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INVESTIGATION OF THE TRAINING NEEDS, KNOWLEDGE, AND SKILLS OF PRESCHOOL TEACHERS FOR THE IMPLEMENTATION OF INCLUSIVE EDUCATION

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Abstract:

Early childhood is a critical period for learning and development and an opportunity to prevent possible delays and difficulties. Children's participation in preschool education has a significant positive effect on their cognitive, social and emotional development. Therefore, early childhood is vital to ensure access to quality inclusive education for all children and especially for children at risk of socio-economic exclusion, children at risk of development and children in disadvantaged environments. The new human rights approach to inclusive education requires a change of mentality and a different pedagogical approach and support systems should aim to capacity/empowerment of schools to meet the diversity of students' needs. There is a need to transform the education system, so that all students are welcome and have the opportunity to belong, to participate actively and to learn. In this article, we report a study on the investigation of the training needs, knowledge and skills of preschool teachers in Greece for the implementation of inclusive education. Quantitative data obtained through a questionnaire were supplemented by preschool teacher interviews. The focus was on the investigation of the training needs of preschool teachers in Greece and the analysis of a number of factors and conditions that seem to be effective in inclusive practices. The findings can contribute to the improvement of inclusive practices in preschool education and influence the policy and practice of inclusive education in Greece.

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1. Introduction

Education systems today face the great challenge of ensuring quality inclusive education for all learners. Policymakers and educators seek to develop inclusive education systems and practices within schools and classrooms (Ainscow, 2020; Florian, Black-Hawkins and Rouse, 2016). Although there is no international consensus on the definition of inclusive education, a significant number of studies have documented the dimensions associated with this concept. In this context, various definitions have been developed by researchers and organizations that have the same main principles that respect the right of all learners to receive a quality education with their peers (e.g., United Nations, 2006; UNESCO, 2017; OECD, 2012; Council of the European Union, 2017; European Agency for special needs and inclusive education, 2015; Florian, Black-Hawkins and Rouse, 2016).

Whereas the inclusion movement started with a concern about how learners with Special Education Needs (SEN) and/or disabilities could be educated in mainstream schools, it is now widely regarded as a concern for all learners. There is a need to transform the education system, so that all students are welcome and have the opportunity to belong, to participate actively and to learn. The UNESCO 2030 Agenda for Sustainable Development, adopted in the Incheon Declaration, defined the goal of inclusive education in goal four (SDG4) which goes beyond non-discrimination with the transition from equality to equity. The overall goal of SDG4 is to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (United Nations, 2015; UNESCO, 2015). This also highlights the need to make greater efforts to address this challenge to those in "vulnerable situations, people with disabilities, indigenous peoples, people in remote rural areas, ethnic minorities, the poor, women and girls, migrants, refugees, and displaced persons, either as a result of conflict or natural disasters" (UNESCO, 2018). Inclusion in this sense concerns the rights of all students in education as well as a means by which other basic rights can be achieved (UNESCO, 2014; United Nations High Commissioner for Human Rights, 2019). Booth indicates that inclusive education is linked to three perspectives, focusing on individuals, systems and values. With regards to individuals, it includes reducing all forms of exclusion and increasing participation for all students. Inclusive education requires the creation of systems and arrangements that respond to diversity and respect for all students and most importantly, it calls for putting specific values into action in education and society. (Booth, 2009) According to the European Agency for Special Needs and Inclusive Education "the ultimate vision for inclusive education systems is to ensure that all learners of any age are provided with meaningful, highquality educational opportunities in their local community, alongside their friends and peers". (European Agency for Special Needs and Inclusive Education, 2015, p.1). For UNESCO, "inclusion is a process that helps to overcome barriers that limit student presence, participation and achievement" (UNESCO (2017, p.7).

