



ISSN 2612-4033

Journal of Clinical & Developmental PsychologyJournal homepage: <http://cab.unime.it/journals/index.php/JCDP/index>

Promoting Social and Emotional Learning in Primary Schools: A Scoping Review of Intervention Programs

Marchi V.^{1*} , Sacchetti M.C.² , Cavallini F.¹ , Vascelli L.² ¹ University of Parma. Department of Humanities, Social Sciences, and Cultural Enterprises, Italy² TICE Live and Learn, Italy

ABSTRACT

The literature shows that school interventions aimed at enhancing social and emotional learning and coping strategies have a positive effect on mental health in children and the maintenance of a positive school climate. This research aims to identify the strengths and limitations of the literature on implementing educational interventions on SEL and coping strategies in elementary school. The selection of studies for this review was based on a priori-defined criteria by consulting four databases: Scopus, MEDLINE, PsycINFO, and Web of Science. Ten articles published in the decade 2013-2023 were included. The analysis of these studies shows that school-based intervention programs seem to be most effective when they are universal and promote active student involvement.

Keywords: Social and Emotional Learning, Coping Strategies, School Programs, Children

—
* *Corresponding author:* Valentina Marchi, University of Parma. Department of Humanities, Social Sciences, and Cultural Enterprises, Italy

E-mail address: valentina.marchi@icloud.com

[doi](https://doi.org/10.13129/2612-4033/0110-4528) <http://10.13129/2612-4033/0110-4528>

© 2024 by the Author(s); licensee Journal of Clinical & Developmental Psychology, Messina, Italy.

This article is an open access article, licensed under a Creative Commons Attribution 3.0 Unported License.

Introduction

Social and Emotional Learning (SEL) is defined as: 'the processes through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions' (Collaborative for Academic Social and Emotional Learning, 2012, pp. 4).

Cavioni and Grazzani (2023) describe the most recent model that analyses the socio-emotional learning construct promoted by Collaborative for Academic, Social, and Emotional Learning (CASEL). The goal of CASEL is to identify and recognize evidence-based SEL interventions that can be used by teachers and educators in schools. This model emphasizes how the work that is done in the school context lays the groundwork for providing students with the skills and abilities necessary to address all the different contexts of life and to be able to become a good citizen and a conscious and responsible adult. Five core competencies for the description of the SEL construct were highlighted: self-awareness, self-regulation, social awareness, social skills, and responsible decision-making.

Self-awareness is the competence that enables individuals to recognize and understand their emotions and thoughts and grasp the link between them and their behavior. Self-regulation allows one to contextually control emotions, thoughts, and behaviors, enabling the individual to plan and achieve their goals. Social awareness is understanding others' perspectives and empathizing with people from different social and cultural backgrounds. Relational or social skills enable individuals to establish, maintain, and cultivate positive and supportive relationships. The last skill is responsible decision-making, the ability to make choices relevant to oneself, others, and the situation one is experiencing; in children, this is fundamental, as decisions made in relationships with peers, particularly in play, are significant for their well-being.

The literature points to the positive outcomes of these programs in the school context. In particular, a meta-analysis conducted by Durlak et al. (2011) collects data from 213 interventions and reports how these led to a significant improvement in students' social-emotional competencies, alongside an increase in prosocial behavior, a reduction in internalizing symptoms and conduct problems, and an increase in school performance. Another relevant finding concerns who conduct the programs: the analysis shows that improvements in all the categories analyzed are produced when teachers administer the intervention to their students. This finding suggests that these projects can only be incorporated into the school curriculum with outside support. Another meta-analysis by Taylor et al. (2017) focuses on the follow-up data of 82 SEL intervention programs, aiming to observe whether these positive effects were maintained over time. Findings show that the implemented projects act as

protective factors against the possible development of problem behavior, and positive effects are maintained concerning social-emotional skills, positive attitudes, prosocial behavior, and school achievement.

Along with the concept of SEL, this review also investigated the construct of coping defined by Compas et al. (2001) as: 'a conscious and voluntary effort to regulate emotions, cognition, behavior, physiology, and environment in response to stressful events or circumstances' (pp. 89). In this same article, results from more than 60 studies show how mental health and adequate stress management of children and adolescents are closely linked to the coping strategies used. In general, it was seen that better adaptation to stressful conditions is associated with problem-centered coping and approach-centered coping. In contrast, avoidance and emotion-centered strategies lead to reduced adjustment. The authors point out how it is fundamental for emotion-centered strategies to recognize that some modes of emotional regulation are more adaptive than others depending on the situation experienced. Clarke's meta-analysis (2006) suggests that primary prevention programs for children and adolescents on coping should teach them to recognize the difference between controllable and non-controllable stressors. In these situations, it is most appropriate to use active coping strategies and to assess which response is more appropriate to the context.

This scoping review aims to identify intervention programs implemented in primary school (ages 6-11) to enhance and improve children's social-emotional skills and coping strategies. In this way, it is possible to highlight methodologies that combine different interventions to grasp the strengths and gather the limitations of this program. The objective of this review is to build a foundation for future guidelines to be used in the school setting: how to organize these projects, which professionals to involve, and which tools to use for data collection.

Method

We conducted a scoping review of English-language literature to identify school-based interventions to develop social and emotional learning (SEL) and coping strategies for primary school children aged 6 to 11. Articles were searched on four online databases: Scopus (Elsevier), MEDLINE, PsycINFO, and Web of Science. To identify records, a text string was defined to be entered in each search engine: 'socio-emotional learning' OR 'coping strategies' AND 'children' AND 'school programs' AND 'psychology'.

Additional criteria were used to select articles. First, the publication period was limited to 2013-2023 to consider the most recent interventions used in school psychology. Furthermore, only research articles were included when selecting the type of paper. The inclusion or

exclusion of the various selected articles was guided by the use of the PICOS tool (Methley et al., 2014):

- P-population: children attending primary school (age group 6-11).
- I-intervention: projects, programs, and interventions carried out in school to develop social-emotional skills in students.
- C-comparison: quantitative and qualitative tools for data collection.
- O-outcome: improvement and increase of skills and socio-emotional competencies in children.
- S-study design: qualitative and quantitative studies.

In the exclusion criteria it was decided to insert, first of all, the age of the subjects: the interest in this specific work concerns only students that are 6-11 years old. The interventions considered must be carried out in school, during school hours, excluding all those projects that could always take place in the building but outside school times or in other contexts. It was considered essential that the program be accompanied by one or more evaluation tools, so as to have data collection with regard to the progress of the activities and monitoring of changes in the variables considered. In addition, it was very important that there be an experimental design and not merely an analysis of SEL change during the school year, without the implementation of a structured intervention.

Firstly, the articles were examined based on title and abstract to assess whether they matched the above criteria. Subsequently, an in-depth analysis of the full text was conducted to select the records that were relevant to the review. Only one meta-analysis emerged from the search (Boncu et al., 2017), of which all reported articles were considered to assess which ones matched the inclusion criteria defined for the scoping review.

The selection of a limited number of articles may be due to the very stringent criteria for selecting studies. All papers in which interventions were proposed in settings other than school, projects that had a focus on skills other than SEL and coping, and in which there was no experimental design were not selected. Of all of them, it was the age criteria that was the most selective, as many studies were done with preschool children or adolescents in middle and high school. The interest for this review was an analysis of projects carried out in primary school.

The ten selected articles were summarized in a table with the following information: title, year, first author, type of study, independent variable, and results.

