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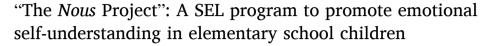
Contents lists available at ScienceDirect

Social and Emotional Learning: Research, Practice, and Policy

journal homepage: www.journals.elsevier.com/social-and-emotional-learningresearch-practice-and-policy

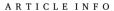


Empirical



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Keywords: SEL The Nous project Emotional self-understanding Elementary school Qualitative research



This article presents "The Nous Project," a SEL program designed to promote and analyze the capacity for emotional self-understanding among children attending elementary schools in Italy. The project rests on the conceptual framework that authentic educational research should be not only explorative of a phenomenon but also transformative of a context and, to achieve this, it should introduce into schools new meaningful experiences and investigate them. The children involved in the project were invited to narrate the emotions they felt during the day in a "diary of emotional life" and analyze them with the help of the metaphor "vegetable garden of emotions." These reflective exercises were qualitatively analyzed in order to understand what ways of emotional self-understanding emerge from the realized educative experience. At the end of the program, children were asked to write what they thought they had learned, and findings from the qualitative analysis of their answers highlight their perceptions about the effectiveness of the educative experience in which they were involved.

1. Introduction

Research on Social and Emotional Learning (SEL) has grown exponentially in recent decades alongside large-scale organizations' interest in it (Organisation for Economic Co-operation and Development, 2015; Organisation for Economic Co-operation and Development, 2024; Singh & Duraiappah, 2020; World Health Organization, 1994; World Health Organization, 2003).

The most widely quoted definition of SEL is the one developed by the Collaborative for Academic, Social and Emotional Learning (CASEL) (Niemi, 2020), which defines it as "the process through which all young people and adults acquire and apply the knowledge, skills and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions" (Collaborative for Academic, 2020).

SEL programs have spread widely across all school levels, and there has been growing recognition by school professionals of the importance and need for such interventions (Atwell & Bridgeland, 2019; Hamilton et al., 2019).

Considerable research effort has been invested in identifying SEL programs that had been developed to be effective on an evidence-based level (Collaborative for Academic, Social, and Emotional Learning,

2013; Collaborative for Academic, Social, and Emotional Learning, 2015) and in offering teachers and schools useful tools to orient themselves in the vastness of the developed interventions, in order to be able to identify those most suited to specific contextual needs (Collaborative for Academic, 2022; Jones et al., 2019).

Among the programs selected by CASEL as evidence-based, well designed, and which offer quality training, some examples of the most widespread are listened below. One of the best-known program is named RULER, developed at the Yale Center for Emotional Intelligence and aimed at promoting five main emotional skills: recognizing, understanding, labeling, expressing and regulating emotions. It should be underlined that this program places particular importance on the professional development of teachers by supporting them in the development of their own socio-emotional skills (Hoffmann et al., 2020), an aspect which is increasingly being paid attention to due to its impact both on the well-being of teachers and on the effectiveness of SEL interventions (D'Emidio-Caston, 2019; Oliveira et al., 2021; Schonert-Reichl, 2017, 2019). Another program, which is widely implemented in schools is called PATHS, which is based on the Affective-Behavioral-Cognitive-Dynamic (ABCD) model (Greenberg & Kusché, 1993). The program is focused on the dynamic integration of affect, behavior and cognitive understanding, and boasts several proof of evidence (e.g. Crean & Johnson, 2013; Domitrovich et al., 2007;

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https://doi.org/10.1016/j.sel.2024.100060

Received 23 January 2024; Received in revised form 28 July 2024; Accepted 28 July 2024 Available online 2 August 2024

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Schonfeld et al., 2015); research on the program is continuing in order to study its impact in several countries outside the USA, where it was developed and has spread most, and consider the need for cultural adaptations as well (Ferrer-Wreder et al., 2021; Humphrey et al., 2016; Humphrey et al., 2018; Novak et al., 2017). Within the vast panorama of existing programs, there is a growing interest in the contribution of mindfulness to SEL practices: it has been observed that the approach of mindfulness and the one of SEL practices have points in common and differences, and that their adequate integration can prove particularly profitable (Feuerborn & Gueldner, 2019). Of particular note is the Mind Up program (Maloney et al., 2016), based on mindfulness and found to be effective in different school levels (Crooks et al., 2020; Schonert-Reichl & Lawlor, 2010; Schonert-Reichl et al., 2015; Thierry et al., 2016).

Overall there is a growing body of research that shows how rigorously founded and implemented SEL programs can significantly improve not only the academic results and path of children and youth but also various aspects of their socio-emotional well-being (Cipriano et al., 2023; Durlak et al., 2011, 2022). Furthermore, research continues to invest effort in reaching useful indications regarding the effectiveness of interventions, for example by aiming to identify which outcomes are associated with interventions and which factors act as moderators (Cipriano et al., 2023).

However, many challenges remain for the improvement of SEL research and practices, particularly the need for better clarification of theoretical frameworks and rigorously based assessment processes (Jones & Doolittle, 2017). Regarding the need for clarity of theoretical frameworks, some critical issues have been highlighted: a) SEL is often used as an umbrella term for a wide range of different disciplines and types of interventions (Jones et al., 2021) with various theoretical backgrounds; b) the plurality of terminologies regarding the definition of skills and competences that are intended to be promoted (including, e. g., "emotional intelligence," "social and emotional skills," and "emotional literacy") (Humphrey et al., 2011) and the phenomenon called the "jingle-jangle effect," which indicates the use of the same terms to refer to different concepts or, conversely, the use of different terms to refer to the same concepts (Reeves & Venator, 2014); c) the problem of misalignment between theory, evaluation plan, and measurement (Jones et al., 2017b).

While significant findings have shown the positive effects of SEL programs, evidence on the effectiveness of such programs has proved to be sometimes controversial. This may be due to the use of different frameworks in research and evaluation, limited precision regarding key SEL competencies and related measurement processes, or even a misalignment between intervention goals and measured student outcomes (Jones & Doolittle, 2017). With regard to primary school, it was observed that different results with respect to the impact of SEL programs could be due to the fact that evaluations are often not aimed at the precise skills promoted by those interventions, but at much broader outcomes (Jones et al., 2017b). Furthermore, the importance of clarifying the reasons, objectives, and purposes of assessments is strongly underlined (National Practitioner Advisory Group, 2019).

This contribution aims to present the SEL program "The *Nous* Project," that is provided by CRED, the Center of Educational and Didactic Research of the University of Verona (Italy), which involves researchers with philosophical, educational and psychological backgrounds at different levels of their academic careers to design educative research aimed at improving the quality of life and practices in school contexts. The program was developed, implemented, and evaluated after careful consideration of the outlined issues regarding theoretical frameworks and the evaluation of effectiveness.

In terms of theoretical frameworks, "The *Nous* Project" was developed after careful reflection on the theoretical references on which it is based. The program takes its name from the Greek term "*nous*," which means both "thought" and "heart." This follows the project's theoretical assumption that the cognitive and emotional dimensions are strictly

connected, as the cognitive conception of emotions, which is sustained in the philosophical and psychological fields, highlights.

"The *Nous* Project" is aimed at children aged 9–10 years. It follows recommendations to consider an alignment between the proposed activities and the developmental stage of the children being addressed (Jones et al., 2017b) and to offer useful indications for the improvement of programs aimed at specific ages. This age group was chosen after a careful analysis of the critical issues found in the literature, particularly the great number of dedicated programs up to age 7–8 years, and the fact that less attention has been given to the delicate phase that prepares for the transition to middle school (Rimm-Kaufman & Hulleman, 2015).

The implementation of the program followed the four practices recommended by the SAFE approach (sequenced, active, targeted and explicit) (Durlak et al., 2010), and its effectiveness was evaluated through a rigorous qualitative methodology.

2. "The Nous project" as SEL program

SEL is described as "the process through which children and adults develop the skills, attitudes, and values necessary to acquire social and emotional competence," where social and emotional competence is conceived as "the ability to understand, manage, and express the social and emotional aspects of one's life in ways that enable the successful management of life tasks such as learning, forming relationships, solving everyday problems, and adapting to the complex demands of growth and development" (Elias et al., 1997, p. 2). The goals of SEL combine behavioral, cognitive and emotional aspects, fostering competences that are considered to be essential for all students (Zins & Elias, 2007).

The term SEL was introduced during a meeting hosted in 1994 by the Fetzer Institute and attended by researchers, educators and child advocates involved in different efforts to enhance the children's positive development. CASEL is the organization which emerged from this meeting with the aim to establish high-quality, evidence-based SEL as an essential part of school education (Greenberg et al., 2003).

Referring to the CASEL framework, SEL programs foster the development of five core-competences: self-awareness, which encompasses "the abilities to understand one's own emotions, thoughts, and values and how they influence behavior across contexts;" self-management, which encompasses "the abilities to manage one's emotions, thoughts, and behaviors effectively in different situations and to achieve goals and aspirations;" social awareness, which encompasses "the abilities to understand the perspectives of and empathize with others, including those from diverse backgrounds, cultures, and contexts;" relationship skills, which encompasses "the abilities to establish and maintain healthy and supportive relationships and to effectively navigate settings with diverse individuals and groups;" responsible decision-making, which encompasses "the abilities to make caring and constructive choices about personal behavior and social interactions across diverse situations" (www.casel.org). Since the fundamental educational aim of "The Nous Project" is to foster children's emotional self-understanding, it addresses the first core competence highlighted by CASEL: self-awareness. However, it is notable that encouraging the development of self-reflection ability is based on the assumption that becoming aware of one's own emotions is crucial to constructing and maintaining positive relationships with others.