By presence we mean the availability and accessibility of general mainstream schools through educational arrangements. It refers to the right of all students to share the same educational framework with their siblings, their neighbours, and their peers. Participation goes beyond the right to access and attend educational environments and focuses on the extent to which educational arrangements welcome all children and allow them to learn and develop. Participation entails two processes: a) attendance: "defined as 'being there' and measured as the frequency of attending, and/or the range or diversity of activities" (Imms, Granlund, Wilson, Steenbergen, Rosenbaum, Gordon, 2017, p.18); and b) involvement: "the experience of participation while attending. Involvement might include elements of engagement, motivation, persistence, social connection, and level of affect" (Imms et al., 2017, p.18). The right to attend school and participate on an equal basis with one's peers is important in itself, but it also lays the foundation for the right to achieve remarkable educational outcomes. Achievement in this sense refers, to "academic" learning, but also refers to personal and social development and the transition to meaningful adult life. Soriano, Watkins and Ebersold argue that inclusive education is the right of all students to high-quality education and includes four dimensions: equal access opportunities, equal learning opportunities, equal achievement opportunities and equal citizenship opportunities (Soriano, Watkins and Ebersold, 2017, p. 8-9).

Early childhood is a critical period for learning and development and an opportunity to prevent possible delays and difficulties. Children's participation in preschool education has a significant positive effect on their cognitive development (Pianta, Barnett, Burchinal, and Thornburg, 2009) and the quality of Early Childhood Education and Care is also associated with a significant improvement in social and emotional development (Barnett, 2011). Participation in high-quality preschool education has also long-term indirect effects on society, such as poverty reduction and better social and economic development. Therefore, early childhood is vital to ensure access to education for all children and especially for children from disadvantaged and vulnerable environments. (European Commission, 2014, OECD, 2014, 2021; Frawley, 2014).

In recent decades, early childhood education across Europe has undergone many changes due to the higher number of children attending pre-school education and care, increasing linguistic and cultural diversity in society and the transition from care to education with an emphasis on preparing children for entry to primary school. These changes brought with them an expectation from policymakers, researchers and parents for better quality in early childhood and pre-school education and care (Michel and Kuiken, 2014). Although there is widespread agreement that early childhood education and care (ECEC) has a significant impact on children's development, according to the World Health Organization (WHO) and UNICEF (2012), in many countries, vulnerable children have limited access to programs and services aimed at promoting the development of children. These children and their families face obstacles that hinder their opportunities and, therefore, if they do not have the necessary support and protection during the first years of their lives, the possibility of achieving healthy development is seriously threatened. Research has shown that process factors (e.g., interaction between

children and educators, as well as between children, play, etc.) in children's daily lives have the greatest impact on the quality of experience and of children's achievements (Pianta et al., 2009; Lillvist and Granlund, 2015).

In 2019, the European Commission announced the initiative 'European Child Guarantee' to ensure that every child in Europe at risk of poverty or social exclusion has access to the most basic rights and services such as pre-school education and care, health care, nutrition, housing. In 2019, almost 18 million children in the EU (22.2% of the child population) lived in households at risk of poverty or social exclusion. This leads to a cycle of disadvantages between the generations, with profound and long-term effects on children (European Guarantee for the Child, 2019). The European Child Guarantee, adopted by the Council in June 2021, aims to break this cycle and promote equal opportunities for children at risk of poverty or social exclusion.

Although the use of the term inclusion and related concepts varies greatly from country to country, everyone agrees that inclusion should begin in early childhood - if children grow up together, they will learn to accept and respect diversity at an early age.

The new human rights approach to education requires a change of mentality and a different pedagogical approach and support systems should aim to increase the capacity/empowerment of schools to meet the different needs of all students. This requires a change of attitudes and values by all involved to support the change in schools so that they can meet the needs of all students. The change in teachers' attitudes plays a key role in promoting the new approach and in changing and strengthening schools. Many researchers consider teacher attitudes to be crucial in ensuring the successful inclusion of students of vulnerable groups. The international literature shows that in the findings of the respective research, there is a great variation in the attitudes of teachers toward inclusive education. Trends range from conflicting and restrictive perceptions/beliefs of teachers about inclusive education (Fyssa, Vlachou and Avramisis, 2014), to a moderately positive attitude (Lee, F. L. M., Yeung, A. S., Tracey, D., & Barker, K. (2015)) and in a more positive attitude (Dias and Cadime, I. (2016)).

