

Review

# Educational Programs to Build Resilience in Children, Adolescent or Youth with Disease or Disability: A Systematic Review

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**Abstract:** Resilience is understood as interactive processes that strengthen the individual and the family in the face of the demands of adversity or vulnerable situation. Resilience is fostered from a psychopedagogical approach when practices are developed that assist in facing challenges positively, having life projects and developing academic potentialities. Thus, the objective of this systematic review of the literature is cartography programs that promote resilience in children, adolescents, or youths who are facing a challenging condition, such as a disease or disability. The PRISMA declaration was used to guide this systematic search. The databases consulted were Web of Science, Scopus, EBSCOhost, ERIC and Dialnet Plus. Open access articles were selected between 2016 and 2021. The selection resulted in 15 educational programs. The results indicate that there are several models for building resilience, such as ecosystem, family, community, and academic models. In conclusion, interdisciplinarity is a cross-cutting axis for enhancing resilience in vulnerable settings.

**Keywords:** resilience; educational programs; inclusive education; systematic review



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## 1. Introduction

How to build a resilient character through interdisciplinary programs? The solution is not straightforward, but it is achievable. Thus, we must interpret resilience and its relationship from an interdisciplinary perspective. In respect of interpreting what is resilience, authors from a variety of disciplines have sought to clarify resilience by using several notions as a reference framework for their studies. This means that there is no single way to interpret resilience, even within the same field. According to Manciaux [1], these definitions often have only a weak consensus. The added nuances are substantial, and many of the terms used to define them in other disciplines of study are identical or quite similar. These different approximations and nuances within the same scientific discipline led to inconsistencies in concepts linked to resilience itself [2].

However, regardless of the discipline in which resilience is investigated, the definition utilized, or the approach taken by the researcher, the phenomenon resilience refers to the same idea. Thus, resilience is a reference framework for describing the positive aspects and mechanisms in an individual, group, material, or system that, when faced with a destabilizing and disruptive situation that threatens their integrity and stability, allows them to hold up, cope, recover, and emerge strengthened.

It is also agreed that the phenomenon can be looked at from an ecological point of view, meaning it can be used to refer to both individual characteristics and those of the context, as well as all the mechanisms used by the internal and external assets when facing adversity [3]. Furthermore, there are other factors that must be considered as influential in

building resilience. These factors are related to family interactions and interactions with several professionals.

Regarding family interactions, it is vital to emphasize that the family is interpreted as a unit. To build resilience, family unit requires strong and committed strategies to meet the needs of a member with some vulnerability, but without abandoning the family integrity [4–6]. In addition, each family requires professional advice and guidance to achieve a comprehensive strengthening of resilience. Therefore, interdisciplinary field of resilience can be interpreted as the relationship of academic, health and psychosocial environment to reach a stable scenario that allows children, adolescents, youth, and their families develop internal strengths and capacities to face difficulties and set relationships with others.

In perspective of this, interdisciplinary programs must emphasize the importance of teamwork from a holistic perspective. The holistic perspective postulate the diversity and complexity of a multiplicity of factors, before which, resilience is understood as dynamic. [7] Therefore, the holistic perspective is not aimed at developing simple formulas or recipes applicable to different contexts, but at offering strategies that, in face of complexity, can reveal synergies and dynamics to strengthen or build specific resilience processes [7]. This trend is the topic of this systematic review.

In addition, this interdisciplinary and holistic perspective of resilience is developing in educational settings. The school is a source of support for children, adolescents and young people exposed to several vulnerable or risk situations [1,7–9]. The focus of this paper is to explore how resilience is promoted for groups in vulnerable situations in different current educational programs. Before proceeding, it is essential to explain what is meant by resilience.

### *The Concept of Resilience*

The concept of resilience refers to the capacity composed of the set of personal characteristics and the contexts of development of an individual and the set of internal and external mechanisms when facing adversity [10,11]. Thus, resilience is interpreted as the ability to respond positively, despite living in challenging or threatening circumstances.

This means holding out, facing, and reacting better than expected in a situation of risk, a traumatic event or adversity affecting the psycho-social integrity of an individual [12,13]. Others add that it is possible to come out of such situations strengthened, avoiding situations of risk, thus producing a better state [14,15] From a purely individual level, resilience is considered as a characteristic of personality, the ability to adapt control depending on the circumstance [16].