This assumption is grounded in the Socratic idea that acquiring self-awareness is a condition for learning how to care for oneself (Plato, *Alcibiades*, 129 a), and only after being able to care for oneself would someone be able to care for others. When the Socratic practice of knowing oneself is carried to a deep level, it has a transformative valence because it leads to the transformation of one's own way of being. This transformation has important implications for the relationships in which one is involved. Some moral philosophers place importance on emotions because they recognize that the emotional dimension contains a fundamental component of ethical thinking. That is, educating people at the ethical level should also imply educating them to consider the

feelings connected to their decisions and actions, and the practice of emotional self-understanding is fundamental to achieving this purpose. "The *Nous* Project"s emphasis on the development of self-awareness, which is done by involving children in activities that encourage reflection on their own emotions to understand them, is also grounded in the assumption that developing this macrocompetence is a condition for not only improving one's social awareness and relationship skills but also engaging in emotional management and responsible decision-making.

3. Conceptual framework and theoretical reference

To introduce "The *Nous* Project" in detail, we will present (a) its pedagogical essence, by referring to the philosophy of care, (b) its theoretical framework, by referring to the cognitive conception of emotions, and (c) the way to implement it, by referring to the practice of emotional self-understanding.

3.1. The philosophy of care

Every theory about education is based on a specific philosophy of life. According to us, the theory of education should have as reference the philosophy of care, because care is the essential structure of life. since to be in the life means to be called to care and be cared for (Mortari, 2022). Knowledge about the ontological necessity of care has ancient roots (Foucault, 2005; Mortari, 2022). However, in the Western culture, for a long time the work of care has been conceived as an exclusive domain of female wisdom, without being adequately theorized and investigated; only in the last few decades, we have witnessed a renewed academic interest for this theme and, consequently, an international proliferation of theoretical and empirical studies about it (Hamington, 2004; Held, 2006; Kittay, 1999; Mayeroff, 1990; Noddings, 1984, 1992; Slote, 2013; Tronto, 1993). The action of care is necessary to conserve, repair and make the life flourish and the work of life is the work of care. Therefore, if education must prepare to the work of life, it must improve the art of caring. Hence, we start from the presupposition that the aim of education consists in cultivating the art of caring and, in particular, of caring for him/herself, for the others and for the world.

The human condition is material and immaterial at the same time, because we are both embodied and thoughtful entities (Merleau-Ponty, 1968, 2002). Consequently, the action of care is not only directed to the body but also to the life of the mind, as the ancient philosopher Plato first suggested in his dialogue Alcibiades. Nevertheless, for a long time the mind was considered only for its intellectual aspect and its emotional substance was neglected; only, from the phenomenological turn, that suggested the recognition of the ontological value of emotions (Scheler, 1973; Stein, 1964, 2002), it has been evident that to care for ourselves also implies to care for our own emotional life. We are a set of existential possibilities (Heidegger, 1996) and the action of education should enhance our capability and passion to cultivate all these possibilities in order to allow our life to flourish (Nussbaum, 1994, 1997, 2001), i.e. to develop accordingly to our humanity and uniqueness. In order that the human potentialities of the person can flourish and consequently allow him/her to live in a good way with the others, it is important that he/she does not only acquire intellectual expertise, but also emotional competence. For this reason, the consideration of education as a practice of care for the whole person, in order to foster the flourishing of his/her existential possibilities, implies to pay attention to the emotional dimension, and therefore to recognize the central role of emotional education.

3.2. The cognitive conception of emotions

If emotions were conceived as irrational, emotional education could not be conceived as a cognitive process. Instead, emotional education can be conceived as possible through the overcoming of the long-term dichotomy according to which the Western culture has considered the

emotional dimension to be separated from the cognitive one; on the contrary, these dimensions of the life of the mind must be considered to be strictly connected. Our thesis is that emotional education is conceivable under the perspective of the cognitive theory of emotions (Ellis, 1993; Harris, 1989; Nussbaum, 2001; Oatley, 1992), according to which emotions imply cognitive contents that affect the processes of elaboration of the meaning of experience. In particular, the emotions we live are the consequences of the meaning that we attribute to our experiences. This cognitive perspective of emotional life is rooted in ancient Greek philosophy, in particular in the works of Aristotle, the Stoic School, and Plutarch, because these philosophers considered emotions to be the expression of a nucleus of thoughts. Famous are the arguments that Aristotle develops in his Rhetoric (Book II, 1382b-1383a), where he analyses the beliefs that are at the basis of our emotional experiences. The Stoicism suggests that emotions are defined by their propositional content. That means that every emotion has its essence in a judgment concerning the phenomena of which we have experience (Graver, 2007). Plutarch, in his work Of the tranquility of the mind, explains that if a person gets to enlighten the cognitive nucleus of his/her emotional life, he/she can be able to intelligently deal with his/her emotions and avoid to be passively subjected to them. If we adopt the cognitive vision of emotions, the core of emotional competence consists in being able to analyze the emotional lived experience in order to grasp its cognitive nucleus. This is necessary, but not sufficient: indeed, following Heidegger (1996), in order to understand the emotional life, we should also comprehend the events from which the emotional flow arises and towards what kinds of externalizations (bodily, gestural and conversational) it brings. On these premises, our program of emotional education is designed to foster the children to recognize which thoughts are at the basis of their emotions, the events that give rise to them and the physical and facial externalizations (or manifestations) they produce.

In the psychological field, the cognitive conception of emotions is strongly supported. Among the most relevant perspectives there are: the rational-emotional therapy (RET) (Ellis, 1993), according to which emotional experiences are conditioned by the beliefs that people develop regarding events; the perspective of discursive psychology (Harré & Gillett, 1994), which interprets emotions as strictly connected to judgments on the quality of experienced events; the componential theory of emotion outlined by Scherer (2005), just to name a few. We also recall Oatley's valuable contribution on how emotions depend on the evaluations that the subject develops on events in relation to his own objectives and beliefs (1992, p. 19). Furthermore, the contribution of the neuroscience of emotions, which has highlighted the connections between body, emotions and cognitive functions, thus leading to crucial implications for educational and school contexts (Immordino-Yang & Damasio, 2007), is increasingly relevant. It has been highlighted how emotional and cognitive functions are closely interconnected, being supported by interdependent neural processes: the body, brain and mental dimensions generate cognitions and emotions which are closely intertwined in building knowledge and making decisions in reference to acting and thinking (Immordino-Yang, 2015).

3.3. The practice of emotional self-understanding

The theory of emotional education that inspires "The *Nous* Project" sustains the fundamental thesis according to which emotional education can be actualized from the earliest years of schooling through educative experiences aimed at facilitating children's emotional self-understanding. This process can be described as the practice of self-analysis applied to emotional lived experience. The method for self-analysis is inspired by phenomenology (Husserl, 2012; Stein, 1964, 1970), according to which the life of the mind can be rigorously studied through a methodic self-observation of the inner lived experience. The practice of emotional self-understanding is carried out by reflecting on one's feelings (Mortari, 2015), and it is important because of the

following reasons put forth by Socrates in Plato's *Alcibiades*: knowing oneself is the primary condition to be able to know how to care for oneself (129 a) and only by learning how to care for oneself is it possible to learn how to care for the others, even from a political perspective (118 b-124 c).

Emotional self-understanding is not aimed at the anesthetization of feelings; rather, it aims for emotional clarification that enlightens our ways of living and being. Furthermore, the practice of self-knowledge cannot be interpreted as a technique for the complete management of the life of the mind because it is not possible to acquire total control of our inner experience. Instead, emotional self-understanding allows us to acquire a reflective awareness about our emotional life. Understanding positive emotions, which are emotions that lead us to experience a good quality of inner and relational life, is important to discover the experiences that make our life flourish. Understanding negative emotions, which are emotions that lead us to experience a poor quality of inner and relational life, is important to discover the experiences that consume our living energy. Furthermore, understanding negative emotions is important because it is the first step to manage these: indeed, in the perspective of the cognitive conception of emotion, transforming emotions is possible only by knowing and changing the thoughts that give rise to these. A few examples of these are changing our perspective on a situation that makes us suffer, rethinking an event that had left us disappointed and considering the positive elements of that event, and reconsidering a behavior that angered us by putting ourselves in the other's shoes.

4. The educative research

Since we developed an educative experience and designed a study to understand its outcomes and effectiveness, our research can be considered as "educative" and not merely "educational." Our aim was not only to collect valid data and increase scientific knowledge on an educative phenomenon but also to provide the study participants with positive and significant possibilities of personal flourishing. For this reason, it cannot be merely described as research with children but, more precisely, as research for children (Mortari, 2009). Research with children considers them as producers of meaning and holders of rights (Christensen & James, 2008), as well as competent subjects who can provide valuable contributions in research processes (Darbyshire et al., 2005a, 2005b; Mauthner, 1997; Thomas & O'Kane, 1998, cit. in Kirk, 2007). The epistemic actions that characterize a research with children are listening to and involving them, and are aimed at achieving a "children centred research," (Barker & Weller, 2003, p. 38) that is, a research that assumes children as the center of its interest. Educative research for children involves them in an educative experience designed to promote their development and enhance their wellbeing, and to listen to their voices in evaluating the effectiveness of this experience.