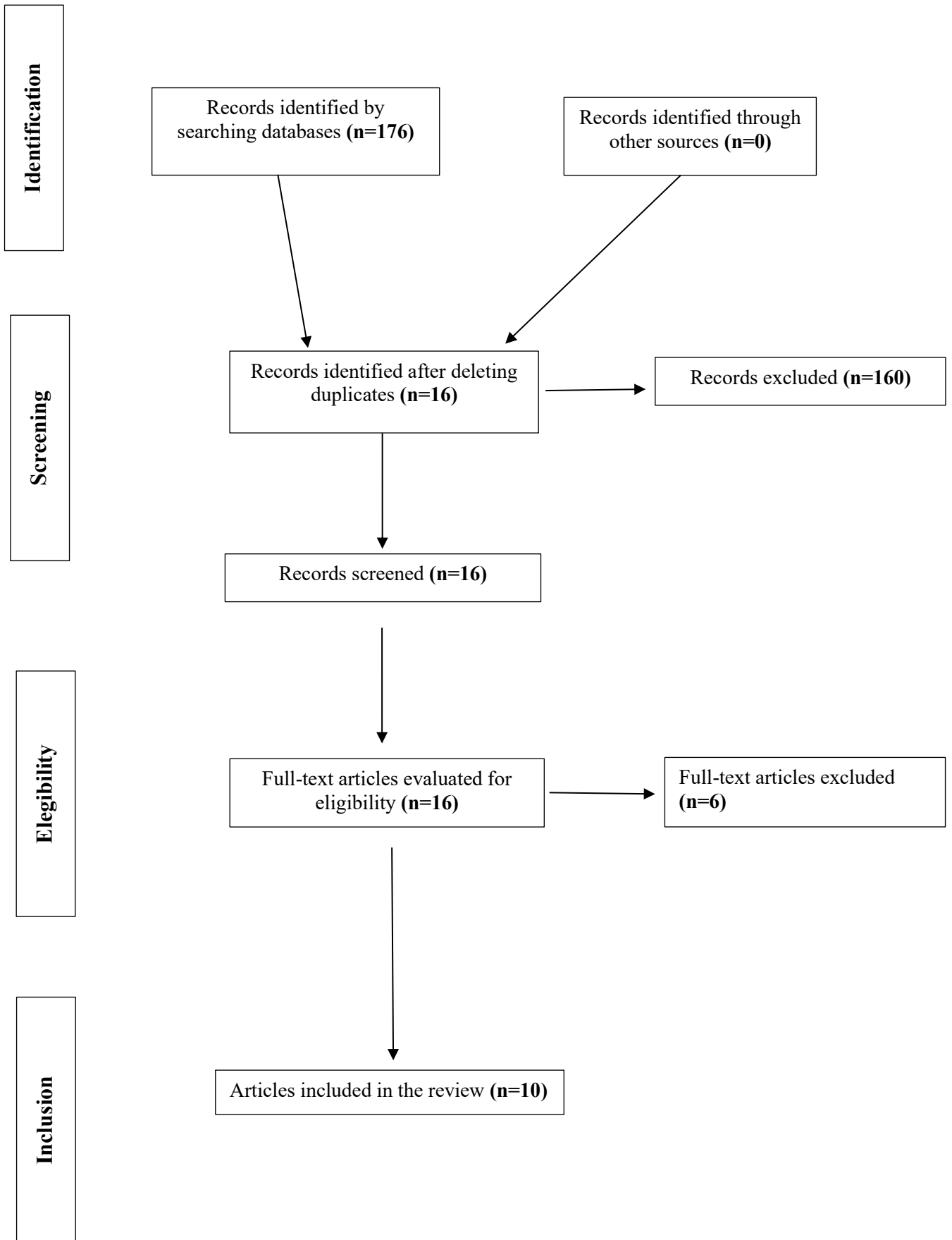


Figure 1. Flow chart for database revision steps

Results

Participants

The ten selected articles present a total sample of 1841 subjects, including 166 female individuals, 223 male individuals, and 1461 subjects whose gender is not specified (Celume et al., 2015; Colomeischi et al., 2022; Muratori et al., 2014; El Hassan & Mougaine, 2014; Kramer et al., 2014; Schonert-Reichl et al., 2015).

The age of the sample subjects ranged from 6 to 11 years (Celume et al., 2020; Kim et al., 2015; Coelho et al., 2023; Schonert-Reichl et al., 2015; Coskun, 2019; Muratori et al., 2014; Colomeischi et al., 2022; El Hassan & Mougaine, 2014; Daunic et al. 2013). In the studies by Kramer et al. (2014) and Colomeischi et al. (2022), the sample also includes subjects of age outside those considered in this study. Only data from primary school considered.

In the experimental studies, 862 subjects were in the intervention groups and 585 in the control groups. Muratori et al. (2014) report that they assigned four classes to the control and 5 to the experimental conditions without specifying the precise number of subjects assigned to each of the two groups. Schonert-Reichl et al. (2015) selected four classes randomly assigned to control and experimental conditions without reporting the number of classes and subjects assigned to the groups.

Type of studies

Four studies used a quasi-experimental design with an intervention group and a control group (Coelho et al., 2023; Colomeischi et al., 2022; El Hassan & Mougaine, 2014; Kramer et al., 2014). The articles by Celume et al. (2020), Muratori et al. (2014), and Schonert-Reichl et al. (2015) report the use of randomized controlled trials with a control group and an evaluation of pre-and post-test variables. Coskun (2019) describes a phenomenological study in which only an intervention group of 12 participants is present. The article by Kim et al. (2015) includes both qualitative and quantitative components, featuring a single intervention group with pre-and post-test measurements. There is a single pilot study (Daunic et al., 2013) in which two primary schools were selected, one assigned to the intervention condition and the other to the control condition.

Type of interventions

Of all the selected studies, nine proposed an intervention carried out on the whole class (Celume et al., 2020; Coelho et al., 2023; Colomeischi et al., 2022; Coskun, 2019; El Hassan & Mougane, 2014; Kim et al., 2015; Kramer et al., 2014; Muratori et al., 2014; Schonert-Reichl

et al., 2015); only one included specific work with a small group, with a maximum of 3-4 children involved (Daunic et al., 2013).

Three articles involve control groups defined as active, meaning that activities are carried out with the children other than the specific intervention. Notably, in the studies of Daunic et al. (2013) and Schonert-Reichl et al. (2015), a program related to social responsibility (Business as Usual) is proposed; Celume et al. (2020) use a program called Collective Sports Games, in which group games are proposed to the students.

The most frequently used strategies in these intervention programs are reading stories, story-telling, role-playing activities, improvisation, group games, moments of reflection, dialogue and discussion, feedback, and video and song support. The lessons vary widely, from a minimum of 15 minutes to a maximum of 75. In many of these studies (Celume et al., 2013; Daunic et al., 2013; El Hassan & Mouganie, 2014; Kim et al., 2015), the topics addressed are divided into different phases, which may be within the same lesson or in different lessons. Each of these moments includes an initial stage of analysis and collection of information already possessed by the students on the topic discussed, another dedicated to activities for awareness-raising on the competence, strategy, and topic addressed, and the last stage dedicated to group work, feedback, and follow-up. Three interventions focused in particular on the management and regulation of stress and negative emotions: Schonert-Reichl et al. (2015) describe a program that includes mindfulness practices; Coskun (2019), starting with critical and problematic scenarios for children, stimulates awareness in the face of difficult-to-manage emotions by providing feedback on possible action strategies; Muratori et al. (2014) describe an intervention that focuses on the emotion of anger, awareness of the physiological activation associated with it and what coping strategies can be used to manage it.

Instruments and variables

The instruments used in the ten selected studies differ regarding tests administered to teachers, tests administered to students, and purpose-built questionnaires for teachers and students.

