



# Building Emotionally Stable, Inclusive, and Healthy Communities with ICT: From State of the Art to PSsmile App

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**Abstract.** There is an increasing interest in Social and Emotional learning (SEL) of youth across the world as testified by many international organizations and institutions. Research clearly shows that higher SEL is linked to successful participation in school life, better health, positive youth development. The COVID-19 pandemic has brought the essential role of SEL into focus and has drawn attention to the need to take a more holistic approach to contrast unexpected and challenging situations. To pursue these goals, it is mandatory that adults acquire and apply knowledge, skills, and attitudes enhancing Social and Emotional competences. To enhance their contribution to social goods, ICTs applications should align with this perspectives' taking. After providing a picture of main currently available tools, the paper presents the Erasmus+ PSsmile project, aimed at developing Social and Emotional competencies and contribute to building emotionally stable, inclusive, and healthy communities. PSsmile is also the name of the mobile application described in the paper with its five weeks program. It is based on the most relevant outcome within SEL studies, and recent theoretical approaches. It is aimed at raising parents and teachers' awareness, promoting and strengthening their personal Social-Emotional competences making them more effective agents of positive growth for children and for their communities.

**Keywords:** Social and emotional learning · Adult education · PSsmile mobile app

## 1 Introduction

Social and Emotional Learning (SEL) is the process through which we learn to recognize and manage emotions, care about others, avoid negative behaviors and make good decisions, behave ethically and responsibly, develop positive relationships [1]. It

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is considered as the learning that unites all areas of human life since its beginning: social, emotional, academic, cognitive, physical, etc. On the other hand, social emotional competence refers to the ability to use social and emotional skills and knowledge to be resourceful, adapt to, respect, and work well with others, and take personal and collective responsibility.

Within the most well-known model of SEL, these skills are organized as five interacting components: self-awareness (the ability to understand one's own emotions, personal goals and values); self-management (the ability to regulate affect and calming oneself down); social awareness (the ability to understand others and take the perspective of those with different backgrounds and cultures, and to act with empathy and compassion); relationship skills (the ability to communicate clearly, to negotiate and to seek help, when needed) and the ability to take responsible decisions [2, 3].

Addressing Social and Emotional competences has important reference to and implications for educational policy and practice. The term 'Social and Emotional Education' (SEE) refers, in fact, to the educational process by which an individual develops social and emotional competence for personal, social and academic growth and development through curricular, embedded, relational and contextual approaches [4]. When we promote social and emotional skills, we build skills that can offset the effects of differences, promote participation of all in several contexts. The numerous benefits of SEL (e.g., increased chance of academic and workplace success, reduced emotional distress, reduced risk of behavioral problems, improvement of scholastic environments, etc.) are more and more recognized [5] and suggest that Social and Emotional Capacity Building contribute to Social Inclusion, to the process that develops along the domain of participation, connection and citizenship.

### 1.1 Threats and Challenges to Social and Emotional Competences

Although Social and Emotional Competences change over time (Campbell et al., 2016), their components do not evolve in isolation. The course of social-emotional development—whether healthy or unhealthy—depends on the quality of relationships that a child has the possibility to experience in different settings, including their families, schools, and communities, with each context playing an important role throughout childhood and adolescence [6].

The COVID-19 pandemic has brought the essential role of SEL into focus and has drawn attention to the need to take a more holistic approach to students' learning and development. SEL may have relevance in the contexts where even greater challenges have been faced in supporting students' distance learning.

The pressing need to bring SEL, mental health, and wellbeing to the fore in children's learning and development, stems from some consequences of the global pandemic. During school closures arising from the pandemic, support for learning through distance education did not reach all students. It may have impacted different groups of students in different ways, with those who are most marginalized experiencing the most adverse effects. Emerging evidence suggests that the pandemic may have exacerbated existing inequalities and created new inequalities. Students who are disadvantaged—including children from poor families, girls, children with disabilities, and those living in rural

and disadvantaged regions—may have faced the biggest challenges both in terms of continuing their learning and of maintaining social and emotional contact [7].