In the field of human sciences, empirical research is either exploratory or transformative in nature (Mortari, 2009): the former is aimed at understanding a phenomenon and increasing scientific knowledge about it, while the latter additionally aims to produce a positive change in the context in which the heuristic process is carried out. Research with children is justified if it aims to enhance the quality of their experience by offering them good and significant possibilities of development. Explorative research involving children is aimed to collect their perspectives in order to increase scientific knowledge about them; if the findings that emerge are used to enhance the quality of the educative institutions and policies, the research can respond to the ethical principle of providing something good to children. Moreover, transformative research involving children is not an alternative to exploratory research but includes it with a broader goal: indeed, transformative research is aimed to offer good experiences to children in order to contribute to their flourishing and enhance their contexts. In fact, the investigation concerns not only children's perspectives about a phenomenon but also the effectiveness of the educative activities designed for them.

4.1. Purposes

As the project presented in this article implies the realization of experiences aimed at 1) fostering children's emotional flourishing and, consequently, enhancing the emotional and relational climate in the classroom and 2) providing teachers with instruments and activities whose effectiveness has been evaluated by a rigorous heuristic process, it can be considered as transformative research.

The objectives of the educative research project were the following:

1) to facilitate children's engagement in the practice of emotional self-understanding (the educative purpose); 2a) to understand what ways of emotional self-understanding emerge from the realized educative experience (first heuristic purpose); 2b) to explore what the children thought they had learnt from the educational experience they were involved in (second heuristic purpose).

4.2. Participants

In line with the epistemic assumptions of naturalistic inquiry (Lincoln & Guba, 1985), we set the research in the scholastic context. In particular, "The Nous Project," in its first edition designed as a pilot study, was conducted in four fourth grade elementary classes of three public schools in northern Italy: two classes were located in two inner-city schools, one of them with a high migration background, while two classes were located in a suburban, rural school. The project was integrated into the educational program of the schools for the current academic year, becoming an essential part of the educational proposal provided for their students, and for this reason it was carried out by the researchers during the scholastic timetable. The study was designed as an educative and heuristic response to a SEL need expressed by the involved schools, which were part of a network of schools with which the research team had collaborated in other projects in the past. The children who participated in the project comprised a total of 57 students, 26 males and 31 females. All the children were in the age group of 9–10 years. The consent of the parents of the children to record the conversations about emotions that were a part of data collection was taken by the teachers; audio-recordings of the dialogical interactions between the researcher and the children during the project activities was necessary to ensure rigorous data collection. The children were informed of the presence of the audio-recorder in the classroom as well as of the reasons for its use, and their consent to the audio-recording was requested and verbally obtained.

5. Instruments and activities

With reference to our educative purpose, an educative program lasting four months was promoted. This program is the result of an original design, based on the theory of emotional education presented above, which, by referring to ancient philosophy, phenomenological philosophy, contemporary philosophy of care and the cognitive conception of the emotions, advocated in both the philosophical and psychological spheres, is structured around the following theses: caring for oneself also requires caring for one's own emotions, in order to care for one's own emotions one must learn to understand them, and to understand one's own emotions is fundamental to understand the thoughts that underlie them.

The activities in the program were structured into nine meetings between each class and the researcher in which group activities, such as conversations on emotions and listening to stories, and individual activities, such as inventing stories, were organized. The principal instrument used was the "diary of emotional life" (Mortari, 2015). Each child was given a diary to write in, and this was a daily activity during alternate weeks. This activity took place for a total of eight weeks during the four months of the project. The time during which this activity was to be carried out in the classroom was decided by the teachers and on the basis of the indications given by the researcher. All the children wrote in

their diary about an emotion they had felt during the day and analyzed it. The analysis was facilitated by the metaphor "vegetable garden of emotions," which implies an association between emotional experiences and the organic life of plants, based on the assumption that emotional life can be "cultivated." When children were asked to express their lived emotional experiences, they could refer to the life of a plant. The use of this metaphor was aimed to facilitate the children's recognition of three aspects: the fact that gave rise to the emotion, the physical and facial externalizations (that in the project, to facilitate the children's comprehension, are named manifestations) through which the emotion expressed itself, and the thoughts that nourished the emotions (see Fig. 1). The last aspect is the one that makes this project coherent with the cognitive conception of emotions.

Every time the children wrote about an emotion in their diary, they were also required to draw a plant that they associated with that emotion; they were encouraged to draw different plants to denote different emotions. The drawing of the plant, which was added to the narration of the emotion, represented a space to analyze the emotion itself: indeed, starting from the second week of writing, children were required to write within the ground of the drawn plant the fact from which the emotion arose; the third week onward, they were also required to write, within the fruits of the drawn plant, the manifestations of the emotion (in the event that their emotion did not express itself at all, children could write "no manifestations"); from the fifth week, they were required to write in addition, within the stem of the drawn plant where the sap ideally flows, the thoughts that nourished the

The researcher met the children every two weeks. The meetings were structured as follows:

- First meeting: During conversations with the researcher, the children verbally expressed the emotions they were familiar with and then wrote the first narration in their respective diaries.
- Second meeting: The researcher narrated a story about an emotion and analyzed with the children the fact in the story that gave rise to the emotion.

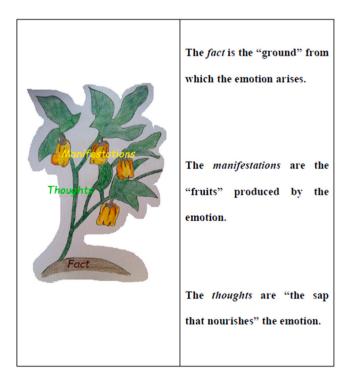


Fig. 1. Graphical explanation of the metaphor "vegetable garden of emotions."

- Third meeting: The researcher narrated a story about an emotion and analyzed with the children the fact in the story that gave rise to the emotion and its manifestations.
- Fourth meeting: A "goose game of emotions" was played, which served as a stimulus for each child to invent a story about an emotion
- Fifth meeting: The researcher narrated a story about an emotion and analyzed with the children the fact in the story that gave rise to the emotion, the manifestations of the emotion, and the thoughts that nourished the emotion.
- Sixth meeting: The "goose game of emotions" was played again in order to stimulate each child to invent a story on an emotion and to analyze the fact, manifestations, and thoughts in the narrated emotion.
- Seventh meeting: The researcher narrated a story about an emotion and analyzed with the children the fact that gave rise to the emotion, the manifestations of the emotion, and the thoughts that nourished the emotion; then, the researcher dialogued with the children about the possibility to change negative emotions by transforming the thoughts at the basis of those.
- Eighth meeting: The researcher engaged the children in a conversation about the distinction between similar emotions.
- Ninth meeting: All the children wrote in their diaries the definitions of all the emotions they had written about previously; then, after having summarized the educative pathway together with the researcher, each child was required to write about their learnings from the project.

During the second, third, fifth, and seventh meetings, the plant metaphor was used to analyze the emotions on which the stories focused. The reflection on stories was aimed at stimulating the recognition and analysis of the emotions of others through the reflection on the emotions felt by the characters presented in the stories.

The analysis of the thoughts that nourish emotions, introduced during the fifth meeting, and the conversation about the transformation of the thoughts at the basis of emotions, carried out during the seventh meeting, were proposed in line with the cognitive conception of emotions that inspires the project. Agreeing with the SAFE approach (Durlak et al., 2010), the activities were proposed according to steps that ensured that the simplest level of learning (identification of the facts from which emotions arise) had been reached by the children before proposing more complex activities (recognition of the manifestations of the emotions and thoughts that nourish them). The proposals have always foreseen the active participation of pupils in terms of Socratic conversations and personal writing in a diary. Adequate time was dedicated to allowing children a relaxed space for writing and reflection and to ensuring a sufficient number of meetings. Additionally, the learning objectives and skills related to emotional self-awareness were clear and explicit. The teachers were always in class during the meetings carried out by the researcher, and they had an important role in assuring the children the possibility to fill out the "diary of emotions" every day during the weeks of writing.

6. Collected data and analysis methods

For the purposes of this article, we considered the collected diaries of emotional life and the collected answers to the question about children's achievements. Both materials have been qualitatively analyzed.

