries, mostly in Spain, Italy, Switzerland and the United Kingdom, in addition to Chile. The other studies were carried out in Australia, Colombia, the Netherlands, the United States, Germany, Romania, China and Canada. On the other hand, the vast majority of the articles considered (71.4% of the

total selected articles) were published in the last 5 years, that is, between 2021 and 2025. Likewise, the vast majority of the articles were published in English. Also, more than half of the selected studies were developed with samples of less than 500 individuals, a size more related to specific Primary School institutions.

Now, regarding the variables considered, Self-regulation and Empathy were named 58% of the times among the studies selected as socio-emotional aspects evaluated. In a lower proportion, Self-esteem, Self-awareness, Autonomy, Self-acceptance, Self-concept, Honesty, Motivation, Coping and emotional intelligence were considered. Meanwhile, among the sociocognitive aspects evaluated, the most named were Cooperation and Problem Solving, followed by Acceptance and Communication in equal measure, and, to a lesser extent, Attention, Anxiety, Aggression, Memory, Tolerance, Responsibility, Antisocial Behavior, Asocial Behavior, Victimization, Sense of Belonging, Teamwork, Understanding, Sympathy, Attachment, Expression, Verbalization, Consideration and Shyness.

Table 1.

General characteristics and distribution of the selected studies.

Characteristics	Frequency	Percentage of selected articles (%)
Country		
Spain	4	19,1
Italy	3	14,3
Swiss	2	9,5
United Kingdom	2	9,5
Chili	2	9,5
Australia	1	4,8
Colombia	1	4,8
Netherlands	1	4,8
USA	1	4,8
Germany	1	4,8
Romania	1	4,8
China	1	4,8
Canada	1	4,8
Year of publication		
2015 - 2020	6	28,6
2021 - 2025	15	71,4
Language		
English	15	71,4
Spanish	6	28,6
Sample size		
28 - 500	11	52,4
501 - 1000	3	14,3
>1000	7	33,3
Socio-emotional aspects		
Self-regulation	11	30,5
Empathy	10	27,7
Self-esteem	4	11,1
Self-awareness	3	8,3
Autonomy	2	5,5
Self-acceptance	1	2,7

Self-concept	1	2,7
Honesty	1	2,7
Motivation	1	2,7
Coping	1	2,7
emotional intelligence	1	2,7
Sociocognitive aspects		
Cooperation	5	11,6
Troubleshooting	5	11,6
Acceptance	4	9,3
Communication	4	9,3
Attention	3	6,9
Anxiety	3	6,9
Assault	3	6,9
Memory	2	4,6
Tolerance	1	2,3
Responsibility	1	2,3
antisocial behavior	1	2,3
asocial behavior	1	2,3
Victimization	1	2,3
Sense of belonging	1	2,3
Teamwork	1	2,3
Understanding	1	2,3
Sympathy	1	2,3
Attachment	1	2,3
Expression	1	2,3
Verbalization	1	2,3
Consideration	1	2,3
Shyness	1	2,3

Source: Soledad Police School, institutional presentation, 2025.

The particular description of each selected article is presented below in Table 2.

Table 2.

No.	Country	Year	Reference	Sample			Socio-emotional aspects	Social aspects	Methods	Main findings
No.	Country	Year	Reference	Size	Gender	Age	Socio-emotional aspects	Social aspects	Methods	Main findings
1	Chile	2023	Vergara, I., & Figueroa, I. (2023). Cultivating empathy in the second grade classroom: An	36	36.1 %F 63.9 %M	7 to 9 years	Empathy	Cooperation	An intervention aimed at empathy with a cooperative approach was carried out. Teacher	There was development in the participants' empathy and greater prosocial

			interactional-cooperative proposal. Pedagogical Experience.						perception was taken into account for a qualitative analysis.	behavior.
2	Colombia	2024	Rincón, J., & López-Rodríguez, N. (2024). Competencias socioemocionales y procesos cognitivos de niños migrantes. <i>Educación</i> , 60(1). https://doi.org/10.5565/rev/educar.1898	104	Not specified	Self-regulation	Sense of belonging Attention Memory Tolerance	A Likert scale, pedagogical diaries, interviews, workshops were used. phenomenological research, mixed and interpretive, carried out through interviews, participant observation, social cartography, field diary and questionnaires.	The migration process affects the development of cognitive processes and socio-emotional skills. The Uniting Borders strategy improves the previous variables, which, in turn, promotes the development of perception, attention, memory and peer interactions.	
3	United Kingdom	2016	Humphrey, N., Barlow, A., Wigelsworth, M., Lendrum, A., Pert, K., Joyce, C., Stephens, E., Wo, L., Squires, G., Woods, K., Calam, R., & Turner, A. (2016). A cluster randomized controlled trial of the Promoting	456	48.8 %F 51.2 %M	7 to 9 years	Empathy Self-regulation	Communication Cooperation Responsibility	A pedagogical intervention was carried out with the Promoting Alternative Thinking Strategies PATHS curriculum that works to improve students' socio-emotional competence and mental health.	The PATHS curriculum improves students' social-emotional competencies and improves prosocial behavior.