## 1.2 Social and Emotional Learning in Action: Current Findings and Choices Promoting Change

Social-Emotional Learning (SEL) curricula are now booming, as more and more countries are including Social and Emotional Skills (SEC) in their national educational strategies [8] and international organizations, such as the Organization for Economic Co-operation and Development (OECD) and the World Economic Forum WEF, are promoting their dissemination [9, 10].

Social-emotional competence programs conducted in schools have shown to be effective in several directions [11, 12]:

- promotes positive, behavioral, and academic results that are important for healthy development
- predicts important results related to the future
- can be improved with feasible and cost-effective interventions
- plays a critical role in the behavior change process.

For instance, school-based programs effective in preventing school violence, including bullying, are intrinsically linked to youth's ability to manage emotions, regulate emotions, and to communicate and problem-solve challenges and interpersonal conflicts [13].

Schools can be seen as an ideal place to provide everyone learning activities designed to help them achieve their best leadership chances, happy, healthy, and independent lives, and reach their unique career potential [14]. Fostering SEL requires implementing practices and policies that help not only students but also adults acquire and apply knowledge, skills, and attitudes that enhance personal development, social relationships, ethical behaviours, and effective, productive work [15–17].

Moreover, participation of significant caregivers (e.g., parents, grandparents, step-parents, foster parents) in the educational process characterized quality of the learning experience from the learner perspective [18]. For a full participation of all to the educational process, the involvement of both the meso (family, school, or classroom) and micro (individual learner) levels should be then considered [19]. SEL development for teachers to support high-quality instruction is considered fundamental for the school of the future [13]: higher SEL competences benefit class management and students' school and personal development [20]. As concern parents, evidence exists that positive parenting roles and SEL practices support children's efforts in school and lead to academic achievement and social skills improvement [21, 22]. Moreover, an effective school-family partnership has been shown to be effective in supporting and improving children's learning. Additionally, benefits for children, teachers and families are achieved through positive changes in social skills and adaptive children's behaviors [23].

### 1.3 The Proposal

The European project PSsmile (Social-Emotional Capacity Building in Primary Education, <http://smile.emundus.lt/>) is the premise for the proposal presented in this work and the app development. Beginning in 2019, it involves teams from Bulgaria, Greece, Italy, Lithuania, and Portugal. This project has its pillars in the SE education as a capacity building process that involve all children, especially those from low-income, underrepresented backgrounds, and high-risk populations. The pandemic caught partners in a specific phase of the project development, that is when we were ready to start the development of the training programs both for educators and students. The school closing and the many challenges both students, teachers and families were experiencing required us to focus on understanding how our project could address some of them and be timely.

Based on the Positive Youth Development approach [24] the project develops along some key goals. A first aim is in developing a training program for primary school teachers; the second one is to develop a training program for children to promote their SE skills to make them more ready to think about their future and facilitate school transitions. A third aim, specifically relevant for this work, is to provide teachers and parents a tool aimed at fostering their SE skills, that is a specific app.

Following recent theoretical studies and challenges to everyone's wellbeing, promoting social-emotional competence in our view requires some methodological choices and actions:

- *Adopt a perspective where both emotional and social dimensions are considered.* It is mandatory to encourage and reinforce social skills such as greeting others, taking turns, cooperation and resolving conflicts, devoting a specific space to emotions and behaviors, knowledge and action level, awareness and management skills.
- *Adopt a future oriented perspective.* This choice is proposed because of the relevance of looking at present and future objectives and undertaking a positive approach, emphasizing the role of decision making in the domains and in all proposed activities.
- *Care for the significant adults, both teachers and parents.* Creating an environment where adult take care of their Social and Emotional Wellbeing and in which children feel safe to express their emotions with the contribution of teachers and family is essential for healthy social-emotional outcomes in young children because attitudes and beliefs of meaningful adults play a key role [25].
- *Promote SECs outside schools* Social-emotional exercises outside of school hours could be of great help in strengthening these competences with repeated exposure in real life contexts and with persons with whom they have a meaningful relationship.
- *Apply new technologies.* Information and Communication Technologies can support Social-Emotional Competencies (SECs) development by providing innovative tools (see, videogames and mobile apps) designed to teach self-management exercises [26] and delivering fast and easily accessible courses and materials (webinars, video training, synchronous/asynchronous lessons, online resources, and many other tools [27]).