6.1. The diaries of emotional life

For the analysis, we decided to consider only the diaries which, on completion of data collection, appeared complete, i.e., contained at least one exercise of emotional self-understanding done in each of the eight weeks that were dedicated to the writing activity, and were decipherable in language and handwriting. As a result, the total number of diaries that

were analyzed was 45, which contained more than 1400 exercises of emotional self-understanding carried out by the study participants. All the diaries were anonymized to ensure the privacy of the children. With reference to our first heuristic purpose, a qualitative analysis of the data allowed us to answer our research question: "Which ways of emotional self-understanding do emerge from the realized educative experience?". The analysis employed a phenomenological approach (Husserl, 2012; Mortari, 2008; Moustakas, 1994; Giorgi, 1985), because it was guided by the principle of faithfulness, according to which the "complete clearness is the measure of all truth, and that statements which give faithful expression to their data need to fear nothing from the finest arguments" (Husserl, 2012, p. 155), and it was carried out by engaging in the practice of "epoché" (Husserl, 2012, p. 59), that recommends to bracket any pre-knowledge, evaluation or expectation which could affect the heuristic process. The analysis was aimed to understand the essence, i.e. the fundamental characteristics, of the reflective experience in which the children were involved through the discovery of what ways of emotional self-understanding emerge from their diaries. Although, for the explained reasons, the followed method refers to a phenomenological approach, the technicalities of the analysis were constructed ad hoc for the type of collected data, which include a narrative part and an analysis part; since the type of collected data, due to its particularity, has no equal correspondence in literature, there were no previously formulated technicalities of analysis that we could apply to this research, which therefore also presents a methodological originality.

After the data were collected, for the purpose of the analysis, the project was divided into four phases based on the tasks given to the children. The first phase corresponded to the first week of writing (narration and drawing), the second phase corresponded to the second week (narration, drawing, and identification of the fact); the third phase corresponded to the third and four weeks (narration, drawing, and identification of the fact and the manifestations), and the fourth phase corresponded to the fifth, sixth, seventh, and eighth weeks (narration, drawing, and identification of the fact, the manifestations, and the thoughts).

Our analysis aimed to identify in each exercise of emotional selfunderstanding the following typology of elements: "required elements," that is, those elements that were explicitly required by the researcher during the different weeks of writing; "unexpected elements," that is, those elements that children spontaneously anticipated during the weeks of writing but were not explicitly required by the researcher. The identification of required and unexpected elements enabled the researchers to understand the ways of emotional selfunderstanding that emerged in children's reflective exercises with reference to different phases of the project and weeks of writing (see Table 1).

We also analyzed if the facts presented by children were generic, i.e. referring to a general and not clearly described situation, or precise, i.e. referring to a particular and clearly described situation. Furthermore, we identified the typology of the thoughts that were the basis for the emotions. In addition to the required and unexpected elements, we identified the "emerging elements," i.e., those elements that emerged in a few diaries and were not explicitly required in this project.

6.2. Children's responses about their learning

At the end of the project, with reference to our second heuristic purpose, we considered important to analyze the answers given by the children to the question: "What have I learnt from this pathway?". There were a total of 41 responses to this question. The data were analyzed through a methodological crossbreeding between the phenomenological method (Husserl, 2012; Mortari, 2008; Moustakas, 1994; Giorgi, 1985) and the grounded theory (Glaser & Strauss, 1967). In order to approach the phenomenon under study as faithfully as possible, it can be useful to crossbreed different methods (Mortari & Silva, 2018), following the principle of the "rigorous freedom" that implies the possibility to

Table 1Typology of elements for analysis.

Project phase	Week/s of writing	Required elements	Unexpected elements
I	First week	Narration of the emotion Drawing of the plant associated with the emotion	Fact that gave rise to the emotion Manifestations through which the emotion was expressed Thoughts that nourished the emotions
П	Second week	Narration of the emotion Drawing of the plant associated with the emotion Fact that gave rise to the emotion	Manifestations through which the emotion was expressed Thoughts that nourished the emotions
Ш	Third and fourth weeks	Narration of the emotion Drawing of the plant associated with the emotion Fact that gave rise to the emotion Manifestations through which the emotion was expressed	Thoughts that nourished the emotions
IV	Fifth, sixth, seventh, and eighth weeks	Narration of the emotion Drawing of the plant associated with the emotion Fact that gave rise to the emotion Manifestations through which the emotion was expressed Thoughts that nourished the emotions	

crossbreed different methodological procedures (freedom) but prescribes the necessity to clearly explicate the reasons at the basis of the researcher's decision (rigor). The phenomenological method and the grounded theory can be blended because they share some fundamental assumptions: the importance of adherence to data in order to construct a faithful description or theory of the phenomenon; the importance of bracketing all the pre-conceived assertions and theories in order to better understand the specificity of the phenomenon under study; and the importance to avoid deductive reasoning and construct knowledge through inductive reasoning.

This method was aimed at understanding the essence of the children's achievements, and at reaching this purpose by a process of labeling and categorization of the children's answers.

The main heuristic actions carried out in the analysis were the following: we repeatedly read any text; we identified significant units in the answers; we elaborated a descriptive label for each significant unit; we elaborated a conceptual category to collect similar labels (i.e., labels referring to the same general dimension of learning); we elaborated a coding system, i.e. an overview table that shows the emerged results in a glance, as it includes all the categories with the correspondent labels grouped in them.

7. Results

Results from the qualitative analysis highlight the ways of emotional self-understanding emerged from the emotional diaries and the learning that children wrote to be achieved thanks to their participation to the program. In order to provide evidence-based results, some data will be included in their presentation.

7.1. The ways of emotional self-understanding

An analysis of the diaries allowed for the identification of the ways of emotional self-understanding that emerged from the educative experience of children in this project. In particular, our analysis confirms that the recognition of the required elements – i.e., the fact, the manifestations and the thoughts – is a way of emotional self-understanding.

Below it is possible to see some examples of these elements emerged in the diaries.

Example 1.

Narrative: "Today I feel sadness because my mom promised to buy me a video game but she didn't".

Emotion: sadness.

Drawn plant: zucchini.

Fact written into the ground: "My mom didn't keep her promise".

Manifestations written into the fruits: "I cried for a while".

Thoughts written into the stem: "I think she forgot it".

Example 2.

Narrative: "Today at 7.30 am I awakened because I had to get dressed to go to school. I got up from the bed and opened the wardrobe, I started looking for something but before looking I had to say it to my mom (because if I had worn something that she didn't want, she would have made me change my clothes). Then I went into my mum's bedroom and asked her if I could wear a skirt and she said yes. Then I ran in my bedroom, opened the wardrobe and took a black skirt, grey tights and black shoes with a black bow with a small heart in the centre. After having worn the jacket I went to school and everybody said me that I was very beautiful".

Emotion: happiness.

Plant: a flower.

Fact written into the ground: "My mom allowed me to wear a skirt".

Manifestations written into the fruits: "A smile".

Thoughts written into the stem: "How beautiful I am".

Furthermore, through the individuation of the emerging elements in a few diaries, we discovered the presence of additional ways of emotional self-understanding, such as the following: the recognition of the *intensity* of the emotion (e.g., "I feel *a lot of* happiness because, today, we saw a documentary about animals; it was very interesting, amusing, and sometimes unhappy. I like animals, except the spider."); the recognition of a *desire* or *unwillingness* connected to the emotion (e.g., "Today, I felt a moment of happiness when I went to school. It was the first time that *I wanted to go to school*," "Today, I had a moment of anger when my mother awakened me early in the morning and *I did not want to go to school*."); the recognition of an *additional emotion* that can be felt before, after, or concurrently with the main emotion (e.g., "Today, during the Italian class, the teacher involved me in an oral history exam and I felt a lot of *anxiety*. But at the end, I was happy as I got 8/9 as a grade.").

The majority of the facts that children recognized as being the basis of their emotions are precise events. In other words, the narrated emotions arose from particular situations, such as an activity carried out at school, a sport activity, the victory of one's heart team, a game, a test, or a good grade. Children were able to individuate the manifestations that were coherent with the narrated emotions, but we also found several cases in which children wrote that their emotions did not express themselves in any way (as mentioned earlier, in the indications for the emotional analysis, we gave them the option of writing "no manifestations").

In the latter case, it is important to highlight that the awareness that emotions can remain within the mind, without being externalized, represents a result of the practice of emotional self-understanding.

The typologies of cognitive acts that emerged from our analysis of the thoughts that nourished the children's emotions can be described as follows: evaluation, ironic evaluation, self-evaluation, foresight, supposition, question, doubt, intention, belief, hypothesis, interpretation of others' emotions, foresight that includes an evaluation, foresight that includes a self- evaluation, foresight of other's emotion.

The category 'no thoughts' emerged when children expressed an absence of thoughts. We did not provide them this option in the indications for the emotional analysis. Probably, children followed for the thoughts the same indication we had provided for the manifestations. An interpretation of this data is challenging. According to cognitive theory, emotions always imply a cognitive content and, even if children did not clarify these, their narrations allow us to hypothesize some thoughts that are at the basis of their emotions. Therefore, we suppose that in these cases, children were not able to individuate the cognitive content because they were less engaged in the exercise of emotional self-understanding than in other cases. Indeed, it should be considered that in educative research conducted in natural settings, several elements, such as children's concentration or the available time, can influence the educative activities through which data collection is carried out.

Despite these difficulties, our data allow to confirm the cognitive theory of emotions (Ellis, 1993; Harris, 1989; Nussbaum, 2001; Oatley, 1992) on the empirical level, in an experience involving children, because being helped with a metaphor, in several cases, the children were able to individuate the cognitive acts that underlie their emotions. An interesting point of reflection could be to interpret our results also in the light of the study of Pons, Harris and de Rosnay (2004) who, on the basis of a literature review and of an empirical research involving children from 3 to 11 years, explored how the emotional comprehension develops through the emerging of nine components, including the comprehension of the role of the beliefs on the emotions.