The instruments administered to teachers aim to measure and assess the students' social-emotional skills and how these changes following the implementation of the intervention. In the study by Daunic et al. (2013), we find The Behavior Rating Inventory of Executive Function Teacher Form (BRIEF) and The Clinical Assessment of Behavior Teacher Rating Form (CAB-T); the former deals with assessing students' emotional and behavioral self-regulation; the latter presents a series of sub-scales assessing the presence of internalization, externalization and social skills in children. Colomeischi et al. (2022) use The Social Skills Improvement System

Social-Emotional Learning Brief Scales (SSIS SEL), in which scales measure self-awareness, self-control, interpersonal skills, and responsible decision-making. The Social Skills Rating System (SSRS) is used in Kramer et al. (2014) study in which teachers assess students' internalizing behavior.

Compared to the tests administered to the students, the variables analyzed and the instruments are numerous. Schonert-Reichl et al. (2015) evaluate executive functions (Flanker task and Heart and Flowers task), empathy, perspective taking and emotional control (Interpersonal Reactivity Index modified for children), optimism (Resiliency Inventory, RI), self-assessment skills, fun and interest in school subjects (Self-Description Questionnaire, SDQ), depressive symptoms (The Seattle Personality Questionnaire for Children, SPQC), differences in student mindful states (The Mindful Attention Awareness Scale adapted for children, MAAS-C), Social Responsibility (Social Goals Questionnaire). There is also an instrument for assessing the relationship with peers (Peer nomination); this variable is also considered by Kramer et al. (2014) with the peer relationship subscale of The School Social Behavior Scale-Second Edition (SSBS-2) instrument and in the study by Coelho et al. (2023) through The Classroom Peer Context Questionnaire (CPCQ) instrument. Celume et al. (2020) measure students in their intervention with The Reading the Mind in the Eyes Test, Child Version (RMET-G), and Prisoner's Dilemma (PD), respectively. Children's social-emotional skills are assessed with The Study on Social and Emotional Skills (SSES) instrument in the study by Coelho et al. (2023); in particular, self-regulation, through the sub-scales of self-control and emotional control, and communication, by assessing assertiveness, cooperation, and sociability, are analyzed. El Hassan and Mouganie (2014) use The Bar-On Emotional Inventory, a student-compiled self-report scale with five sub-scales: interpersonal, intrapersonal, stress management, adaptability, and general mood.

The studies by Muratori et al. (2014) and Colomeischi et al. (2022) use the Strengths and Difficulties Questionnaire (SDQ) instrument, a questionnaire that evaluates the occurrence of behaviors related to psychosocial difficulties (conduct problems, hyperactivity, emotional symptoms, problems with peers); in particular, the second study considers the psychosocial difficulties subscales and total difficulty scores.

Kim et al. (2015) use an open-ended questionnaire in which teachers are asked to reflect on their experience, what changes were observed in the students, how they perceived being the conductors of the intervention, and what would change in the curriculum. Coskun (2019) also proposes a semi-structured interview explicitly constructed for the project carried out with the children, but this time it is administered directly to the children. El Hassan and Mouganie (2014) propose an assessment protocol for teachers consisting of 29 items (SDSC rating scales) in

which the areas of child readiness (learning, self-control, social awareness) and social decision-making are measured.

Narrative description of results

All the ten studies selected in this review describe intervention projects implemented in the school context to promote socio-emotional learning in children attending primary schools (Celume et al., 2020; Coelho et al., 2023; Colomeischi et al., 2022; Coskun 2019; Daunic et al., 2013; El Hassan & Mouganie, 2014; Kim et al., 2015; Kramer et al., 2014; Muratori et al., 2014; Schonert-Reichl et al., 2015).

Celume et al. (2020) propose an intervention called 'Drama Pedagogy Training' (DPT), a program specifically focusing on children's socio-emotional competencies, implemented in the French context. The program is based on the theories of active pedagogy focusing on children's social and emotional learning, with activities like role-playing, improvisation, make-believe play, storytelling. The control group "Collective Sporting Games - CGS" involves group games for students. The dependent variables considered in this study are the theory of mind and collaborative behavior. The results show significant differences after the intervention between the DPT and active control groups in collaborative behavior. However, the CSG had higher initial scores than the intervention group. At the end of the DPT, a greater awareness of collaboration emerges. Prisoner's Dilemma instrument showed more collaboration between DPT than in the pretest. The ANOVA and T-test showed significant differences following training in the theory of mind; in particular, they were statistically higher for the DPT group. Correlational analysis showed a significantly weak correlation between the theory of mind and collaborative behavior in children. This result calls for further investigation in the future, as it suggests a relationship between the two variables but does not guarantee it. The limitations highlighted in this study include using of the same instruments for pre- and post-test evaluation: the possibility of a learning effect is highlighted. There is also a lack of a follow-up study to assess whether the effects remain over time. Finally, the RMET-G instrument only measures one dimension of the theory of mind, not considering the construct's complexity.

The 'Calmly - Learning to Learn Yourself' program is described in the article by Coelho et al. (2023). The study was conducted in three Portuguese primary schools. It is a program that is carried out with the entire class of students; 16 sessions of 60 minutes duration. The intervention is led by formal facilitators with the class teacher, who can work on generalizing socio-emotional skills. Each lesson is dedicated to enhancing emotional competence in students. The strategies used in this intervention to promote SEL in children are posters, brainstorming, reflective moments, questioning, modeling, reinforcement feedback, and group

games. With the socio-emotional learning, the variables considered here are self-regulation (self- and emotional control) and communication (assertiveness, cooperation and sociability). Another variable considered is the perception of the relationship with peers (classroom comfort, cooperation, conflict, mutual affection, cohesion, isolation). The results of this study report that teachers noticed a statistically significant improvement in the emotional control and sociability of students who received the intervention. Parents report a significant reduction in assertiveness and communication in the control group; teachers report increased sociability in both groups of students. With the peer relationship variable, lower levels of conflict and isolation in the intervention group and higher levels of comfort and mutual affectivity emerge in the post-test measurements. The results of the study show a discrepancy in the evaluation of the intervention by different informants. Here, the authors put forward hypotheses related to these results: a difference in the understanding of the implemented program and other contextual factors. They suggest, therefore, that future studies should be undertaken that can investigate this further, focusing mainly on the implementation of the project to improve its knowledge and perception by all stakeholders. The results revealed that some hypotheses of the intervention were not anticipated, as specific outcomes showed a decrease in values rather than the expected increase; this could be because, as a result of the classroom program, the students have achieved a greater awareness of socio-emotional skills such that the children want to demand more from both their socio-emotional skills and their relationships with peers. The authors emphasize that study's results cannot be generalized and the effects of the intervention could be influenced by the intensity of the lessons. The SSES instrument has not been validated for the Portuguese population, an aspect to be considered when evaluating the results. As a final aspect, the authors emphasize that the teachers were encouraged to promote the socio-emotional skills outside the project itself, but this was not investigated. The authors also suggest including observational measures of students' behavior to assess environmental changes.