Walsh [17,18] according to whom resilience interactive processes that strengthen the individual and the family over time. With this family-centered approach, interdisciplinarity is vital to promote resilience, not only from an educational field, but also from a health and social perspective.

Masten [19] considered that resilience might depend on dynamic psychological processes such as the use of coping strategies (CS), and/or on personality factors configuring what she called resiliency. In relation to these two possibilities, on one side, some authors [11,20,21] have shown the important role that the personality factors configuring resiliency play as potential determinants of resilience in adolescence. On the other side, resilience in adolescents depends in great degree on coping styles and strategies [6]. However, it is possible that the coping styles and the personality factors underlying resilience are related. If this were the case, it would be important to know the relative weight of each of these variables on resilience, as depending on the answer to this question, the implications for assessment and intervention would be different.

In sum, resilience is understood as a dynamic process, not as an absolute static or definitive quality [1]. It arises from a process of interaction which implies a positive personal and social adaptation of the individual despite exposure to risk [14]. It is evident in continuous interaction with the environment in which people develop and socialize [22].

It can vary according to the relationship with the context, requiring a reaction to a series of circumstances specific to each moment and everyone. It is applied when facing an adverse situation which could put personal and social stability at risk [6,22,23]. Greater resilience is shown on occasions when a person must put it into practice. However, the development of resilience is subject to the specific adjustment a person makes in an adverse situation [14].

This systematic review has the objective cartography and analyze programs which develop strategies to build resilience in children, adolescents, or youth with some vulnerability, such as disease or disability. Thus, this systematic review was carried out focused on educational, psychological and health programs, under an interdisciplinary perspective.

## 2. Materials and Methods

### 2.1. Search Strategy

Systematized review is a methodology that promotes transparency and rigor [24] and allows to identify trends and opportunities in future lines of research [25]. The Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA) guidelines [26] and the Framework ReSiste-CSH [27] were followed to conduct this systematic review. Moreover, this systematized review includes creating the database and the Visualizing Scientific Landscape (VOSviewer) analysis.

Between February and May of 2021, this systematic review was carried out. Databases used included: Scopus, Web of Science (WoS), ERIC, EBSCOhost (Psychology and Behavioral Sciences Collection, Academic Search Complete, APA PsycInfo, APA PsycArticles, E-Journals, eBook Collection, Social Work Abstracts, SocINDEX with Full Text) and Dialnet Plus. Descriptors and keywords were selected from DeCS (Health Sciences Descriptors) and ERIC thesaurus (Table 1).

**Table 1.** Keywords and descriptors.

Keywords	DeCS	ERIC Thesaurus
Resilience	Resilience, Psychological	Resilience (Psychology) Resilience (Academic)
Program/Intervention/Plan	Programs	Programs

Search strategies were adapted to the different academic databases, the final search equations presented in Table 2. In the search equations, used boolean operators (AND, OR) and truncations (\*) for terms resilience, program, plan, and strategy. In addition, search was limited to the topic section (Title, Keyword and Abstracts). Inclusion criteria for the review were records from 2016 to 2021, records in Open Access from an account at the Library Service of the University of the Balearic Islands, article type, and English and Spanish language.

In total, 2451 articles were included for the evaluation phase [27]. All documents were uploaded to Mendeley's bibliographic manager. Furthermore, references were checked through the Endnote web manager.

**Table 2.** Search equations.

Database	Search Equations	Date	Records
Scopus	((resilienc*) AND (program * OR plan * OR intervention OR strategy *))	12 February 2021	421
WoS	((resilienc*) AND (program * OR plan * OR intervention OR strategy *))	12 February 2021	810
EBSCOhost	((resilienc *) AND (interventions or strategies or best practices) AND (interdisciplinary))	13 February 2021	475
ERIC	resilience AND (programs OR strategy OR plan OR intervention)	13 February 2021	102
Dialnet Plus	((resilienc *) AND (program * OR plan * OR intervention OR strategy *))	15 February 2021	643

Note: There are truncations (\*) for terms: resilience, program, plan, and strategy. Using these truncations increased range of results in the bibliographic search.



