ECO-IN
ALGORITHM FOR NEW ECOLOGICAL APPROACHES TO INCLUSION

Output 3.2 - Scientific review on evidence-based education in school inclusion

Researchers contact:

francesco_marsili@hotmail.it – University of Perugia

federicasisti.fs@gmail.com – University of Urbino

www.eco-in.eu

Introduction

The paper presented here is the result of the completion of the output 3.2 for the ECO-IN_Algorithm for New Ecological Approaches to Inclusion funded by Erasmus+ program KA3: support for policy reform. The purpose of ECO-IN project is the improvement of inclusive education policies and practices from primary to lower secondary school, through the active involvement of all the main educational stakeholders - such as, teachers, school heads, educational staff (inside and outside the school), parents and public authorities - by providing them with specific training and supporting actions to concretely act as a teamwork combating segregation and radicalization thus enabling more qualitative and quantitative measures to implement, monitor and assess inclusiveness at school. ECO-IN is an evidence-based, cross-European project that aim at testing, monitoring and assessing the impact of "ecological" and innovative training targeting different players engaged in inclusion (school heads, teachers, parents, experts inside and outside school, policy-makers, Civil Society Organisations, etc.) on the quality of inclusive procedures and related assessment practices, for improving education systems and achieve equity and equal opportunities for all.

One of the main products to realize during this project is the "Inclusive Process Assessment Scale" (IPAS), an assessment and self-assessment tool pertaining to school contexts (Cottini et. al., 2016) that allows specific types of evaluation and promotes reflections on inclusive education's quality indicators, thus contributing to the planning and ongoing adjustment of the educational program of the school and the class. For this purpose, it was useful and necessary an in-depth analysis of what is already known about the tools tested, studied and currently used in Europe to evaluate the inclusion process at educational level. Both the team of the University of Urbino and the team of the University of Perugia were in charge of it. An analysis report was conducted on the "state of the art" of the school inclusion and tools for measuring their effects and impact at European level. The method we used was the systematic literature review, a research synthesis that aims to integrate study findings on a specific topic. Our aim was to reach as many comprehensive corpus of studies as possible in order to discuss what has been done and what to do in the future**.**

Background of the review

In the last two decades the evaluation of school systems has seen an increasing interest both from international organizations and the scientific research field. Most of the efforts have been directed on the assessment of organizational and didactical dimensions (es. PISA) (Ianes & Dell'Anna, 2020). However, the quality of inclusive process is one of the most controversial dimensions in the research field, specifically the assessment of the school inclusion processes

in Europe are widely underrepresented as a topic in the debate on the scientific literature and in the European legislation.

In Europe lots of different school systems coexist with different norms and theoretical models. In spite of the EU agencies and institutional bodies such as the European Commission (2013), with the document *Support for Children with Special Education Needs,* and the European Agency for Special Needs and Inclusive Education (EADSNE, 2009; 2012) have focused on the importance to pursue the aim of inclusion, in most country persists exclusive or "special" educational systems. International organizations as well, such as the United Nations (UN, 2006) and UNESCO (UNESCO, 2016; 1994) address the importance of moving from an exclusive to an inclusive school system.

As a first data there is a misleading conception between inclusion and integration. Inclusion, in the educational context, is intended not just to have a specific attention and participation of children with disability in mainstream school, but it is defined as a process to allow all children to participate and develop their potentiality. In this perspective inclusion means recognizing the importance of the participation in the school life of all the children and students (Booth & Ainscow, 2002). This is the terminological difference between inclusion and integration, this one focused on the "normalization" of "special" pupils. So, if integration could be identified as a condition, inclusion represents a process, a multidimensional framework (Cottini, 2019) composed of:

- Dimension of principals
- Dimension of organization
- Dimension of methodologies
- Dimension of evidence

Methodology

This research was based on the typical steps for a systematic review: formulate a question identifying keywords and specific terminology; develop a search protocol defining inclusion and exclusion criteria; electronic search of studies on databases using keywords for defining queries; select studies for the first screening of title and abstract; second screening of full-text reading; extract data from studies included; Interpret and discuss the results. The research presented in this paper was conducted starting from the PICOS tool, an instrument used to structure a systematic review and to identify the problem of research, the intervention, the eventual comparative intervention, the outcomes and the study design.

Purpose of the review

This paper presents a systematic literature review investigating all subjects involved in the so-called *schoolwide* approach regarding inclusive education at school. The aim of this paper is to identify studies on the assessment of the inclusive process in the schools looking at all the actors involved, each for its specific competence (policy makers, school heads, teachers, educators, psychologists and experts, families and students). This study was carried out to answer these research questions:

-   Are there any studies in the literature with a focus and application of tools for the measurement and evaluation of school inclusion quality?

-   What are the levels and dimensions through which, at European level, the quality of school inclusion is being analysed?

-   In light of previous studies regarding IE quality assessment, what are the themes and issues, focused as research gaps, to be identified in depth in future research in IE?

The study explores the abundant literature regarding the concept of inclusive education in Europe, the role of different policies and legislation in the European context, the practices, the measures and scales for evaluating inclusion, the different roles of all stakeholders, the relationship between social and school inclusion. Furthermore, it investigates how the concept of inclusion is focusing not only on academic outcomes, but rather on building effective, social and emotional interactions within the whole learning environment.

