Article

Inclusive Education as a Tool of Promoting Quality in Education: Teachers' Perception of the Educational Inclusion of Students with Disabilities

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Abstract: Teachers' attitudes towards inclusion are influenced by factors such as training and teaching experiences. However, there is no conclusive trend correlating specific factors with negative or positive attitudes. The aim of this study is to understand the reality of inclusion in schools in Extremadura, Spain, from the teachers' point of view. To do so, a reliable and valid questionnaire was administered to a total of 106 teachers from more than 20 schools in Extremadura, followed by the subsequent categorization of more than 300 comments obtained from semi-structured interviews with 16 teachers. The results show that teachers value an inclusive philosophy in schools, especially in terms of values and policies. Teachers working in special schools had a moderately more positive perception of the degree of inclusion in their school, although there were hardly any significant differences compared to teachers in other types of schools, nor were there any significant differences according to teachers' prior training. Finally, the importance of evaluation in the creation of plans to guarantee an improvement in the attention to diversity is assessed.

Keywords: inclusive education; teacher's perceptions; disabilities; surveys

1. Introduction

With regard to the educational inclusion of students with functional diversity, the World Conference on Special Needs Education [1] affirmed that every child has the right to be included in a regular education system, to be supported in their learning and to participate in all aspects of school life. In line with this principle, there is now a growing tendency to include students with disabilities within the mainstream education system [2].

According to the World Conference on Special Needs Education [3], the 2030 Agenda for Sustainable Development provides a unique opportunity to build an equitable society. The starting point in this sense should be more inclusive education systems that are based on the principles of equality, non-discrimination and attention to the students' needs, according to Gallego-Ortega and Rodríguez-Fuentes [4]. In this respect, for more than two decades, the Member States of the World Conference on Special Needs Education have been implementing educational inclusion policies to reduce the marginalization and exclusion of students [5], with adequate measurements in order to reap major benefits in terms of both academic performance and social skills [6]. However, despite these efforts, there are several aspects of the school environment that still make full inclusion difficult, for example, prejudice or stigma towards people with disabilities, lack of training in the inclusion of the educational community or physical, communicative and economic barriers. The data offered by the Ministry of Education and Vocational Training [7] confirm that, during the 2020–2021 academic year, there were a total of 748,054 students who received

educational attention other than ordinary (9.3% of the total number of students), of which 30.5% were attended to respond to their special educational needs related to disability or serious disorder. Taking these data into account, how is it possible that inclusion is not a reality in the classroom? At the legislative level (international, national or regional), it is a present issue. As an example, in the Spanish context, it has been regulated that students with special educational needs can continue their schooling in a normalized manner and under the protection of the exercise of their rights without any type of discrimination or barrier [8].

In order to answer the previous question, there are several factors that influence the full inclusion of students with special educational needs, such as school organization, educational methodology, curricular structure, resources and teaching attitude [9,10].

Broadly speaking, the role of teachers is to achieve a successful educational inclusion, but they continue to encounter difficulties [11,12], particularly when dealing with students with autism [2,13], intellectual disabilities and other psychological disorders. When it comes to students with motor impairment, educators state that the task is much less complicated [14]. These difficulties are largely due to shortcomings in teacher training and, although there is an important legal basis in the field of education to support the inclusion of people with disabilities, there are still some gaps, especially when it comes to providing a satisfactory response to their educational needs [15,16]. Therefore, the success of the educational inclusion of people with disabilities is based on teacher training, as stated by Fernández et al. [17] and Pérez-Jorge et al. [10]. These authors highlight the need to search actively for methodological and didactic strategies to achieve this goal through classroom practice [18,19]. To solve this problem, Mather et al. [20] based their research on the situated learning theory when considering that school practice will improve teachers' learning.

Teachers are responsible for promoting motivation, participation and learning of all the students, with less rigid teaching systems focused on shared responsibility [21]. Along with this training need, we find a lack of professional support [22].

There are different strategies and methodologies in order to overcome the challenge of inclusive education. They must be developed within the school culture, guided by less segregating and more humanizing pedagogical methodologies; in other words, a single educational system for everybody is necessary in terms of curricular design, methodologies, resources and organizational structures to be successfully adapted to diversity [23]. Amor et al. [24] are committed to a supportive paradigm that facilitates the general understanding of the students' needs from a broad context, and that is why they adopt an active role. Other authors are committed to the Universal Design for Instruction as a didactic strategy to favor the inclusion of all students [25], as well as methodologies based on cooperative work, flexible groupings and support in ordinary groups, to name but a few [23].

Another noteworthy aspect in favor of educational inclusion is the positive attitude of teachers towards having children with disabilities in mainstream schools. An appropriate attitude is crucial to promote the comprehensive development of students [26]. It has been emphasized that teachers' skills, beliefs and attitudes, as well as their interpretation of diversity, are key to the success of inclusive education in order to achieve a transformation of perspectives, organizational structures and teaching methodologies that guarantee quality inclusion [19,27–31]. According to Rizzo et al. [32], the change in direction of educational policies in terms of inclusion requires also a change in the mentality of teachers. An optimal school climate must be created where communication and cooperation are encouraged by implementing teaching methodologies based on the mutual construction of knowledge, so it also benefits the entire educational community [33].