According to our analysis, the "diary of emotional life" and the "vegetable garden of emotions" metaphor proved to be effective instruments for facilitating children's emotional self-understanding. Several cases in this study illustrate that the act of emotional self-analysis supported by the metaphor is more effective than the act of narration in helping children recognize manifestations and thoughts.

Nevertheless, in some cases the children also demonstrated some difficulties in doing the emotional analysis. The difficulties concerning the emotional analysis are evident in those exercises of emotional self-understanding in which, in the spaces of the plants dedicated to the fact, manifestations and thoughts, emerge different elements from the ones that were required.

7.2. The children's achievements

The project promoted important educative achievements, as it is summarized in the coding system emerged from the analysis process (see Table 2).

The emerged categories give an overview of children's achievements, according to their own evaluations about the effectiveness of the project. In this paragraph, we will briefly present each of them, by particularly focusing on those data which particularly highlight "The Nous Project" effectiveness in enhancing emotional self-understanding. This is because, according to our theoretical perspective, the emotional self-understanding is conceived as a fundamental practice for learning how to care for oneself.

The categories "To know the emotional life", "The characteristics of emotions," and "To engage in self-analysis," demonstrate that children became more familiar with their emotional life, explored the specific qualities which characterize the emotional phenomena, and learned to analyze emotions by engaging in a reflective effort.

The category "To know the emotional life" reveals that some children generically listed the learned emotions, but other children were able to explain something more. The following children's answers help understand this:

- "We learned lots of emotions, for example, sadness, fear, glee, happiness, anger. joy."
- "From this path, I have learned to recognize my emotions."

Table 2Coding system of children's achievements.

Labels	Categories
Emotions	To know the emotional life
What emotions mean	
How emotions manifest/express themselves	
Emotions help to understand how one feels	
To recognize emotions	
To know feelings and emotions	
What an emotion is	
To discover what emotions one feels during the day	
The difference between various emotions	The characteristics of emotions
The similarity in various emotions	The characteristics of chiotions
The difference in similar emotions	
The interiority of emotions	
The spontaneity of emotions	
Emotions can be positive or negative	
The individuality of the emotional life	
Emotions can be analyzed	
To distinguish emotions	To engage in self-analysis
To describe emotions	To engage in sen unarysis
To look inside oneself	
To carry out the analysis of emotions (to	
individuate facts, manifestations, and	
thoughts)	
To think more	
To search for one's own thoughts	
To understand the origin of emotions	
How emotions are used and understood	
To listen to emotions	
To express one's own emotions	To express oneself
To express oneself with others	To express onesen
To share emotions	
The names of the emotions	The emotional lexicon
Several words	The emotional remedi
It is difficult to write different meanings of	The difficult work of self-
similar emotions	understanding
Expertise is needed in distinguishing	anderstanding
emotions	
Emotions are important	The importance of emotions
Emotions are important because they help	importance of emotions
one understand oneself	
To write emotions	To write
Writing emotions is important	
How to write a narrative	
The similarity between emotions and plants	The metaphor of the plant
Every emotion has a plant	
Every plant has an emotion	
Emotions are plants	
Plants are emotions	
Thought nourishes emotions	Children use the metaphor in an
Emotions can be cultivated	active way in order to describe emotions

- "I have learned [...] that if I feel an emotion such as joy, I smile, instead when I'm sad I cry."
- "From this path about emotions, I have learned how emotions manifest themselves."
- "From this path, I have learned that emotions [...] help you, for example, to answer to questions [such as]: how do you feel? Today I'm happy."
- "During this path, we have learned to know our feelings and emotions."
- "To discover what emotions I feel during the day."

The category "The characteristics of emotions" includes the data that describe how the emotional phenomena are similar or different from one another and highlight some fundamental qualities of emotions, such as their spontaneity, their interiority (i.e. their being felt within us), their polarization in positive and negative according to their effect on our quality of life, their contribution to the constitution of our individuality, and the possibility to be analyzed.

The category "To engage in self-analysis" reveals that children acquired a method to explore their inner life. Some of the children's answers in this category are as follows:

- "I have learned to describe my emotions, by looking in depth inside me [and] finding thoughts, manifestations and facts..."
- "I have learned to think more and to search for what I want to say. I have also learned to see more inside me."
- "I have learned how emotions can be used and understood."

One of the children said that she had learned to understand "from where emotions are born," while some others said that they had learned to distinguish emotions.

The educative experience we developed in the form of the *Nous* program can also be considered an experience of emotional literacy, specifically, with reference to the achievement categories "To express oneself" and "The emotional lexicon."

The category "To express oneself" reveals that some children learned to express and share their emotions (for example, "I have learned to express my emotions," "I have learned to write my emotions and to share them") as well as to express themselves to others (for example, "I have learned to express myself better with another person. It was very beautiful.").

The category "The emotional lexicon" suggests that some children learned the words to name emotions (for example, "From this path, I have learned [...] the name of the emotions," "We have learned lots of words.").

It is important to handle an emotions lexicon. For example, when we experience emotions that make us feel particularly vulnerable, we need to be cared for by others. And in order to describe our condition to others, we need to know the right words.

The category "The difficult work of self-understanding" highlights the children's awareness that emotional self-understanding is not a simple practice but one that requires a continuous reflective effort, as it emerged in the following answers:

- "From this path, I have learned that some emotions are very similar and that it is difficult to write all the different meanings."
- "I have learned that you must be very good to distinguish the various emotions because some of them are very similar, but once you have learned, recognizing emotions is simple and amusing."

As suggested in the second answer, despite difficulties, it is possible to learn how to practice emotional self-understanding. The children who participated in the project developed the ability to understand their emotional life during the four months of the educative path; however, this practice needs to be cultivated throughout one's life.

The cultivation of emotional self-understanding is fundamental also because, as it is highlighted in the category "The importance of emotions", emotions themselves are important, especially because they help us to understand ourselves.

In practicing emotional self-understanding, writing seems to be an effective support, and as it is suggested by the category "To write," thanks to the *Nous* program children enhanced their writing ability.

Finally, it is important to highlight that, in the answers collected at the end of the project, it also emerged that children learned the metaphor of plants which was at the basis of the program, and in some cases they were able to use it in an active way in order to describe emotions, as it is clarified in the last two categories of the coding system.

8. Implications and discussion

Despite the fact that the reduced number of the participants and the qualitative framework of the research do not allow a generalization of the emerged findings, the collected data show the effectiveness of the realized activities and encourage to experiment the *Nous* program in a broader way, with reference to different contexts and geographic areas.

It should be underlined that the commitment to carry out a rigorous qualitative research on the program responds to what has been suggested with regard to the increasing efforts to undertake more evaluations in the European context, which include qualitative studies (Cefai et al., 2018).

The program focuses on the promotion of a specific skill, the one of emotional self-understanding, and it was shown how the research conducted to evaluate its effectiveness was precisely aimed at this particular skill. In this sense, an example is offered about the modalities to maintain coherence between program objectives and evaluation, in line with what has been recommended in order to have a clearer understanding of the results that emerge with respect to the impact of SEL interventions (Jones et al., 2017b).

Moreover, teachers can be inspired by the program in order to realize activities of emotional education in their classrooms, on the belief that fostering the children's reflection on emotions can be effective to promote the development of their emotional self-awareness. This indication is also supported in the literature, which has highlighted the potential of writing a social and emotional education journal as a precious phenomenological tool for self-evaluation (Cefai & Cavioni, 2014).

Considering that among the wide range of methodologies used to varying degrees in the different SEL programs there seems to be less emphasis on the use of writing (Bouffard et al., 2009; Jones et al., 2021; Jones et al., 2017a), "The Nous Project" proves not only innovative in terms of design, using the daily writing of the diary of emotions combined with the proposal of the metaphor of the vegetable garden of emotions, but it also proves to be useful to expand the practices that teachers can employ in response to the specific needs of their school contexts, offering them tools that have proven fruitful.

Regarding the metaphor of the plant used in the program to analyze emotions, the results obtained from the carried out research lead us to reflect on how the structure of the adopted plant may not be sufficient to gain a complete understanding of the complex phenomenon of emotional life.

In fact, the emerged findings highlight that the involved children, in describing their emotions, also refer to other elements such as intensity, desires or unwillingness, and additional emotions. These elements, that we define "emerging" elements, appear in the narratives as well as in the plant of analysis, in the spaces dedicated to the required elements. In particular, "intensity" emerges most frequently in the narrations, while "desires" and "unwillingness" appear in the narrations as well as in the spaces of the analysis dedicated to the fact, where the children explain the origin of their emotions, and to the thoughts, where the children clarify the emotion's cognitive contents. The additional emotions appear both in the narrations and in the spaces of analysis dedicated to facts, manifestations and thoughts, in substitution or addition to the abovementioned elements. Considering the findings of our empirical research, the plant metaphor should be restructured to include the possibility to express the found emerging elements, i.e. intensity, desire or unwillingness and additional emotions. Under the perspective of the participatory research, the restructuring of the metaphor could be realized by the children who will take part in future implementations of the program.