Eligibility Criteria

The eligibility criteria, presented in the table 1, were discussed between the researchers that after an exploratory research, decided to include studies published from 2013 because of previous studies and the suggestions provided by the article published by Nepi (2013).

Title and abstract	Keywords in title or abstract concerning inclusion, quality assessment, schools.
Topic	Studies had to focus on assessment of inclusion process at school
Language	English
Timeframe	Studies carried out after 2013.
Design	Primary and secondary quantitative studies.
Publication type	Article and scientific paper
Participants	Students from 3 to 18 years old.
Exclusion	- Studies conducted in non-European countries - Interview, case-study, cross-sectional studies - Studies with a focus just on social inclusion or on school inclusion without any connection with assessment quality. - Studies focused on a specific disability or special need

Table 1. Inclusion and exclusion criteria

Search procedure

Searches were conducted in electronic databases using different combinations of keywords and Boolean operators (e.g. AND, OR, NOT). Different queries were used in order to reach primary and secondary studies. Different terms were used as follow "school inclusion" OR "social inclusion" AND "systematic review" OR meta-analysis OR review OR literature review AND measuring OR instrument OR "assessment tool" OR evaluation OR assessment OR indicators AND quality OR qualities. The researchers used different online databases such as ERIC, PsycInfo ecc., including Google Scholar for the grey literature. Then a bibliographical hand-research in selected articles has been conducted. The criteria and details of the research are presented in the table 2.

Date	April 2020
Place	Urbino
Researchers	Federica Sisti from University of Urbino and Francesco Marsili from University of Perugia.
Strategy	Online database, grey literature and bibliography extraction
Number of database	5
Database	EBSCO – APA PsycArticles – APA PsycInfo – Psychology and Behavioral Sciences Collection – ERIC
Grey literature	Google scholar

Table 2. Search criteria

Selection procedure

The screening was conducted by two independent researchers: Federica Sisti from the University of Urbino and Francesco Marsili from the University of Perugia. During the full-text screening the researchers asked for a third reviewer to ascertain the inclusion or exclusion of a study. After the title and abstract first screening, the full-text screening and the bibliography research, 326 total records were screened, and 8 studies were included. Despite lots of primary studies having been conducted during the last decade, a lesser presence of secondary studies (systematic review, meta-analysis etc.) persists in the literature. 7 primary studies and only 1 systematic literature review were included. To follow a rigorous screening and research has been used the tool PRISMA as presented in the table 3.
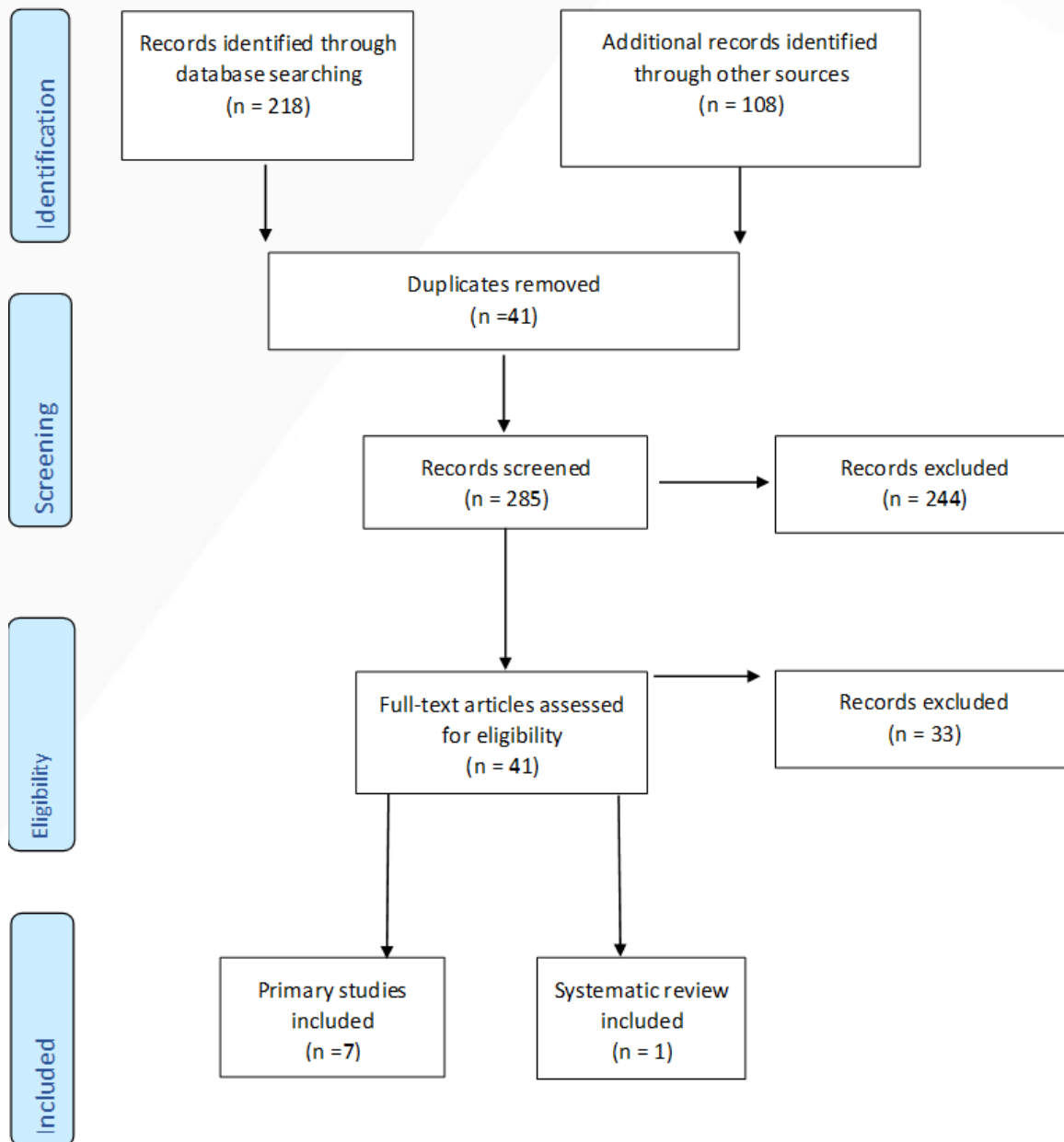
Identification