## 2 Previous Research

Although at an early stage, research addressing the relationship between SEL and technologies shows a new trend in the use of educational technologies (ed-tech), aimed at broadening their scope of action, providing greater support to teachers and innovating the school experience. Because it involves such a broad field of action, SEL curricula need new and specific tools, technology can be a useful ally in the design of these programs.

An image of the current state of the art was provided by Stern and colleagues who, after presenting a historical account of the reflections that accompanied the technological development and the emergence of the SEL studies, divided the technologies adopted for SEL into three categories: Established (webinar, Online libraries, Software supports, etc.) Emerging (Remote video coaching, podcast, digital teacher manuals, etc.) Future (SEL focused videogames, mobile apps, avatar, etc.) [28].

Morganti and colleagues further developed this tripartite division by focusing on the current field of application of these technologies [27]. They identified 4 possible applications for the SEL domains: teacher training by delivering fast and easily accessible courses; Support to the didactic implementation of SEL activities at school through didactic platforms that also allow to establish a connection between teachers; Involvement of parents who can support their children and their social and emotional learning and provide opportunities for meaningful family time [26]. Assessment of skills acquired by students by transferring some examples of protocols and guidelines on how to assess social-emotional skills from physical to digital format.

The World Economic Forum (WEF) report, in 2016, included cutting-edge technologies such as wearable devices, cutting-edge apps, virtual reality, advanced analytics and machine learning, affective processing as tools that could play an important role for SEL in the next future. Certainly, EdTech is an excellent resource for helping teachers and parents and students to meet social-emotional needs, as tools we can also use to support other methods used daily in school such as hands-on activities, outdoor learning and creative play. CASEL and Elias (2016), emphasizing the need to promote SEL learning by providing children with consistent and ongoing learning opportunities to practice their skills, go beyond the simple presentation of information to focus on repeated practice. The authors also report how essential it is to involve people inside and outside the school, who “walk together” towards achieving the same goals [15].

We will go through some of the most well-known tools available to describe the current state of the art, to highlight strengths and limits that motivate the choices underlying the PSsmile app. We will describe first the apps for children and, then those for adults.

Table 1 describes the main aspects of these tools that can be summarized as follows:

*Dimensions Addressed:* Not all apps consider both awareness and management (5/8).

*Users' Characteristics:* Often the age range is too broad or not classified in terms from age-to (4/8). Only 2 apps foresee a progression in the difficulty of the activities (2/8). None of the apps summarized identify or describe possible manipulations to make activities suitable for younger or older children.

*Ecological Validity:* A key aspect is the type of task used and their ecologic validity. An ecologically valid tool is one that has characteristics of “topographical similarity”