Another key element is the variety, status and quality of educational resources. Some authors point out that using diverse educational resources in the classroom increases students' motivation and, as a consequence, their learning is more meaningful [34]. Additionally, Alper et al. [35] emphasize the importance of implementing technology in schools in order to facilitate students' learning in general.

Based on the importance of including adequate resources to respond to the needs of the student, it is essential to emphasize that teachers must be prepared for their use. Instead, teachers' training continues to be one of the weakest areas in ensuring educational inclusion [36], and it is paramount to know the resources, but also the possibilities, offered by these tools [37]. Similarly, Coronel [38] highlights that teachers' knowledge regarding digital tools' application in the classroom is not the only factor to achieve successful integration; in fact, the availability and quality of resources can also be decisive factors. However, where the availability of resources is valued positively in some schools [34], their frequency of use is influenced by the methodology and organizational method adopted by the teacher, who usually believes that technological tools should be used as complementary support [39].

Against this backdrop, it is clear that inclusive education is a work in progress and there are still a great number of challenges that need to be addressed at every level of the educational system (administration, schools, teachers and families). Therefore, the scope of this study is to determine the teachers' point of view about the reality of inclusion of people with disabilities both in average and special schools of Extremadura (Spain). The purpose of this investigation is also to identify how these perceptions may differ depending on the type of school they work at and their previous training. This study aims to answer the following research questions:

What is the teachers' point of view about the inclusion reality of people with disabilities in average and special schools in Extremadura?

How different is the perception about the inclusion reality among teachers with and without previous training in special needs? Is the perception different among teachers who work in general schools and those who work in special schools?

2. Materials and Methods

2.1. Research Design

A mixed methodology research design was used in this study. It incorporated the use of a survey method through a reliable and validated questionnaire and also semi-structured interviews.

2.2. Participants

The participants were selected using non-probability convenience sampling. The study sample consisted of a total of 106 teachers from Extremadura, of whom 55.7% had received specific training to deal with diversity (71.2% were women, 25.4% were men and 3.4% did not indicate their gender). The other participants (44.3% of the total) had not received specific training to deal with diversity (51.1% were women, 42.6% were men and 6.4% did not indicate their gender). Therefore, not all the participants had received specific training to deal with diversity. This was intentional, as the aim was to include teachers with different backgrounds in terms of disability training. The participants work at 21 schools in Extremadura that have diversity programs and host students with different disabilities. A selection that included mainstream schools with special education classrooms (47.2% of participants), mainstream schools with preferential schooling or with stable classrooms for students with Pervasive Developmental Disorders (33.9% of participants) and special education schools (18.9% of participants) was made. This was made based on the importance of representing a wide range of educational contexts, in both rural and urban environments.

Besides, another 16 participants, who expressed their willingness to be interviewed, were contacted to find out more about their perceptions of inclusive education. Out of all the participants, 50% had more than 20 years of experience in education and 75% had received specific disability initial training. Table 1 shows the distribution of the total sample.

Table 1. Sample distribution.

Length of Time in Teaching	Special Education Training	Count (%)
5–10 years	Yes	3 (18.75%)
	No	0 (0%)
10–20 years	Yes	5 (31.25%)
	No	0 (0%)
20 years or above	Yes	4 (25%)
	No	4 (25%)

2.3. Instruments

Two types of instruments were used to obtain the data on teachers' perceptions regarding the inclusion of disability at their schools.

On the one hand, the Scale for the Assessment of Inclusion (SAI) was used to examine the teachers' perceptions and perspectives towards inclusion [40]. The instrument consisted of 24 items grouped into the dimensions indicated in Table 2. It was developed using a four-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree). The general reliability of the scale was adequate [40], and so were the factors considered individually (in all cases, above 0.83 according to Cronbach's alpha). The validity was obtained through two different methods. Firstly, the draft version of the scale was subjected to a process of content validation via a group of experts formed by six people of the knowledge field. Good content validity was obtained. Secondly, a construct validation process via confirmatory analysis. The results from the components' matrix showed a total of 24 items distributed into the four components. So, a good construct validity was obtained through factor analysis.

Table 2. Dimensions and items of the Inclusion Rating Scale.

Dimensions	Item	Total
D1. Practices	I12. The teacher training strategy is designed to meet the needs of diversity.	7
	I16. The activities actively involve everyone, favoring individual autonomy.	
	I17. The activities organized make use of all the resources existing in society.	
	I18. The activities are designed to encourage people's participation in society.	
	I19. Users, families, teachers and the head team share the philosophy of inclusion.	
	I20. The policies implemented are geared towards encouraging people's participation in society.	
	I21. The policies implemented favor the exercise of rights by people.	
D2. Community	I13. The evaluation of the activities carried out motivates everyone to improve.	6
	I14. The management involves everyone in decision-making, sharing tasks.	
	I15. The activities are accessible to all students.	
	I22. Support is given to enable students to participate in the activities.	
	I23. Everyone feels part of the school community.	
	I24. Everyone feels part of a project that they can contribute to.	