In the research for high quality services, recent EU and OECD policy documents emphasize that improving working conditions and enhancing the professional development of Early Childhood Education Care and pre-school services is vital to addressing the dual challenge of providing equal access to services, while improving the quality of the offer (OECD, 2018, 2021). In addition to the positive attitudes, teachers should have the appropriate pedagogical knowledge and skills to be able to meet the needs of all children and in particular those at risk of exclusion. Teachers must have adequate initial training and access to systematic in-service training on inclusive education. The inclusive pedagogical approach requires, among others, appropriate knowledge and skills in a number of relevant issues such as the use of universal design, of differentiated instruction, and alternative teaching and learning, in the design and use of individual educational plans, in the use of inclusive and flexible curriculum, in coteaching, in reasonable accommodations (appropriate modifications and adaptations to

infrastructure and the curriculum), and in formative assessment techniques (Ryan and Gottfried, 2012).

In order to be able to successfully meet the diversity of children's needs, pre-school teachers must have the necessary knowledge and skills related to inclusive education. Therefore, two important factors that significantly determine the pedagogical approach to inclusive practice at pre-school and classroom level, are the investigation of pre-school teachers' training needs, for the acquisition of necessary knowledge and skills, and their attitude towards the new approach to inclusive education. The scope of this article is to present and discuss the main findings of a study on investigating the training needs, knowledge, and skills of preschool teachers in Greece so they can meet the diversity of needs of all children in the classroom.

2. Methodological issues

The research is based on the existing knowledge in the field of active and effective participation of all pre-school children in education as well as in the field of exploring the training needs of preschool teachers. The main goal was to investigate the training needs of preschool teachers in Greece and to analyze a number of factors and conditions that seem to be effective in order to be able to support the implementation of inclusive education policies at the pre-school level, for children from the age of three until the beginning of primary education.

The research questions are as follows:

- How do the key partners in pre-school education school principals, teachers, special educators - deal with issues that promote pre-school inclusive education?
 (What do they consider to be the main principles and most important challenges of effective inclusive practice?)
- What do the key partners in pre-school education think is needed for the quality and effective implementation of inclusive pre-school education?
- What are the educational needs of pre-school teachers, in order to be able to support the implementation of inclusive education policies?

The methodology used is the sequential explanatory strategy of mixed methods research, a combination of quantitative and qualitative data collection. The sequential explanatory strategy is characterized by the collection and analysis of quantitative data followed by the collection and analysis of qualitative data. The priority typically is given to the quantitative data, and the two methods are integrated during the interpretation phase of the study. The purpose of the sequential explanatory strategy typically is to use qualitative results to assist in explaining and interpreting the findings of a primarily quantitative study. The straightforward nature of this design is one of its main strengths. It is easy to implement because the steps fall into clear, separate stages. In addition, this design feature makes it easy to describe and to report. The main weakness of this design is the length of time involved in data collection, with the two separate phases. This is especially a drawback if the two phases are given equal priority (Creswell, 2011).

The findings are expected to contribute to the improvement of inclusive practices at preschool education and influence the policy and practice of inclusive education in Greece.

The quantitative method is used when it is desired to investigate the views, attitudes and behaviors of those involved in the research (Clark and Carter, 2010). The quantitative method refers to the systematic investigation of phenomena with statistical methods, mathematical models, and numerical data. A representative sample of observations is usually used and generalization to a wider population is sought. Data collection is done with structured protocols, such as questionnaires, scales and achievement tests. The quantitative method allows statistical processing of data in order to quantify the views of respondents on the issue under consideration.

Qualitative research aims at in-depth investigation and understanding of social phenomena. The researcher answers questions related to "Why?" and "How?" of these phenomena. The qualitative approach is a fundamentally exploratory method.