Given the positive impact of the program on emotional selfunderstanding, other developments could include the adaptation of this educational proposal for middle schools, which is often neglected. Youngsters in the pre-adolescent and adolescent phase can be particularly vulnerable to various difficulties (Cappella et al., 2019; Steinberg, 2017), finding themselves facing numerous changes on multiple levels: physical, emotional and social (Zhao et al., 2015). In fact, this is a critical period for the onset of anxious, depressive and emotional distress symptoms (Cohen et al., 2018). At the same time, typical changes in this evolutionary phase make it a unique moment to invest in the development of socio-emotional skills (Collaborative for Academic, Social, and Emotional Learning, 2015; Steinberg, 2017). A metaphor that is more suitable for preadolescents should be identified. Children's reflexivity on possible ways of reacting to emotional experiences could also be stimulated, promoting the reflective and mentalizing skills that are particularly valuable in this age group with a view to preventing risky behavior.

Another important development concerns teacher training, which is

increasingly recognized as a fundamental aspect of advancing SEL work (Schonert-Reichl, 2019). The literature shows an ever-increasing attention to promote the socio-emotional skills of the teachers themselves, as it is shown, for example, in the RULER program which attributes a great importance to the fact that the tools provided for the activities must first of all be understood and used by teachers themselves in order to develop their professional and personal skills, before being proposed in the classroom (Hoffmann et al., 2020). Another example is the teacher training provided by the CARE program which, according to a mindfulness-based approach, is based on the premise that, in order to be empathetic and compassionate in relationships, it is essential to first develop these qualities within oneself (Jennings et al., 2019), and which encourages teachers to experiment with techniques related to self-care, self-awareness and emotional regulation.

In comparison to other educational proposals, developed in the horizon of SEL conceptual frameworks, the Nous program seems to have the limit of focusing too much on the emotional self-understanding and not enough on the understanding of the emotions of the others. This is due to the fact that the children were encouraged to write down in their diaries the emotions they felt in first person, in order to learn how to analyze them. As a matter of fact, our belief is that learning to analyze one's own emotion is essential to learn how to understand the other's emotions through a more intensive empathic posture. Furthermore, it should be highlighted that self-care should not be interpreted as a solipsistic practice because, even from a political point of view, if one must learn to take care of others, it is important to learn to take care of oneself (Alcibiades, 118 b-124 c); consequently, in order to learn to care for the emotions of others, it is important to learn to care for your own emotions. In the program, recognition and analysis of others' emotions is encouraged through the reflection on the emotions felt by the characters of the presented stories; however, this educative research needs to be developed with the introduction of additional instruments that foster the children's reflection on the other's emotional dimension, in order to better fit with the educational purposes of SEL frameworks.

In conclusion, the emerged findings encourage the introduction of the emotional self-understanding activities in a broader program, able to take into account, in a more social focused framework, the effectiveness of fostering children's reflection on emotions by using writings and metaphors.

9. Conclusion

At the basis of our study, we propose an idea of emotional education as a practice of care with its elements delineated as follows:

- Every person should learn to care for themselves in all their dimensions, and their emotional life is one of these.
- In order to know how to care for oneself, it is important to engage in the practice of self-knowledge (*Alcibiades*, 129 a). Similarly, in order to understand how to care for one's own emotions, it is important to engage in the practice of emotional self-understanding.
- Education should be understood as a practice of care, which helps people learn how to care for themselves (Apology, 36 c), and emotional education should be considered as a practice of care that helps people learn how to care for their own emotions.

Even if the emotional competences are essential, our society does not only neglect them but, in many cases, it is also characterized by emotional illiteracy (Goleman, 1995; Steiner, 1984), a phenomenon that indicates incapability or difficulty in understanding, expressing and handling one's own emotions as well as in recognizing, listening to and being responsive to the emotions of the others. The categories of achievement, which emerged from our study, allow us to conclude that "The *Nous* Project" can be effective in reducing the risks of emotional illiteracy by offering children the possibility to learn how to care for their emotional lives.

The "wisdom of the heart" (Mortari, 2023), which can be experienced by a continuous engagement in the practice of emotional self-understanding, gives one the ability to have a sort of sovereignty on one's life. This should not be interpreted as having complete control on one's inner dimension but as the capability to monitor how one's emotional experiences affect the quality of one's life.

Based on the premise that authentic educational research in school should be transformative, we conclude that the program presented in this article has a transformative effectiveness in multiple ways. It fosters children's emotional flourishing by encouraging their learning of the practice of emotional self-understanding. It makes possible the enhancement of the emotional and, consequently, relational environment in the classroom by facilitating the development of children's skills related to emotions, such as emotional analysis, awareness, expression, and verbalization. It also contributes to improving the educative practices in educational institutions by equipping teachers with instruments and activities whose effectiveness has been established through rigorous research.

Impact statement

"The *Nous* Project" is: grounded in a clear theoretical framework, which is represented by the cognitive conception of emotions and the ancient philosophy of care, accordingly to which the purposes of the program are clarified; innovative in terms of design, in particular for the original metaphor "vegetable garden of emotions", designed to help children to reflect about their emotions; evidence-based, because a qualitative research has been conducted in order to rigorously evaluate the effectiveness of the implemented educative activities; helpful for practice, because it provides teachers with easily replicable activities, whose effectiveness has been evaluated through a rigorous research process.

CRediT authorship contribution statement

Rosi Bombieri: Writing – review & editing, Writing – original draft, Conceptualization. Federica Valbusa: Writing – review & editing, Writing – original draft, Methodology, Investigation, Data curation. Luigina Mortari: Writing – original draft, Supervision, Methodology, Investigation, Conceptualization.

Acknowledgments

The University of Verona is acknowledged for the support provided through the extraordinary university fund for Open Access publications.

References

- Aristotle (2010). Rhetoric (W. Rhys Roberts, Trans.). Cosimo.
- Atwell, M.N., & Bridgeland, J.M. (2019). Ready to Lead: A 2019 Update of Principals' Perspectives on How Social and Emotional Learning Can Prepare Children and Transform Schools. A Report for CASEL. Civic with Hart Research Associates. https:// files.eric.ed.gov/fulltext/ED602977.pdf.
- Barker, J., & Weller, S. (2003). "Is it fun?" Developing children centred research methods. International Journal of Sociology and Social Policy, 23(1/2), 33–58. https:// doi.org/10.1108/01443330310790435
- Bouffard, S., Parkinson, J., Jacob, R., & Jones, S. M. (2009). Designing SECURe: A summary of literature and SEL programs reviewed in preparation for the development of SECURe. Harvard Graduate School of Education. Harvard University.
- Cappella, E., Schwartz, K., Hill, J., Kim, H. Y., & Seidman, E. (2019). A national sample of eighth-grade students: The impact of middle grade schools on academic and psychosocial competence. *The Journal of Early Adolescence*, 39(2), 167–200. https:// doi.org/10.1177/0272431617735653
- Cefai, C., Bartolo, P., Cavioni, V. & Downes, P. (2018). Strengthening social and emotional education as a core curricular area across the EU – A review of the international evidence – Analytical Report, Publications Office of the European Union. (https://data.europa. eu/doi/10.2766/664439)
- Cefai, C., & Cavioni, V. (2014). Social and emotional education in primary school: integrating theory and research into practice. Springer.
- Christensen, P., & James, A. (Eds.). (2008). Research With Children: Perspectives and Practices (2nd ed.). Routledge.