Table 2. *Cont.*

Dimensions	Item	Total
D3. Policies	I1. The school involves society in its project.	6
	I2. The school seeks to improve its work processes to meet personal needs.	
	I3. The school has a strategy to ensure that everyone has the necessary information and support to function independently.	
	I4. There is a policy of improvement in place to resolve issues posed by disabilities.	
	I5. The school's organizational model promotes inclusion.	
	I11. The philosophy of inclusion is reflected in the school's processes and projects.	
D4. Values	I6. Respect and acceptance of everyone is key so that no one feels excluded.	5
	I7. The school recognizes equality regardless of personal, social factors, etc.	
	I8. The school respects the rights of individuals.	
	I9. The school values the ability of all people to develop their potential.	
	I10. The school values the diversity, individuality and potential of each individual.	
	Total	24

Source: Adapted from Gutiérrez-Ortega et al. [40]. Note: The results are shown using the code of each item (for example, I1) instead of the item text (for example, "The school involves society in its project").

In addition, a semi-structured interview was created based on previous studies [41–43]. The semi-structured interview was assessed by experts (university professor working in inclusive education) to validate its content, scoring, from zero to ten, the relevance and appropriateness of each of the items. The results obtained following the quantitative evaluation of the instrument by the experts were positive. The interview consisted of nineteen open questions grouped into the following categories: "Identification details" (six questions), "Educational reality of the students" (three questions), "Organization of the school" (three questions), "Material resources" (three questions), "Collaboration" (three questions) and, finally, "Contributions relating to COVID-19" (one question).

2.4. Data Collection

Once the different participating schools had been selected, the teaching staff was asked to collaborate and the questionnaires were sent in paper format to the staff members who wished to respond voluntarily and anonymously. At the same time, various teachers who expressed their willingness to be interviewed were approached in order to learn more about their perceptions of inclusive education. During the data collection process, the participants were also asked to give their consent to participate in the study and to be recorded during the interviews, ensuring the anonymity and confidentiality of the data.

2.5. Data Analysis

The quantitative data were collected with the SAI questionnaire and were analyzed using SPSS (v.26). A variable results descriptive analysis using percentages was carried out to examine the teachers' general agreement towards 24 items related to the perspective of inclusive education at school. Following Cubo et el. [44], before inferentially testing the research questions, several tests were performed to verify the normal distribution and randomness of the data series (Kolmogorov–Smirnov, Rachas and Levene tests). To check the distributions of two independent groups (teachers with or without specific disability training), a chi-squared test was used and more than two independent groups (type of school in which teachers work) were compared by ANOVA [45].

All the interviews were transcribed and analyzed via NVivo 12. When analyzing the interview transcripts, the categories shown in Table 3 were taken into account (except for the identification details, which were ignored in the results of the study, although a total of 112 comments of the participants' profile were used in Table 1). The investigation was

based on the analysis of the comments recorded from the teachers. For the segmentation of the units of analysis, a semantic–pragmatic criterion was applied. Considered as a unit of analysis was any verbal response produced by the teacher that was related to a specific topic. This is one of the several methods for the segmentation of the units of analysis purposed by Montanero [46]. Each of these units was subsequently classified according to the system of categories that appears in Table 3. The category system was designed through an inductive/deductive procedure. First, various works related to teachers' perceptions of inclusive education were reviewed and categories were specified to analyze the teachers' comments. After analyzing the sample's units of analysis, those that could not be classified precisely were identified. Then, the new categories that had not been provided for in the first version were added.

Table 3. System for the categorization of teachers' comments in relation to inclusive education.

Categories	Reduction	Citation
Degree of inclusion of students with disabilities	This could be positive or negative (whether students with disabilities are considered to be appropriately integrated or not).	"They [referring to students with disabilities] are included in an exclusive world" [Interviewee 3].
Organization of general resources	Referring to the provision and organization of functional, human and material resources by the school to cater for diversity.	"He has the support he needs; in this case, he receives the help of the educational support specialist and the speech-language therapist" [Interviewee 12].
Material resources	This category included responses relating to the frequency of use of material resources and their state of repair.	"The speech-language therapist does not have enough resources to do her job" [Interviewee 15].
Collaboration	Responses relating to the collaboration between teachers and other stakeholders, such as families, external specialists (e.g., guidance counselors) and specific centers and associations, to attend to students with disabilities.	"I work in coordination with teachers of private education" [Interviewee 16].
COVID-19 contributions	Responses relating attention to students with disabilities during the COVID-19 lockdown, including available resources and support from families.	"Difficulties in connection and use [of virtual resources] by parents and students" [Interviewee 16].

The classification of the comments was carried out after a training in which the researchers improved the thoroughness of the category system designed. The level of agreement between 2 researchers on a sample of 29 comments, chosen at random, was higher than 80%, and the resulting Kappa index was sufficient (Cohen's Kappa index: 0.82; $p < 0.01$).

Finally, the number of comments in each category was counted and percentages were obtained. For example, regarding the "collaboration" category, a count of the total comments in this category was made and, subsequently, it was counted whether they referred to family, associations or experts (these aspects appear in the reduction of the category). The number of teachers who expressed comments on each category was also counted. For example, regarding the "degree of inclusion", all teachers expressed their opinion, and the number of teachers who expressed a positive opinion as well as a negative one was counted.