Records identified through
database searching
(n = 218)

Additional records identified
through other sources
(n = 108)

Duplicates removed
(n =41)

Screening

Records screened
(n = 285)

Records excluded
(n = 244)

Eligibility

Full-text articles assessed
for eligibility
(n = 41)

Records excluded
(n = 33)

Included

Primary studies
included
(n =7)

Systematic review
included
(n = 1)

Table 3. Chart of selection procedure (Moher et al. 2009, p.267).

Coding into categories

For the purpose of this review, studies were coded in terms of publication features (authors and year of publication), study characteristics (country, school level, subjects involved), study design (method, objectives). The two reviewers compared and discussed the thematic categories that emerged from the articles. After selection, studies were placed into various categories according to the main factors they examined. If a study analysed various factors/objectives relating to different categories, it was placed in the related categories. As an example, if one study focuses on teachers' attitudes and social and emotional students' experiences, it is related either to attitudes and beliefs or student participation categories.

Table 4, as follows, provides a definition of the final thematic categories which included: (a) Attitudes and beliefs, (b) professional development, (c) practices, (d) students' participation, (e) and critical reflexions together with the amount of studies where these categories are present. According to the categories previously described, some studies fell in more than one, as they offer a view of more than one aspect.

Categories	Description	N. studies
Attitudes and beliefs	✓ The attitudes and/or perceptions of different stakeholders in regard to inclusive education. ✓ Multidimensional attitude measure used as a multifactorial belief system when aggregating single studies in systematic reviews or meta-analyses.	5
Professional development	✓ Teachers professional knowledge and perceived research needs in the context of inclusive education. ✓ The capability of transferring scientific and theoretical knowledge into educational practice.	1
Practices	Practices to enhance IE would lead to successful teacher experiences. They can be divided into two subcategories: 1. additional support by teachers (co-teaching and teaching assistants) 2. support by peers (cooperative learning and peer tutoring)	2
Students' participation	The relationship between inclusive participation and student achievement in terms of providing a methodological framework for studying this. ✓ social participation ✓ academic participation	5
Critical reflections	Factors that enhance the practical impact of research on IE: 1. The responsiveness of research (usability, accessibility, consistency and organisaional demands for implementation; 2. Long-term collaboration between researchers and practitioners; 3. Support for the school acting on researchers' advice.	3

Table 4. Description of each article category.

Table 5 below lists all the stakeholders involved, in other words, all subjects involved in the so-called *schoolwide* approach regarding inclusive education. The aim of this table is to identify cross-sectional studies where a specific category looks at one specific subject involved in the inclusive process, each for its specific competence (policy makers, school heads, teachers, educators, psychologists and experts, families and students). In this way, it was possible to obtain an accurate portrait of the impact of different actors on the categories analysed.

Themes / Participants	Attitudes and beliefs	Professional development	Practices	Students' participation	Critical reflections
Policy makers					
School heads					
Teachers	2	1	1	1	3
Educators					1
Psychologists and other experts					
Families					
Students	3		1	5	

Table 5. Different stakeholders' perspective

Results

Descriptive results

The included studies are characterized by having been conducted in Northern European countries, almost all of them in the UK and Germany. It is important to note that in these countries, including Switzerland, the school system is not *full inclusion*, therefore research is the subject of debate for the "conversion" of these school systems into inclusive systems. Secondly, a terminological heterogeneity concerning Special Educational Needs is highlighted. There are several labels that often include or exclude specific difficulties and disabilities by adding numerous acronyms (BESD, SEBD, LD, ID, etc.) to the educational vocabulary. In the European research context, there is no terminological sharing but a certain presence of reference groups which, each with their own nuances, constitute subjects in conditions of specific behavioral characteristics, social-relational, emotional, intra and interpersonal and socio-economic difficulties.