Qualitative research investigates in-depth representations, attitudes, perceptions, motivations, as well as data on individuals' behavior. The goal of qualitative investigation is the holistic understanding of an attitude or a behavior (Denzin, Norman and Lincoln, Yvonna, 2008). Dealing with young children is a very delicate and sensitive issue and research has shown that interviews with key actors of the educational community - school principals, teachers, and support teachers - provide good and sufficient information for a thorough knowledge of educational practice in pre-schools.

2.1 Quantitative part

In quantitative research, the questionnaire is considered as the most widespread and widely used tool for collecting quantitative data (Clark-Carter 2010). Using the questionnaire, the researcher has the ability to collect data from a large number of individuals in a short period of time. In addition, it is easy to codify and process as it provides structured and numbered data and is therefore suitable for statistical analysis (Johnson and Christensen, 2008). It also has the ability to correlate variables and consequently identify both empirical trends and uniformities. Compared to other research tools, it ensures to a greater extent the anonymity of the participants in the research and prevents the bias of the researcher.

In addition to the above advantages, the online questionnaire, in particular, offers even more possibilities to the researcher and eliminates even to a small extent some of the disadvantages of having a printed questionnaire. Creating an online questionnaire allows the researcher to format it in such a way as to make it more attractive to the respondent without much cost.

For this study, an online, individual, and anonymous questionnaire was formulated and addressed to preschool teachers, at the national level, together with an introductory explanatory note.

Regarding the structure of the questionnaire, we sought the wording of the questions to be clear and the vocabulary to be simple and understandable, avoiding

complicated terms or abstract concepts, so that all participants could answer. The questions were targeted to the subject under study and reflected the general purpose and the individual objectives of the research. The questions were governed by a logical sequence and grouped by topic to facilitate the mental processing of the questions by the participants. At the beginning of the questionnaire, there was the assurance that anonymity is ensured in order for the respondent to feel more secure and to answer the questions honestly (Cohen, Manion, & Morrison, 2007). The questionnaire comprised of 25 questions, of which 18 were closed-ended questions and seven were open-ended questions. The questions referred to demographics (gender, age group, studies, years of teaching experience and experience with children with different backgrounds, place of work and residence, type of school and type of school assignments), the knowledge and skills that the teacher should have for inclusive classroom practice as well as the barriers to applying inclusion in pre-schools. They also referred to the adequacy of teacher training in inclusion, cooperation with parents and other teaching staff, cooperation between students and the availability of adequate pedagogical/educational materials.

The quantitative research was conducted during the years 2020-2021. The questionnaire was completed online by 300 preschool teachers. Of the 300 questionnaires, 255 were fully completed and used for data analysis and quantitative research findings. Of the 255 teachers, 248 (97.3%) were women and 7 (2.7%) were men. Regarding the age group of the participants, the majority of them are 31-40 years of age (51%), and (27.8%) of them are 41-50 years old, while none of the participants in our research is over 60 years old. With regards to the studies of the participants, apart from their first degree, 6 out of 10 answered "other" (65.9%). 22.8% of our sample stated that they have a postgraduate diploma. While it is worth noting that 7.3% of participants have obtained a second degree and only 4.1% of the sample holds a doctorate. In terms of years of teaching experience, half of the participants in our sample range from 11 to 20 years (53.5%), while with lower percentages follow the answers "21 to 30" (25.2%) and "1 to 10" (18.1%). A very small percentage of our sample belongs to the age group 31 and over (3.1%). In addition to the years of teaching experience, participants were asked about their years of experience with children characterized by different backgrounds/needs. Most of the teachers in the sample, 6 out of 10 participants, stated that they have 11 to 20 years of experience (60.9%) and 30.8% stated that they have 1 to 10 years of experience.