**Table 3.** Bibliometric variables.

Database	Year	Journal	Authors	Program	Method	Country	Language
WoS	2020	Children	Aggarwal, R. Salamon, K.S.	Outpatient Interdisciplinary Pediatric Chronic Pain Management Program [29]	QT	USA	EN
EBSCOhost	2019	Counselling Psychology Quarterly	Armstrong, L.L. Desson, S. St. John, E. Watt, E.	D.R.E.A.M. Program [30]	MM	Canada	EN
Dialnet Plus	2016	Psicología y Educación: Presente y Futuro	Barrera, S.A. Acle, G. Martínez, L.M.	Program for children with language difficulties with the risk/resilience ecosystem model: [31]	QT	Mexico	SP
Scopus	2020	Electronic Journal of Research in Educational Psychology	Cantero-García, M. Garrido-Hernansaiz, H. Alonso-Tapia, J.	“Supérate. ¡No tires la toalla!” Program [32]	QL	Spain	SP
WoS	2017	Journal of Adolescence	Dray, J. Bowman, J. Campbell, E. Freund, M. Hodder, R. Wolfenden, L. Richards, J. Leane, C. Green, S. Lecathelinais, C. Oldmeadow, C. Attia, J. Gillham, K. Wiggers, J.	Pragmatic school-based universal intervention [33]	QT	Australia	EN
Scopus	2018	Journal of Adolescence	Jenkins, E.K. Bungay, V. Patterson, A. Saewyc, E.M. Johnson, J.L.	Social Networking Action for Resilience (SONAR) study [34]	MM	Canada	EN
WoS	2017	Social Science and Medicine	Li, X. Harrison, S.E. Fairchild, A.J. Chi, P. Zhao, J. Zhao, G.	Child-Caregiver-Advocacy Resilience (ChildCARE) intervention [35]	QT	USA China	EN
Scopus	2020	European Educational Research Journal	Morote, R. Las Hayas, C. Izco-Basurko, I. Anyan, F. Fullaondo, A. Donisi, V. Zwiefka, A. Gudrun, D. Ledertoug, M.M. Olafsdottir, A.S. Gabrielli, S. Carbone, S. Mazur, I. Królicka-Dereęowska, A. Henrik Knoop, H. Tange, N. Kaldalóns, I. Jónsdóttir, B. González Pinto, A. Hjemdal, O.	UPRIGHT (Universal Preventive Resilience Intervention Globally implemented in schools to improve and promote mental Health for Teenagers) [36]	MM	Spain Italy Poland Denmark Iceland	EN
WoS	2016	Revista de Educación Inclusiva Inclusive Education Journal	Muñoz Garrido, V.	Hospital classroom at the CPEE Hospital Gregorio Marañón, Madrid [37]	QL	Spain	SP
ERIC	2017	Revista Internacional de Apoyo a la Inclusión, Logopedia, Sociedad y Multiculturalidad	Pérez Quinteros, L.E.	Proyecto Ángel [38]	MM	Chile	SP
WoS	2019	Innovación Educativa	Rascón, M.T. Cabello, F.	Educational innovation project: Multimedia perspectives on resilience and education [39]	MM	Spain	SP
WoS	2021	PLoS ONE	Rosen, J.G. Phiri, L. Chibuye, M. Namukonda, E.S. Mbizvo, M.T. Kayeyi, N.	Zambia Family (ZAMFAM) Project [40]	QT	Zambia	EN

Table 3. Cont.

Database	Year	Journal	Authors	Program	Method	Country	Language
Scopus	2016	Family Process	Saltzman, W.R.	FOCUS Program [41]	QL	USA	EN
WoS	2016	Anales de Psicología	Sánchez-Hernández, Ó. Méndez Carrillo, F.X. Garber, J.	Penn Resiliency Program [42]	MM	Spain	EN
Scopus	2016	Family Process	Saul, J. Simon, W.	Summer Institute in Global Mental Health and Psychosocial Support [43]	QL	USA The Netherlands	EN

Abbreviations: QT = Quantitative; QL = Qualitative; MM = Mixed Methods; EN = English; SP = Spanish; Len = Language.