The concerned studies have mostly investigated the perception and attitudes of teachers and students towards inclusion. No studies have been identified concerning the opinion of specialized operators (neuropsychiatrists, psychologists, etc.) outside the school but directly involved in the inclusion practice. No studies involved school leaders or parents.

An important detail to be highlighted in this systematic review is the fact that it makes reference to studies concerning not a narrow and circumscribed target, but a more numerous one, in order to broaden the scientific investigation to a plethora of subjects who are directly involved in the school inclusion process: neuropsychiatrists, psychologists, collaborators, school managers and parents.

The categories mostly identified are "Attitudes and Beliefs" (4) and students' participation (4). In two studies, they occur separately, in the others, they are in co-occurrence.

There are studies (4) regarding "attitudes and beliefs" towards IE; attitudes/beliefs category refers to perceptions, views, beliefs, feelings and the predispositions of actors towards something or someone. They define attitudes as a compilation of cognitive (beliefs or knowledge), affective (feelings) and behavioural (predisposition to act in a particular way) components. Authors emphasise that "positive attitudes towards IE and students with SEN of all actors involved in IE are vital to create a school climate that welcomes difference. These actors include teachers and typically developing students".

There are studies (4) regarding "students' participation" considered either as social or as academic participation. Several researchers consider social participation to be the most adequate concept to describe the social dimension of inclusion. They state that "social participation of pupils with special needs in regular education is the presence of positive social contact/interaction between these children and their classmates".

The researchers record higher achievements in academic and vocational skills for SEN students who are part of mainstream classes in comparison to special education, whereas, the results for students with emotional and behavioural disorders were found to be inconsistent. At a general sense, this category could consider and analyse both levels of participation which are consistent with a complete inclusive education process.

It's necessary to address future research on the attitudes of all students, with and without SEN, as well as on the academic participation of all students.

"Students participation" category focuses on developing the relationship between inclusive participation and academic achievement into an inclusive context.

A few studies (3) consider "critical reflexions" as the means for providing rationale in regard of inclusive education, thanks to existing or developing theory. This could be applied "at the level of country-wide policy development or local policies in schools or communities, as well as by theoretically-driven frameworks for developing professional development related to

inclusive education". The focus of the studies is less often related to "process level", both in terms of "professional development" (1) and "practices" (2).

The "critical reflexions" category focuses on the less occurring categories such as "professional development" and "practices" so as to show the reason why teacher and general school system professional development on evidence informe IE practices which are vital for the successful implementation of IE, such as "practices" category as well.

"Practices" are related to additional support by teachers and support by peers. "Additional support by teachers/teaching assistants for SEN students is labelled co-teaching. It's found to be an effective instrumental and pedagogical model for handling diversity from which students with and without SEN can benefit. Effective co-teaching strategies focus directly on student learning goals and provide adequate planned instruction. Peer support practices as: (1) cooperative learning (students work and thereby learn together in sustainable groups) and (2) peer tutoring (students teach each other within or cross class settings".

The two less representative categories show that in spite of the importance of research for policy-making, there is the need to increase the number of experimental studies that can inform on the pragmatic impact of inclusion, along with the "process" level in the "school system" and establish the criteria of methodological quality for both quantitative and qualitative research, in order to understand how inclusive practices are related to students' perspectives of inclusion (at the "outcome" level) and if an inclusive setting may support better outcomes (at the "input" level) .

Analytical results

A thematic content analysis was conducted to sort the information obtained from the selected studies. To structure this process, the input–process–outcome model of Kyriazopoulou and Weber (2009) was designated, because it identifies core-areas that contribute to the realisation of IE. **Input** represents all aspects provided to the system to achieve a certain outcome and can vary from financial resources and policy developments to the training level of school actors and infrastructural issues. **Process** describes all educational activities including procedures, school practices, or classroom instructional practices. **Outcome** refers to efficiency measures such as participation rates or curricular achievements, for example, academic and functional literacy, independence or citizenship (Kyriazopoulou and Weber 2009).

Input	Process	Outcome
- **Attitudes and beliefs** - **Professional development**	- **Practices**	- **Students' participation**
Everything provided to the system to achieve inclusive education including financial resources, policy, leadership, staffing, staff training, curriculum, infrastructure.	The practices in districts, schools and classrooms that transform the inputs into ways of working with students that produce outcomes. This includes instructional practices, climate, school practices, collaboration and shared responsability, support to individuals, role of special schools. The efficient operation of these processes is also dependent on the availability of adequate inputs in the form of resources, structures and expertise.	The result of the inputs and processes including satisfaction from stakeholder groups, rates of academic achievement, social participation. They centrally involve student development, which is dependent on staff development, and is inextricably linked to organisational development.

Table 6. Input-process-outcome model

Attitudes and Beliefs (input)

"Attitudes and beliefs" category focus on understanding the attitudes and/or perceptions of different stakeholders regarding inclusive education.

There are four studies regarding attitudes and beliefs towards IE (Kristie Hind, Rebecca Larkin & Andrew K. Dunn, 2019; Anke Heydera, Anna Sudkampa, Ricarda Steinmayra, 2020; Katja Petry, 2018; Pandelitsa Cosma & Anita Soni, 2019).