3. Results

The results obtained regarding teachers' perceptions of the reality of the inclusion of students with disabilities in schools of Extremadura are presented below.

3.1. Teachers' Perception of the Inclusion of Students with Disabilities in Schools of Extremadura

The results in Figure 1 show the percentages of teachers' perceptions regarding the inclusion of students with disabilities in schools. Teachers value the fact that the schools where they work have an inclusive philosophy, especially in terms of values and practices, which are the dimensions with the highest percentages of agreement.
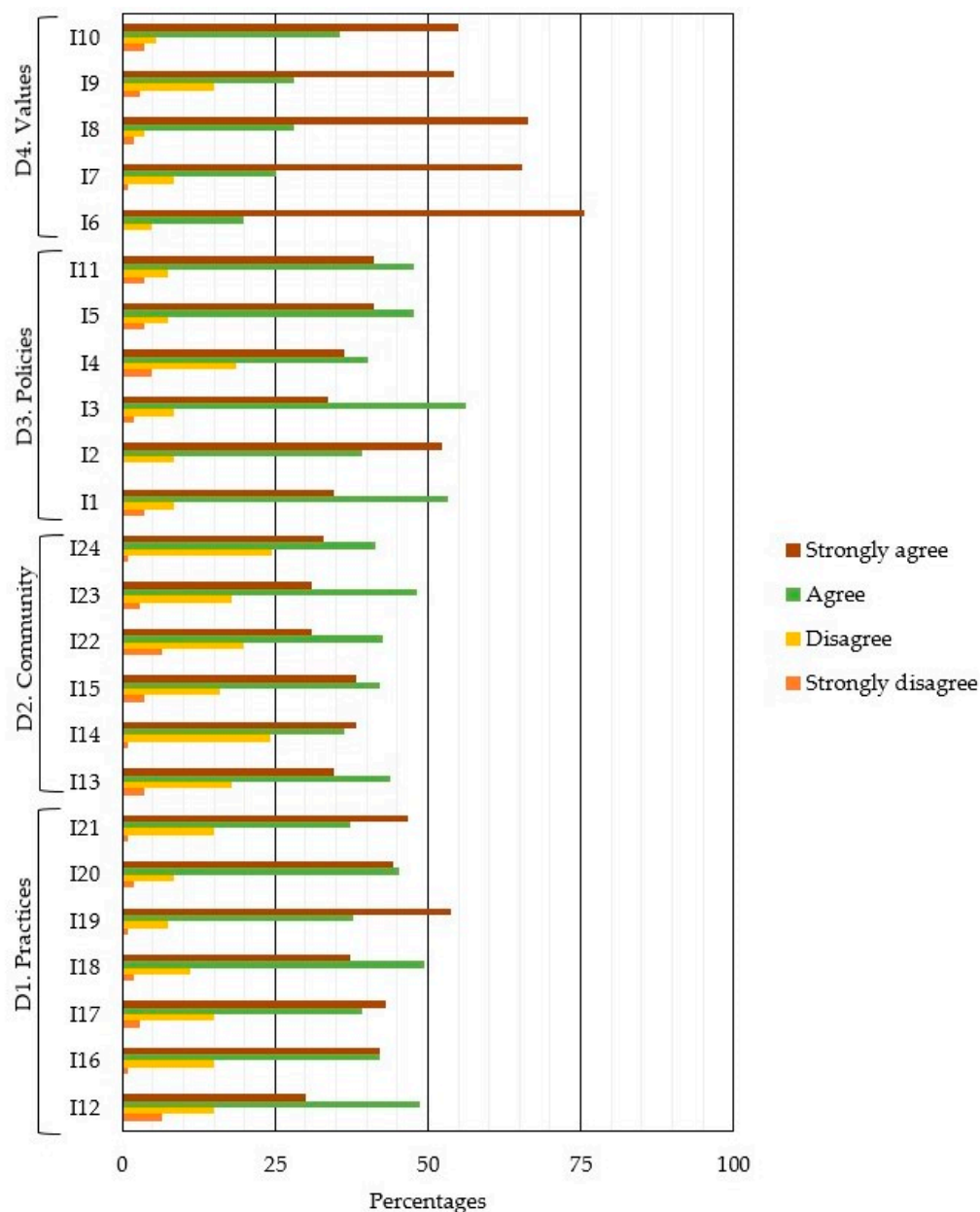

Figure 1. Percentages of teachers' perceptions regarding the inclusion of students with disabilities in schools.

In relation to values, it is noteworthy that the majority of teachers (94.4%) consider that people's rights are respected and 95.3% of them consider that everyone is accepted within the framework of the schools where they work. However, teachers' perceptions of the school's assessment of the ability that all individuals have in developing their potential are somewhat lower (82.2% of participants show agreement). In fact, the teachers showed a low degree of agreement with statements such as "Support is given to enable students

to participate in the activities" (73.1%) and "Everyone feels part of a project that they can contribute to" (74.5%).