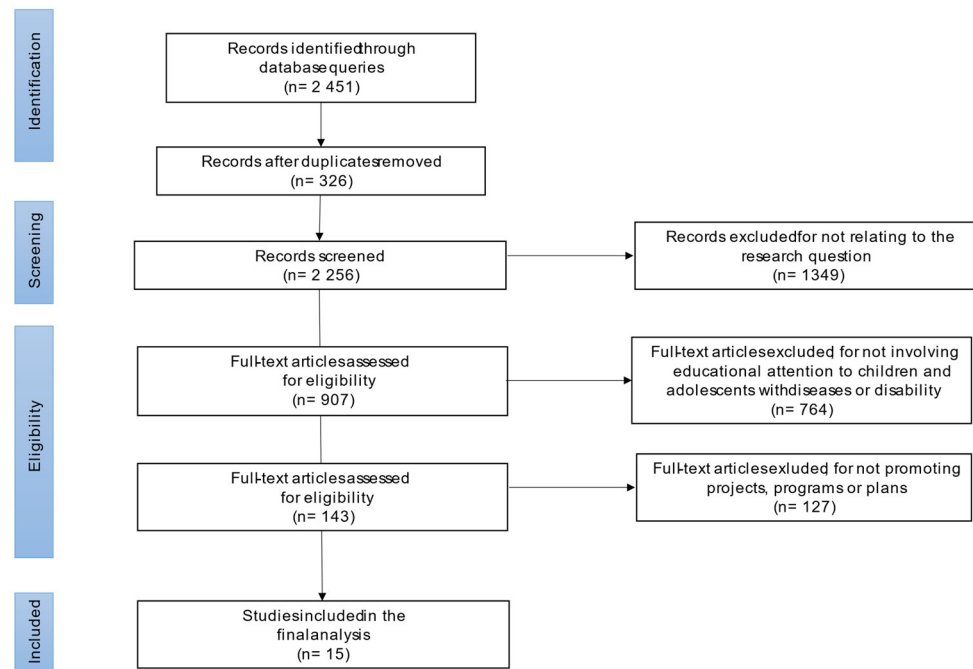


Figure 2. PRISMA flowchart of article selection produce.

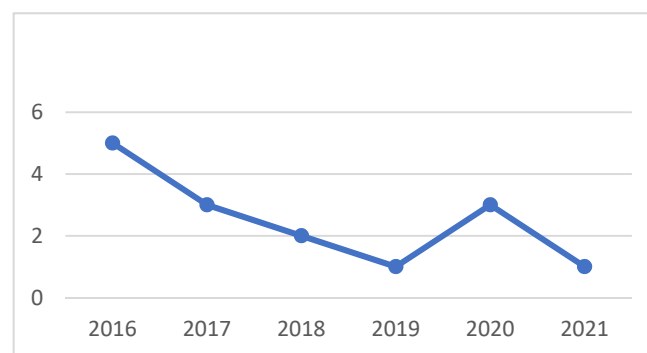


Figure 3. Evolution of articles per year.

### 3. Results

The results are presented below in relation to the goal of the investigation: cartography and analyze interdisciplinary programs which develop strategies to build resilience in children, adolescents, or youth with some vulnerability, such as disease or disability. In total, 15 programs matched the goal of this systematic review.

The programs were systematized by drawing up summarized tables with details of the main descriptive data (Table 4): Reference, Program, Objective, Participants, Design, Intervention, Measures, and Results.

Table 4. Descriptive data of the studies.