			Alternative Thinking Strategies (PATHS) curriculum. Journal Of School Psychology, 58. http://dx.doi.org/10.1016/j.jsp.2016.07.002						Quantitative analysis of the results was carried out.	
4	United Kingdom	2019	Piotrowska, P., Stride, C., Maughan, B., & Rowe, R. (2019). Mechanisms underlying social gradients in child and adolescent antisocial behaviour. <i>SSM - Population Health</i> , 7. https://doi.org/10.1016/j.ssmph.2019.100353	7.97	Not specified	5 to 16 years	Self-regulation Empathy	antisocial behavior Aggression	Mixed analysis was implemented with data retrieved by parent report, information was collected on family income, parents' mental health with the General Health Questionnaire GHQ-12, the General Functioning Scale of the McMaster Family Assessment Device (FAD) and the ACORN classification scheme for the social context of the participants.	Antisocial behavior is mediated by dysfunctional families, stressful events, literacy difficulties, and housing disadvantages.
5	Spain	2017	Corredor, G., Justicia-Arráez, A., Romero-López, M., & Benavides-Nieto, A. (2017). Longitudinal study of the Effects of social competence on Behavioral problems. <i>Procedia - Social And Behavioral</i>	343	51.3 %F 48.7 %M	3 to 7 years	Self-regulation	Cooperation Troubles hooting	Annual measurements were made during the time of the quasi-experimental study, mediated by an intervention.	There is a positive relationship between social skills and behavioral problems.

			Sciences, 237. https://doi.org/10.1016/j.sbspro.2017.02.093							
6	Romania	2023	Prodan, N., Pan, X., Visu-Petra, L., Szekely-Copîndean, R., & Tîrnăanu, A. Asescu, A. (2023). Socio-cognitive correlates of primary school children's deceptive behavior toward peers in competitive settings. <i>Acta Psychologica</i> , 240. https://doi.org/10.1016/j.actpsy.2023.104019	75	54.7 %F 45.3 %M	6 to 8 years	Honesty	Understanding Memory	Students participated in games in which they were tested on their ability to cheat. It was an experimental research with qualitative analysis.	Participants' ability to cheat was predicted by their sociocognitive abilities. Students were more likely to deceive unfamiliar people in the game.
7	Italy	2025	Vecchio, G., Pastorelli, C., Zava, F., Zuffiano, A., Luengo, B., Gerbino, M., & Vittorio, G. (2025). Enhancing Prosocial Behaviors, Reducing Aggression: Effects of CEPIDEAS Junior in Primary school. <i>Journal Of Applied Developmental Psychology</i> , 99. https://doi.org/10.1016/j.appdev.2025.101835	858	44.4 %F 55.6 %M	7 to 12 years	Empathy	Communication Cooperation	An intervention in prosocial behavior was carried out with before and after evaluation. The Prosocial Behavior scale and Aggressive Behavior scale were implemented.	Promoting prosocial behavior and social-emotional skills at school improves students' psychological well-being and academic performance.
8	Italy	2020	Vecchio, G., Pallini, S., Zava, F., & Zuffiano, A. (2020). The effects of the CEPIDEAS Junior program on prosocial behaviors and aggression in primary school children. <i>Journal of Applied Developmental Psychology</i> , 99. https://doi.org/10.1016/j.appdev.2020.101835	10	45.1 %F	7 to 12 years	Empathy Self-Sympathy	Sympathy	Information was collected from	Emotion regulation