In relation to practices, the teachers generally consider that the team of professionals working at their school shares a philosophy of inclusion (91.5%), which is reflected in the policies adopted (89.6%). However, teachers' perceptions are fairly moderate with regard to the effective response that can be offered to the diversity of users based on the educational design (78.5% of participants are in agreement).

3.2. Results of the Comparative Analysis of Teachers' Perception of the Inclusion of Students with Disabilities according to Their Training

This section offers a comparative analysis of teachers' perception of the inclusion of students with disabilities according to their training, comparing the perspective of teachers who have received specific disability training with those who have not. As can be seen from the sum of the means for the dimensions shown in Figure 2, teachers without specific disability training have moderately lower means for all the dimensions, except for "Community".
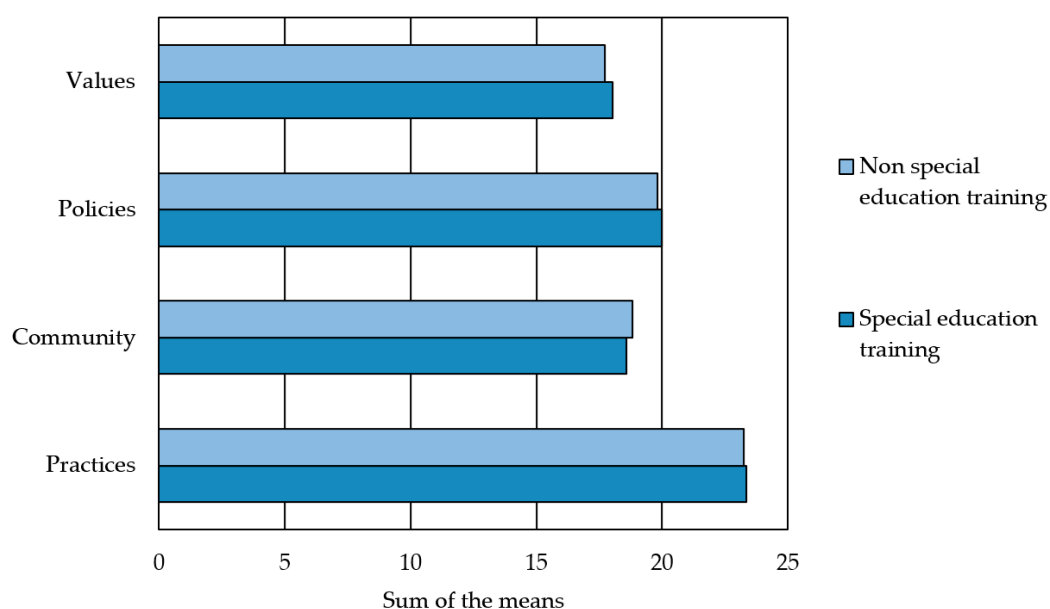

Figure 2. Sum of the dimensions' deviations of teachers' perceptions regarding the inclusion of students with disabilities in schools according to their training.

Table A1, in Appendix A, shows the means and standard deviations of teachers' perceptions regarding the inclusion of students with disabilities in schools according to their training. With regard to the items of the "Values" dimension, it can be observed that teachers without specific training consider to a lesser extent that the school respects people's rights ($\bar{x}$ item 8, no special education training = 3.64, SD = 0.49; $\bar{x}$ item 8, special education training = 3.70, SD = 0.53) and values diversity ($\bar{x}$ item 10, no special education training = 3.50; SD = 0.60; $\bar{x}$ item 10, special education training = 3.55, SD = 0.56) and the ability of all individuals to develop their potential ($\bar{x}$ item 9, no special education training = 3.36, SD = 0.85; $\bar{x}$ item 9, special education training = 3.45, SD = 0.71). The same trend can be seen in the results for the "Practices" dimension, although with slightly smaller differences in the means for the items than those recorded for the "Values" dimension. For example, teachers without specific training are less likely to consider that the activities and policies used encourage people's participation in society compared to those who did receive that training.

On the other hand, Table A1 shows moderate differences at the descriptive level for items of other dimensions according to the disability training that teachers have received.

For example, in the "Community" dimension, teachers without specific disability training consider to a greater extent that everyone is involved in the decisions made by the school's management ($\bar{x}$ item 14, no special education training = 3.23, SD = 0.87; $\bar{x}$ item 14, special education training = 3.00, SD = 0.94) and that the necessary support is provided so that people with disabilities can participate in activities ($\bar{x}$ item 22, no special education training = 3.14, SD = 1.04; $\bar{x}$ item 22, special education training = 2.97, SD = 0.81), which is not the case for the those who have such training.

At the inferential level, a series of independent samples *t*-tests were conducted to examine the differences in the teachers' perception of inclusion based on whether they had received specific disability training. No significant differences were found for any of the items, nor in the sums of the means. The data are shown in Table A1.

