



Corti, F.; Rodríguez-Ponga Salamanca, R.; de Carlos Buján, A. (2024). Methodological foundations for fostering resilience in the Andreia Project. *Aula de Encuentro*, volumen 26 (2), Monográfico, pp. 107-134

## METHODOLOGICAL FOUNDATIONS FOR FOSTERING RESILIENCE IN THE ANDREIA PROJECT

### *BASES METODOLÓGICAS PARA FOMENTAR LA RESILIENCIA EN EL PROYECTO ANDREIA*

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### ABSTRACT

This article presents the methodological bases of the research project “Fostering resilience in Primary Education: Innovation and Continuous Teacher Training”



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(PID2019-111032RB-I00), funded by the Spanish Ministry of Science and Innovation. In order to respond to the challenges faced by the post-pandemic school, the project aims to identify possible shortcomings or needs in resilience-related skills and to foster their development in 5<sup>th</sup> and 6<sup>th</sup> grade primary school students.

Given the complexity of the topic and the globalising nature of the objectives proposed in the study, the adaptation of the method to the principle of complementarity of research techniques is justified by carrying out a mixed descriptive-comprehensive action-oriented study.

This article presents the methodological design, including the development, validation, implementation, and analysis of two data collection instruments—'Initial screening interview with managers to identify resilience-building needs' (EDINRES+D) and 'Initial screening interview with teachers to identify training needs in resilience' (EDINRES+M)—along with the main findings of the study. The focus lies on providing a comprehensive overview of both the instruments and the results derived from their application.

**KEYWORDS:** Methodology for resilience, resilient competencies, methodological support to the school.

### **RESUMEN**

Este artículo presenta las bases metodológicas del proyecto de investigación "Fomento de la resiliencia en Educación Primaria: Innovación y Formación Continua



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del Profesorado” (PID2019-111032RB-I00), financiado por el Ministerio de Ciencia e Innovación de España. En respuesta a los desafíos de la escuela pospandemia, el proyecto busca identificar posibles carencias o necesidades en competencias relacionadas con la resiliencia y promover su desarrollo en los alumnos de 5º y 6º de Educación Primaria.

Dada la complejidad del tema y el carácter globalizador de los objetivos planteados, se justifica la adaptación del método al principio de complementariedad de las técnicas de investigación mediante un estudio mixto descriptivo-comprensivo orientado a la acción.

Como marco metodológico, este texto describe el proceso de elaboración, validación, aplicación y análisis de dos instrumentos de recogida de datos: la “Entrevista inicial de cribado con directivos para identificar necesidades de construcción de resiliencia” (EDINRES+D) y la “Entrevista inicial de cribado con docentes para identificar necesidades de formación en resiliencia” (EDINRES+M).

**Palabras clave:** Metodología para la resiliencia, competencias resilientes, apoyo metodológico a la escuela.

## 1. INTRODUCTION

### 1.1. Background of the research project

The research project Fostering Resilience in Primary Education: Innovation and Continuous Teacher Training (ANDREIA) was promoted by the Family, Education and Inclusive School (TRIVIUM) research group at Abat Oliba CEU University in



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Barcelona, Spain. This initiative focuses on fostering resilience through innovative approaches and continuous teacher training.

One of the main aims of the TRIVIUM group is the study of the person from different fields –especially education–, from philosophical, literary, psychological, pedagogical, anthropological, methodological, philological, social and ethical perspectives, among others. Its members and collaborators are researchers from various disciplines who have participated in various competitive projects, complementing each other in order to respond to common goals from an interdisciplinary, cross-curricular work in which education forms the central axis.

Taking into account the personal, affective or social elements and aspects involved in the educational process for the adequate development of the teaching-learning process, the TRIVIUM group approached positive psychology from perspective of the analysis of the pedagogical potential of literary stories. Thus, the possibility was considered of using literary and audiovisual narratives -fictional or based on real stories- to find a method of educational intervention that would provide a mechanism of prevention and the fostering of attitudes to overcome adverse circumstances.