'The Promoting Mental Health at School (PROMEHS) ' is an intervention program described in the article by Colomeischi et al. (2022). This project aims to promote mental health in the school context and involves several European countries: Italy, Romania, Portugal, Greece, Croatia, Malta, and Latvia. The three key themes addressed by the intervention are the promotion of SEL and resilience, preventing of behavioral difficulties, and internalizing and externalizing problems. Classroom activities last 12 weeks; this program is designed for children and young people from preschool through high school. The teachers who conducted the intervention received 16 hours of training, followed by 19 hours of mentoring and monitoring throughout. In the vademecum for children and young people, we find information for each exercise and topic proposed: outcomes of the activities, materials, phases, and some

tools used, including stories, videos, exercises, cards, books, and films. Among the proposed material are guidelines for teachers, parents and policymakers. The aim is that all those involved in the school context can work for the promotion of SEL and the well-being of children. The variables measured are self-awareness, self-regulation, social awareness, social skills, responsible decision-making, and psychosocial difficulties. The results show that the scores for all SEL variables increased significantly in post-test measurement in the experimental group, an outcome observed at every school level. Regarding internalizing and externalizing difficulties, a significant reduction in scores in the post-test measurement was observed in the intervention group of primary school students. The authors acknowledge some limitations in this study, suggesting that future studies should include perspectives on data collection other than those of teachers and emphasizing a lack of evaluation of the long-term effects of PROMEHS. Finally, they point out that this intervention becomes rather complex due to the many hours of training and supervision involved.

Coskun (2019) proposes a month-long intervention in a Turkish school consisting of 24 lessons, focusing on the relationship between children's emotions and behavior and self-regulating ability. Scenarios of critical situations, conflicts, and difficulties in the school context, as well as in the interaction with peers and teachers, are proposed to them and discussed in class with the researcher. The activities involve dealing with various emotional issues: labelling them as positive or negative, grasping their link with behavior, how they have experienced and dealt with them in the past, and what strategies they have used when faced with anger and stress. The semi-structured interviews with each child who participated in the intervention highlighted how they achieved greater awareness of the emotions they felt, naming them and understanding how these are linked to behavior; they also revealed a reduction in conflicts within peers due to strengthened self-regulation strategies. As a limitation, the author points out that the results are limited to this study and cannot be generalized. Furthermore, only the competence of self-regulation was analyzed, not considering the other SEL abilities.

Daunic et al. (2013) propose the 'Social-Emotional Learning Foundations (SELF) ' program developed for primary school children at risk of developing behavioral and emotional problems. The intervention was implemented in two elementary schools in North Florida, USA. It consisted of 15 sessions, each lasting 20 minutes, involving small groups of 3-4 children. Their teachers previously identified these children as at-risk using the Early Childhood Observation System (ECOS) tool. In the control group, a Business-as-Usual project was proposed to promote social responsibility. This intervention involves reading stories and strategies for systematically developing the students' emotional vocabulary. The variables considered are internalizing and externalizing symptoms, social skills, and competencies

(cognitive and language development and ability to satisfy one's own needs). A significant effect was observed in the intervention group in the subscales of internalized behavior and competencies (CAB-T) and in the behavior regulation index. The limitations highlighted in this pilot study relate to the fact that the schools were not randomly assigned to the two conditions. In addition, the teachers decided to participate on a voluntary basis. The teachers who conducted SELF were the same as those who filled out the tests, with the possibility of an expectation bias. Finally, it is pointed out that a measure of fidelity to the treatment is missing to assess how the treatment was carried out in the group.

El Hassan and Mouganie (2014) describe their study's intervention 'The Social Decision-Making Skills Curriculum (SDSC)' implemented with primary school students in Lebanon. The program lasted nine weeks, and there were 42 short sessions lasting 15 minutes. Students were presented with role-playing activities, the objective of which was to practice active listening to their peers and train their self-control, with the constant presence of teachers and their feedback. For the control group, there were moments dedicated to the themes of responsibility, respect and friendship. The variables analyzed were social problem-solving, decision-making skills, and emotional intelligence. The results show that the children in the experimental group have higher scores in emotional intelligence than the control group; furthermore, the SDSC rating scale shows lower scores in the intervention group, which is the preferable condition as they indicate positive values in the area of readiness of the child and social decision-making. For the future, the authors suggest including training and reinforcement of these skills in the school curriculum.

'Eccomi Pronto' is a curriculum presented in the article by Kim et al. (2015) implemented within the Korean context, previously validated in Italian primary schools (Bertolani et al., 2014). It is an intervention that proposes using stories as its primary strategy: teaching the proper structure of stories, how to remember and connect sequences of events, and how to grasp the emotions and feelings of the characters. Each story presented to the students has a moral based on psychological theories. The objective of this intervention is twofold: to promote socio-emotional and literacy development in fourth-grade students. Six 60-minute lessons are planned, in which there is always an introductory part, followed by storytelling, a time for group work, and, finally, follow-up activities to reinforce learning. The results of the open-ended questionnaire show that the teachers noticed positive effects on their students, particularly in terms of autonomy and self-reflection. They rated this tool as engaging, improving both the relationship and communication between them and their students, giving access to a greater understanding of the children's psychological lives. Teachers propose follow-up activities closer to the Korean context, using structured worksheets in which they are

asked to write about their experience, so eliminating the drawings used in the Italian project. Concerning the variable of school involvement, the results found in the study carried out previously in the Italian context were not confirmed. Possible explanations are that the Student Engagement Survey (SES) instrument is less reliable for the Korean sample, differences may be present due to translation problems, and the authors point out that it is typical of this culture and the educational system to give positive answers to multiple-choice items to give the impression of doing well. The authors emphasize that future studies are needed to use more contextually appropriate instruments to evaluate student changes. They also suggest collecting qualitative data directly from the experience of the children. A control group should be included, to compare the results obtained. Finally, it is suggested that other variables should be evaluated: altruism, self-efficacy, self-acceptance, health and well-being.

Kramer et al. (2014) present in their study an intervention, called 'Strong Kids', which provides a specific curriculum for different age groups, from kindergarten to 12 years, implemented in the United States. The study aim is to evaluate the program in the school context and the instruction format. 'Strong kids' is developed to promote resilience and increase social-emotional competence using a cognitive-behavioral approach (Merrell, 2010). The program consists of 13 lessons, once a week and lasting 35-50 minutes. The topics addressed are promoting prosocial behaviour and social skills and, preventing of internalizing disorders. The strategies used are discussion with the students, role-playing, and example scenarios. The intervention is designed to be short, user-friendly and cost-effective. A non-significant reduction of internalizing symptoms was noted in the intervention group. This outcome is not surprising, as the teachers had assessed the students with few or no symptoms, so an excessive reduction of these could not be observed. In the control group, an increase in internalizing symptoms was observed: this result suggests the role of this intervention in preventing the onset of such symptoms and that a class-wide intervention may be beneficial to both experimental and control group. The scores on the scales measuring the variable of prosocial behavior increased for both the intervention and control group; a significant increase in scores for this index in the post-test was observed in the students who had received the 'Strong Kids' training and had previously been identified as being at risk. The limitations highlighted relate primarily to data collection: it was the teachers who filled out the tests, there may be an expectation effect. The possibility of including information from parents and self-report instruments for students is considered. There is a lack of evaluation of the long-term effects of the intervention. Finally, the authors acknowledge that in socio-emotional learning only internalizing symptoms and prosocial behavior were considered; other dimensions were not analyzed.

The 'Coping Power Program' is an intervention aimed at the entire class group described

in the article by Muratori et al. (2014), carried out in Italy. The intervention was carried out by a CPP-certified trained psychologist together with the class teacher. An advanced CPP-trained psychologist supervised the project using a checklist. This program consists of 24 lessons, once a week, lasting 60-75 minutes, in which topics such as physiological activation related to the emotion of anger, self-control, perspective-taking, problem-solving, and coping strategies are addressed. The variables considered are conduct problems, hyperactivity, emotional symptoms, problems with peers, and prosocial behavior. The results showed that the classes that participated in the intervention tended to exhibit fewer problems with inattention and hyperactivity, and there was an increase in prosocial behavior. Regarding behavioral difficulties, there was no significant reduction; this can be explained by the fact that most children in the sample had age-appropriate social skills and limited behavioral difficulties. The authors point out that a specific intervention in small groups might be more effective for students with clinically recognized aggression problems. The results show an increase in helping behavior. The authors suggest future studies to investigate whether there is a connection between prosocial behavior and a reduction in aggressive episodes among students. A strong point of this study is the joint work of psychologists and teachers, which can also reinforce and promote these skills in regular school activities. Limitations include a limited sample and the lack of monitoring of the generalization of improvements in other contexts. A teacher bias may be present, as the data was collected from only the teachers involved.