3.3. Results of the Comparative Analysis of Teachers' Perception of the Inclusion of Students with Disabilities according to the Type of School in Which They Work

This section offers a comparative analysis of teachers' perception of student inclusion according to the type of school in which they work. The following three categories of schools were established: mainstream schools with special education classrooms (MSE); mainstream schools with preferential schooling or with stable classrooms for pupils with Pervasive Developmental Disorder or PDD (MPD); and special education schools (SPS). In general, it can be seen from the sum of the means of the items in the different dimensions that teachers working in special schools have a relatively more positive perception of the degree of inclusion in their school, followed by those in mainstream schools with a special classroom. These results can be seen in Figure 3.
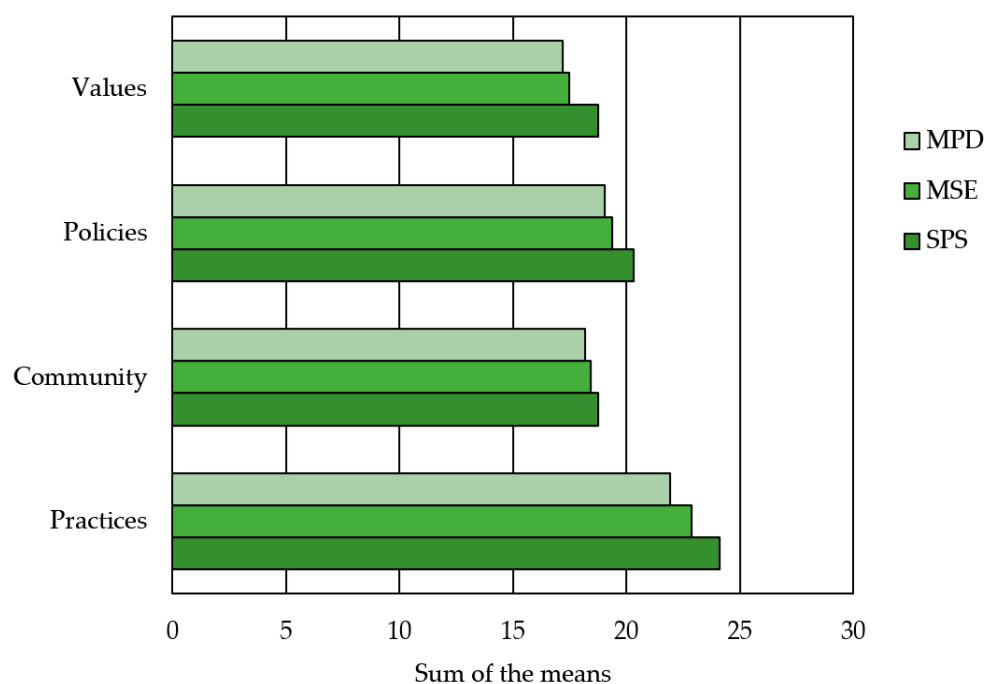

Figure 3. Sum of the dimensions' deviations of teachers' perceptions regarding the inclusion of students with disabilities in schools according to the type of school in which they work.

Table A2 in Appendix A shows the means and standard deviations of the teachers' perception of the inclusion of students with disabilities in schools according to the type of school in which they work. A one-way ANOVA was applied to analyze the differences in teachers' perceptions, with no significant differences being found in the sum of the dimensions. There were only significant differences for item 19 concerning the philosophy of inclusion shared by the different stakeholders in schools attended by students with disabilities. Teachers in mainstream schools with a Special Education classroom share

this consideration to a greater extent than those working in mainstream schools with preferential schooling or with a stable classroom for PDD (ANOVA: 4.06; $p < 0.05$). The data are shown in Table A2.

3.4. Description of the Fundamental Aspects of the Situation of Educational Inclusion of Students with Disabilities in Schools of Extremadura

In the teachers' responses to the interviews, more than 330 comments were identified, but 112 of these comments were used in Table 1 to create a profile of the participants. The rest of the comments allow us to complete the picture regarding their perception of the inclusion of students with disabilities in schools. It is worth noting that 75% of teachers ($n = 12$) consider that the full inclusion of students with disabilities in the classroom is achieved. Interviewee 7, for example, stated that they try to "include them rather than fit them". A total of 25% of the participants ($n = 4$) thought that full inclusion is not achieved with these types of students because "full inclusion is very difficult" (interviewee 5).

The difficulties in the inclusion of learners with disabilities described above are due to a variety of reasons. Firstly, the lack of materials; 44% of the participants ($n = 7$) considered that they do not have enough material resources to attend to these types of students (for example, interviewee 6 explicitly stated "we need more staff"). A total of 6% of the participants ($n = 1$) stated that the resources were adequate, but that "the digital resources should be updated" (interviewee 2). Secondly, the problems achieving inclusion of students with disabilities were justified by the difficulties establishing effective collaboration with families. Of the 50 comments that deal with collaboration, only 4% of them ($n = 2$) refer to families, although it is worth noting that they are of a positive nature (e.g., respondent 1 indicated: "There are parents who come and listen to you"). However, this is a very low percentage compared to other actors, such as external specialists (36% of comments; $n = 18$) or association professionals (60% of comments; $n = 30$).

On the other hand, regarding the comments that deal with COVID-19, 11 comments seem to have communication issues with the families, being considered as negative by 50% of the interviewed teachers. For example, respondent 11 indicated that he "could not reach the family", even though teachers facilitated communication through applications such as WhatsApp (interviewee 10). A considerable number of these negative comments shows that this lack of communication was due to issues such as minimal family involvement (73% of comments) and absence of parental training (18% of comments).