		2 3	F., Cattelino, E., & Zuffiano, A. (2023). Children's Prosocial and Aggressive Behaviors: The role of emotion regulation and Sympathy. Journal Of Applied Developmental Psychology, 89. https://doi.org/10.1016/j.appdev.2023.101598	4 5	54.9 %M	10 ye ars	awaren ess Self- regulati on	Commun ication Aggressi on	students with questionnaires such as the Emotion Regulation Checklist, teacher perception, and other scales to measure prosocial behavior and aggression. Then the analysis was quantitative.	was positively associated with agreeableness and prosocial behavior.
9	Netherlands	2 0 2 2	Mooij, B., Fekkes, M., Van Den Akker, A., Vlieg, L., Scholte, R., & Overbeek, G. (2022). Does affirming children's autonomy and prosocial intentions help? A Microtrial into intervention component effects to improve psychosocial behavior. Journal Of School Psychology, 90. https://doi.org/10.1016/j.jsp.2021.11.003	7 7 9	47% F 53% M	8 to 14 ye ars	Empath y Self- regulati on Self- esteem Autono my	Troubles hooting Cooperati on Assertive communi cation	Evaluation of the participants was carried out before and after an intervention in socio-emotional competencies with special emphasis on autonomy. Topper questionnaire, Social Skills Improvement System-Rating Scales, Rosenberg self-esteem scale, general self-sufficiency scale, Self-perception Scale for Children were used.	Emphasizin g student autonomy through the intervention improved their behavior.
1 0	Germany	2 0 2 5	Klemp, G., Urton, K., Krull, J., Bosch, J., & Wilbert, J. (2025). What does well-being at school mean to primary school students?	4 2	52.4 %F 47.6 %M	10 to 12 ye ars	Autono my	Attachme nt	Interviews were conducted with focus groups of students about their perceptions of well-being. The results were then quantitatively	Students associate well-being at school with attachment to friends, rather than autonomy.

			Children's understanding of basic psychological needs. International Journal Of Educational Research Open, 8. https://doi.org/10.1016/j.ijedro.2025.100442					analyzed.		
1 1	USA	2 0 2 5	Jia, Z., Willner, C., Hoffmann, J., Bailey, C., Mack, V., Brackett, M., & Cipriano, C. (2025). Development of the Student Emotion Regulation Assessment (SERA) for children and adolescents in grades 1–12. Social And Emotional Learning: Research, Practice, And Policy, 5. https://doi.org/10.1016/j.sel.2025.100104	8. 0 8 3	Not speci fied	6 to 17 ye ars	Self- regulati on Self- accepta nce	Troubles hooting	The Student Emotion Regulation Assessment instrument is evaluated with a qualitative analysis based on the information recovered from 8083 students and 114 teachers.	Training in emotional regulation favors cognitive and emotional experiences in the school environment .
1 2	Italy	2 0 2 4	Mortari, L., Valbusa, F., & Bombieri, R. (2024). “The Nous Project”: a SEL program to promote emotional self-understanding in elementary school children. Social And Emotional	5 7	45.6 %F 54.4 %M	9 to 10 ye ars	not specifie d	Expressio n Verbaliza tion	Students recorded and described their emotions in an emotional diary that was then analyzed qualitatively.	The participants learned to identify and describe their emotions and, in turn, there were improvements in the school environment

			Learning: Research, Practice, And Policy, 4. https://doi.org/10.1016/j.sel.2024.100060							
1 3	Swiss	2 0 2 3	Brauninger, I., & Roosli, P. (2023). Promoting social-emotional skills and reducing behavioural problems in children through group psychomotor therapy: a randomized controlled trial. <i>The Arts In Psychotherapy</i> , 85. https://doi.org/10.1016/j.aip.2023.102051	2 8	28.6 %F 71.4 %M	7 ye ars on av era ge	Self-regulation emotional intelligence	Attention Anxiety	An intervention was carried out to strengthen socio-emotional skills. It was evaluated before and after the intervention with the IDS-2 SEC test, in addition to the CBCL/6-18 R. The results were analyzed quantitatively.	The intervention in socio-emotional skills carried out improved the social skills of the participants.
1 4	China	2 0 2 5	Ding, X., McVarnock, A., Li, M., Coplan, R., Ooi, L., Yu, J., & Sang, B. (2025). Motivations for social withdrawal and socio-emotional functioning among urban/suburban Chinese children. <i>Journal Of Applied Developmental Psychology</i> , 98. https://doi.org/10.1016/j.appdev.2025.101787	1. 5 8 5	44.5 %F 55.5 %M	11 ye ars on av era ge	Self-esteem	Shyness asocial behaviors	The Children's Shyness Questionnaire, the Child Social Preference Questionnaire and the Social Avoidance Scale were used. The Children's Loneliness and Social Dissatisfaction Scale was also used. The evaluation of the students among themselves and that of the teachers was taken into account. The analysis was	Social avoidance is strongly related to socioemotional difficulties, even more so than shyness and other asocial behaviors.