**Table 1.** Dimensions and key aspects addressed by the main apps created for primary school

Awareness	Management	Domains	Ecologic	Parents
<b>EMOTIONS -AVOKIDDO</b> (Age: 4+)				
<a href="https://play.google.com/store/apps/details?id=andy.emotions&amp;hl=it&amp;gl=US">https://play.google.com/store/apps/details?id=andy.emotions&amp;hl=it&amp;gl=US</a>				
<ul style="list-style-type: none"> <li>Put names to emotions and re-actions</li> <li>Connecting the animals' emotions to their causes</li> </ul>	<ul style="list-style-type: none"> <li>Exploring cause and effect relationships</li> <li>Empathy</li> <li>Understanding &amp; care for other creatures</li> </ul>	emotional and social	Creative expression through pretend play	
<b>POSITIVE PENGUINS</b> (Age: 4+)				
<a href="https://apps.apple.com/us/app/positive-penguins/id570371342">https://apps.apple.com/us/app/positive-penguins/id570371342</a>				
<ul style="list-style-type: none"> <li>Help you understand that feelings arise from your thinking</li> <li>Presents emotions to choose</li> </ul>	<ul style="list-style-type: none"> <li>Challenge negative thoughts successfully to see things in a more realistic and optimistic way</li> <li>Relational problem-solving situations.</li> </ul>	emotional and social	You can choose your penguin	Info for teachers and parents
<b>THE MIDDLE SCHOOL CONFIDENTIAL SERIES BUNDLE</b> (Age 8-14)				
<a href="https://apps.apple.com/us/app-bundle/middle-school-confidential-series/id917713588">https://apps.apple.com/us/app-bundle/middle-school-confidential-series/id917713588</a>				
	<ul style="list-style-type: none"> <li>Self-confidence</li> <li>Communication problems</li> <li>Conflict resolution</li> <li>Out of control emotions</li> <li>Friendship issues</li> </ul>	social	Interactive quizzes that let readers choose how they would handle these situations	
<b>THE SOCIAL EXPRESS PROGRAM</b> (Age 5-14)				
<a href="https://www.educationalappstore.com/app/the-social-express">https://www.educationalappstore.com/app/the-social-express</a>				
<ul style="list-style-type: none"> <li>Self management</li> <li>Non-Verbal Communication</li> <li>Relationship</li> </ul>	<ul style="list-style-type: none"> <li>Attentive Listening</li> <li>Conflict Resolution</li> <li>Conversations</li> <li>Critical Thinking</li> </ul>	emotional and social	Real life situations	Teachers tools
<b>TOUCH AND LEARN - EMOTIONS</b> (Age 4+)				
<a href="https://apps.apple.com/us/app/touch-and-learn-emotions/id451685022">https://apps.apple.com/us/app/touch-and-learn-emotions/id451685022</a>				
<ul style="list-style-type: none"> <li>Read body language and understand emotions</li> </ul>		emotional		Customize: introduce new emotion and hearing parent's voice
<b>OK PLAY</b> (Age 3-8)				
<a href="https://play.google.com/store/apps/details?id=com.okco.okplay&amp;hl=it&amp;gl=US">https://play.google.com/store/apps/details?id=com.okco.okplay&amp;hl=it&amp;gl=US</a>				
<ul style="list-style-type: none"> <li>Explore new worlds, experiences, and understanding emotion</li> <li>Build persistence</li> <li>Build new plan</li> </ul>	<ul style="list-style-type: none"> <li>Regulating emotion</li> <li>Turn taking</li> <li>Supporting other</li> <li>Build empathy and kindness</li> </ul>	emotional and social		Share the game with parents; Blog with articles

to the skills or behaviors required in the child's natural environment and has value in predicting daily function (Franzen & Wilhelm, 1996). Five out of 8 apps present real-life situations or use a fantasy world to represent everyday situations (e.g., animals are used to avoid gender definitions or language).

*Parent's Involvement:* 4 out of 8 apps have a "tips" section for parents or teachers; 3 of these 4 the involvement of parents is thought in terms of "playing with the children". None of the apps includes activities in which the parent works on their knowledge and skills. None of the apps consider the involvement of both parents and teachers to build shared knowledge.

*Future Time Perspective:* only one app includes activities about future, and in terms of building new plans.

We then addressed tools developed for adults' education and learning (Table 2). In this case, again, some main aspects emerge:

*Dimensions Addressed:* Most apps consider both self-awareness and self-management (7/9) and only 2 (out of 9 apps) consider social dimension, in terms of strategy to manage conflict or strengthen a relationship;

*Users' Characteristics:* only *Smiling mind* provides the opportunity to share similar activities with other adults;

*Ecological Validity:* 6 out of 9 apps present real-life situations or use a chatbot that simulate a conversation;

*Future Time Perspective:* only 2 apps include activities about future, in terms of planning actions.

In more general terms, apps that support SEL align with the skills outlined by CASEL. However, most of these apps do not cover the full range of SEL categories (self-awareness, social awareness, self-management, relationship skills, responsible decision making) and leave parents out. Offering them the possibility to become more competent in SEL skills with a tool that join them to teachers is a way to engage them and realize the school to home collaboration. Since their value is recognized, their self-perceptions and parenting skills are fostered.