The findings in Heydera et al. (2019) suggested that teachers were more convinced of positive effects of inclusive education in general than of positive effects of inclusive education on the learning environment and the required classroom management skills. Interestingly, they also report lesser positive beliefs about the benefits of inclusive education when this was assessed by directly opposing special vs. integrated education than when the benefits of inclusive education were judged in general only. Teachers further seemed to be the most negative of whether mainstream teachers possess the skills that are needed to work with students with SEN. Furthermore, the lower level of social participation of students with SEN than without SEN when attending the same classroom corroborates once more that physical integration is necessary, but it is not a sufficient condition for inclusive education.

In Petry (2018) the study refers to the assessment by measuring attitudes towards peers with a disability and it presents new insights on the social influence of classmates on the social behaviour towards students with a disability and in the relationship between class attitudes and the social participation of students with a disability. The article explores the link between class attitudes towards peers with a disability and the social participation of students with a disability. It can be assumed that adolescents are more inclined to accept, interact and build friendships with peers with a disability when their classroom context is permissive regarding such social behaviour.

Pandelitsa Cosma & Anita Soni, (2019) identified research exploring the views of pupils with SEMH/BESD and offers a greater insight into their experiences and viewpoints. Pupils in these studies share views about when they were negatively perceived by others, particularly teachers, because of the labelling process perpetuated at school, in the current years. Conversely, positive relationships with members of staff largely contributed to a more positive schooling experience for many pupils. This review has highlighted that the voices of pupils with BESD can be captured, despite perceptions that this is difficult. Risk factors including negative relationships with staff and protective factors such as a personalised curriculum have been identified as influential to BESD pupils' educational experiences. The concept of "pupil

voice" seems to be linked to feelings of being listened to, understood, and may, therefore, be a strategic factor towards positive educational experiences for these pupils.

In Kristie Hind, Rebecca Larkin & Andrew K. Dunn (2018) authors state that teachers' perceptions of inclusion greatly influence both the way in which they manage their own classroom environment, and how they understand and interpretation the support that is available to them. The aim of the study is approaching the assessment issue to enhance understanding and provide in-depth, meaningful representation of teachers' attitudes to SEBD inclusion. Specifically, this work will address whether teachers' age, experience, qualifications, and support received, influence their attitudes towards the inclusion of children with SEBD in mainstream teaching and learning environments. The work also aims to determine a link between educators' attitudes to inclusion and willingness to work with SEBD whilst identifying the barriers to successful inclusion regarding the current support available.

Professional development (input)

Teachers' attitudes and beliefs are considered linked to teachers' professional identity and competencies or even part of teachers' professional competencies, thereby affecting teachers' instruction and behaviour and contributing to students' learning conditions and learning. One study, Anna-Maria Hintz, Conny Melzer, David Scheer, Michael Paal & Clemens Hillenbrand (2015) concern the "professional development" category and aims at examining teachers' professional knowledge and needs in the context of inclusive schooling. Results of the descriptive analysis revealed differences between special and general education teachers, especially on the perceived personal knowledge.

Practices (process)

Two of the studies, Bensted Helen (2019), Andrea Caputo and Viviana Langher (2015), concern procedures to enhance IE for SEN students which can be divided into two categories: additional support by teachers and support by peers.

In Andrea Caputo and Viviana Langher (2015), there is a general recommendation towards co-teaching as one of the practices suggested to implement inclusive education. The study states

that "assessing the quality of perceived support can help preventing failures and malfunctions that may lead to ineffective inclusive practices and burnout among SETs".

In Bensted Helen (2019), the relationship between the theoretical process of social inclusion and the reality of the process for children identified with SEN in school contexts is then highlighted so as to show the lack of actual practices toward inclusion.

Social participation (outcome)

Four of the studies included: Carmen L. A. Zurbriggen, Martin Venetz, Susanne Schwab, and Marco G. P. Hessels (2019); Anke Heydera, Anna Sudkampa, Ricarda Steinmayra (2020); Katja Petry (2018); Pandelitsa Cosma & Anita Soni (2019) concern "students' participation" category.

In Carmen L. A. Zurbriggen, Martin Venetz, Susanne Schwab, and Marco G. P. Hessels (2019) socio-emotional functioning has been considered a key issue in the inclusion debate.

It's a based-evidence theme that it is the study, Kristie Hind, Rebecca Larkin & Andrew K. Dunn (2019) which explores mainstream teachers' attitude towards inclusion, that is coherent only with teachers' perspective, who don't feel to be asked for acting IE, because of their lack of specialistic and pedagogical competencies in treating special educational needs of children and young people.

The systematic review which has been included, Pandelitsa Cosma & Anita Soni (2019) refers to students and investigates the views gathered from children and young people (CYP) identified as having Behavioural, Emotional and Social Difficulties (BESD) or Social, Emotional and Mental Health (SEMH) difficulties. It reflects on the educational experiences of pupils with BESD alongside educational practice.