								quantitative.		
15	Australia	2025	Carpendale, E., Green, M., Dix, K., Tzoumakis, S., Williams, K., White, S., Carr, V., & Laurens, K. (2025). An exploratory evaluation of universal social-emotional learning programs delivered during elementary school to Australian students. <i>Journal Of School Psychology</i> , 110. https://doi.org/10.1016/j.jsp.2025.101447	184	49.7 %F 50.3 %M	6 to 12 years	Self-awareness Self-regulation	Consideration	The MCS-SEL, SSPESH questionnaire was used, and sociodemographic information was collected from the participants who were part of the interventions. Quantitative analysis was carried out with the results.	Students who received education in socio-emotional competencies achieved better development of them compared to those who did not receive such education.
16	Swiss	2022	Spitz, A., Aebi, M., Winkler, C., Walitza, S., & Steinhausen, H. (2022). Stability and change in a predictive model of emotional and behavioural problems from early adolescence to middle adulthood. <i>Journal Of Psychiatric Research</i> , 151. https://doi.org/10.1016/j.jpsychires.2022.03.029	194	58.5 %F 41.5 %M	6 to 17 years	Self-esteem Coping	Attention Aggression Anxiety Troubles hooting	The Rosenberg self-esteem scale, the Zurich Life Event List, the Coping Across Situations questionnaire and Youth Self-Report were implemented. Statistical quantitative analysis was performed with the results.	The impact of negative life events, self-esteem, and coping techniques predicted the emergence of emotional and behavioral problems in participants.
17	Spain	2023	Balluerka, N., Aliri, J., Goñi-Balentiaga, O., & Gorostiaga, A. (2023). Association between bullying	550	56.5 %F 43.5 %M	10 to 17 years	Self-esteem	Victimization Anxiety	The participants answered a questionnaire on sociodemographic information, a test on depression and	Bullying victimization contributes to the development of

			<p>victimization, anxiety and depression in Childhood and Adolescence: The Mediating effect of self-esteem. Revista de Psicodidáctica, 28.</p> <p>https://doi.org/10.1016/j.psicod.2022.10.001</p>					<p>anxiety (CECAD), the Rosenberg self-esteem scale and a questionnaire on victimization. Statistical analysis of the results was performed.</p>	<p>symptoms of anxiety and depression. The relationship between the variables is mediated by self-esteem.</p>	
18	Chili	2021	<p>Lagos, N., & Sandoval, I. (2021). Evaluación de la efectividad del Programa HAPPY 8-12 a partir de la medición de competencias socioemocionales en estudiantes de educación primaria. Educación, 30(59).</p> <p>http://www.scielo.org.pe/scielo.php?script=sci_arttext&pid=S1019-94032021000200113&lang=es</p>	197	48.7 %F 51.3 %M	8 to 12 years	<p>Self-awareness Emotional self-regulation Empathy Motivation</p>	<p>Problem solving Teamwork</p>	<p>A quasi-experimental study was carried out with evaluation before and after a pedagogical intervention. To measure emotional competencies, the Socioemotional Competencies Scale was used. The data were analyzed quantitatively.</p>	<p>The Happy 8-12 program works to improve socio-emotional skills and prosocial behavior.</p>
19	Canada	2015	<p>Schonert, K., Overle, E., Stewart, M., Abbott, D., Oberlander, T., & Diamont, A. (2015). Mejora del desarrollo cognitivo y socioemocional mediante un programa escolar basado en la atención plena</p>	99	not specified	9 to 11 years	<p>Empathy Self-concept Self-regulation</p>	<p>Acceptance</p>	<p>A mindfulness-based MindUp intervention was used and five sources of measurement were used before and after the intervention: 1) Behavioral assessments, 2- Biological assessments, 3- Children's self-</p>	<p>Students who received MindUP improved more in cognitive control and stress physiology, reported greater development of socio-</p>