### 3 The PSsmile App: Its Development and Use

*PSsmile Mobile App* has been developed as an intellectual output from the Erasmus+ project "Social-emotional Capacity Building in Primary Education". It can be seen as an opportunity to apply the most relevant outcome within SEL studies, portraying a viable solution for those problems that have been often indicated in SEL curricula. Its main aim is to raise adults' awareness of SEL's importance and develop the target social-emotional skills, to contribute to building emotionally stable, inclusive, and healthy

**Table 2.** Dimensions and key aspects addressed by the main apps created for adults

Awareness	Management	Domains	Ecologic	Parents
<b>SMILING MIND</b>				
<a href="https://play.google.com/store/apps/details?id=com.smilingmind.app&amp;hl=it&amp;gl=US">https://play.google.com/store/apps/details?id=com.smilingmind.app&amp;hl=it&amp;gl=US</a>				
<ul style="list-style-type: none"> <li>◦ Meditation and mindfulness exercises</li> </ul>	<ul style="list-style-type: none"> <li>◦ Dealing with the pressure, stress, and challenges of daily life</li> </ul>	emotional	Characters mirror humans	
<b>MITRA track what matters most</b>				
<a href="https://play.google.com/store/apps/details?id=com.mitrapp.mitra&amp;hl=es_GT">https://play.google.com/store/apps/details?id=com.mitrapp.mitra&amp;hl=es_GT</a>				
<ul style="list-style-type: none"> <li>◦ Learn how emotions impact your ability to live</li> <li>◦ Build awareness of values and emotions</li> <li>◦ Stay true to your personal values</li> </ul>	<ul style="list-style-type: none"> <li>◦ Reflect on and record what contributed to your day’s value alignment and emotion rating, view the “Analytics” screen to see your improvement over time</li> </ul>	emotional	Chatbot	
<b>PARADYM: emotional wellbeing</b>				
<a href="https://www.appannie.com/en/apps/ios/app/paradym-love-yourself/">https://www.appannie.com/en/apps/ios/app/paradym-love-yourself/</a>				
<ul style="list-style-type: none"> <li>◦ Identify emotional patterns</li> <li>◦ Mind-body connection</li> <li>◦ Confidence, value and identity</li> <li>◦ Stress</li> </ul>	<ul style="list-style-type: none"> <li>◦ Guidance to help you break negative patterns</li> <li>◦ Relationship</li> <li>◦ Team player or solo player</li> </ul>	emotional and social	Chatbot	
<b>WYSA: anxiety, depression &amp; sleep therapy chatbot</b>				
<a href="https://apps.apple.com/us/app/wysa-sleep-depression-support/id1166585565">https://apps.apple.com/us/app/wysa-sleep-depression-support/id1166585565</a>				
<ul style="list-style-type: none"> <li>◦ Build confidence, reduce self-doubt and improve your self-esteem</li> </ul>	<ul style="list-style-type: none"> <li>◦ Keep track of mood</li> <li>◦ Mindfulness exercises for effective anxiety relief, depression and stress management</li> <li>◦ Manage anger, worry and tiredness</li> <li>◦ Manage conflict at work, school, in relationships</li> </ul>	emotional and social	Diary	
<b>DAYLIO: Diary, Journal, Mood Tracker</b>				
<a href="https://play.google.com/store/apps/details?id=net.daylio&amp;hl=en_US&amp;gl=US">https://play.google.com/store/apps/details?id=net.daylio&amp;hl=en_US&amp;gl=US</a>				
<ul style="list-style-type: none"> <li>◦ Private journal with your mood and activity of the day</li> </ul>	<ul style="list-style-type: none"> <li>◦ Monitoring data</li> <li>◦ Track and improve your mood</li> </ul>	emotional	Empathetic Artificial Intelligence (chat)	

(continued)