Schonert-Reichl et al. (2015) present in their article an intervention program called 'MindUp', implemented in a public school district in Canada, consisting of 12 lessons lasting 40-50 minutes. This curriculum uses mindfulness practices to promote executive functions, self-regulation, social understanding, and positive mood in students across the class. In the control group, Business-as-Usual project was proposed to children. An ecobehavioral system orientation was designed for teachers with the aim to generalize the skills acquired in everyday school life; this can lead to internalizing these skills and foster a positive classroom climate. The variables measured in this study are executive functions, salivary cortisol (evaluated in association with aggression), empathy, perspective-taking, optimism, emotional control, school concept, depressive symptoms, mindfulness, and social responsibility. In the intervention condition, a significant improvement in well-being (self-report measures) and prosocial behavior is noted. As for executive functions, it was seen that the experimental group outperforms the control in more complex tasks such as response inhibition, working memory, and cognitive flexibility. The increase in inhibitory control may be due to mindfulness practices or could be due to practicing optimism and acts of kindness. It is recognized as a limitation the fact that they conducted an individual-level analysis with a randomization, however, of classes.

Furthermore, significant differences were found between the MindUp and BAU groups at the first assessment concerning empathy and other indices of access to peer behavior. There was no blind condition for teachers and students, so, bias may have been present in the evaluation of changes. The authors suggest future studies to assess whether this intervention can promote teacher changes.

Study	Tools	Design	Independent Variable	Results
Daunic et al. (2013)	-The Behavior Rating Inventory of Executive Function Teacher Form (BRIEF; Gioia et al., 2000) -The Clinical Assessment of Behavior Teacher Rating Form (CAB-T; Bracken & Keith, 2004) -The Woodcock Reading Mastery Test-Revised (Woodcock, 1987)	Program: "Social-Emotional Learning Foundations (SELF)". A pilot study was conducted with an intervention group and a control group (business-as-usual BAU condition). The intervention comprises five units, each corresponding to a socio-emotional competence (self-awareness, self-regulation, social awareness, relationship management, and responsible decision-making) consisting of three lessons. The duration is 20 minutes, 2-3 times a week. The intervention is aimed at groups of 3-4 students identified as at risk.	Students' emotional and behavioral self-regulation	The results in the intervention group show a significant effect in the subscales "Internalizing behavior" and "Competence" (CAB-T) and a significant positive effect in the behavior regulation index (BRIEF).
Celume et al. (2020).	-The Reading the Mind in the Eyes Test, Child Version (RMET-G; Baron-Cohen et al., 1997; Baron-Cohen et al., 2001) -Prisoner's Dilemma (PD; Garaigordobil, 1995)	This randomized, pre and post-test study compares two groups to two programs. The intervention group participated in the Drama pedagogy training (DPT, intervention): 6 sessions of 60/70 minutes. The active control group took part in the The collective Sportive Games (CSG, control) consisted of six sessions of 60/70 minutes.	Theory of mind and collaborative behavior.	There was a significant but weak correlation between Tom and collaborative behavior in children in the DPT condition (RMET-G and PD). Scores increase in the intervention group, showing a significant effect (RMET-G). The CSG group's initial scores for collaborative behavior were high; at the end of the intervention, the DPT group scores increased (PD).

Kim et al. (2015).	<ul style="list-style-type: none"> -Open-ended survey: a tool with open questions for teachers. -The Student Engagement Survey (SES; Bertolani et al., 2014) 	The intervention realized is "Eccomi Pronto (EP)." It is an experimental design with a single group, and they were evaluated pre-test and post-test. It is a lecture based on reading stories, consisting of 12 lessons.	Teachers' observation. School involvement.	The teachers' responses identify positive changes in their students following the intervention: children are described as more self-reflective and autonomous. The study's results do not show a significant increase in student involvement at school about participation in the EP (SES) intervention.
Coelho et al. (2023)	<ul style="list-style-type: none"> -The Study on Social and Emotional Skills (SSES; OECD, 2019) -The Classroom Peer Context Questionnaire (CPCQ; Boor et al., 2016). -Sociodemographic questionnaires 	Program completed: "Calmly - Learning to Learn Yourself". This study used an almost experimental design, with an intervention group and a control group. The intervention lasted 16 weeks. Universal programs are realized in the classroom and within the school curriculum.	Self-regulation and communication. Relationship with peers.	Teachers report a statistically significant increase in children's emotional control and sociability (SSES) in the intervention group; for the control group, teachers report an increase in sociability, while parents report reduced assertiveness and communication (SSES). Children in the intervention group report a significant reduction in class conflict and higher levels of cooperation than the control group; the latter shows higher scores for comfort and mutual effect than the intervention group (CPCQ).
Schonert-Reichl et al. (2015)	<ul style="list-style-type: none"> -Flanker task (M. C. Davidson et al., 2006) -Heart and flowers task (Diamond et al., 2007; Wright & Diamond, 2014) -Interpersonal Reactivity Index modified for children (Schonert-Reichl et al., 2012) -The Resiliency Inventory (RI; Noam & Goldstein, 1998; Song 2003). -Self Description Questionnaire (SDQ; Marsh et al., 1984) -The Seattle Personality Questionnaire for Children (SPQC; Kusché et al., 1988) -The Mindful Attention Awareness Scale adapted for 	The intervention realized is "MindUP." It is a controlled and randomized study that includes mindfulness and gratitude practices. The experimental group carries out the intervention, which consists of 12 lessons lasting 40-50 minutes. The Active Monitoring Group has undertaken a program on social responsibility (business as usual, BAU).	Executive functions include empathy, perspective-taking and emotional control, optimism, self-assessment skills, fun and interest in school subjects, depressive symptoms, differences in student mindful states, and social responsibility. Relationship with peers.	The results in the intervention group show a significant improvement in empathy, perspective-taking (IRI), optimism (RI), emotional control (RI), school concept (SDQ), and mindfulness (MAAS-C). The children in the intervention group achieved good results on the most demanding executive functions: inhibition of response, working memory, and cognitive flexibility (Flanker task and Hearts and Flowers task). The results show an improvement in