			fácil de administrar para niños de primaria: ensayo controlado aleatorio. Universidad de Columbia Británica. http://dx.doi.org/101037/a0038454.sup						reports, 4-Peer nominations, 5) Academic grades. The results were analyzed quantitatively.	emotional competencies, and improved their behavior with prosocial behaviors.
20	Spain	2015	Rodríguez-Ledo, C., Orejudo Hernández, S., Celma Pastor, L., & Cardoso Moreno, M. (2019). Mejora de las competencias socioemocionales en el aula, con jóvenes de educación secundaria, mediante el programa SEA. Universidad de Zaragoza. https://doi.org/10.25115/ejrep.v16i46.2241	127	not specified	4 to 8 years	Empathy	Acceptance	The research used a quasi-experimental design with evaluation before and after a pedagogical intervention. Instruments designed to separately measure the cognitive and affective components of both theory of mind and empathy were used. To measure social acceptance, a sociometric technique was used.	Social cognition and empathy skills were significant predictors of social acceptance.
21	Spain	2018	Recio, M., & Barajas, C. (2018). Teoría de la mente y empatía. Repercusiones en la aceptación por los iguales en niños y niñas de educación infantil, primaria y secundaria. Universidad de Málaga. https://doi.org/10	127	not specified	4 to 8 years	Empathy	Acceptance	Psychometric instruments designed to evaluate the four differential components of the central variables were used: cognitive theory of mind, affective theory of mind, cognitive empathy and affective	Both theory of mind and empathy are significant predictors of peer acceptance, although their predictive weight may vary depending on age.

		.5231/psy.writ.2 018.0105						empathy. The data were analyzed quantitatively.	
--	--	------------------------------	--	--	--	--	--	----------------------------------------------------------	--

Regarding the methodologies described, among the selected studies, 9 considered pedagogical interventions in their research and pre- and post-test moments to evaluate the effects of the interventions, which were mainly focused on strengthening socio-emotional competencies, with emphasis on autonomy, mental health, empathy, among others. The measurement instruments used in the 21 investigations were Strengths and Difficulties Questionnaire, Social and Emotional Competence Change Index, Development and Well-Being Assessment (DAWBA), General Health Questionnaire (GHQ-12), General Functioning Scale of the McMaster Family Assessment Device (FAD), ACORN classification scheme, Observation Scale in Early Childhood Education, School, Behavior Social Scale-2 (SBSS-2), Topper questionnaire, Social Skills Improvement System-Rating Scales (SISS), Self-perception Scale for Children, Student Emotion Regulation Assessment, Children's Shyness Questionnaire, Child Social Preference Questionnaire, Social Avoidance Scale, Children's Loneliness and Social Dissatisfaction Scale, MCS-SEL questionnaire, Rosenberg self-esteem scale, the Zurich Life Event List, and other unspecified scales of Prosocial and Aggressive behavior, scales of self-sufficiency, emotional regulation, self-sufficiency, victimization, among others. Likewise, among the methodologies applied, the mediation of games, focus groups, emotional diaries, interviews with teachers and parents, among others, were recorded.

In all the results, the authors managed to establish relationships between socio-emotional and socio-cognitive aspects through quasi-experimental research designs, mostly involving pedagogical interventions to strengthen socio-emotional competencies and the application of tests before and after (Brauninger and Roosli, 2023; Carpendale et. al., 2025; Humphrey et. al., 2016; Jia et. al., 2025; Lagos and Sandoval, 2021; In second place in prevalence are studies with quantitative analysis and the establishment of correlations of information collected from interviews, evaluations, reports from teachers and peers, among other sources (Corredor et. al., 2017; Ding et. al., 2025; Recio and Barajas, 2018; Rodríguez-Ledo et. al., 2019; Vecchio et. al., 2023). Additionally, two studies with experimental design and qualitative analysis of results were found (Mortari et. al., 2024; Prodan et. al., 2023).

On the other hand, some studies reported how the interaction between socio-emotional and socio-cognitive aspects manages to predict or affect a third element such as academic performance, psychological well-being, the ability to lie, among others (Prodan et. al., 2023; Vecchio et. al., 2025). Similarly, a third element, such as negative life events or bullying, affect the expression of socioemotional and sociocognitive competencies in those involved with the appearance of behavioral problems, symptoms of anxiety, depression, among others (Balluerka et. al., 2023; Spitz et. al., 2022).

Also, more specific studies were included where the relationship between the study variables was mediated by particularities of the sample, such as in Rincón and López-Rodríguez (2024) where it was stated that the migratory history of the students negatively affected the development of cognitive processes and socio-emotional competencies, which sought to be corrected with the Uniting Borders strategy and promoted quality interactions between equals. Also, in Piotrowska et. to the. (2019)

concluded that antisocial behavior is mediated by dysfunctional families that lack training in socio-emotional competencies. Finally, in Klemp et. to the. (2025) the objective was to fully assess the children's perception of their well-being, for which they exalted the importance of social attachment and autonomy.