2.2 Qualitative part

In the context of qualitative research, the interview was chosen as a methodological tool. The choice of this tool is based on the fact that the interview is considered a "negotiable achievement" by the interviewer and the interviewees, which is shaped by the contexts and situations in which it takes place (Oltmann, 2016). According to Robson (2007), the interview has the advantage that it allows the researcher to have interpersonal communication with the respondent. This form of communication can provide the confidence that the respondent needs in order to give honest answers to the questions that exist. In addition, conducting an interview has the advantage of dialogue and

discussion between the researcher and the respondents, thus giving the latter the opportunity to ask any questions and unclear points and on the other hand to clarify the questions that the researcher has clarified. in order for research participants to respond as reliably as possible.

The aim of the interviews in this study was to understand in depth the pedagogical methods and techniques used by teachers as well as to explore their educational needs so that they can include all children in the learning and social activities of the pre-school. The interview questionnaire included five thematic areas and 32 open-ended questions.

The first theme included demographics, the second thematic area included questions in relation to the theoretical approach and the basic principles of inclusive education. The third theme included questions about teachers' attitudes and views on inclusive education. The fourth theme included questions about the knowledge and skills they need to have and the appropriate training to apply inclusiveness in practice. The fifth topic included questions about the curriculum. In addition, Teachers were asked, based on their experience and knowledge, to report the advice they would give to another pre-school teacher trying to implement classroom inclusion. The qualitative research was implemented in the year 2021 and 15 interviews were conducted with teachers who agreed to participate in the qualitative research. The duration of each interview ranged from 60 to 90 minutes and was recorded with the consent of the participants. Seven of them were by phone and eight were online. At the beginning of each interview, there was an extensive report on the purpose of the research and in particular on inclusive education in pre-schools. The researcher tried to create a friendly atmosphere to facilitate the flow of the interview.

The questions of each interview were tailored to the particular characteristics of each interviewee (e.g., length of service, type of duties, etc.). The wording and order of the questions were determined according to the flow of each interview. For the qualitative research, it was judged that the research could be completed in 15 people because what had already been saying had begun to be repeated, which indicates that there was a saturation effect. The process of analyzing the data from the qualitative approach included the following steps: a) Organization and transcription of interview data, b) Investigation and coding of data, c) Development of categories and subcategories and d) Grouping in topics units. (Creswell, 2011). In more detail, after the interviews were completed and we had the data, we proceeded to the recording process (transfer of the recorded material to a text file). Particular emphasis was placed on reading and penetrating the recorded data in order to capture the broad picture of what the interviewees said, their attitude towards specific issues, and their use for further investigation. Based on what has just been mentioned, we proceeded to manual coding, which aimed to capture as much as possible the subject under consideration - based on the combination of words and ideas presented.

3. Presentation of the quantitative and qualitative research findings

Pre-school teachers, as shown in Table 1 of the quantitative research, rank a number of knowledge and skills as the most important for the implementation of inclusive education. More specifically, almost all participants (98.4%) consider "knowledge for the implementation of differentiated instruction, in the content, process, results and/or learning environment" as one of the most important for the implementation of inclusive education.

This is followed by "knowledge of co-teaching or group teaching" (96.4%), "knowledge of the use of universal design, and the alternative approach of learning and teaching to address the diversity of needs of children" (96%); and "implementation of an individual educational plan" (92%).

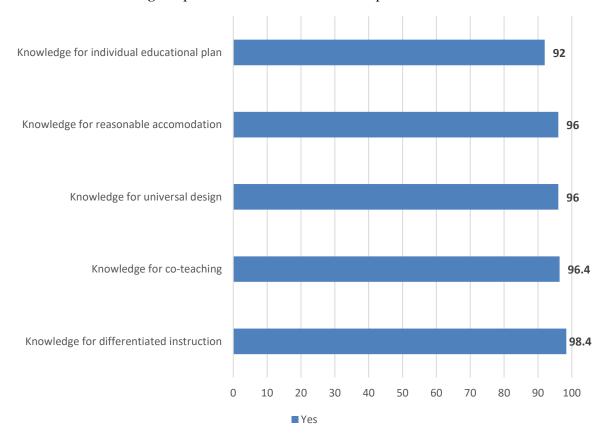


Table 1: Main knowledge of pre-school teachers for the implementation of inclusive education

The knowledge that preschool teachers consider very important for implementing inclusive practice is complemented by the knowledge and skills indicated by the interviewees in the qualitative research.