	<p>children (MAAS-C; Lawlor et al., 2014)</p> <p>-The Social Goals Questionnaire (Wentzel, 1993)</p> <p>-Peer nomination (Parkhurst & Asher, 1992)</p>			<p>inhibitory control, which leads to improved emotional control and reduced aggression. The authors point out that the results could be due to mindfulness, the opportunity to practice optimism, and acts of kindness toward others.</p>
Coskun, (2019)	<p>- Semi-structured interviews (videotaped and transcribed)</p>	<p>Phenomenological research.</p> <p>The intervention lasted a month with 24 lessons.</p>	<p>Valuation of the experience.</p>	<p>Interviews show that SEL activities made children more competent in naming their emotions and establishing a link between emotions and behaviors. There has been reduced peer conflict and improved relationships within the classroom context.</p>
Muratori et al. (2014)	<p>-The Italian Strengths and Difficulties Questionnaire (SDQ; Tobia et al., 2011)</p>	<p>Intervention program: "Coping Power Program (CPP)". The study used a randomized design with a pre- and post-assessment. The intervention was for the whole class and included 24 sessions, 60-75 minutes, once a week.</p>	<p>Conduct problems, hyperactivity, emotional symptoms, problems with peers</p>	<p>The intervention group showed less hyperactivity and inattention (SDQ) and more prosocial behaviors (SDQ). The authors report that no significant decrease in behavioral problems has been observed, contrary to the CPP intervention program's initial assumptions.</p>
Colomeischi et al. (2022)	<p>-The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997)</p> <p>-The Social Skills Improvement System Social-Emotional Learning Brief Scales (SSIS SEL; Elliott et al, 2020)</p>	<p>Intervention: "The Promoting Mental Health at School (PROMEHS)". A quasi-experimental design study was conducted with an intervention group and a control group. 12 weeks of intervention. Activities differentiated by age groups.</p>	<p>Self-awareness, self-control, interpersonal skills, and responsible decision-making. Psychosocial difficulties.</p>	<p>The results for the whole sample show a significant increase in the SEL variables (SSIS SEL) in the intervention group between pre and post-tests; there is also a significant reduction in internalized and outsourcing behaviors (SDQ) in the intervention group.</p>
El Hassan & Mouganie (2014)	<p>-SDSC rating scale</p> <p>-Bar-On Emotional Inventory: Youth Version (Bar-On & Parker, 2000)</p>	<p>Intervention: "The Social Decision-Making Skills Curriculum (SDSC)". Almost experimental design with experimental and control groups, with pre and post-test measurements. Five sessions per week, 15 minutes, for nine weeks. 42 sessions total.</p>	<p>Child readiness (learning, self-control, social awareness) and social decision-making. Stress management, adaptability, and general mood.</p>	<p>The results show that the experimental group has higher scores in emotional intelligence than the control group (Bar-On EQ-i: YV) and lower scores in the SDSC (SDSC rating scale) instructions. These scores show that children who received SDSC treatment significantly</p>

				improved prosocial skills and emotional intelligence.
Kramer et al. (2014).	<ul style="list-style-type: none"> -The Systematic Screening for Behavior Disorders (SSBD; Walker & Sevenson, 1992) -The Early Screening Project (ESP; Walker et al., 1995) -The Social Skills Rating System (SSRS; Gresham & Elliott, 1990) -The School Social Behavior Scale-Second Edition (SSBS-2; Merrell, 2002) - Validity questionnaire submitted to teachers in the intervention group 	This study used an almost experimental design with a control group that was not equivalent. "Strong Kids 3-5": 12 lessons and one booster lesson.	Relationship with peers. Students' internalizing behavior.	Internalizing symptoms decreased in the intervention group and increased slightly in the control group (SSRS-I); the effect was insignificant for either time or group. Students identified as at risk of developing outsourcing disorders showed significant symptom reduction (SSRS-I). No significant differences were found between the two groups regarding prosocial behavior (SSBS-2); both groups showed improvement in this variable over time.

Table 1. Studies included in the scoping review.

Discussion

The ten intervention programs selected in this review vary widely in number of sessions and duration. However, considering the strategies used, the organization of the lessons, and the topics addressed, it is possible to identify common elements.

Four interventions (Colomeischi et al., 2022; Kim et al., 2015; Celume et al., 2020; Daunic et al., 2013) report the use of storytelling, through which the topic addressed is introduced to students: this allows the development of a common vocabulary, teaching to analyse the structure of the story and the sequences of events that occur, alongside a focus on the emotions and experiences of the characters. Other strategies described, include role-playing (Celume et al., 2020; Colomeischi et al., 2022; El Hassan & Mouganie, 2014; Kramer et al., 2014), reflection and brainstorming (Hassan & Mouganie, 2014; Coelho et al., 2023), group and fiction games (Celume et al., 2020; Coelho et al.; Colomeischi et al., 2022), feedback and reinforcements (Coelho et al., 2023; Coskun, 2019; Celume et al., 2020).

In four articles, we find the the sessions to be organized in three phases: first an introduction in which the topics are presented to the students (Daunic et al., 2013; Celume et al., 2020), the problems and difficulties to be managed are discussed (Coskun, 2019) and in which the first strategies are proposed (El Hassan & Mouganie, 2014); a second in which the main activities are developed (Celume et al., 2020), in which a group discussion with the

students is promoted (Coskun, 2019; Daunic et al., 2013) and in which problem-solving and social decision-making activities are proposed (El Hassan & Mouganie, 2014); a third phase where we find the application of the issues addressed in the activities (Daunic et al., 2013) and feedback sharing (Celume et al., 2020; Coskun, 2019). The program of Kim et al. (2015) presents an organization very similar to the one described above, with the addition of the elaboration of the events in the group narrative before the final activities.

Socio-emotional competencies, coping strategies, and their development are what all these selected intervention programs have in common. Across these studies, the five competencies defined by CASEL (2012) are named: self-awareness, self-regulation, social awareness, relationship management, and responsible decision-making. Additionally, there is focus on promoting resilience and preventing emotional, social, and behavioral difficulties as well as teaching coping strategies and anger and stress management (Muratori et al., 2014; Schonert-Reichl et al., 2015; Coskun, 2019; Kramer et al., 2014). In three studies (Coelho et al., 2023; Kim et al., 2015; Celume et al., 2020), an analysis of collaborative behavior, school engagement, and the relationship with peers in the classroom is present. Several studies address specific topics, such as problem-solving and decision-making strategies (Kramer et al., 2014; El Hassan & Mouganie, 2014), communication skills (Kramer et al., 2014; Coelho et al., 2023), the link between thoughts and emotions (Kramer et al., 2014) and between emotions and behavior (Coskun, 2019), self-regulation (Schonert-Reichl et al., 2015; Coelho et al., 2023; Coskun, 2019) and finally self-determination (Kim et al., 2015).

An increase in SEL skills is evidenced in the post-test measurements (Colomeischi et al., 2022; El Hassan & Mouganie, 2014; Schonert-Reichl, 2015). In the study by Colomeischi et al. (2015), students' internalizing and externalizing difficulties were also measured, and a reduction of these was reported in the intervention group in the post-test. A decrease in internalizing symptoms was also found in other studies (Daunic et al., 2013; Kramer et al., 2014).

Relationships in the school context are considered by several of the studies analyzed in this review:

- An improvement is measured in peer relationships within the classroom following the conduct of the interventions (Coelho et al., 2023; Muratori et al., 2014; Schonert-Reichl et al., 2015; Coskun, 2019; Celume et al., 2020).
- There is an increase in prosocial behavior, in particular in the at-risk students in the 'Strong Kids' intervention group (Kramer et al., 2014).

- The value of the student-teacher relationship is considered, emphasizing how the implementation of the intervention improved and increased its quality (Kim et al., 2015).

Three articles specifically address the children's ability to cope, manage, and regulate the emotion of anger and stressful situations experienced in life contexts:

- Muratori et al. (2014) report a significant reduction in children's inattention and hyperactivity problems following intervention focused on strengthening coping strategies.
- Coskun (2019) highlights an increased competence of students in regulating and coping with their emotions in stressful situations.
- Schonert-Reichl et al. (2015) found an increased ability to regulate students' emotions, which was associated with an enhancement of inhibitory control, probably due to mindfulness.

Some articles report data on the progress of the intervention in pupils and qualitative and quantitative information from parents and teachers. Kim et al. (2015) and Kramer et al. (2014) collect extremely positive evaluations and experiences from teachers: the improvements observed in the students are remarkable, especially in their relationship with each other and their relationship with teachers. Kramer et al. (2014) recognize that one of the program's strengths is that it has provided a common vocabulary across the school setting, facilitating more transparent and more understandable communication with students. Coelho et al. (2023) use the child, family, and teacher version of the SSES instrument to collect data on the constructs of self-regulation and communication.