**Table 2.** (continued)

<b>YOUPER AI therapy for anxiety &amp; depression</b>			
<a href="https://play.google.com/store/apps/details?id=br.com.youper&amp;hl=it&amp;gl=US">https://play.google.com/store/apps/details?id=br.com.youper&amp;hl=it&amp;gl=US</a>			
◦ Understand yourself	◦ Track and improve your mood	emotion- al	
<b>SUPERBETTER</b>			
<a href="https://play.google.com/store/apps/details?id=com.superbetter.paid&amp;hl=it&amp;gl=US">https://play.google.com/store/apps/details?id=com.superbetter.paid&amp;hl=it&amp;gl=US</a>			
	◦ Build resilience, achieve goals, tackle challenges (anxiety, depression, stress, chronic pain...)		Bringing the same mindset and psychological strengths naturally displayed when playing games
	◦ Adopt a new habit, learn or improve a skill, strengthen a relationship, make a physical or athletic breakthrough, complete a project, or pursue a lifelong dream	social	Project and lifelong dream
	◦ Overcome a life challenge		
<b>MOOD METER</b>			
<a href="https://play.google.com/store/apps/details?id=com.reliablecoders.moodmeter">https://play.google.com/store/apps/details?id=com.reliablecoders.moodmeter</a>			
◦ Identify emotions throughout the day, supports when shifting to a different emotion	◦ Discover what causes you to feel the way you do and see patterns over time	emotion- al	
◦ Expand emotional vocabulary, discover emotional nuances	◦ Learn effective strategies to help you regulate your feelings and enhance the way you manage your life each day		

communities where significant adults, namely parents and teachers, take care of their own social-emotional functioning and support its development in children.

We will describe and provide details on the app including the general idea, the explanation of the programme, some screenshots and a first activity. Then we will address how this programme was implemented from IT side, how to use the app for the user and what information will be collected.

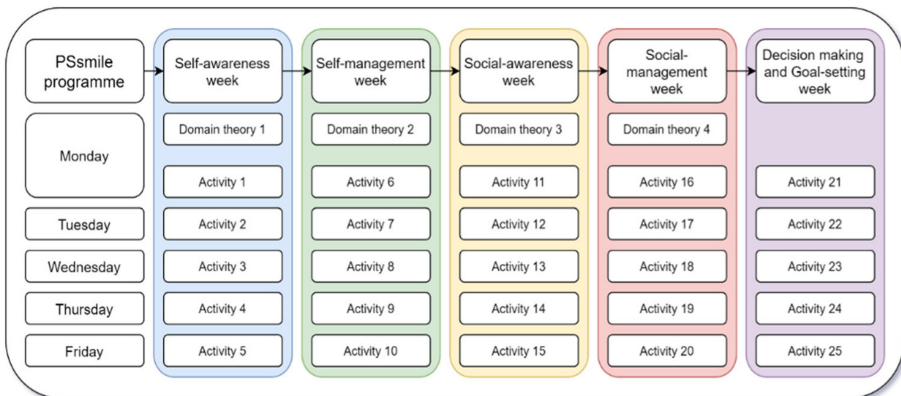
### 3.1 Basic Choices

The app includes a great deal of daily exercises, a thorough and accurate explanation of the theoretical background on which SEL is based, infographics showing the progress made by the users, and a questionnaire for feedbacks, providing relevant data for research and the opportunity to improve the app, making it more suitable for the users. This division has been adopted to escort the learners through the entire course, building their social-emotional skills in an incremental way, one that adapts itself to the needs of the trainee.

The app has been designed to deliver adult training, both for parents and teachers, who have their own dedicated sections and activities, since they play different and specific roles in children’s social-emotional development. Additionally, PSsmile app is unique because it can also be used by parents and teachers simultaneously. The app was in fact realized specifically for having these two groups no longer neglected as active agents of change and supporting for a positive development [29].

### 3.2 The Five-Week Program and Its Content

In essence, *PSsmile Mobile App* is an innovative social and emotional learning guide structured to be a five-week-long programme (Fig. 1).



**Fig. 1.** PSsmile programme structure

The first four weeks are dedicated to getting acquainted with all the SEL domains, Self-awareness, Self-management, Social-awareness, Social-management, respectively.

The fifth week is dedicated to learning to take responsible decisions and thinking about the future.

### 3.3 Structure of the PSsmile App

The first thing a new user sees after logging in is a page containing the rules of the five-week *PSsmile Mobile App* and here user can get acquainted with the SEL domains by reading more about them (Fig. 2).