DISCUSSION

The objective of this systematic review was to compile the findings regarding the relationship between socio-emotional competencies and social cognitive processes in Primary School students registered during the last 10 years (2015-2025) in research articles. The findings confirm that variables such as self-regulation and empathy do not operate in isolation, but act as fundamental precursors for the development of complex sociocognitive processes, such as problem solving and prosocial behavior. In this systematic review, a total of 21 articles were found that met the inclusion criteria. Most of this research was published in the last 5 years (2020-2025), was carried out in European countries and is written in English. Also, a good part of the studies were based on evaluating the effectiveness of pedagogical interventions focused on strengthening socio-emotional competencies in participating boys and girls. However, there are still specific educational contexts in which the interventions intended to be carried out will have to be adapted or precisely designed. In the Colombian context, for example, interventions must consider the reality of many childhoods mediated by armed conflict, war, forced displacement, among other factors not considered in the studies collected. Studies such as that of Domínguez-de la Ossa et al. (2024) in Colombia, tend to link the strengthening of socio-emotional skills directly with the urgency of mitigating school violence and bullying in vulnerable environments. This suggests that, while in Europe interest may focus on the curricular development of competence, in Latin America it responds to a need for social intervention and construction of citizenship.

On the other hand, it is striking that many investigations were excluded because their emphasis was on other age groups such as adolescents, parents, caregivers and teachers, when boys and girls are available as a direct source of information. When you want to study the child population, it is important to take their voices and opinions into account because boys and girls want to be heard and participate in their own investigations. However, researchers are also required to be previously instructed in appropriate ways to approach this specific population (Franchino-Olsen et al., 2025). Furthermore, Primary School students are in an extremely crucial stage for cognitive and social development, which reinforces the invitation to researchers and teachers to continue developing pedagogical interventions focused on childhood and for training in socio-emotional and socio-cognitive competencies as a pillar for student well-being with a view to avoiding negative behaviors in future stages of life. In the future, consideration could be given to coupling this type of interventions as educational requirements in vulnerable contexts, for example.

Another relevant aspect among the results of this review was the collection of instruments for measuring socioemotional and sociocognitive competencies that have been used in recent years. Regarding this, Sánchez-Camacho and Grane (2022) explain that the first step to be able to adapt a questionnaire is to understand the theoretical model on which it is based, so the selection of instruments also requires research that considers the study objectives and the context of application, among other aspects.

Finally, the increasing trend of publications between 2021 and 2025 indicates that the field is expanding, likely driven by post-pandemic interest in school mental health. However, heterogeneity in measurement instruments poses a challenge to the generalization of results. Future research should aim to standardize these instruments and expand the evidence in Global South contexts to avoid cultural biases in the understanding of socioemotional and sociocognitive development.

Among the limitations found in this review is the possible omission of other studies outside the databases considered or in languages other than Spanish and English, in addition to research that may have considered specific socioemotional and sociocognitive aspects and that did not appear in the search carried out.

CONCLUSIONS

It can be concluded that in general, the strengthening of socio-emotional competencies in Primary Education students is directly related to the improvement of the prosocial behavior of minors. It is evident that interest in studying the relationship between socio-emotional skills and social cognitive processes of boys and girls has grown in the last five years. The studies considered in this review reaffirmed positive relationships between the study variables, sometimes mediated by third aspects such as school performance, the nature of families or parenting patterns, the vulnerability of infants, among others. The strong positive effect of pedagogical interventions focused on strengthening socio-emotional competencies is highlighted in the relationship between socio-emotional competencies and students' prosocial behavior. The findings of this systematic review encourage Primary Schools to continue investing in strengthening social competencies in boys and girls to positively impact their cognitive processes and, in turn, promote well-being in the classroom.