- Cipriano, C., Strambler, M. J., Naples, L. H., Ha, C., Kirk, M., Wood, M., Sehgal, K., Zieher, A. K., Eveleigh, A., McCarthy, M., Funaro, M., Ponnock, A., Chow, J. C., & Durlak, J. (2023). The state of evidence for social and emotional learning: A contemporary meta-analysis of universal school-based SEL interventions. *Child Development*, 94(5), 1181–1204. https://doi.org/10.1111/cdev.13968
- Cohen, J. R., Andrews, A. R., Davis, M. M., & Rudolph, K. D. (2018). Anxiety and depression during childhood and adolescence: testing theoretical models of continuity and discontinuity. *Journal of Abnormal Child Psychology*, 46(6), 1295–1308. https://doi.org/10.1007/s10802-017-0370-x
- Collaborative for Academic, Social, and Emotional Learning. (2020). Fundamentals of SEL. CASEL. https://casel.org/fundamentals-of-sel/.
- Collaborative for Academic, Social, and Emotional Learning. (2022). CASEL program guide. CASEL. https://pg.casel.org/.
- Collaborative for Academic, Social, and Emotional Learning. (2013). 2013 CASEL Guide: Effective social and emotional learning Programs—Preschool and elementary school edition. https://files.eric.ed.gov/fulltext/ED581699.pdf.
- Collaborative for Academic, Social, and Emotional Learning. (2015). 2015 CASEL Guide: Effective Social and Emotional Learning Programs—Middle and High School Edition. https://staticl.squarespace.com/static/5532b947e4b0edee99477d27/t/ 5d0948b6a78e0100015f652f/1560889545559/CASEL+Secondary+Guide+2015. pdf.
- Crean, H. F., & Johnson, D. B. (2013). Promoting Alternative Thinking Strategies (PATHS) and elementary school aged children's aggression: results from a cluster randomized trial. American Journal of Community Psychology, 52(1–2), 56–72. https://doi.org/10.1007/s10464-013-9576-4
- Crooks, C. V., Bax, K., Delaney, A., Kim, H., & Shokoohi, M. (2020). Impact of MindUP among young children: Improvements in behavioral problems, adaptive skills, and executive functioning. *Mindfulness*, 11(10), 2433–2444. https://doi.org/10.1007/s12671-020-01460-0
- D'Emidio-Caston, M. (2019). Addressing social, emotional development, and resilience at the heart of teacher education. *Teacher Education Quarterly*, *46*(4), 116–149. https://www.jstor.org/stable/26841579.
- Darbyshire, P., MacDougall, C., & Schiller, W. (2005a). Multiple methods in qualitative research with children: More insight or just more? *Qualitative Research*, 5(4), 417–436. https://doi.org/10.1177/1468794105056921
- Darbyshire, P., Schiller, W., & MacDougall, C. (2005b). Extending new paradigm childhood research: Meeting the challenges of including younger children. Early Child Development and Care, 175(6), 467–472. https://doi.org/10.1080/ 03004430500131247
- Domitrovich, C. E., Cortes, R. C., & Greenberg, M. T. (2007). Improving young children's social and emotional competence: a randomized trial of the preschool "PATHS" curriculum. *The Journal of Primary Prevention*, 28(2), 67–91. https://doi.org/ 10.1007/s10935-007-0081-0
- Durlak, J. A., Mahoney, J. L., & Boyle, A. E. (2022). What we know, and what we need to find out about universal, school-based social and emotional learning programs for children and adolescents: A review of meta-analyses and directions for future research. Psychological Bulletin, 148(11-12), 765. https://doi.org/10.1037/ bul0000383
- Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology*, 45(3-4), 294–309. https://doi.org/ 10.1007/s10464-010-9300-6
- 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(1), 405–432. https://doi.org/10.1111/j.1467-8624.2010.01564.x
- Elias, M. J., Zins, J. E., Weissberg, R. P., Frey, K. S., Greenberg, M. T., Haynes, N. M., Kessler, R., Schwab-Stone, M. E., & Shriver, T. P. (1997). Promoting Social and Emotional Learning: Guidelines for Educators. ASCD.
- Ellis, A. (1993). Reflections on rational-emotive therapy. *Journal of Consulting and Clinical Psychology*, 61(2), 199–201. https://psycnet.apa.org/doi/10.1037/0022-006X.61.2.199.
- Ferrer-Wreder, L., Eninger, L., Olsson, T. M., Sedem, M., Allodi, M. W., & Hau, H. G. (2021). The cultural adaptation of interventions to promote positive development: The preschool edition of PATHS® in Sweden. In R. Dimitrova, & N. Wiium (Eds.), Handbook of positive youth development: Advancing research, policy, and practice in global contexts (pp. 399–413). Springer Nature Switzerland AG.
- Feuerborn, L. L., & Gueldner, B. (2019). Mindfulness and social-emotional competencies: Proposing connections through a review of the research. *Mindfulness*, 10(9), 1707–1720. https://doi.org/10.1007/s12671-019-01101-1
- Foucault, M. (2005). The Hermeneutics of the Subject: Lectures at the Collège de France 1981-1982. Springer.
- Giorgi, A. (1985). Phenomenological and Psychological Research. Duquesne University Press.
- Glaser, B., & Strauss, A. (1967). The Discovery of Grounded Theory. Strategies for qualitative research. Aldine.
- Goleman, D. (1995). Emotional Intelligence. Bantam Books.
- Graver, M. (2007). Stoicism and Emotion. The Chicago University Press.
- Greenberg, M. T., & Kusché, C. A. (1993). Promoting social and emotional development in deaf children: The PATHS project. University of Washington Press.
- Greenberg, M. T., Weissberg, R. P., O'brien, M. U., Zins, J. E., Fredericks, L., Resnik, H., & Elias, M. J. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist*, 58(6-7), 466–474. https://doi.org/10.1037/0003-066X.58.6-7.466.
- Hamilton, Laura S., Doss, C. J., & Steiner, E. D. (2019). Teacher and Principal Perspectives on Social and Emotional Learning in America's Schools: Findings from the American

- Educator Panels. RAND Corporation. https://www.rand.org/pubs/research_reports/ RR2991.html.
- Hamington, M. (2004). Embodied Care: Jane Addams, Maurice Merleau-Ponty, and Feminist Ethics. University of Illinois Press.
- Harré, R., & Gillett, G. (1994). The discursive mind. Sage Publications.
- Harris, P. (1989). Children and Emotion. The Development of Psychological Understanding. Basic Blackwell.
- Heidegger, M. (1996). Being and time (J. Stambaugh, Trans.). State University of New York
- Held, V. (2006). The Ethics of Care. Personal, Political, and Global. Oxford University Press. Hoffmann, J. D., Brackett, M. A., Bailey, C. S., & Willner, C. J. (2020). Teaching emotion
- regulation in schools: Translating research into practice with the RULER approach to social and emotional learning. Emotion, 20(1), 105-109. https://doi.org/10.1037
- 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, 73-89. https://doi.org/ 10.1016/j.jsp.2016.07.002
- Humphrey, N., Hennessey, A., Lendrum, A., Wigelsworth, M., Turner, A., Panayiotou, M., Joyce, C., Pert, K., Stephens, E., Wo, L., Squires, G., Woods, K., Harrison, M., & Calam, R. (2018). The PATHS curriculum for promoting social and emotional well-being among children aged 7-9 years: a cluster RCT. NIHR Journals Library.
- Humphrey, N., Kalambouka, A., Wigelsworth, M., Lendrum, A., Deighton, J., & Wolpert, M. (2011). Measures of social and emotional skills for children and young people: A systematic review. Educational and Psychological Measurement, 71(4), 617-637. https://doi.org/10.1177/0013164410382896
- Husserl, E. (2012). Ideas (W. R. Boyce Gibson, Trans.). Routledge.
- Immordino-Yang, M. H. (2015). Emotions, learning, and the brain: Exploring the educational implications of affective neuroscience. WW Norton & Company.
- Immordino-Yang, M. H., & Damasio, A. (2007). We feel, therefore we learn: The relevance of affective and social neuroscience to education. Mind, Brain, and Education, 1(1), 3-10. https://doi.org/10.1111/j.1751-228X.2007.00004.x
- Jennings, P. A., DeMauro, A. A., & Mischenko, P. (2019). Cultivating Awareness and Resilience in Education. The CARE for teachers program. In I. Ivtzan (Ed.), Handbook of mindfulness-based programmes: Mindfulness interventions from education to health and therapy. Routledge.
- Jones, S., Bailey, R., Brush, K., & Nelson, B. (2019). Introduction to the Taxonomy Project: Tools for Selecting & Aligning SEL Frameworks. Establishing Practical Social-Emotional Competence Assessments Work Group. Measuring SEL. Using Data to Inspire Practice. https://measuringsel.casel.org/wp-content/uploads/2019/02/ Frameworks-C.1.pdf.
- Jones, S. M., Barnes, S. P., Bailey, R., & Doolittle, E. J. (2017b). Promoting social and emotional competencies in elementary school. *The future of children, 27*(1), 49–72. http://www.istor.org/stable/44219021.
- Jones, S., Brush, K., Bailey, R., Brion-Meisels, G., McIntyre, J., Kahn, J., ... Stickle, L. (2017a). Navigating SEL from the inside out. Looking inside & across 25 leading SEL programs: A practical resource for schools and OST providers, Harvard Graduate School of Education (https://www.edu-links.org/sites/default/files/media/file/Navigating-Social-and-Emotional-Learning-from-the-Inside-Out.pdf).
- Jones, S. M., Brush, K. E., Ramirez, T., Xinyi Mao, Z., Marenus, M., Wettje, S., Finney, K., Raisch, N., Podoloff, N., Kahn, J., Barnes, S., Stickle, L., Brion-Meisels, G., Mcintyre, J., Cuartas, J., & Bailey, R. (2021). Navigating SEL from the inside out. Looking inside & across 33 leading SEL programs: A practical resource for schools and OST providers. The EASEL Lab - Harvard Graduate School of Education. https:// www.wallacefoundation.org/knowledge-center/Documents/navigating-social-and-emotional-learning-from-the-inside-out-2ed.pdf.