4. Discussion

The integration of pupils in the classroom is a necessity, which is being addressed from different perspectives (educational centers, legislation and others), although it is still not a reality. Focusing on our study, according to the results obtained from the semi-structured interviews, only 75% of teachers considered that the full inclusion of pupils in the classroom is achieved, with statements such as "there is more integration than inclusion". The growing tendency towards an inclusive model that allows the development of all learners must be one of the priorities of any education system [1,3,8]. In that way, this study contrasts that the inclusive education model is present in schools, as 94.4% of teachers that completed the scale consider that people's rights are respected and, specifically, 95.3% of teachers consider that everyone is accepted in their schools.

Teacher training is also essential, as several authors point out [10,15–19,22]. In this study, it was found that teachers who have not received specific disability training showed moderately lower means with regard to the perception of inclusion. For example, considering the following areas—if the school respects individual rights ($\bar{x}$ item 8: 3.64 vs. 3.70), if the school values diversity ($\bar{x}$ item 10: 3.50 vs. 3.55), and if the school's organizational model promotes inclusion ($\bar{x}$ item 5: 3.36 vs. 3.52)—it can be seen how teachers with no disability training have lower averages. Following this line of results, Jury et al. [2] showed that special education teachers have a more positive attitude towards inclusive education than teachers who do not usually work with children with special educational needs. Not

only are attitudes important, but also the response that can be offered to students through training. In this respect, more than 20% of the teachers who completed the survey consider that their training will not let them give an effective response to students with special needs.

Similarly, although less than 10% of teachers disagreed with item 7, we know that not all students are integrated in the same way. Those with psychological disorders, intellectual disabilities or autism present greater difficulties than those with physical disabilities [2,8,9]. In fact, the teachers stated in the interviews that they had more experience working with certain student profiles, as it was understood that the educational response they can provide to this habitual profile is more effective. To sum up, specific disability training and previous experiences have a minimal impact on teachers' perception of the inclusion of students in schools, which are generally positive. Conveniently, these results are aligned with the results of the study by Van Steen et al. [12], which found that these attitudes towards inclusion are influenced by an interaction of cultural and demographic factors. Gallego-Ortega and Rodríguez-Fuentes [4] believe that, although attitudes towards inclusion are positive, they could increase if what is entailed in inclusive education is better understood.

Nonetheless, these attitudes, which have been studied in the scientific literature, are not always positive [47]. Teachers have sometimes reported difficulties offering students an education adapted to their needs. For example, item 2 (The school seeks to improve its work processes to meet personal needs) shows that teachers in mainstream schools with preferential schooling have a lower perception that the characteristics of each student are taken into account.

As mentioned above, there are numerous studies indicating that teachers' perceptions may vary depending on the type of school where they work, although it is not a key factor. In this study, significant differences can only be seen for one of the items relating to the philosophy of inclusion shared by the different stakeholders involved in schools attended by students with disabilities. No significant differences can be seen in the rest of the items, sums and dimensions, although it could be said that teachers in special schools have a higher perception of inclusion proved by the higher scores they obtained for items stating that the institution seeks to meet personal needs ($\bar{x}$ of SPS = 3.60; $\bar{x}$ of MSE = 3.41; $\bar{x}$ of MPD = 3.39) or that the organizational model promotes inclusion ($\bar{x}$ of SPS = 3.45; $\bar{x}$ of MSE = 3.25; $\bar{x}$ of MPD = 3.20). The results of other studies are similar, such as those of Pérez-Jorge et al. [10], who found similar attitudes towards inclusion among professionals from mainstream schools and those with preferential schooling for pupils with certain disabilities.

On the other hand, the importance of the educational or didactic resources used in the classroom should not be overlooked. The use of diverse educational resources with the presence of ICT enhances students' motivation and makes learning meaningful [34,35], although, in the study, the teachers reported a relatively low average with regard to the use of all the resources available in society for the activities carried out (item 17). Furthermore, availability and access to resources (and even their quality) also influence whether integration is successful and whether they become allies in the teaching-learning process, as has been found in previous studies. In this respect, 44% of the respondents considered that one of the difficulties is the lack of the necessary resources to attend to these students. The studies by [34,38,39] reach similar conclusions. In addition, 6% of the participants indicate that they should be updated to digital format. Leiva-Olivencia et al. [33] consider that the dimension of didactic and human resources and the adaptation of spaces must be improved, as it is also expressed in our work.

In order to further investigate the existence of the effective inclusion of students with special educational needs in schools of Extremadura, this study also analyzed the weaknesses and strengths of these schools. According to the survey and interviews with the different teachers, the schools in this autonomous region are sensitive to this issue and foster the comprehensive development as well as the quality of life of all students, while respecting the rights of individuals. The practices carried out in schools are also seen as sharing a philosophy of inclusion. On the other hand, training continues to be a weak area

and a firm commitment needs to be made in this area. Therefore, although the trend is promising and points to positive attitudes not only on the part of teachers in Extremadura, but also on the entire team of these schools, a further in-depth study is required of the barriers and determining factors as well as the various elements that can contribute to improve education in general. As a final consideration, this study has certain limitations, such as the non-random selection of the sample and the possible social desirability bias in the answers to some of the questions. Therefore, conclusions should be drawn with caution. It is recommended that future studies should repeat the study by selecting the sample using probability sampling.