This idea has its antecedent in the classic mimetic-cathartic vision of the cognitive and educational potential of literary works, on which various authors have worked (Carrand Harrison, 2015; Carreira, 2018; Kazmierczak, 2014; MacIntyre, 2007; Ricoeur, 2000; Signes, 2017). Thus, following this classic theory, which still enjoys important supporters today, it is considered that the vicarious experience (through empathy with the story's protagonist) can become a revealing event for the learner. For example, in the classic tales of authors such as the Brothers Grimm or Hans Christian Andersen, certain characters appear who represent courage and the



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overcoming of great setbacks and challenges and, therefore, can be used to foster the skills included within the framework of resilience (Kazmierczak, 2016).

As G.K. Chesterton points out, it is important to underline “what ethics and philosophy owe to fairy tales” (Chesterton, 2019, p. 24), i.e. to children’s literature, an idea that, to a certain degree, we can extend to literature in general.

We need to bear in mind that children’s stories, as literary works, are not far from people’s real lives, nor are they mere fossilized repetitions. On the contrary, they are very much in touch with the problems, desires and fears we face. Indeed, Garrido *et al.* (2004) state that “literature is always born from a feeling of imbalance with reality” (p. 371) in such a way that “literature is life, life in perspective, deeper, freer” (p. 372). Hence our vision of the pedagogical value of literary works, whether written or audiovisual.

Since the start of the COVID-19 pandemic, the importance of building resilience has become more relevant. However, for many years its study has been one of the research avenues of the TRIVIUM group, as reflected in the many competitive research projects, international collaborations and publications of the group’s members and collaborators, and in their educational and research experience. Specifically, the profound crisis resulting from the pandemic was the occasion for a collective work titled *Pandemic and resilience: academic contributions in times of crisis* (Kazmierczak *et al.*, 2020).

Previously, between 2016 and 2018, TRIVIUM developed the project *School failure, resilience, and basic learning processes involved in the student’s academic performance: a study of their relationship*, which was positively evaluated by the National Administration of Public Education (ANEP) and financed by Banco Santander. This project analysed the role that resilience can play in the academic



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performance of students and in their life development when facing difficulties. Later, between 2019 and 2022, another project financed by Banco Santander was carried out and positively evaluated by the Spanish Research Agency (AEI): *Evaluation and fostering of resilience in primary education pupils*, a project based on the use of literary texts for building resilience.

The research yielded significant insights into the role of art, literature, and beauty in fostering resilience and promoting post-traumatic growth. These findings highlight how creative and aesthetic experiences can be integrated into educational practices to support students and educators in overcoming adversity and enhancing emotional well-being”.

It is also important to highlight that this project places special emphasis on the role of teachers, whose preparation and willingness is essential (Signes, 2022).

## **1.2. The research project**

The research project *Fostering Resilience in Primary Education: Innovation and Continuing Teacher Training* (ANDREIA) (PID2019-111032RB-I00), which runs from 2020 and 2023, is an R&D project funded by the Ministry of Science and Innovation of Spain. This project aims to respond to objective IV of the Spanish Strategy for Science and Technology and Innovation, namely “Research aimed at the challenges of society”.

Taking into account the increasing number of challenges and difficulties that students have to face at all educational levels, it seems especially pertinent to apply the concept of resilience to the school environment. Research into resilience factors and their fostering will benefit the whole of society.





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With the aim of responding to the challenge identified in works previously carried out by the Trivium group, the project aims to diagnose the possible gaps or needs of skills related to resilience and to foster their development in Year 5 and 6 primary school pupils. Similarly, the results of the *Knightly Virtues* program of the Jubilee Centre for Character and Virtues (University of Birmingham), which was taken as a reference, have been taken into account.

To achieve the proposed goals, the ANDREIA project uses literary and audiovisual stories as tools for the development of certain skills that allow pupils to overcome adverse situations, including bullying, gender violence, various behavioural disorders, learning difficulties, situations of risk and exclusion, and the integration of immigrant populations.

Despite the numerous studies showing the ability of human beings to grow following a trauma or after facing the everyday difficulties of life, there appears to be no consensus in the scientific literature regarding the conditions, characteristics, elements or factors that allow resilience to be developed. Since this question cannot be answered from a single perspective, an interdisciplinary study is necessary (Cyrulnik and Anaut, 2016).