As we can see in Table 2, almost 2/3 (9 out of 15) of the interviewees classify as important skills of the pre-school teacher for the implementation of inclusive education the following: a) knowledge for adapting the curriculum to the needs of students, b) communication, cooperation and support between teachers, c) appropriate knowledge

(general on inclusive education) and d) design of an individual educational plan. Two characteristic excerpts:

"A key skill of teachers is the ability to adapt the curriculum to the needs of each student, taking into account the information provided by parents who know their child well; the curriculum needs to be modernized and made flexible to the current needs of children and of society."

"For general educators, I find it very useful to have general knowledge about the most common problems that children face..."

The following are the skills, which are supported by four participants, and are: a) identifying cases and assessing their severity, b) knowledge of adapting infrastructure and c) encouraging children to express their emotions.

At the end of Table 4, we find the use of the game as a learning tool (supported by three participants) and practical experience (supported by two participants).

Table 2: Main skills of preschool teacher for the implementation of inclusive education

Main/skills	Number of participants who support it
Knowledge of adapting the curriculum	0
to the needs of students	9
Communication, cooperation and support between teachers	9
Appropriate knowledge (general on inclusive education)	9
Design of an individual educational plan	9
Identifying cases and assessing their severity	4
Knowledge of adapting infrastructure	4
Encouraging children to express their emotions	4
Use of the game as a learning tool	3
Practical experience	2

With regards to whether pre-school teachers feel competent to implement a series of processes, as presented in Figure 3, we observe that their answers tend to be "moderate" in most of their replies, with the exception of the processes related to the "encouragement of children to share their feelings" (49.4%) and the "participation of children in decision-making on matters concerning them" (49.8%), which bring together higher percentages in the answer "very much". Regarding the answer "a little" the highest percentage was collected by the responses concerning the "adaptation of the infrastructure to the needs of all children (especially those who face more difficulties)" (44%) and the "adaptation of the curriculum to the needs of children" (41%). Regarding the answer "absolutely" for the implementation of the activities listed, we can note that there are very few who stated it.

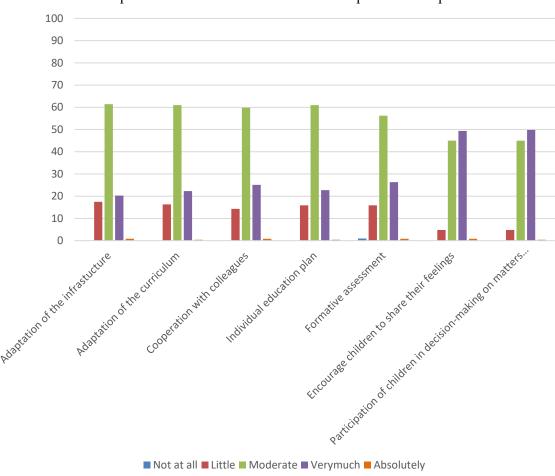


Table 3: Opinions on knowledge and skills preschool teachers have for the implementation of inclusive education processes in pre-school

In order to have an in-depth understanding of the findings of the quantitative research, interviewees were asked whether they consider themselves to have the appropriate training in inclusive education, as well as whether they consider their initial teacher training, their postgraduate studies (if any), and their in-service training to be sufficient for inclusive education issues.

As for the first part of the question, 9 participants responded positively that they have the appropriate training in inclusive education, while 6 responded negatively, claiming that although they have acquired knowledge about inclusive education, they do not feel ready for the implementation of inclusive education.

In a relevant question, all interviewees (100%) agree that they feel the need for inservice training in inclusive education issues. Emphasis was placed on updating knowledge and skills, as well as learning new methods and techniques.