Appendix A

Table A1. Means and standard deviations of teachers' perceptions regarding the inclusion of students with disabilities in schools according to their training.

Dimension	Item	Special Education Training		No Special Education Training		F	p
		$\bar{x}$	SD	$\bar{x}$	SD		
D1. Practices	I12	3.21	0.82	2.91	0.68	1.43	0.16
	I16	3.33	0.69	3.36	0.85	−0.15	0.89
	I17	3.27	0.80	3.23	0.75	0.21	0.83
	I18	3.33	0.65	3.41	0.67	−0.42	0.68
	I19	3.55	0.62	3.45	0.60	0.54	0.59
	I20	3.30	0.64	3.50	0.67	−1.10	0.28
	I21	3.36	0.65	3.36	0.73	0.00	1.00
D2. Community	I13	3.24	0.79	3.14	0.99	0.44	0.66
	I14	3.00	0.94	3.23	0.87	−0.91	0.37
	I15	3.30	0.77	3.23	0.92	0.33	0.74
	I22	2.97	0.81	3.14	1.04	−0.67	0.51
	I23	3.03	0.73	3.18	0.80	−0.73	0.47
	I24	3.03	0.85	3.10	0.77	−0.28	0.78

Table A1. *Cont.*

Dimension	Item	Special Education Training		No Special Education Training		F	*p*
		$\bar{x}$	SD	$\bar{x}$	SD		
D3. Policies	I1	3.39	0.56	3.41	0.59	−0.10	0.92
	I2	3.58	0.56	3.45	0.60	0.77	0.45
	I3	3.18	0.53	3.27	0.63	−0.58	0.57
	I4	3.06	0.93	2.91	0.81	0.62	0.54
	I5	3.52	0.57	3.36	0.66	0.91	0.37
	I11	3.27	0.63	3.41	0.67	−0.77	0.44
D4. Values	I6	3.69	0.59	3.64	0.66	0.30	0.77
	I7	3.58	0.71	3.59	0.59	−0.08	0.93
	I8	3.70	0.53	3.64	0.49	0.43	0.67
	I9	3.45	0.71	3.36	0.85	0.43	0.67
	I10	3.55	0.56	3.50	0.60	0.29	0.78

Table A2. Means and standard deviations of teachers' perception of the inclusion of students with disabilities in schools according to the type of school in which they work.

Dimension	Item	SPS		MSE		MPD		F	*p*
		$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD		
D1. Practices	I12	3.25	0.72	3.06	0.73	2.83	1.03	1.69	0.19
	I16	3.55	0.64	3.20	0.72	3.17	0.81	2.04	0.14
	I17	3.20	0.70	3.25	0.72	3.19	0.98	0.07	0.93
	I18	3.45	0.51	3.18	0.68	3.17	0.85	1.22	0.30
	I19	3.50	0.61	3.60 *	0.49	3.19 *	0.86	4.06	0.02
	I20	3.58	0.51	3.29	0.64	3.22	0.87	1.65	0.20
	I21	3.50	0.76	3.33	0.68	3.14	0.83	1.59	0.21
D2. Community	I13	3.40	0.60	3.08	0.82	2.94	0.89	2.05	0.13
	I14	3.05	0.83	3.24	0.71	3.00	0.93	0.99	0.38
	I15	3.35	0.75	3.14	0.76	3.06	0.92	0.83	0.44
	I22	2.70	0.98	3.06	0.87	3.03	0.84	1.27	0.29
	I23	3.20	0.83	3.00	0.73	3.11	0.82	0.53	0.59
	I24	3.05	0.94	3.10	0.74	3.03	0.77	0.09	0.91
D3. Policies	I1	3.35	0.67	3.24	0.74	3.03	0.77	1.43	0.24
	I2	3.60	0.60	3.41	0.67	3.39	0.64	0.77	0.47
	I3	3.25	0.64	3.16	0.58	3.28	0.81	0.37	0.69
	I4	3.25	0.85	3.12	0.74	2.94	1.01	0.89	0.42
	I5	3.45	0.60	3.20	0.69	3.25	0.91	0.81	0.45
	I11	3.40	0.68	3.27	0.63	3.17	0.94	0.62	0.54

Table A2. *Cont.*

Dimension	Item	SPS		MSE		MPD		F	p
		$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD		
D4. Values	I6	3.80	0.41	3.74	0.56	3.61	0.60	0.92	0.40
	I7	3.80	0.52	3.51	0.70	3.47	0.74	1.65	0.20
	I8	3.85	0.37	3.49	0.64	3.58	0.77	0.22	0.12
	I9	3.65	0.75	3.25	0.80	3.28	0.91	1.77	0.18
	I10	3.65	0.67	3.45	0.64	3.25	0.94	1.86	0.16

Note: Statistically significant differences: (*) $p < 0.05$.

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