The project therefore includes a total of 19 researchers from different fields and universities: Abat Oliba CEU University, the University of Barcelona, CEU San Pablo University, and CEU Cardenal Herrera University. Some members of this project ensemble are from other countries, which gives it an interesting international perspective. Moreover, the majority teach degrees in Primary Education and Early Childhood Education, or master's degrees in Teacher Training for Compulsory Secondary Education and Baccalaureate, Vocational Training and Language Teaching. In other words, in their day-to-day activities they are directly involved in teacher training, which was of great importance for this project.



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### 1.3. Justification for the research project

It is common for us to suffer various adversities, both personal and collective, throughout our lives. Sometimes, however, instead of preparing to face them, we tend to hide their existence and this attitude is reflected in the education of children.

Today, there is an educational trend that advocates overprotection and the smoothing out of the difficulties of the adults of the future. In an attempt to remove obstacles from their path to make their lives easier and help them be happy, children are sometimes prevented from preparing themselves to face challenges and problems. As a result, they sometimes do not know how to deal with difficulties and are not able to tolerate frustration, recognize the value of effort or persist with an arduous task. In this way, to what extent are children able to face adversity and continue their lives with strength? In other words, are they resilient?

If, when confronted with an obstacle, we are able to face it, overcome it and even learn from it, our lives could become full and happy. However, if we lack the personal skills to deal with it, our life trajectory can be affected. Knowing how to cope with stressful life events and adapting positively to changes is a lesson that will allow a satisfactory development and an adequate projection in the future. According to UNICEF (2015), fostering resilience is an urgent challenge that must be addressed, and the school, by its nature, can become an ideal space. Therefore, it is essential to take into account the importance and the need for the school to become a place where resilience is fostered and developed.

Vanistendael (1999) identifies two components within the concept: on the one hand, the ability to resist destruction, preserving integrity in difficult circumstances or under pressure, and, on the other, the ability to react and build positively despite difficulties. Thus, we can understand resilience as a process of strength in the face





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of adversity, which involves accepting it and also positively overcoming it, thereby implying personal growth.

According to Amado (2018), resilience is the “ability to successfully face adverse life conditions and grow through them” (p. 36) and is also “a capacity and a process that we mobilize in everyday difficulties or problems in order to build life” (p. 36).

Starting from the idea that resilience can be built, developed and fostered, it is essential to study how to foster it in students so that they can take the positive side of the obstacles they encounter on their way. In this regard, “in everyday life it is a priority to know how we can build resilience, even if we do not understand exactly how it works” (Vanistendael, 2010, p. 231). For this, according to the same author, we do not need to wait for major destabilizing events, but, rather, we need to anticipate them and build the capacity to act, looking forward into the future, in the face of major life challenges.

1.4. Objectives of the research project

Table 1 shows the general and specific objectives of the research project.

Table 1. Project objectives

Objectives
1. Raise awareness of the importance of fostering resilience today in Year 5 and 6 primary school pupils. 1.1. Identify good practices and challenges for schools regarding the fostering of resilience. 1.2. Diagnose the training needs of active teachers in terms of skills associated with resilience.
2. Analyse the skills needed for the development of resilience by Year 5 and 6 primary school pupils. 2.1. Diagnose the levels of acquisition of skills required for the development of resilience in Year 5 and 6 primary school pupils. 2.2. Identify pupils' training gaps vis-à-vis the development of resilience.
3. Develop activities to foster resilience in Year 5 and 6 primary school pupils. 3.1. Design an APP (mobile application) for Year 5 and 6 primary school pupils for the development of those skills most necessary to foster resilience. 3.2. Develop a Massive Open Online Course (MOOC) to train teachers interested in fostering resilience in their pupils.

Note: Authors' own creation.



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## 2. METHOD

Although for a long time a dichotomy between quantitative and qualitative research methods was quite common –and indeed still is–, it is becoming increasingly common in educational research to approach a subject of study from different perspectives. Given the complexity of the subject and the globalizing nature of the objectives proposed in the study, the modification of the method to the principle of the complementarity of research techniques is justified (Bericat, 1998; Cook, 1985; Creswell *et al.*, 2003).