"I believe that all pre-school teachers should be trained in basic methods of inclusion. The pre-school teacher must feel responsible for all the children in the class, so he/she must have the knowledge and skills to understand the problems that some children face and be able to educate all of them or ask for appropriate support..."

Maria Kyriazopoulou, Thanassis Karalis, Konstantinos Magos, Eugenia Arvanitis INVESTIGATION OF THE TRAINING NEEDS, KNOWLEDGE, AND SKILLS OF PRESCHOOL TEACHERS FOR THE IMPLEMENTATION OF INCLUSIVE EDUCATION

"We need to update our knowledge and techniques on inclusion. I need training in new methods and techniques of inclusive teaching as well as the creation of educational material to meet the needs of all children. Techniques and methods are evolving, and we need to keep abreast of what is happening internationally in inclusion..."

Regarding the way of conducting the training, participants suggest as the most useful and effective ways the following: a) the in-school training (12 participants) and b) the implementation in combination, i.e., through life and remotely (11 participants).

Regarding the training providers, most of the interviewees suggest the Regional Training Centers (14 in total) and the University (13 in total). However, it should be noted the "model" that is detected to the greatest extent through interviews is that of cooperation of the Regional Training Centers with the University for the provision of training.

Participants in quantitative research also indicated the main challenges they face for the implementation of inclusive education in pre-school today, presented in Table 4.

Table 4: T Main challenges for the implementation of inclusive education in pre-school

Tuble 1. I frame chancinges for the implementation of inclusive categories in pre-school		
Challenges	%	
Lack of knowledge and experience in implementing	96.4	
inclusive education	96.4	
Insufficient initial and in-service pre-school teachers' training	96.4	
to meet the needs of all children		
Lack of adequate support of pre-school teachers by specialized	95.3	
staff to meet the needs of all children		
Negative attitudes to inclusive education	95.2	
Lack of reasonable accommodations, which means the appropriate	94.4	
modifications and adjustments in both the infrastructure and the curriculum		
Lack of sufficient economic resources	94.4	

In addition to the abovementioned challenges, 2/3 of the interviewees of the qualitative research stressed that teachers' negative attitudes play a key role in the implementation of inclusive practices. Through the interviews it was seen that there are many teachers who underestimate inclusive education, others who do not accept it and some others are opposed to it.

"Many preschool teachers are very hesitant about inclusion and have a negative attitude towards the possibility of educating heterogeneous groups."

"...the negative attitude of many preschool teachers who, as a result of the lack of knowledge and the lack of support from the competent bodies, believe that inclusion is not feasible".

6. Discussion

The findings underline that almost all preschool teachers who participated in the quantitative and qualitative research, have a human rights approach to inclusive education, based on the equality, equity and respect for the diversity it ensures. This approach refers to equal opportunities for education for every child, without excluding anyone, and respect for diversity. The human rights approach requires a change of mentality and attitudes from all those involved in the educational community and a different pedagogical approach. Educational support systems should aim to increase the capacity/empowerment of schools to meet the diversity of students' needs.

These findings are consistent with the international literature on the core values of equality, equity, respect for diversity and the fight against discrimination (Ainscow, 2020; Florian, Black-Hawkins and Rouse, 2016; OECD, 2012; United Nations, 2015; UNESCO, 2015, 2017; IIEP-UNESCO. 2019)

Positive attitudes contribute significantly to the process of changing the pedagogical approach, but they are not enough to substantially increase schools' capacity. The findings show that almost all preschool teachers believe that teachers must have the necessary knowledge and skills to be able to meet the diversity needs of all children. This is a fundamental precondition for the implementation of quality and effective inclusive practice in schools.

Specifically, they reported knowledge and skills related to: differentiated instruction, in the content, process, outcomes and/or learning environment; co-teaching; universal design and alternative approach to learning and teaching to address the diversity of children's needs; reasonable accommodation, which means appropriate modifications and adaptations to both the infrastructure and the curriculum; the design and use of an individual educational plan; good communication, cooperation and support between teachers for inclusive education; timely and valid identification of cases of students in need of support; and encouraging children to express their feelings.