Limitations

Concerning this scoping review, it must be pointed out the possible risk of bias in the authors' selection of articles. In addition, a lack of deep quantitative analysis of the results obtained is highlighted. It is recommended for future studies to adopt broader inclusion criteria, especially with respect to age range, to increase the number of studies considered.

Conclusion

The ten articles selected within this scoping review allowed us to analyse what it means to bring an intervention that stimulates social-emotional competence into the school context,

how to organize it, whom to involve, and which instruments to use for data collection.

All ten studies describe intervention programs that aim to develop and consolidate socio-emotional skills in children and their coping strategies to promote a positive, inclusive and welcoming school environment, and to be able to extend new learning to all life contexts and to give students the necessary tools to become good citizens of the world.

The results highlight how conducting a universal intervention on the entire class has a positive effect on all students: the most evident and significant improvements concern children who present difficulties and problems (social, emotional, or behavioral), but progress involves the entire group, favoring harmonious relationships with both peers and teachers and achieving a greater awareness of one's own and other's behavior. Even in the only study conducted on a small group (Daunic et al., 2013), the teachers suggest expanding at least the introductory component on the SEL topic to the entire class group so that specific vocabulary and strategies learned during everyday lessons can be stimulated.

What emerged about the limitations of these interventions mainly concerns the aspect of data collection: in most of the studies, it was the teachers themselves who provided the information about the change in the behavior of the students; the authors recognize that there may be the influence of the expectation of desired improvement for the class involved. As suggested by Colomeischi et al. (2022), it would be advisable for data to be collected at the same time from parents, teachers, and students (self-report measures) to capture all points of view to have as objective a reconstruction of the change in children's behavior as possible. At the same time, it is also essential to consider the findings of Coelho et al. (2023), who found inconsistency between the data collected from different informants, suggesting for future research a greater awareness of the intervention on the part of teachers and parents.

It can be concluded that carrying out an intervention based on socio-emotional skills and coping strategies with children attending primary school can lead to positive outcomes concerning the development of these skills together with an awareness of their emotions and how to manage them, and concerning relationships in the school context, with teachers and peers, contributing to a positive and harmonious climate in which to grow. It is essential to build a project that involves the entire class, thus having the opportunity to stimulate and reinforce new learning in every moment of school life and ensuring the possibility of growing in a welcoming and understanding environment. Through role-playing, improvisation, and discussion, the children's active involvement is essential to make the experience enjoyable, leaving a good memory that can stimulate them to use these strategies in relationships with others. It is essential to provide a time for dialogue in groups to encourage constructive confrontation between the students; this enables them to train and accustom themselves to listen

to their peers actively and to grasp points of view different from their own.

Compliance with Ethical Standards

Conflict of Interest. No authors have a conflict.

Ethical Approval. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed Consent. Informed consent was obtained from all individual participants in the study.

Availability of data and materials. The authors confirm that the data supporting the findings of this study are available within the article.

References

- Bar-On, R., & Parker, J. (2000). *BarOn emotional quotient inventory: Youth version*. Canada: Multi-Health Inc.
- Baron-Cohen, S., Jolliffe, T., Mortimore, C., & Robertson, M. (1997). Another advanced test of theory of mind: Evidence from very high functioning adults with autism or Asperger syndrome. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 38(7), 813-822. <https://doi.org/10.1111/j.1469-7610.1997.tb01599.x>
- Baron-Cohen, S., Wheelwright, S., Hill, J., Raste, Y., & Plumb, I. (2001). The “Reading the Mind in the Eyes” test revised version: A study with normal adults, and adults with Asperger syndrome or high-functioning autism. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 42(2), 241-251. <https://doi.org/10.1111/1469-7610.00715>
- Bear, G., Yang, C., Mantz, L., Pasipanodya, E., Hearn, S., & Boyer, D. (2014). *Technical Manual for Delaware school survey: Scales of school climate, bullying victimization, student engagement, and positive, punitive, and social emotional learning techniques*. Delaware Positive Behavior Support (DE-PBS) and School Climate Transformation Projects.
- Bertolani, J., Mortari, L. & Carey, J. (2014). Formative evaluation of Eccomi Pronto [‘Here I Am Ready’]: A school counselor-led, research-based, preventative curriculum for Italian primary schools. *International Journal for the Advancement of Counselling*, 1-15.

<https://doi.org/10.1007/s10447-014-9209-0>

- Boncu, A., Costea, I., & Minulescu, M. (2017). A meta-analytic study investigating the efficiency of socio-emotional learning programs on the development of children and adolescents. *Romanian Journal of Applied Psychology*, 19(2), 35-41. <https://doi.org/10.24913/rjap.19.2.02>
- Boor, K. H. J., Segers, E., Hendrickx, M. M. H. G., and Cillessen, A. H. N. (2016). Development and psychometric properties of the classroom peer context Questionnaire. *Soc. Develop.* 25, 370–389. <https://doi.org/10.1111/sode.12137>
- Bracken, B.A., & Keith, L.K. (2004). *Clinical assessment of behavior*. Lutz, FL: Psychological Assessment Resources.
- Cavioni, V., & Grazzani, I. (2023). *L'apprendimento sociale ed emotivo. Teorie e buone pratiche per promuovere la salute mentale a scuola*. Bologna, Italy: il Mulino.
- CASEL, Collaborative for Academic, Social and Emotional Learning (2012). *2013 CASEL guide, Effective Social and Emotional learning programs. Preschool and elementary school edition*. Chicago: Illinois Edition (CASEL Ed.).
- Celume, M., Goldstein, T., Besançon, M., & Zenasi, F. (2020). Developing Children's Socio-Emotional Competencies Through Drama Pedagogy Training: An Experimental Study on Theory of Mind and Collaborative Behavior. *Europe's Journal of Psychology*, 16(4), 707-726. doi: <https://doi.org/10.5964/ejop.v16i4.2054>
- Clarke, A. (2006). Coping with interpersonal stress and psychosocial health among children and adolescents: A meta-analysis. *Journal of Youth and Adolescence*, 35, 11-24. <https://doi.org/10.1007/s10964-005-9001-x>
- Coelho, V., Peixoto, C., Azevedo, H., Machado, F., Soares, M., & Espain, A. (2023). Effects of a Portuguese social-emotional learning program on the competencies of elementary school students. *Frontiers in Psychology*, 14, 1-15. <https://doi.org/10.3389/fpsyg.2023.1195746>
- Colomeischi, A.A., Duca, D.S., Bujor, L., Rusu, P.P., Grazzani, I., & Cavioni, V. (2022). Impact of a School Mental Health Program on Children's and Adolescents' Socio-Emotional Skills and Psychosocial Difficulties. *Children*, 9, 1661. <https://doi.org/10.3390/children9111661>
- Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin*, 127, 87-127. <https://doi.org/10.1037/0033-2909.127>
- Coskun, K. (2019). Evaluation of the Socio Emotional Learning (SEL) Activities on Self-