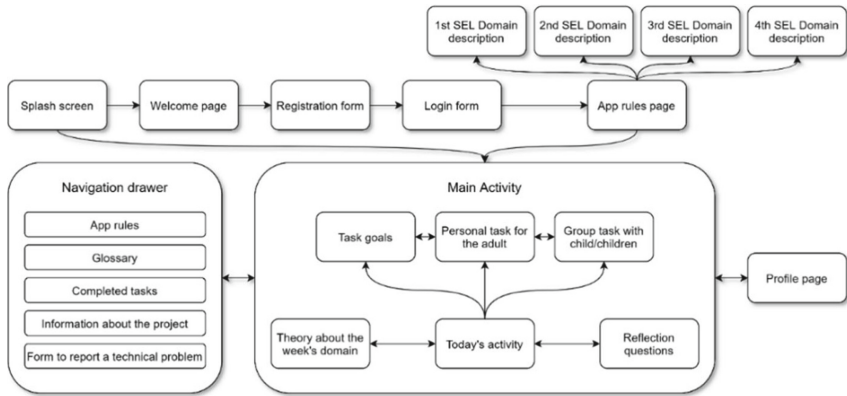


Fig. 2. Individual components of the program

After agreeing to the programme rules, the users finally see the Main activity. Main Activity has a bottom navigation bar connecting it to Theory and *Reflection Questions* sections, as well as a *Profile* page button at the top right corner (Fig. 3).



Fig. 3. App navigation drawer and registration page

Each day of the week, from Monday to Friday, this page displays a unique SEL activity, related to the week’s domain. The daily activity section is divided into three tabs – the first one contains the name, instructions, and goals of the daily task, usually paired with a visual; the second one contains a detailed description of the task that the adult must complete with a child or children.

If they did not download the app on a Monday, a notification on this screen will invite the users to come back on Monday or start learning about SEL in the Theory section. The best practice for the users is always to read more about the week’s domain in the Theory section on Monday, before doing the first task of the week.

Each day of the week, from Monday to Friday, this page displays a unique SEL activity, related to the week’s domain. The daily activity section is divided into three tabs – the first one contains the name, instructions, and goals of the daily task, usually paired with a visual; the second one contains a detailed description of the task that the adult must complete with a child or children.

To score points, the user must click completion confirming buttons in second and third tabs and answer all the three reflection questions.

For the users' convenience, the *Main Activity* also contains a navigation drawer in the top left corner. Here the user finds the rules of the five-week programme, a glossary with more complex definitions presented in the content, a section to review already completed tasks, a section to read more about the *PSsmile* project, as well as a form to report a technical problem.

The application was implemented using Android Studio.

When users open the application, they are always greeted with a Splash screen – a colorful loading screen containing the project logo. If it is their first time using *PSsmile* application, they will be directed to a Welcome page, which invites them to use this innovative social-emotional learning tool.

The first thing the users must do is register or log in if they already have an account from earlier (Fig. 4). For this aim they must provide some basic information, such as their name or nickname, if they are a teacher or a parent, email, and chosen password.

After registration the users receive an email confirmation letter. The users must open it and validate their email before logging in. After this process is completed, the users can log in using their email and password. Although, it is important to note, that the registration using email and password feature will only be active during the research data collecting period.

### 3.4 Using the Program

Preferably, the user should start using the *PSsmile Mobile App* at the beginning of the week. Every Monday morning the user should read the theory to learn more about the week's domain. In addition, each working day the user should read the first part of the daily task in the morning. After that, during the day, at any convenient time the adult should mindfully do the personal task, and only after that experience the task with a child or children. It is evident that adult should first learn more about SEL skills and test them on themselves before practice with children.

Weekends are meant for resting or if one wishes – reading more about SEL, repeating some of the activities.

### 3.5 A Closer Look to the Activities: The First Activity in PSsmile App

When the users start to use the *PSsmile Mobile App*, they will first encounter a description of the first domain – Self-management – and then the first activity, titled the Tree of emotions (Fig. 4). With this task the users start their social and emotional learning journey with improving how to better express emotions verbally.