Reference	Program	Objective	Participants	Design	Intervention	Measures	Results
Aggarwal and Salamon [29]	Outpatient Interdisciplinary Pediatric Chronic Pain Management Program	Explore the risk and resilience factors that contribute to treatment compliance and functional decline among youth with chronic pain during adolescence.	64 adolescents (11–18 years old) diagnosed with chronic pain from a children’s hospital located in the northeastern region of the USA.	Quasi-experimental study	Psychological interventions based on Cognitive-Behavioral Therapy (CBT) with 6–10 sessions for pain and stress management.	Several questionnaires.	Findings indicate that adolescent resilience factors (i.e., high pain self-efficacy, high pain acceptance) may make adolescents less likely to comply with treatment overall.
Armstrong et al. [30].	D.R.E.A.M. Program	The D.R.E.A.M. (Developing Resilience through Emotions, Attitudes, and Meaning) program, grounded in a Second Wave Positive Psychology approach called R.E.A.L. (Rational Emotive Attachment Logotherapy).	45 children, 6–12 years old, who are affiliated with the Association for Bright Children (ABC) Ottawa.	Quasi-experimental study based on Knowledge Translation-Integrated (KTI) model.	Educational interventions based on Social and Emotional Learning (SEL).	Evaluation with standards of acceptability, feasibility, sustainability, and credibility [44]	A positive self-perception, a sense of hope for the future, and an openness to learning and experiencing new things were the goals of the program.
Barrera et al. [31]	Program for children with language difficulties	Program based on risk/resilience ecosystem model for children with oral and written language difficulties.	6 children with oral and written language difficulties between 6 and 7 years old, his parents and two teachers.	Quasi-experimental study	Educational interventions.	4 stages: pretest, intervention, social validation and pretest-posttest assessment	This work emphasizes effectiveness of risk/resilience ecosystem model in the field of Special Education.
Cantero-García et al. [32]	“Supérate. ¡No tires la toalla!” Program	Promote families’ ability to deal with behavioral issues, as well as conflict methods and parents’ emotional regulation levels	61 parents from 7 Secondary schools in Madrid; 41 in experimental group and 20 in control group.	Non-randomized study	Psychological interventions	Several questionnaires to evaluate various items of this program (learning, transfer, impact, and perception of quality).	The program produced a significant reduction in the levels of anxiety, depression as well as an improvement in the perceived family climate.
Dray et al. [33]	Pragmatic school-based universal intervention	Evaluate the efficacy of a universal, school-based intervention focusing on resilience protective variables in reducing mental health problems in adolescents.	32 secondary schools within a socio-economically disadvantaged (students aged 12–16 years) in the Hunter New England region of New South Wales (NSW), Australia.	Cluster randomized controlled trial	Universal school-based intervention.	Questionnaires to measure mental health and internal and external factors of resilience in students. Additionally, structured interviews to school staff.	Study strengths include a wide range of implementation support strategies, a significant focus on increasing student resilience, and a large sample size.
Jenkins et al. [34]	Social Networking Action for Resilience (SONAR) study	Design a mental health promotion intervention based on experience of young people.	10 youth co-researchers (YCRs) and 344 students enrolled in one Secondary School (grades 8 to 12) of a rural community, located in North-Central British Columbia, Canada	Experimental Study based on Community-based Knowledge Translation (CBKT) framework.	Mental health promotion interventions	Mixed methods approach (both surveys and qualitative interviews)	The SONAR intervention shows the feasibility of involving youth in mental health promotion as well as a variety of positive youth development benefits connected with this collaborative strategy.

Table 4. Cont.