According to Sabariego (2004), questions in educational and social research –novel, dynamic and versatile– generate new forms of research that bring together different traditions. Mixed methods research blends quantitative and qualitative approaches in the design of a study. As Valenzuela and Flores (2018) point out, its central premise is the use of different combined approaches to promote a better understanding of the problems. Based on these considerations, we propose a mixed descriptive-comprehensive action-oriented study.

In this regard, the sample that took part in the research comprised 24 state, grant-aided and private primary schools distributed among the autonomous communities of Catalonia, Madrid and Valencia. It is a sufficiently limited sample so that the context of each can be analysed in depth through the collection of qualitative data. At the same time, it is broad enough for the quantitative results to be relevant, considering that, of the 24 schools, 89 teachers and 1015 students participated in the study.

Having the active participation of schools located in Catalonia, Madrid and the Valencian Community gives an idea of the territorial and social impact of this project and the implications it has for knowledge transfer. The scientific research



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undertaken from the university community was carried out with schools from different geographical areas that have different legal statuses (state, grant-aided) and that use different working languages in teaching (Spanish, Catalan, English).

In order to respond to the first objective, namely to raise awareness of the importance of fostering resilience today in Year 5 and 6 primary school pupils, a descriptive study was carried out using semi-structured interviews as the primary data collection technique. These interviews were developed specifically for this research project, with the creation of tailored instruments to ensure relevance and depth in the data collected. Two instruments were designed: the 'Initial screening interview with managers to identify resilience-building needs' (EDINRES+D) and the 'Initial screening interview with teachers to identify training needs in resilience' (EDINRES+M).

The creation of EDINRES followed a rigorous process aimed at ensuring the reliability and validity of the collected data. The instrument was structured around multiple dimensions related to resilience, such as prior knowledge, relevance, good practices, challenges, training needs, and the availability of resources. Each dimension was accompanied by specific questions designed to elicit detailed and relevant responses. For example, questions like 'What practices does your school currently implement to promote resilience?' and 'What resources or training would you consider essential for fostering resilience in your institution?' were designed to provide actionable insights.

The validation of the EDINRES instruments followed a multi-step approach:

- Expert Review: The initial versions of the instruments were reviewed by a panel of experts in resilience, education, and qualitative research. This process ensured that the questions were clear, contextually appropriate, and aligned with the objectives of the study.



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- Pilot Testing: The instruments were tested in a small sample of schools to assess their functionality and identify potential issues. Feedback from this phase was used to refine the questions and improve their applicability to diverse educational contexts.
- Iterative Refinement: Based on expert feedback and pilot results, the instruments were adjusted to enhance their clarity and depth, ensuring that they captured both quantitative and qualitative nuances of resilience-related practices and needs.

The validated EDINRES instruments were then applied in participating schools through semi-structured interviews conducted with management teams and teachers. The semi-structured format allowed interviewers to explore responses in greater depth while maintaining consistency across interviews. These interviews were carefully recorded, transcribed, and analyzed using Atlas.ti version 22, which enabled the identification of patterns, triangulation of perspectives, and the generation of actionable recommendations.

By incorporating rigorous validation processes, the EDINRES instruments provided reliable and comprehensive insights into the challenges, good practices, and needs associated with fostering resilience in primary education. This robust methodological foundation ensured that the findings of the study were both credible and practical for the development of tailored educational interventions.

The EDINRES interviews were structured around clearly defined dimensions, including prior knowledge about resilience, its perceived relevance, good practices in the school, challenges and limitations, as well as specific needs related to training and resources. For instance, questions directed at school management teams explored their understanding of resilience, the importance they attributed to fostering it in students, and the existing practices in their institutions that align with resilience-building goals.



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Similarly, the teacher-focused interviews examined their perspectives on resilience-related training and how their role could contribute to fostering these skills in students. The questions asked were applied in a pilot test and was favourably evaluated by the Research Ethics Committee of the Abat Oliba CEU University.

The semi-structured nature of the interviews allowed for a balance between predefined questions and the flexibility to explore topics in greater depth based on participants' responses. For example, management teams were asked about their expectations regarding the project and the technical or logistical barriers they might face in implementing resilience-focused initiatives. Teachers, on the other hand, provided insights into specific classroom strategies and good practices already in place, such as promoting social competencies or problem-solving skills.