- Regulation Skills Among Primary School Children. *The Qualitative Report*, 24(4), 764-780. doi: <https://doi.org/10.46743/2160-3715/2019.3064>
- Daunic, A., Corbett, N., Smith, S., Barnes, T., Santiago-Poventud, L., Chalfant, P., Pitts, D., & Gleaton, J. (2013). Brief Report: Integrating Social-Emotional Learning with Literacy Instruction: An Intervention for Children at Risk for Emotional and Behavioral Disorders. *Behavioral Disorders*, 39(1), 43-51. <https://doi.org/10.1177/019874291303900106>
- Davidson MC, Amso D, Anderson LC, Diamond A. (2006). Development of cognitive control and executive functions from 4 to 13 years: Evidence from manipulations of memory, inhibition, and task switching. *Neuropsychologia*, 44:2037–2078. <http://dx.doi.org/10.1016/j.neuropsychologia.2006.02.006>
- Diamond A., Barnett W.S., Thomas J., Munro S. (2007). Preschool program improves cognitive control. *Science*, 318, 1387–1388. <http://dx.doi.org/10.1126/science.1151148>
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82, 405–432. <https://doi.org/10.1111/j.1467-8624.2010.01564.x>
- El Hassan, K., & Mouganie, Z. (2014). Implementation of the Social Decision-Making Skills Curriculum on primary students (Grades 1–3) in Lebanon. *School Psychology International*, 35(2), 167-175. <https://doi.org/10.1177/0143034312469758>
- Elliott, S.N., DiPerna, J.C., Anthony, C.J., Lei, P.W., Gresham, F.M. (2020). *SSIS SEL Brief Scales—Teacher K-12*. Scottsdale; SAIL Collaborative: Scottsdale, AZ, USA.
- Garaigordobil, M. (1995). Intervención en la creatividad: Evaluación de una experiencia [Intervention in creativity: Evaluation of an experience]. *Revista Iberoamericana de Diagnóstico y Evaluación Psicológica*, 1, 37-62.
- Gioia, G.A., Isquith, P.K., Guy, S.C., & Kenworthy, L. (2000). *Behavior Rating Inventory of Executive Function professional manual*. Lutz, FL: Psychological Assessment Resources, Inc.
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A Research Note. *J. Child Psychol. Psychiatry*, 38, 581–586. <https://doi.org/10.1111/j.1469-7610.1997.tb01545.x>
- Gresham, F. M., & Elliott, S. N. (1990). *Social Skills Rating System manual*. Circle Pines, MN: American Guidance Service.
- Kim, D., Hyun, J. H., Lee, J., Bertolani, J., Mortari, L., & Carey, J. (2015). Eccomi Pronto: Implementation of a Socio-Emotional Development Curriculum in a South Korean Elementary School. *The International Journal of Emotional Education*, 7(2), 2-14.
- Kramer, T. J., Caldarella, P., Young, R., Fischer, L., & Warren, S. (2014). Implementing

- "Strong Kids" School-Wide to Reduce Internalizing Behaviors and Increase Prosocial Behaviors. *Education and Treatment of Children*, 37(4), 659-680. <https://doi.org/10.1353/etc.2014.0031>
- Kusché, C.A., Greenberg, M.T., Beilke, R. (1988). Seattle Personality Questionnaire for Young School-aged Children. Unpublished personality questionnaire. University of Washington, Department of Psychology; Seattle, WA.
- Lawlor, M.S., Schonert-Reichl, K.A., Gademann, A.M., Zumbo, B. (2014). A validation study of the Mindful Attention Awareness Scale adapted for children. *Mindfulness*, 5, 730–741. <http://dx.doi.org/10.1007/s12671-013-0228-4>.
- Marsh, H.W., Barnes, J., Cairns, L., Tidman, M. (1984). Self-description questionnaire: Age and sex effects in the structure and level of self-concept for preadolescent children. *Journal of Educational Psychology*, 76, 940–956. <http://dx.doi.org/10.1037/0022-0663.76.5.940>.
- Merrell, K. W. (2002). *School social behavior scales (2nd ed.)*. Baltimore, MD: Paul H Brookes Publishing.
- Merrell, K. W. (2010). Linking prevention science and social and emotional learning: The Oregon Resiliency Project. *Psychology in the Schools*, 47(1), 55-70. doi
- Methley, A. M., Campbell, S., Chew-Graham, C., McNally, R., & Cheraghi-Sohi, S. (2014). PICO, PICOS and SPIDER: a comparison study of specificity and sensitivity in three search tools for qualitative systematic reviews. *BMC Health Services Research*, 14, 579. doi: <https://doi.org/10.1186/s12913-014-0579-0>
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & The PPRISMA Group (2015). Linee guida per il reporting di revisioni sistematiche e meta-analisi: il PRISMA Statement. *Evidence*, 7(6), 1-8.
- Muratori, P., Bertacchi, I., Giuli, C., Lombardi, L., Bonetti, S., Nocentini, A., Manfredi, A., Polidori, L., Ruglioni, L., Milone, A., & Lochman, J. E. (2014). First Adaptation of Coping Power Program as a Classroom-Based Prevention Intervention on Aggressive Behaviors Among Elementary School Children. *Society for Prevention Research*, 16, 432-439. <https://doi.org/10.1007/s11121-014-0501-3>
- Noam G.G., Goldstein L.S. (1998). The Resiliency Inventory. Unpublished protocol.
- OECD (2019). Study on social and emotional skills. Nonpublished assessment measure.
- Parkhurst, J.T., Asher, S.R. (1992). Peer rejection in middle school: Subgroup differences in behavior, loneliness, and interpersonal concerns. *Developmental Psychology*, 28, 231–241. <http://dx.doi.org/10.1037/0012-1649.28.2.231>.
- Schonert-Reichl, K. A., Oberle, E., Stewart Lawlor, M., Abbott, D., Thomson, K., Oberlander,

- T. F., Diamond, A. (2015). Enhancing Cognitive and Social–Emotional Development Through a Simple-to-Administer Mindfulness-Based School Program for Elementary School Children: A Randomized Controlled Trial. *Dev Psychol*, 51(1), 52-66. <https://doi.org/10.1037/a0038454>
- Schonert-Reichl K.A., Smith V., Zaidman-Zait A., Hertzman C. (2012). Promoting children's prosocial behaviors in school: Impact of the “Roots of Empathy” program on the social and emotional competence of school-aged children. *School Mental Health*, 4, 1–21. <http://dx.doi.org/10.1007/s12310-011-9064-7>.
- Song, M. (2003). Two studies on the resiliency inventory (RI): Toward the goal of creating a culturally sensitive measure of adolescent resilience. Harvard University. Unpublished doctoral dissertation
- Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg R. P. (2017). Promoting Positive Youth Development Through School-Based Social and Emotional Learning Interventions: A Meta-Analysis of Follow-Up Effects. *Child Development*, 88(4), 1156-1171. <https://doi.org/10.1111/cdev.12864>
- Tobia, V., Gabriele, M. A., & Marzocchi, G. M. (2011). Norme italiane dello Strengths and Difficulties Questionnaire (SDQ): Il comportamento dei bambini italiani valutato dai loro insegnanti. *Disturbi di Attenzione e Iperattività*, 6,167–174.
- Walker, H. M., & Severson, H. H. (1992). *Systematic Screening for Behavior Disorders (SSBD): User's guide and administration manual*. Longmont, CO: Sopris West.
- Walker, H. M., Severson, H. H., & Feil, E. G. (1995). *Early screening project: A proven child-find process*. Longmont, CO: Sopris West.
- Wentzel, K.R. (1993). Motivation and achievement in early adolescence: The role of multiple classroom goals. *Journal of Early Adolescence*, 13, 4–20. <http://dx.doi.org/10.1177/0272431693013001001>.
- Woodcock, R.W. (1987). *Woodcock Reading Mastery Tests—Revised/normative update (WRMTR/NU)*. Bloomington, MN: Pearson.
- Wright, A., Diamond, A. (2014). An effect of inhibitory load in children while keeping working memory load constant. *Frontiers in Psychology*. Advance online publication. <http://dx.doi.org/10.3389/fpsyg.2014.00213>