Reference	Program	Objective	Participants	Design	Intervention	Measures	Results
Li et al. [35]	Child-Caregiver-Advocacy Resilience (ChildCARE) intervention	Promote resilience in HIV/AIDS people in rural central China by educating them skills such as positive thinking, emotional regulation, coping, and problem solving.	790 Chinese children (6–17 years old) who had a biological father with HIV/AIDS. Children with HIV infection were excluded.	Cluster randomization-controlled trial	Educational and psychological interventions	Questionnaires at baseline, 6 months, and 12 months that included demographic and psychosocial scales.	The ChildCARE intervention is efficacious in promoting psychosocial well-being of children affected by parental HIV/AIDS in rural China.
Morote et al. [36]	UPRIGHT (Universal Preventive Resilience Intervention Globally implemented in schools to promote mental Health for Teenagers)	Promote mental well-being by enhancing resilience capacities in young people	448 Adolescents between 12 and 14 years old, 345 family members and 218 school staff and teachers from several schools in Italy, Denmark, Spain, Poland, and Iceland	Mixed-methods research process combining a survey study with participatory group sessions customized	Educational interventions.	Participatory sessions, survey quantitative and survey qualitative	The participants agreed that in a universal and inclusive program, each member of the school community has a concrete role in fostering resilience and well-being for all.
Muñoz Garrido [37]	Hospital classroom at the CPEE Hospital Gregorio Marañón, Madrid	Analysis of the program based on resilience in the hospital classroom	School unit at the Gregorio Marañón Hospital, to care for children admitted for poliomyelitis.	Descriptive and interpretative-symbolic study	Educational interventions.	Satisfaction survey	Students will be more motivated if their teachers provide them with an appropriate learning environment, including techniques, methodology, and humanism.
Pérez Quinteros [38]	Proyecto Ángel	Analyze whether there are any strategies that favor the development of resilience in students with attention deficit hyperactivity disorder (ADHD).	Students with ADHD of the second level of Basic General Education who participated in a local service project called “Angel Project” in Chile.	Action-research study framed in an interpretative paradigm	Educational and psychological interventions	Mixed methods (participant observation, interviews, a group discussion, and a Likert scale)	Strategies that build resilience refer to enhancement of self-esteem in collaborative work, and development of communication skills and emotional expression.
Rascón and Cabello [39]	Multimedia perspectives on resilience and education project	Improve the resilience of children and youth in vulnerable situations	268 university students and Children and youth in vulnerable situations in Malaga (Spain).	Project-based cooperative learning and Service-learning	Socio-educational interventions	Qualitative evaluations	77 audiovisual pieces were created for 27 partnering entities in the process of resilience and inclusion of vulnerable groups.
Rosen et al. [40]	Zambia Family (ZAMFAM) Project	Strengthening the household's capacity to meet the needs of people living with or affected by HIV, as well as improving the well-being of the child and caregivers.	544 Adolescents living with HIV (ALHIV) aged 5–17 years and their adult caregivers in Zambia	Prospective cohort study	Multilevel interventions (education, psychosocial, economic, and clinical services)	Structured interviews and Poisson regression with generalized estimating equations measured one-year changes	Significant improvements in caregivers' financial capacity were observed among households receiving ZAMFAM services, with few changes in health or wellbeing among ALHIV.



Table 4. Cont.

Reference	Program	Objective	Participants	Design	Intervention	Measures	Results
Saltzman [41]	FOCUS Program	Promote family resilience through communication and make sense of traumatic experiences.	Families exposed to significant levels of stress or loss who may be at risk for psychological disturbance	Longitudinal study	Psychoeducational interventions focused on families	Mixed methods	A structured family approach, creating shared goals, strengthening communication, and practicing specific skills that promote family resilience.
Sánchez-Hernández, et al. [42]	Penn Resiliency Program	Study the effectiveness of a cognitive-behavioral intervention inspired by the Penn Resiliency Program for the prevention of depression in students from primary education.	25 students, 10–12 years old, selected from 185 schoolchildren in grades 5 and 6 of Primary education.	Randomized experimental study. Participants were randomly assigned to the experimental group (preventive intervention) and control (waiting list)	Cognitive-behavioral interventions.	A mixed 2 × 2 factorial design with an inter factor (prevention program; waiting list) and an intra factor (pretest, posttest).	Results indicated that there was significant improvement from pre-test to post-test in the experimental group for children with “high depressive symptoms” compared with controls.
Saul and Simon [43]	Summer Institute in Global Mental Health and Psychosocial Support	Strengthening the capacity of families, communities, and organizations to address mental health issues and promote psychosocial well-being.	24 professionals (several mental health professionals, a psychiatrist, a psychologist, a human rights practitioner, and an ethnomusicologist)	Randomized experimental study	Training program with educational, psychosocial, and health interventions	Qualitative interpretation of experience in the Summer Institute	The Summer Institute provided training to promote a systems-oriented resilience approach in the field of Global Mental Health and Psychosocial Support (GMHPSS)

#### 4. Discussion

This review offers a comprehensive summary of the 15 educational programs to promote resilience in the field of care for children, adolescents, or young people, including their families, with a situation of vulnerability due to a disease or disability. By summarizing the information in the articles, an up-to-date overview of current knowledge in this field is obtained, focusing on the results provided by different resilience-building interventions with educational and interdisciplinary programs. However, these results must be treated with caution.