To ensure rigorous analysis, the interviews were processed using Atlas.ti version 22, a qualitative data analysis software. This allowed researchers to systematically code and triangulate the data from different perspectives—those of school management teams and teachers—ensuring a comprehensive understanding of the diagnostic information. By integrating these insights, the study was able to identify both the strengths and gaps in resilience-building practices within the participating schools, providing a solid foundation for the project's subsequent phases.

This methodological approach highlights not only the key challenges and opportunities identified but also the collaborative nature of the project, which sought to engage stakeholders meaningfully to ensure that the findings were relevant and actionable within their educational contexts.

In section 3, further details regarding these data collection instrument will be specified

According to Sandín (2003), qualitative research basically covers those studies that develop the objectives of understanding socio-educational phenomena





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and the transformation of reality. The methodological background of the study presented here forms part of a democratic approach based on the participation of all those involved in it, analysing, interpreting and making consensual decisions to determine results and priorities for action and research. This commitment, participation and consensus are guaranteed through a methodological structure that follows in its development the procedural logic of qualitative research in the first part of the project design.

Through the triangulation of theoretical studies regarding the concept of resilience and the data collected in the initial interviews, the main skills necessary to foster resilience in Year 5 and 6 primary school pupils were prioritized. We considered that the beginning of the intervention program, should respond to the current needs of pupils from participating schools, for example, fostering social and problem-solving skills. These skills were analysed, as a pre-test, in pupils from participating schools in order to establish the basis for comparison that would allow us to evaluate a posteriori the achievement of the training objectives (post-test).

Therefore, in order to respond to the second objective, namely to *Analyse the skills needed for the development of resilience by Year 5 and 6 primary school pupils*, a mixed study (quantitative-qualitative) was conducted to evaluate the levels of acquisition of resilience-related skills in these pupils. This study employed two data collection techniques: a diagnostic test (a) and an observational record (b), both designed to comprehensively assess resilience in both controlled and natural educational contexts.

#### a) Diagnostic Test

The diagnostic test, of an educational-psychological nature, was developed to evaluate pupils' cognitive, emotional, and social skills related to resilience. It





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included a structured set of items aligned with key dimensions of resilience, such as problem-solving abilities, emotional regulation, empathy, and adaptability. The test was designed to:

- Measure specific competencies: Each item corresponded to measurable skills, providing a clear overview of pupils' strengths and areas for development.
- Ensure validity: The test was reviewed by experts in psychology and education to ensure it accurately assessed resilience-related competencies.
- Provide actionable insights: Results were analyzed quantitatively, allowing researchers to identify patterns and trends across the sample.

The procedure for implementing the diagnostic test ensured that it was administered in a controlled setting within the schools, ensuring a quiet environment where pupils could focus on completing the assessment. Teachers and school psychologists were trained to facilitate the test, ensuring consistency in its application.

#### b) Observational Record

The observational record was designed as a measurement scale for teachers to apply in their classrooms. This tool focused on observing pupils' behaviors and interactions in their natural learning environment, capturing qualitative nuances of resilience that might not surface in a formal test. Key dimensions observed included:

- Social competencies: Empathy, cooperation, and effective communication with peers.
- Emotional regulation: Responses to challenges, frustration, or unexpected changes.
- Problem-solving abilities: Flexibility, creativity, and perseverance when faced with tasks or conflicts.



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The procedure for implementing the observational record involved providing teachers with a detailed rubric and training them to ensure consistent and accurate application of the observational record. Over a period of several weeks, teachers recorded their observations during regular classroom activities, noting specific examples and patterns of resilience-related behaviors. This longitudinal approach allowed for a richer, more authentic understanding of pupils' resilience in context.

Both techniques were applied sequentially and their results triangulated to provide a holistic view of resilience development among Year 5 and 6 pupils. The diagnostic test offered a structured, quantitative baseline, while the observational record provided qualitative insights into how these skills manifested in real-life classroom interactions. This combination ensured a comprehensive evaluation that informed targeted strategies for fostering resilience in primary education.

The data obtained through these two combined data collection techniques/instruments allowed us to diagnose in terms of resilience the initial skills levels of young people and to identify their training gaps. The quantitative data were analysed through the statistical package SPSS version 27, following both descriptive and inferential approaches.