 Jones, S. M., & Doolittle, E. J. (2017). Social and emotional learning: Introducing the
- issue. The future of children, 27(1), 3-11. https://www.jstor.org/stable/44219018.
- Kirk, S. (2007). Methodological and ethical issues in conducting qualitative research with children and young people: A literature review. International Journal of Nursing Studies, 44(7), 1250-1260. https://doi.org/10.1016/j.ijnurstu.2006.08.015 Kittay, E. (1999). Love's Labor. Routledge.
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Sage.
- Maloney, J. E., Lawlor, M. S., Schonert-Reichl, K. A., & Whitehead, J. (2016). A mindfulness-based social and emotional learning curriculum for school-aged children: The MindUP Program. In K. A. Schonert-Reichl, & R. W. Roeser (Eds.), Handbook of mindfulness in education: Integrating theory and research into practice (pp. 313-334). Springer-Verlag Publishing/Springer Nature.
- Mauthner, M. (1997). Methodological aspects of collecting data from children: Lessons from three research projects. Children & Society, 11(1), 16-28. https://doi.org/ 10.1111/i.1099-0860.1997.tb00003.x
- Mayeroff, M. (1990). On Caring. HarperCollins Publishers.
- Merleau-Ponty, M. (1968). The Visible and the Invisible. Northwestern University Press. Merleau-Ponty, M. (2002). Phenomenology of Perception. Routledge.
- Mortari, L. (2008). The ethic of delicacy in phenomenological research. International Journal of Qualitative Studies on health and Well-being, 3(1), 3-17.
- Mortari, L. (2015). Emotion and education: Reflecting on the emotional experience emotion and education. European Journal of Educational Research, 4(4), 157-176. Mortari, L. (2022). The Philosophy of Care. Springer.
- Mortari, L. (2023). The Wisdom of the Heart. Zeta Books.
- Mortari, L., & Silva, R. (2018). Words faithful to the phenomenon: A discursive analysis method to investigate decision-making processes in the intensive care unit. International Journal of Qualitative Methods, 17(1), 1-14.
- Mortari, L. (Ed.). (2009). La ricerca per i bambini. Mondadori Università. Moustakas, C. (1994). Phenomenological Research Methods. Sage.

- National Practitioner Advisory Group. (2019). Making SEL assessment work: Ten practitioner beliefs. Measuring SEL. Using Data to Inspire Practice. https://casel.org/ making-sel-assessment-work-2/.
- Niemi, K. (2020, December 15). CASEL is updating the most widely recognized definition of social-emotional learning: Here's why. The 74. https://www.the 74 million.org/ article/niemi-casel-is-updating-the-most-widely-recognized-definition-of-socialemotional-learning-heres-why/.
- Noddings, N. (1984). Caring. A Feminine Approach to Ethics and Moral Education. University of California Press.
- Noddings, N. (1992). The Challenge to Care in School. An Alternative Approach to Education. Teachers College Press
- Novak, M., Mihić, J., Bašić, J., & Nix, R. L. (2017). PATHS in Croatia: A school-based randomised-controlled trial of a social and emotional learning curriculum. International Journal of Psychology, 52(2), 87-95. https://doi.org/10.1002/
- Nussbaum, M. (1994). The Therapy of Desire. Theory and Practice in Hellenistic Ethics. Princeton University Press.
- Nussbaum, M. (1997). Cultivating Humanity. A Classical Defence of Reforme in Liberal Education. Harvard University Press.
- Nussbaum, M. C. (2001). Upheavals of Thought. The Intelligence of Emotions. Cambridge University Press
- Oatley, K. (1992). Best Laid Schemes. The Psychology of Emotions. Cambridge University
- Oliveira, S., Roberto, M. S., Veiga-Simão, A. M., & Marques-Pinto, A. (2021). A metaanalysis of the impact of social and emotional learning interventions on teachers' burnout symptoms. Educational Psychology Review, 33(4), 1779–1808. https://doi. org/10.1007/s10648-021-09612-x
- Organisation for Economic Co-operation and Development. (2015). Skills for social progress: The power of social and emotional skills. OECD Skills Studies. OECD Publishing. https://doi.org/10.1787/9789264226159-en
- Organisation for Economic Co-operation and Development. (2024). Social and Emotional Skills for Better Lives: Findings from the OECD Survey on Social and Emotional Skills 2023. OECD Publishing. https://doi.org/10.1787/35ca7b7c-en
- Plato. (1997a). Apology (G. M. A. Grube, Trans.). In Complete works (pp. 17-36). Hackett Publishing Company.
- Plato. (1997b). Alcibiades (D. S. Hutchinson, Trans.). In Complete works (pp. 557-595). Hackett Publishing Company.
- Plutarch. (1874). Of the tranquility of the mind. In Plutarch's Morals (pp. 136–167). Little, Brown, and Company,
- Pons, F., Harris, P. L., & de Rosnay, M. (2004). Emotion comprehension between 3 and 11 years: Developmental periods and hierarchical organization. European journal of developmental psychology, 1(2), 127-152. https://doi.org/10.1080/ 17405620344000022
- Reeves, R. V., & Venator, J. (2014). Jingle-jangle fallacies for non-cognitive factors. Brookings Institution (https://www.brookings.edu/articles/jingle-jangle-fallaciesfor-non-cognitive-factors/).
- Rimm-Kaufman, S. E., & Hulleman, C. S. (2015). SEL in elementary school settings: Identifying mechanisms that matter. In J. A. Durlak, C. E. Domitrovich. R. P. Weissberg, & T. P. Gullotta (Eds.), Handbook of social and emotional learning: Research and practice (pp. 151–166). The Guilford Press.
- Scheler, M. (1973). Ordo Amoris (D. R. Lachterman, Trans.). In Selected philosophical essays (pp. 98-135). Northwestern University Press.
- Scherer, K. R. (2005). What are emotions? And how can they be measured? Social Science Information, 44(4), 695-729. https://doi.org/10.1177/0539018405058216
- Schonert-Reichl, K. A. (2017). Social and emotional learning and teachers. *The Future of* Children, 27(1), 137-155. https://www.jstor.org/stable/44219025.
- Schonert-Reichl, K. A. (2019). Advancements in the landscape of social and emotional learning and emerging topics on the horizon. Educational Psychologist, 54(3), 222-232. https://doi.org/10.1080/00461520.2019.1633925
- Schonert-Reichl, K. A., & Lawlor, M. S. (2010). The effects of a mindfulness-based education program on pre- and early adolescents' well-being and social and emotional competence. Mindfulness, 1(3), 137-151. https://doi.org/10.1007/ s12671-010-0011-8
- Schonert-Reichl, K. A., Oberle, E., Lawlor, M. S., 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. Developmental Psychology, 51(1), 52-66. https://doi.org/10.1037/a0038454
- Schonfeld, D. J., Adams, R. E., Fredstrom, B. K., Weissberg, R. P., Gilman, R., Voyce, C., Tomlin, R., & Speese-Linehan, D. (2015). Cluster-randomized trial demonstrating impact on academic achievement of elementary social-emotional learning. School Psychology Quarterly: The Official Journal of the Division of School Psychology, American Psychological Association, 30(3), 406-420. https://doi.org/10.1037/ spq0000099
- Singh, N. C., & Duraiappah, A. (2020). Rethinking learning: A review of social and emotional learning for education systems. UNESCO MGIEP (https://mgiep.unesco.org/ rethinking-learning).
- Slote, M. (2013). Education and human values. Routledge.
- Stein, E. (1964). On the problem of empathy (W. Stein). Springer Science+Business Media. Stein, E. (1970). Beiträge zur philosophischen Begründung der Psychologie und der
 - Geisteswissenschaften. In Beiträge zur philosophischen Begründung der Psychologie und der Geisteswissenschaften - Eine Untersuchung über den Staat (pp. 1-283). Max Niemeyer Verlag.
- Stein, E. (2002). Finite and eternal being. An attempt at an ascent to the meaning of being (K. F. Reinhardt, Trans.). ICS Publications,.
- Steinberg, L. (2017). Adolescence (11th ed.). McGraw-Hill.

- Steiner, C. (1984). Emotional literacy. *Transactional Analysis Journal, 14*(3), 162–173. https://doi.org/10.1177/036215378401400301
- Thierry, K. L., Bryant, H. L., Nobles, S. S., & Norris, K. S. (2016). Two-year impact of a mindfulness-based program on preschoolers' self-regulation and academic performance. *Early Education and Development*, 27(6), 805–821. https://doi.org/ 10.1080/10409289.2016.1141616
- Thomas, N., & O'Kane, C. (1998). The ethics of participatory research with children. *Children & society, 12*(5), 336–348. https://doi.org/10.1111/j.1099-0860.1998.
- Tronto, J. (1993). Moral Boundaries. Routledge.
- World Health Organization. (1994). Life skills education for children and adolescents in schools. Pt. 1, Introduction to life skills for psychosocial competence. Pt. 2, Guidelines to
- facilitate the development and implementation of life skills programmes. World Health Organization. https://iris.who.int/handle/10665/63552.
- World Health Organization. (2003). Skills for health: Skills-based health education including life skills: An important component of a child-friendly/health-promoting school. World Health Organization. https://iris.who.int/handle/10665/42818.
- Zhao, W., Young, R. E., Breslow, L., Michel, N. M., Flett, G. L., & Goldberg, J. O. (2015).
 Attachment style, relationship factors, and mental health stigma among adolescents.
 Canadian Journal of Behavioral Science/Revue canadienne des sciences du comportement, 47(4), 263–271. https://doi.org/10.1037/cbs0000018
- Zins, J. E., & Elias, M. J. (2007). Social and emotional learning: promoting the development of all students. *Journal of Educational and Psychological Consultation*, 17 (2-3), 233–255. https://doi.org/10.1080/10474410701413152