Furthermore, this systematized review makes it possible to map various educational programs focused on resilience with different intervention and design models. On the one hand, the family-centered model is present in 46% of the programs [29,31,32,36,37,40,41]. This approach considers that families are a fundamental pillar in making informed decisions, thus being the center from which the promotion of the quality of life of children and adolescents begins. Thus, family resilience is understood as the interactive processes that strengthen the individual and the family in the face of the demands of the disease [17,45]. For example, “Supérate. ¡No tires la toalla!” Program used group techniques such as the case study method, guided discussion, role play, activities, and commitments according to the experimental methodology to assist parents learn or improve their coping skills for stress and self-regulation of their emotions, thereby increasing their resilience. This program consisted of 10 group sessions of 90 min per week divided into two parts: first, family conflict resolution strategies (sessions 1–6); second, coping strategies and improving levels of resilience (sessions 7–10).

Another program, FOCUS [41] provided family psychoeducation and developmental guidance through shared family narratives using the timeline technique. In this program, interventions were carried out in eight sessions: the first two with the parents, the second two with the children, a fifth session with the parents to prepare for the family sessions,

and then a series of three family sessions. Hence, having a family approach allows integral care, which not only meets the needs of the child, adolescent or youth, but also the needs of the family that, in addition to contributing to the physical and emotional health of its members, the family can be potential victim of the effects of the disease [46].

With this family-based approach to integral care, interdisciplinarity is vital to promote resilience. Therefore, interdisciplinarity of several fields, such as educational, psychological, social and health, will allow an ecosystem approach to resilience. This review makes it possible to detect various programs that stand out for an ecosystem and interdisciplinary approach. Aggarwal and Salamon [29] described an intervention in the hospital setting from an interdisciplinary approach. In this program, each adolescent who entered the program was evaluated by a medical provider, a psychologist, and a physical or occupational therapist. Her families also were given treatment recommendations, including individual, family, and group psychotherapy.

In Li et al. [35], a community vision of resilience is promoted in children of parents affected by HIV in a rural context. The intervention consisted of three levels: child, caregiver, and community. The child intervention included 20 h of facilitator-guided programming given in 10 peer-group sessions to increase resilience by developing skills (positive thinking, emotional regulation, coping, and problem solving). At the caregiver level, five sessions were organized with the goal of improving positive parenting skills and participating in personal care and seeking support. At the community level, a series of community activities were organized to promote cohesion. Rosen et al. [40] conducted a similar project (ZAMFAM) in which they promoted community resilience of adolescents with HIV and their families in the context of Zambia ZAMFAM's multilevel interventions supplement an integral package of health and social support services across five domains: HIV care and treatment, Parenting, Food security, Household economic strengthening, and Psychosocial support. In Muñoz Garrido [37], the need and importance of interdisciplinary work in hospital classrooms is evident. In this program of Hospital Pedagogy, educational interventions were supported by a coordinated multiprofessional intervention adapting interventions at level of curricular competence of the students, their diagnosis, the entrance phase, and their response capacity. Thus, integral and ecosystem care for children, adolescents and youth with diseases and or disabilities is based on interdisciplinarity [47].

Regarding the educational context, resilience is understood as the achievement of good educational results despite the adversity of the students [48]. Thus, a school based on resilience is one that develops educational practices that help students to face difficulties in a positive way, to have life projects and to develop their potentialities. This review shows that various programs focus on the academic model of resilience. The following programs with educational interventions are described.

DREAM Program [30] makes it possible to improve the academic agency of students following the psychological model called R.E.A.L. (Rational Emotive Attachment Logotherapy). DREAM is a SEL program that consisted of 10 brief units with administration times ranging from 5 to 30 min. Each of the units included an original song and a hands-on activity as a teaching tool. In Barrera et al. [31] resilience was promoted in children between 6 and 7 years old with some oral and writing language difficulties. This program worked with the group of six children during 40 sessions twice a week. In addition, three sessions were dedicated to parents to promote the correct practice of the elements of the language. Additionally, three meetings were held with the teachers to share information about the performance and development of the participating children.