### 3.6 Data Collection and Participant Profile

For each user the following basic information (name or nickname, gender and age group), were collected:

- Status (parent or teacher)



Fig. 4. Screenshots from day 1

- Activities completed
- Domain and Final score
- Answers to *Reflection Questions* the participant answers after each activity
- Answers to the App Evaluation Questionnaire.

The reflection questions represent an important section for users to self-monitoring their learning across the five domains. They could increase their awareness on domains where they experienced more difficulties or reached higher goals, where they gained more benefits in everyday life. This section also provides useful information on the activities that have an impact on the users, which ones were disregarded. For the same reason, the tool includes the App Evaluation Questionnaire with the following questions:

1. *The programme I participated in was unique, positively different from other experiences I have had.*
2. *Information was presented in a clear way.*
3. *Interacting with the app was simple.*
4. *The navigation structure was easy to use.*
5. *Application interface was visually appealing.*
6. *Do you have any suggestions to the creators?*

Respondents are required to provide an answer using a Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). This questionnaire will be used only during the piloting with the aim of knowing details on the performance and improving the application.

## 4 Conclusions

Thanks to the basic choices underlying the application, the attention in choosing significant activities as well as feedback from preliminary data collected, we expect the use of *PSsmile Mobile App* will help moving “towards building emotionally resilient individuals who are able to navigate the complex landscape of conflicting goals and dissonance,

to one of prosocial behavior that promotes human flourishing and the attainment of the Sustainable Development Goals” (UN Sustainable Development Goals). More specifically, since the COVID-19 pandemic has highlighted the important role that schools, and contexts will play in supporting a whole children’s development, it will be useful in ensuring that all members of the community- and children in the first line- receive the support that they require, first from the closer significant adults in their life, that is from teachers and parents.

As Iyengar recently argued, “education is the path to a sustainable recovery from COVID-19” [30]. We hope that a systemic approach can go further to not only support children currently and during future school disruptions, but also all individuals as educators, parents and responsible adults that take care of their personal and community members wellbeing.

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## Links to the Apps:

31. EMOTIONS -AVOKIDDO. <https://play.google.com/store/apps/details?id=andy.emotions&hl=it&gl=US>
32. POSITIVE PENGUINS. <https://apps.apple.com/us/app/positive-penguins/id570371342>
33. THE MIDDLE SCHOOL CONFIDENTIAL SERIES BUNDLE. <https://apps.apple.com/us/app-bundle/middle-school-confidential-series/id917713588>
34. THE SOCIAL EXPRESS PROGRAM. <https://www.educationalappstore.com/app/the-social-express>
35. TOUCH AND LEARN – EMOTIONS. <https://apps.apple.com/us/app/touch-and-learn-emotions/id451685022>
36. OK PLAY. <https://play.google.com/store/apps/details?id=com.okco.okplay&hl=it&gl=US>
37. SMILING MIND. <https://play.google.com/store/apps/details?id=com.smilingmind.app&hl=it&gl=US>

38. MITRA track what matters most. [https://play.google.com/store/apps/details?id=com.mitrap.mitra&hl=es\\_GT](https://play.google.com/store/apps/details?id=com.mitrap.mitra&hl=es_GT)
39. PARADYM: emotional wellbeing. <https://www.appannie.com/en/apps/ios/app/paradym-love-yourself/>
40. WYSA: anxiety, depression & sleep therapy chatbot. <https://apps.apple.com/us/app/wysa-sleep-depression-support/id1166585565>
41. DAYLIO: Diary, Journal, Mood Tracker. [https://play.google.com/store/apps/details?id=net.daylio&hl=en\\_US&gl=US](https://play.google.com/store/apps/details?id=net.daylio&hl=en_US&gl=US)
42. YOUPER AI therapy for anxiety & depression. <https://play.google.com/store/apps/details?id=br.com.youper&hl=it&gl=US>
43. SUPERBETTER. <https://play.google.com/store/apps/details?id=com.superbetter.paid&hl=it&gl=US>
44. MOOD METER. <https://play.google.com/store/apps/details?id=com.reliablecoders.moodmeter>