Descriptive analysis focused on summarizing the data, providing measures such as means, standard deviations, and frequency distributions to understand the overall trends in resilience skills among the participants. This helped to establish a baseline for the initial skill levels.

Inferential analysis, on the other hand, aimed to draw conclusions about the broader population based on the sample data. Predictive tests, such as regression analysis, were applied to examine how specific variables (e.g., socio-demographic factors, school environment) influenced resilience levels. This allowed the identification of significant predictors of resilience development.



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Additionally, classification tests, such as cluster analysis, were employed to group participants based on shared characteristics related to their resilience skills. This technique facilitated the identification of distinct profiles among pupils, enabling researchers to tailor recommendations for interventions according to specific needs.

The combination of these analytical approaches ensured a comprehensive understanding of resilience development, highlighting both general trends and individual differences, and provided actionable insights for targeted educational strategies (Vilà *et al.*, 2014).

A methodological question to be taken into account in any study is scientific rigor. In quantitative research, this criterion is called validity and is particularly important to consider it at this time given the need to compare data –pre- and post-test– that allows the effectiveness of the training program to be evaluated. According to Latorre *et al.* (2005), “a study is valid when it allows the real relationship that it intends to analyse to be detected” (p. 96). Similarly, the authors confirm that three types of validity can be considered:

- External validity: External validity refers to the possibility of extrapolating research results to other subjects or contexts. In this study, external validity was ensured through the inclusion of a large and diverse sample comprising 1,015 Year 5 and 6 primary school pupils, 89 teachers, and 24 schools, each represented by its headteacher. These schools covered a wide range of educational contexts, including urban, rural, and suburban areas, as well as public and private institutions. The diversity in socioeconomic conditions, teaching methodologies, and previous exposure to resilience-focused initiatives ensured that the sample was representative of the broader population of primary education institutions. This robust sampling approach supports the generalization of the findings to similar educational settings.



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- **Internal validity:** Internal validity relates to the extent to which the relationships observed between variables are free from interference by external factors. While this study did not permit full experimental control due to its social nature, several measures were taken to strengthen internal validity. Contextual data were collected, including information on the socioeconomic profile of the schools, the professional training of the 89 participating teachers, and the resources available for resilience-building efforts. These contextual variables were analyzed alongside the primary data to minimize potential biases. Additionally, control groups were established among the 1,015 students, allowing for comparative analysis to verify that observed relationships between variables were attributable to the resilience-focused interventions and not external factors.
- **Conceptual validity:** Conceptual validity ensures the alignment between theoretical constructs and their operationalization in the research instruments. This study demonstrated high conceptual validity through the rigorous development of its diagnostic test and observational record. These instruments were designed based on established theoretical frameworks of resilience, incorporating dimensions such as emotional regulation, social competence, adaptability, and problem-solving skills. The instruments underwent expert review by specialists in education and psychology to ensure their alignment with contemporary resilience theories and their practical applicability in school settings. Furthermore, the TRIVIUM research group's extensive theoretical contributions over the past decade provided a solid foundation, ensuring that the instruments accurately measured the intended constructs.

Under the projection of the criteria presented, the methodological rigor allowed the results of the study to generate clear lines in order to design intervention



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programs in the third and last objective of this study, namely to *Develop activities to foster resilience in Year 5 and 6 primary school pupils*.

As a result of the previous two objectives, challenges and improvements for the schools will have been identified as good practices associated with the fostering of resilience (first objective). Similarly, the levels of resilience of the primary school pupils will have been diagnosed and their training gaps identified (second objective). In order to respond to the third objective and effectively develop skills for fostering resilience in primary education pupils, an APP (mobile application) was designed based on the concept of “revealing event” (Vanistendael, 2010). Although the cited author basically refers to the life events that pupils face, he proposed “generating” such revealing events through experience with literary and audiovisual stories. This materializes in the carrying out of different activities in which the pupils adopt both a reflective and a creative attitude in relation to the contents of both types of story. The resulting mobile application, called *AndreiaApp*, was implemented with Year 5 and 6 primary school pupils of the schools participating in the project. Finally, the main objective of the study (post-test) was evaluated to demonstrate that the program improved the levels of skills associated with the resilience of pupils.