REFERENCES

- Balluerka, N., Aliri, J., Goñi-Balentziaga, O., & Gorostiaga, A. (2023). Association between bullying victimization, anxiety and depression in Childhood and Adolescence: The Mediating effect of self-esteem. *Revista de Psicodidáctica*, 28. <https://doi.org/10.1016/j.psicod.2022.10.001>
- Brauninger, I., & Roosli, P. (2023). Promoting social-emotional skills and reducing behavioural problems in children through group psychomotor therapy: a randomized controlled trial. *The Arts In Psychotherapy*, 85. <https://doi.org/10.1016/j.aip.2023.102051>
- Carpendale, E., Green, M., Dix, K., Tzoumakis, S., Williams, K., White, S., Carr, V., & Laurens, K. (2025). An exploratory evaluation of universal social-emotional learning programs delivered during elementary school to Australian students. *Journal Of School Psychology*, 110. <https://doi.org/10.1016/j.jsp.2025.101447>
- Collie, R., Martin, A., Renshaw, L., & Caldecott-Davis, K. (2024). Students' perceived social-emotional competence: the role of autonomy-support and links with well-being, social-emotional skills, and behaviors. *Learning And Instruction*, 90. <https://doi.org/10.1016/j.learninstruc.2023.101866>
- Corredor, G., Justicia-Arráez, A., Romero-López, M., & Benavides-Nieto, A. (2017). Longitudinal study of the Effects of social competence on Behavioral problems. *Procedia - Social And Behavioral Sciences*, 237. <https://doi.org/10.1016/j.sbspro.2017.02.093>
- Ding, X., McVarnock, A., Li, M., Coplan, R., Ooi, L., Yu, J., & Sang, B. (2025).

- Motivations for social withdrawal and socio-emotional functioning among urban/suburban Chinese children. *Journal Of Applied Developmental Psychology*, 98. <https://doi.org/10.1016/j.appdev.2025.101787>
- Domínguez-de la Ossa, E., Vázquez-Miraz, P., Fortich-Pérez, D., & Campo-Landines, K. (2024). Competencias ciudadanas contra el acoso escolar en Cartagena, Colombia. *Revista Electrónica Educare*, 28(3). https://www.scielo.sa.cr/scielo.php?script=sci_arttext&pid=S1409-42582024000300148&lang=es
- Franchino-Olsen, H., Maluleke, P., Woollett, N., Christofides, N., Thurston, C., & Meinck, F. (2025). “They should ask me so that they can help me”: Patterns of young children’s expressed feelings and beliefs when interviewed about violence and difficult experiences. *Child Abuse & Neglect*, 162. <https://doi.org/10.1016/j.chiabu.2024.106932>
- Humphrey, N., Barlow, A., Wigelsworth, M., Lendrum, A., Pert, K., Joyce, C., Stephens, E., Wo, L., Squires, G., Woods, K., Calam, R., & Turner, A. (2016). A cluster randomized controlled trial of the Promoting Alternative Thinking Strategies (PATHS) curriculum. *Journal Of School Psychology*, 58. <http://dx.doi.org/10.1016/j.jsp.2016.07.002>
- Jia, Z., Willner, C., Hoffmann, J., Bailey, C., Mack, V., Brackett, M., & Cipriano, C. (2025). Development of the Student Emotion Regulation Assessment (SERA) for children and adolescents in grades 1–12. *Social And Emotional Learning: Research, Practice, And Policy*, 5. <https://doi.org/10.1016/j.sel.2025.100104>
- Klemp, G., Urton, K., Krull, J., Bosch, J., & Wilbert, J. (2025). What does well-being at school mean to primary school students? Children’s understanding of basic psychological needs. *International Journal Of Educational Research Open*, 8. <https://doi.org/10.1016/j.ijedro.2025.100442>
- Lagos, N., & Sandoval, I. (2021). Evaluación de la efectividad del Programa HAPPY 8-12 a partir de la medición de competencias socioemocionales en estudiantes de educación primaria. *Educación*, 30(59). http://www.scielo.org.pe/scielo.php?script=sci_arttext&pid=S1019-94032021000200113&lang=es
- Mooij, B., Fekkes, M., Van Den Akker, A., Vliek, L., Scholte, R., & Overbeek, G. (2022). Does affirming children’s autonomy and prosocial intentions help? A Microtrial into intervention component effects to improve psychosocial behavior. *Journal Of School Psychology*, 90. <https://doi.org/10.1016/j.jsp.2021.11.003>
- Mortari, L., Valbusa, F., & Bombieri, R. (2024). “The Nous Project”: a SEL program to promote emotional self-understanding in elementary school children. *Social And Emotional Learning: Research, Practice, And Policy*, 4. <https://doi.org/10.1016/j.sel.2024.100060>
- Munevar, S., Silva, A., & Sarmiento, J. (2019). Exposición al conflicto armado y logro académico en Colombia. *Desarrollo y Sociedad*, 83. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0120-35842019000200013&lang=pt
- Page, M., McKenzie, J., Bossuyt, P., Boutron, I., Hoffmann, T., Mulrow, C., Shamseer, L., Tetzlaff, J., Akl, E., Brennan, S., Chou, R., Glanville, J., Grimshaw, J., Hrobjartsson, A., Lalu, M., Li, T., Loder, E., Mayo-Wilson, E., McDonald, S., . . . Moher, D. (2021). Declaración PRISMA 2020: una guía actualizada para la publicación de revisiones sistemáticas. *Revista Española de Cardiología*, 79(9). <https://doi.org/10.1016/j.recesp.2021.06.016>
- Piotrowska, P., Stride, C., Maughan, B., & Rowe, R. (2019). Mechanisms underlying social gradients in child and adolescent antisocial behaviour. *SSM - Population*