The research focuses on the assessment of the presence of social interactions between students with a disability and their classmates. "Attitudes towards peers with a disability are measured in order to assess the affective, behavioural and cognitive attitude components towards children with a disability, to explore the relationship between attitudes towards peers with a disability and social participation". The research states that "inclusive education creates opportunities for interaction with typically developing peers, which is assumed to help

students with a disability to develop academic and social skills, fosters attainment of educational goals and contributes to friendship development".

The research argues that "positive social-emotional school experiences, such as experiencing social integration and well-being in school, are an important educational goal in itself".

Critical reflections

One study, Anna-Maria Hintz, Conny Melzer, David Scheer, Michael Paal & Clemens Hillenbrand (2015), addresses the issue of transferring scientific knowledge into educational practice by assessing the teachers' knowledge and the perceived research needs in the context of inclusive education.

Another study, Andrea Caputo and Viviana Langher (2015), describes the development and initial validation of the Collaboration and Support for Inclusive Teaching, a measure of perceived support in special education teachers regarding the degree of collaboration with regular teachers for inclusive practice at school. The usefulness of this study is highlighted by the improvement of cooperative teaching supporting school inclusion, as well as to the prevention of the risk of burnout in special education teachers.

The study by Benstead Helen (2019) highlights a need for further empirical research to identify the ways in which educational practitioners, who hold socially inclusive values and beliefs, interpret current education policy in informing their practice. "The 'current' model of social inclusion presented in this article indicates that many pupils are failing to achieve active participation and are often conversely experiencing marginalisation. This is frequently due to poorly self-managed social experiences by pupils displaying low levels of social competence".

Empirical research involving practitioners working in schools with inclusive admissions policies is recommended, with the aim of identifying successful approaches to inclusive practice that values both social inclusion and academic attainment.

Discussion of the results

The amplification of inclusive practices, inside and outside school, the complex concept of inclusive education should be acknowledged by all stakeholders and, therefore, involving complex inter-linkages among them.

According to the main findings, most of the studies were conducted in north-European country (UK, Germany, Switzerland and Belgium) and none of them examine the point of view of psychologists, families, policy makers and school heads. Most of them are focused on teachers' perspectives particularly focused on their attitudes towards inclusion. Some studies involve students and their attitudes towards peers with disability and SEN.

The review highlights the urgent need to establish common criteria for the definition, implementation, and assessment in inclusive education in order to build an effective collaboration at all levels of education system (policy, leadership and final users) and to outline common evaluation indicators.

The present study includes only one systematic literature review that has been chosen and analysed as point of reference or as existing empirical evidence on the outcomes around our focus of interest which is the quality of school inclusion in Europe. It has been written by Pandelitsa Cosma & Anita Soni in 2019. It explores the perspective of students, identified as BESD, or subject to the wide range of difficulties behavioural, emotional and social and as SEMH, or subject to difficulties with regard to the state of mental, social and emotional health.

It introduces the terminological question suggested by the different acronyms used to identify subjects with difficulties, which identifies an important limitation to studies on this topic; it's the synthesis of 7 articles that collect the voice of pupils attending primary school in the UK. The record immediately refers to the SEND code of practice to clarify the reasons behind the use of the acronyms BESD and SEMH.

This is the Code of Good Practice developed by the English Department for Education, which is the official guide for teachers who work with children with special educational needs and with disabilities. This "diagnostic" categorization system focuses on a family-led care and education system that encompasses four broad areas of special educational needs and

supports: communication and interaction, cognition and learning, social, emotional and mental health and needs sensory and physical.

The study by Anna-Maria Hintz, Conny Melzer, David Scheer, Michael Paal & Clemens Hillenbrand (2015) reports the results of an exploratory study, carried out through a cross-sectional online survey questionnaire and gives voice to the teaching component, both special and class. What is important to highlight through this study is the difference between general/ordinary and special teaching and the challenge that special education in a German environment collects, at the teacher level, in investigating the professional knowledge of class teachers, towards inclusive education and in the attempt to actualize the transferring of scientific knowledge that allows to bridge the gap between research and practice, theory and action. The study reveals that teachers' perception of self-efficacy is an important indicator of inclusive behaviour, as well as an attitude functional to inclusion. Furthermore, possession of theoretical tools and practical skills by teachers is much more relevant regarding the development of inclusive intentions, rather than a simple "good-natured" affective attitude.

The study of Carmen L. A. Zurbriggen, Martin Venetz, Susanne Schwab, and Marco G. P. Hessels (2019) record and analyse students' perspective in three areas of inclusion (academic, social and emotional) between students with LD and those without LD (learning difficulties). The study analyses the use of the PIC questionnaire, on the perceptions of the students themselves on the concept of inclusion in the three areas described above. The German version of the model was used in 823 Swiss primary schools. However, this reveals some limitations as the school self-perceptions captured can vary considerably within the same category of LD and even more if we also consider students with other types of SEN. The study suggests applying the use of PIQ also in secondary schools and to teachers and parents as well.