The project culminated with the design of a MOOC for the continuous training of teachers in resilience beyond the study participants, which will be included as a training offer of the Abat Oliba CEU University. This will expand the project’s scope of educational action.

### 3. DATA COLLECTION INSTRUMENT

As explained in the previous section, the study included three objectives that ultimately determined the three phases of the study. Having framed the project’s





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aims and the method to achieve them, the following section explains the first phase of the study.

In this phase, two data collection instruments were developed *ad hoc*:

- *Initial screening interview with managers to identify resilience-building needs (EDINRES+D)*: a semi-structured interview conducted with the management teams of the 24 schools participating in the study to identify good practices or projects associated with resilience or their skills, and identify challenges and improvements vis-à-vis resilience.
- *Initial screening interview of teachers for resilience training needs (EDINRES+M)*: a semi-structured interview conducted with teachers and tutors from the schools participating in the study to diagnose the training needs of active teachers in terms of the skills associated with resilience.

The EDINRES+D script was developed within the framework of the research project *Evaluation and fostering of resilience in primary school students* (B920PR01). This script was validated by an international committee of experts in the field of study, bearing in mind the aspects about the validation process commented in previous sections. This first instrument forms the basis for the creation of the EDINRES+M script, whose dimensions were expanded and nuanced. The EDINRES+D script focuses on 5 dimensions: prior knowledge; relevance; good practices; identifying needs; and future programs. The EDINRES+M interview comprises 8 dimensions presented below (see Table 2). The development of the second instrument was initially carried out in 3 phases: review of the EDINRES+D script; program to expand the dimensions by a working group; and selection of the final dimensions by another working group within the research team. Once the instrument had been created *ad hoc*, it was validated by experts, subjected to a pilot test and favourably evaluated





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by the Research Ethics Committee of the Abat Oliba CEU University. The instrument with its dimensions is presented below.

Table 2. Table of the EDINRES+M dimensions

<i>Dimension</i>	<i>Question</i>	<i>Related concept</i>
<b>Concept of resilience</b>	1. Have you heard of the concept of resilience? In what context? 2. What do you understand by resilience?	<b>Resilience:</b> <i>We understand resilience as a process of strength in the face of adversity, which implies accepting it and also overcoming it positively, thereby implying personal growth.</i>
<b>Role of the school in fostering resilience</b>	3. Do you think that the school is a space in which resilience can be fostered? What is the role of the teacher in fostering resilience? 4. In what situations at school do you think resilience can be fostered? 5. Have you carried out any activity or project associated with fostering resilience?	
<b>Visible challenges in students</b>	6. What do you think are the challenges and problems that most of your pupils face?	<b>Possible problems and needs:</b> <i>autonomy, overprotection, ability to solve problems, social skills, ability to face adversity and continue with strength...</i>
<b>Teacher training</b>	7. Have you received any training in skills related to resilience?	<b>Training in:</b> <i>social skills, problem-solving skills, autonomy, sense of the future, prevention mechanisms and the fostering of positive attitudes, emotional regulation...</i>
<b>Perceived self-efficacy</b>	8. To what extent do you feel prepared to foster the development of resilience skills in your pupils?	
<b>Resource availability</b>	9. Do you have the resources to foster resilience (app, books, texts, dynamics...)?	
<b>Need for training and/or resources</b>	10. What would you need to increase your level of preparation in terms of resilience (face-to-face or online training, bibliography, access to professionals in the field, space for the exchange of ideas between teachers...)?	
<b>Expectations in relation to the project</b>	11. What expectations do you have of the project?	

Note: Instrument developed *ad hoc*.



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Once the instrument had been validated, it was then implemented. Twenty-nine group interviews were conducted in which a total of 89 tutors and teachers participated; the interviews were recorded, transcribed and analysed. Due to the COVID-19 pandemic, access to the schools was limited. Therefore, some interviews were conducted face-to-face and others by video call. The transcription of the interviews was carried out verbatim. Data analysis was carried out by pairs of researchers, while Atlas.ti version 22 was used to qualitatively analysis the data (Bazeley, 2013; Friese, 2019).