In terms of the extent to which participants feel they have the appropriate knowledge and skills to implement inclusive education practice, the findings show that preschool teachers feel mostly moderately adequate for inclusive education interventions and need the training to meet the educational needs of all students.

As to whether the participants consider their education on inclusive education appropriate/adequate, the findings show that the majority consider that the initial education was "moderate" in inclusion issues while the postgraduate studies, for those who attended, were very good.

In terms of in-service training, the findings show that half of the participants consider it very good and the others moderate.

Inclusive education seems to be of particular interest to the teachers who participated in the research, set by many as the ideal approach, however, in many cases they indicated that there are challenges to its implementation. Among the main challenges, they pointed out the negative attitude of teachers and other actors in the

educational community, lack of knowledge and practical experience, lack of adequate support to preschool teachers and lack of reasonable accommodations, which means the appropriate modifications and adaptations to both the infrastructure and the curriculum.

The findings also underline the importance of good cooperation between all those involved in the educational community. Almost all participants refer to the role played by good cooperation with parents, not only for informing them about their child's progress, but also for activities outside the classroom, as many were the ones who told us that the educational process does not stop at school, but continues at home for the child, with the help of parents.

Collaboration with the school principal is set as a pillar for the implementation of effective inclusive practice. Good cooperation with other teachers, support staff as well as with professionals from other bodies and the local community, is considered to contribute the most to the implementation of effective inclusive education.

The majority of the participants stated that cooperation between the students is moderate. The game is mentioned by teachers as a tool for communicating with children and at the same time as a tool for involving children in everyday school life. Play is approached as a means of learning for children.

It is also stated that it is important for teachers and support staff to have access to continuing professional development programs based on their needs. In terms of how the training is conducted, a combination of in-school and distance training is considered a useful and effective way, by the participants. In-school training is good, as it emphasizes the needs of teachers at a specific time and in terms of the combination of in-school and distance training, it is pointed out that its flexibility is quite helpful to all teachers regardless of their daily tasks.

Regarding the training providers in Greece, cooperation between the Regional Training Centers, with the Universities and the Teachers' Networks is proposed.

In summary, the key components of the quality and effective implementation of inclusive education include the cooperation between all those involved in the educational community, the positive attitude towards inclusive education and of course the support of the teacher. In addition, important resources for the pre-school teacher for the implementation of inclusive education are the knowledge he/she must have in relation to the specific field, the understanding of the child's needs and the focus on the abilities and not only on the challenges.

The key message highlighted by the participants in the research is that the preschool teacher must recognize the uniqueness of each child and use it as the basis for implementing the inclusive practice.

7. Conclusion

The main precondition for the implementation of quality and effective inclusive practice in preschools, is the acquisition of the necessary knowledge and skills of all teachers and support staff, in matters related to the theory and practice of inclusive education.

Acquisition of knowledge is considered necessary at the level of 'Initial teacher training' and 'Continuing professional development', to be able to meet the diversity of educational needs of all children in the class. Although the findings show that preschool teachers have some knowledge of inclusive education, acquired in initial teacher training and/or in-service training, many of them do not feel ready and competent to implement inclusion in practice. They all agree that there is a clear need for further in-service training in inclusive education issues. Emphasis is placed on updating knowledge and skills, as well as learning new methods and techniques.

Therefore, it is important for teachers and support staff to have access to continuing professional development programs based on their needs.

8. Limitations

A limitation of this research is related to the fact that the sample in both quantitative and qualitative research comes in the vast majority from a specific geographical area, Attica. Consequently, the results of this research cannot be easily generalized and even in this case, the generalization of the results should be done with great concern. Due to the restrictive measures for Covid19 that were in force in Greece during the period of the qualitative investigation, the interviews were conducted online and not live.

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Authors

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