The study, Kristie Hind, Rebecca Larkin & Andrew K. Dunn, "Assessing Teacher Opinion on the Inclusion (2018) through the use of two questionnaires (MATIES and TWSD), investigates and measures the quality of inclusion of both students with SEN and students with severe disabilities, assuming the perspective of teachers operating in the English context, both in primary and secondary schools. The important theme from which the study starts is that the inclusion of subjects with SEN and other disabilities, within the traditional school context, raises important controversies regarding the   impact of "school inclusion" to families,

professionals and to the students themselves. The emerging outcome of the study is the evidence that the attitudes of teachers represent a significant indicator of the willingness to teach students with SEBD within the traditional school context and to improve their educational interventions to fully promote inclusion. The study has highlighted some factors that could be useful quality indicators if the whole world of school is examined, in its various components: greater involvement in promoting inclusion in primary school teachers, rather than in those of secondary school, a higher level of training and updating positively conditions the practice, the perspectives and the skills in using resources and adopting diversified strategies and methodologies and didactic mediation. The age of the teachers and therefore the time spent in the profession (older teachers = more experience) also play an important role in diversifying the quality of their inclusion-oriented interventions; the younger teachers (less time spent in the profession), paradoxically, show that they are more methodologically and psychologically equipped and also more ready to contain any episodes of burn-out, as they are less subject to states of psychological pressure and performance anxiety, compared to the older ones, less accustomed to facing an educational urgency, emerging from the stresses of modern times (multiculturalism, heterogeneity in learning, hyper-stimulating society on a cognitive level ...). They are more inclined to get involved, to seek resources for inclusion, to find alternative strategies, innovative methodologies to prevent special education from dividing, instead of including.

The article, Anke Heydera, Anna Sudkampa, Ricarda Steinmayra (2020) represents quantitative empirical evidence on the gap between inclusive education and special education, in the German context. The field of investigation, suggested by social indicators (well-being in school, school well-being and social integration between students with SEN, with social and emotional needs and students without SEN in the same classroom context), is analysed through the perspective of both the students themselves and the teachers. The study provides empirical insights into the attitudes of teachers towards the concept of inclusion, as a potential factor for the success of inclusive education. A further point of interest comes from considering other factors as determining factors for the implementation and development of the level of inclusion and social integration between students with SEN and without SEN, or other potential mediators such as the class climate and especially the type of SEN, that is the specific disorder.

The article also raises the importance and the need to create a school climate of all-round inclusion, which also includes collaboration between colleagues which involves the wide school environment. There is an obvious appeal to school leaders to promote a climate oriented towards inclusion. This refers to the issue, described above, relating to the extreme heterogeneity of the difficulties suggested by the various acronyms used in the studies included and to the issue of the generalization of the results of these investigations as they are always in the balance between differentiation and homogenization. The funding emerged from the study is that the simple physical presence within the same class context, between students with SEN and without SEN, is not the only indicator for inclusion, in fact the result of the survey confirms a lower level of social participation among students with SEN versus those without SEN. It is therefore necessary to address future research towards the education and training of teachers in order to achieve inclusive education at 360° or for all students, whether with difficulty or without difficulty, overcoming the risk that with special education the segregation and differentiation are further emphasized and thus widen the gap with respect to students without SEN.

The study, Andrea Caputo and Viviana Langher (2015) reports the validation of the scale that measures the level of collaboration and support existing between curricular teachers and support teachers, in the Italian context. The scale appears as a useful tool for the development and implementation of cooperative teaching between the two different categories of teachers, aimed at supporting the inclusive process as well as preventing the risk of burn-out among support teachers. The application of the scale highlights how often the issue of the overlapping of roles and the ambiguity of roles with respect to the division of work in the classroom are obstacles to the setting up of an effective cooperative teaching work and how this can produce negative effects at the level of personal and emotional perception in the support teacher and ultimately on students with difficulties and their effective inclusion.

The study written by Katja Petry in 2018, extracted by hand from a bibliography, takes the perspective of students, peers, classmates of pupils with disabilities in the context of the first year of secondary school. The study confirms that there is a link between peer behaviours towards peers with disabilities and their level of social participation. The goal of this study is to investigate whether the "class" behaviour of peers towards peers with disabilities

(regardless of the type of difficulty) is related or not and to what extent to their level of social participation.

A limitation of the study, however, is to have considered only three of the four key themes of social participation, namely (1) acceptance by peers, (2) friendships and (3) interactions between peers, except for (4)) the self-perception of social participation by the student with disabilities. However, it is understood that this last aspect is more difficult to analyse as it is closely related to the type of disability, which on the other hand can also affect the results of this research.

Limitations of our study

The paper addresses barriers and backlashes deriving from the lack of a shared view regarding inclusive education. Limitations are derived from the lack of rigorous experimental studies regarding the assessment of inclusion, along with a low methodological quality of the research available in the field. Prior to discussing the implications of the findings of this review, it is necessary to acknowledge limitations that must be considered for future work. First, this review only analysed European studies, written in English language, published not before 2013. The choice about the language of studies has been a limitation, in fact during our review, we realised that many studies, which were extremely concerned to our focus, were written in other languages, but our eligibility criteria didn't allow us to include them. It prevented us from considering all studies above all from United States and Canada, which were strongly consistent with the focus of our research. We decided to include only quantitative studies to reach just experimental, quasi-experimental as primary studies and meta-analysis, systematic review or best-evidence synthesis as secondary studies. This could have been a limitation for the research and could be also the reason why we found few studies in the literature.