As León and Montero (2020) state that in qualitative research, more than reliability and validity, there is concern regarding confidence in results: “This can be understood as the desire of every researcher to achieve a good fit between the instruments and the original source records” (p.444). The triangulation of data between management teams, teachers and tutors and the status of the research project sought to provide that confidence in the results. The data analysis process, which was carried out in teams of at least two pairs of researchers, also provided some guarantee that no relevant data was disregarded.

#### 4. RESULTS PREVIEW

The preliminary findings obtained from the EDINRES+D and EDINRES+M instruments provide key insights into the state of resilience within primary education, highlighting both challenges and strengths observed across the participating schools. Here is a summary of the key results:

##### - Findings from the EDINRES+D (Headteachers' Interviews)

**Resilience Awareness and Practices:** A significant majority of the school headteachers recognized the importance of fostering resilience but noted a lack of



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structured programs or initiatives specifically addressing resilience in their schools. Existing practices were often fragmented and not part of a cohesive strategy.

**Identified Needs:** Directors emphasized the need for additional resources, such as training materials, expert guidance, and time allocation, to integrate resilience-building into daily school activities. This aligns with their recognition of resilience as critical for both academic success and emotional well-being in students.

**Challenges:** One of the primary challenges reported was the difficulty in maintaining consistent resilience-focused programs due to limited budgets, high workload for teachers, and lack of specialized training.

#### - Findings from the EDINRES+M (Teachers' Interviews)

**Training Gaps:** Many teachers reported feeling inadequately prepared to foster resilience in their classrooms. They expressed a need for practical training that focuses on implementing resilience-building strategies effectively, especially for handling classroom conflicts and supporting students facing adversity.

**Good Practices:** Despite the challenges, teachers shared examples of successful resilience-building activities, such as group problem-solving tasks, cooperative projects, and mindfulness exercises. These practices highlighted the potential for integrating resilience into existing curricular activities.

**Behavioral Insights:** Teachers observed that students displayed resilience inconsistently, often excelling in social cooperation but struggling with emotional regulation, particularly when faced with personal setbacks or academic challenges.

#### - Cross-Referenced Findings

The combination of insights from directors and teachers allowed for a triangulated understanding of the current state of resilience in primary schools. Directors highlighted systemic needs, while teachers provided ground-level perspectives on student behaviors and instructional practices.



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Both groups identified the need for a unified framework and ongoing professional development to address the gaps in resilience-building effectively.

These results underscore the importance of tailored interventions to support both educators and students in developing resilience competencies.

## 5. CONCLUSIONS

The findings of this study underscore the critical role of resilience in primary education and highlight key areas for intervention and improvement. Based on the data obtained through the EDINRES+D and EDINRES+M instruments, several main conclusions can be drawn:

### - Awareness of Resilience's Importance:

Both directors and teachers recognize the value of fostering resilience in primary school students. However, there is a clear gap between this recognition and the availability of structured, systematic approaches to resilience-building within schools.

### - Resource and Training Deficits:

Directors identified a lack of resources, time, and strategic frameworks as significant barriers to implementing resilience-focused programs. Teachers, meanwhile, expressed a need for practical, targeted training to equip them with effective strategies for supporting students in their classrooms.

### - Good Practices Exist but Lack Consistency:

Teachers reported examples of successful activities promoting resilience, such as collaborative projects and mindfulness exercises. However, these practices are often isolated and not part of an overarching strategy, limiting their long-term impact.



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#### - Behavioral Gaps in Students' Resilience Skills:

While students demonstrated strengths in social cooperation, they frequently struggled with emotional regulation and coping with personal or academic setbacks. This highlights the need for interventions focused on developing these specific areas.

#### - Systemic and Individual Perspectives Align:

By triangulating insights from directors and teachers, it became evident that a unified approach combining systemic frameworks and individualized teacher training is essential for fostering resilience effectively.

#### - Future Directions:

The study provides a robust foundation for other initiatives developed by the TRIVIUM group, such as developing comprehensive training modules for educators (e.g., a MOOC) and integrating technological tools. These interventions aim to address the gaps identified and create sustainable, practical solutions for building resilience in primary education.

These conclusions emphasize the need for coordinated efforts at all levels of the educational system to support resilience development. By addressing both systemic barriers and individual training needs, schools can cultivate environments where students and educators alike are better equipped to navigate challenges and thrive.

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