Dray et al. [33] postulated a strategy based on universal school to promote resilience and mental health for adolescents. This program designed 16 strategies to address internal factors (cooperation, communication, empathy, self-efficacy) or external resilience protective factor (school support, school meaningful participation, peer caring relationships). Schools were required to implement 9 h of resilience-focused content in a minimum of three of the following key learning areas (KLAs): English; Math; Science; History and Geography,

or Personal Development, Health and Physical Education (PDHPE). Furthermore, schools received support from an interdisciplinary school intervention team.

UPRIGHT program [36] was implemented to improve and promote adolescent mental health. In this program, teachers were asked to implement 18 sessions (each session at least 40 min) with adolescents. Sessions included (a) 1 session to present the program; (b) 14 sessions dedicated to each skill of the Coping, Efficacy and Socio-Emotional Learning components; and (c) 3 sessions dedicated to the skills, concerns, or preferred activities suggested because of the co-creation process in their countries.

Angel project [38] was aimed at students with ADHD to build their resilient personality. This project created intervention strategies in five categories: emotional identification, identify, self-esteem, communication skills, and teamwork. This program consisted of 15 sessions: five were assigned to the category of feelings and emotions, three to the category of identity, three to the category of self-esteem, three to the category of communication skills and two to the category of teamwork.

Multimedia perspectives project [39] proposed a socio-educational interventions through an edu-communicative approach in favor of the resilience of children and youth in vulnerable situation. This initiative brought together instructors and students of education, communications, and psychology, together with social entities and a social educator to cooperatively create a series of multimedia videos and a documentary short film, to disseminate and reflect on the processes of social exclusion and childhood resilience.

Penn Resiliency Program [42] aimed to prevent depression in elementary school students. In this program, twelve sessions of two hours each were used to deliver the cognitive-behavioral intervention in a group setting. According to the handbook, the group leader conducted two sessions per week, and students were given an activity book to use during those sessions. Session models consisted of four elements: (a) Adversity-Beliefs-Consequences (ABC model); (b) Changes to the explanatory style; (c) Questioning and de-catastrophizing; (d) Resolution of interpersonal problems. For organizational team development and stress management, the program included a blend of didactic presentations, hands-on interactive exercises, and case studies.

The Summer Institute [43] fostered an ecosystem immersion of community resilience in the field of public mental health. This program was a two models' immersion: a multisystemic, strength-based viewpoint was used in Module I to introduce participants to clinical and community approaches to mental health and psychosocial well-being promotion. Module 2 focused on psychosocial and clinical approaches targeting populations at risk for common mental health conditions.

Finally, SONAR study [34] promoted community resilience through youth co-researchers (YCRs). In the rural community of SONAR study, youth were not exposed to opportunities or engaged in discussion about possibilities for their future. Interventions consisted of several group meeting led by the YCRs. During meetings, the youth identified that they wanted to create a web-app (called SONAR) that would be simple and easy to use. The web-app was viewed as a platform for sparking dialogue about the needs of youth in this community and initiating further opportunities for positive engagement.

The limitations of this systematized review were, on the one hand, the search for equations of generic terms to find studies or programs related to our research objective; on the other hand, the term resilience is used in different areas and fields, this resulted in the selection of the articles being more careful, trying to ensure that the programs were appropriate to the research question.

## 5. Conclusions

This systematic review provides evidence to support the design and implementation of educational programs to enhance or strengthen resilience in vulnerable groups. Vulnerable groups need integral care; therefore, first, it is suggested that educational programs should strengthen interdisciplinary interventions. Furthermore, secondly, it is suggested that these educational interventions integrate the family and social context from an ecological and

holistic model of resilience. Thus, this review can act as a guide to generate more inclusive and resilience-building educational programs. Hence, programs to promote resilience in children, adolescents, or young people with a situation of vulnerability due to a disease or disability must have a transversal axis based on interdisciplinarity.

On the other hand, it is essential to emphasize future research on two critical aspects: (a) how to build or create interprofessional commitments that generate good teaching practices to promote resilience, and (b) how to evaluate and transfer these interprofessional commitments to offer cohesion to a resilient character in children, adolescents, youths, and their families with some situation of disease or disability.

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