- Health, 7. <https://doi.org/10.1016/j.ssmph.2019.100353>
- Prodan, N., Pan, X., Visu-Petra, L., Szekely-Copîndean, R., & T^ˆ An^ˆ Asescu, A. (2023). Socio-cognitive correlates of primary school children's deceptive behavior toward peers in competitive settings. *Acta Psychologica*, 240. <https://doi.org/10.1016/j.actpsy.2023.104019>
- Recio, M., & Barajas, C. (2018). Teoría de la mente y empatía. Repercusiones en la aceptación por los iguales en niños y niñas de educación infantil, primaria y secundaria Universidad de Málaga. <https://doi.org/10.5231/psy.writ.2018.0105>
- Rincón, J., & López-Rodríguez, N. (2024). Competencias socioemocionales y procesos cognitivos de niños migrantes. *Educación*, 60(1). <https://doi.org/10.5565/rev/educar.1898>
- Rodríguez-Ledo, C., Orejudo Hernández, S., Celma Pastor, L., & Cardoso Moreno, M. (2019). Mejora de las competencias socioemocionales en el aula, con jóvenes de educación secundaria, mediante el programa SEA Universidad de Zaragoza. <https://doi.org/10.25115/ejrep.v16i46.2241>
- Sánchez-Camacho, R., & Grane, M. (2022). Instrumentos de evaluación de inteligencia emocional en educación primaria: una revisión sistemática. *Revista de Psicología y Educación*, 17(1). <https://doi.org/10.23923/rpye2022.01.214>
- Santoyo-Reyes, L. (2023). Implicaciones emocionales del duelo infantil sobre los procesos de enseñanza-aprendizaje. *Revista de Investigación y Evaluación Educativa*, 10(2). <https://revie.gob.do/index.php/revie/article/view/158/317>
- Schonert, K., Overle, E., Stewart, M., Abbott, D., Oberlander, T., & Diamont, A. (2015). Mejora del desarrollo cognitivo y socioemocional mediante un programa escolar basado en la atención plena fácil de administrar para niños de primaria: ensayo controlado aleatorio Universidad de Columbia Británica. <http://dx.doi.org/101037/a0038454.sup>
- Spitz, A., Aebi, M., Winkler, C., Walitza, S., & Steinhausen, H. (2022). Stability and change in a predictive model of emotional and behavioural problems from early adolescence to middle adulthood. *Journal Of Psychiatric Research*, 151. <https://doi.org/10.1016/j.jpsychires.2022.03.029>
- Vecchio, G., Pallini, S., Zava, F., Cattelino, E., & Zuffiano, A. (2023). Children's Prosocial and Aggressive Behaviors: The role of emotion regulation and Sympathy. *Journal Of Applied Developmental Psychology*, 89. <https://doi.org/10.1016/j.appdev.2023.101598>
- Vecchio, G., Pastorelli, C., Zava, F., Zuffiano, A., Luengo, B., Gerbino, M., & Vittorio, G. (2025). Enhancing Prosocial Behaviors, Reducing Aggression: Effects of CEPIDEAS Junior in Primary school. *Journal Of Applied Developmental Psychology*, 99. <https://doi.org/10.1016/j.appdev.2025.101835>
- Vergara, I., & Figueroa, I. (2023). Cultivando la empatía en el aula de segundo básico: Una propuesta interaccional-cooperativa. *Experiencia Pedagógica*
- Villa-Gómez, J., Londoño, N., Gallego, M., Arango, L., & Rosso-Pérez, M. (2016). Apoyo mutuo, liderazgo afectivo y rehabilitación comunitaria una experiencia de acompañamiento psicosocial para la "rehabilitación" de víctimas del conflicto armado. *Universidad de San Buenaventura*, 16(2).