Conclusions and future directions for future research and practice

Our systematic review have made some issues come out and become points of reference for implementation of practices towards inclusion, development of effective policies and interventions to promote inclusive and quality education starting from some more effective European alliances and providing real partnership among all stakeholders involved.

Many studies excluded focused on some basic aspects for IE, such as those about peer mediation, which is a basic aspect for inclusion as well, and, furthermore, because they could give voice to students with SEN. The pupils' voices should be considered more and more; it refers to the views, perceptions and perspectives of pupils. Article 12 of The United Nation's Convention on the Rights of the Child, (United Nations, 1989), was ratified by the United Kingdom (UK) in 1991 and asserts that "all children have the right to express their views on matters affecting them and should be involved in any decision making about their lives". As research in the views of pupils with difficulties is limited, further research in this area may therefore focus more closely on their views in relation to their permanent exclusion, and to past and current educational experience. In light of these limitations, which make evidence of several omissions with regard of the global view of the schoolwide approach to inclusion at school, and referring to the input-process-outcome model, various research gaps are identified in order to let researchers and practitioners know about what is lacking on the international research level, and about the actual needs which are to be supported by empirical data.

Here are some issues extracted from this scientific review on evidence-based education in school inclusion, so there are both academically themes and politically/socially themes. According to our findings, there is no terminology correspondence in the field of research on disability and special educational needs in Europe; a limitation concerns the controversial concept of labelling by using specialised acronyms: grouping children in terms of common characteristics is required in order to most effectively explore the process of social and school inclusion for diverse groups, thereby increasing our understanding of "other schools", in different contexts and in different countries. A first issue is concerning controversial concepts and terminology that lead to labelling and categorizing disabilities and SEN emerged.

A discrepancy between policy/legislation and the "real school context" has been registered. There is a different way for interpretation and for the application of the norms, despite a growing focus on the rights of children, there continues to be discrepancies about how this legislation has been implemented.

A shared responsibility among all school team members (teachers, principals, collaborators, psychologists, policy-makers etc) has been lacking, together with a shared vision with explicit

goals towards IE which should be an essential and basic procedure at school and it can be helpful in its successful implementation.

Three research gaps are identified following the three sections of this thematic content analysis:

1. The attitudes of students with or without SEN and of school leaders towards IE should be highlighted (input)
2. School practice was little discussed (process)
3. Only some aspects of participation for SEN students was mentioned, whereas the participation of all students (with and without SEN) in IE should be considered (outcome).

A major role for school psychologists in bringing a focus on the social and emotional outcomes of all students and helping schools focus on these outcomes is needed.

School psychologists, with their training in assessment, intervention, social and emotional well-being, and child and adolescent development, are experts that support the inclusion process at school and they should be seen as the leaders in helping teachers develop a better sense of the whole child and how best to create resilience rather than using the traditional model of test and categorize. The role of school psychologists is becoming much more important in the school as collaboration figure for planning the steps of the inclusion process, inside and outside the school. Even if few researchers examine their impact and their involvement in the inclusion process, they fulfil a crucial role on the social and emotional outcomes for all students.

The same is for the role of families, as a key element for the inclusion at school; for school heads, both as coordinators/administrators of finance and resources and main actors for the organization of a school and for policy makers, looking at their contribution in terms of participation and collaboration for the school inclusion not just as mere legislator but as a bridge between school and social inclusion.

Another important issue that has emerged from this study is concerning the need for a synthesis of ideas, between inclusion and normalisation, between a physical integration and

a real social inclusion, in the realm of an organisational paradigm. There is a clear distinction between inclusion and absorption. Inclusion is not a synonym for assimilation or normalisation where students should not only be physically integrated but also socially included. There are some tensions inherent in the inclusion literature, such tensions being most obvious, between the theory and practice of inclusion, with a view to seeking some synthesis of ideas, such synthesis most likely to be located in the realm of a school-system conceived as a complex organisation.

It is not clear the distinction between social inclusion and school inclusion, between the need for attaining social competencies or academic outcomes. An important issue is related to social inclusive practices vs specific academic outcomes into the generalization perspective. Historically, the inclusion of individuals was primarily determined by their school placement. Current thinking focuses strongly on inclusion being viewed in terms of participation, collaboration, planning, efficacy, relationships, emotions, prosocial actions, suggesting that there is an inherent social focus within the concept of inclusion. It is this social focus that appears to be lacking within the current European education policy and research.

The lack of cooperative and mutual support between regular (curricular) and support (special) teachers in special education is conceived as one of the main causes for teacher burnout in special education. This is negatively affecting the teacher attitudes but it encourages and reinforces the concept of exclusion, of marginalisation and segregation of pupils with SEN, outside the regular classroom, behind the incorrect label of Special Education.

Lastly, another important aspect which seem to be lacking in current studies on inclusion is peer-mediation, that is the peer perspective as means for learning for students with SEN. Research stated an evident lacking of literature about peers which act as tutors in relation to students with SEN as tutees. That is important, also and above all to the extent of the emotional benefits, social, but also academic ones.

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