

PAPER

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THE ELEMENTS OF AN INCLUSIVE EDUCATIONAL SYSTEM AS SEEN FROM THE PERSPECTIVE OF TEACHERS

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ABSTRACT

Inclusive education is the right which guarantees the attendance of all students, as well as their participation and also the possibility for them to progress, within the educational system. Throughout the following study we will take a brief look at this process, still in progress, dealing with the most relevant aspects with regards to legislation and literature relative to this subject. The main objective is to propose a scale of measurement of the level of inclusion and to know what are the fundamental aspects to carry out a true inclusion. The most novel aspect included in this study is related to the results of empirical research, which lends a scientific framework for this process. We propose a measurement scale for inclusive education (CSEI) which – taking into consideration the opinion of 133 teachers - includes 10 factors deemed to be essential in order to reach a reliable conclusion. Furthermore, using causal and linear regression models, we can illustrate the fact that knowledge relative to inclusion is more important than that knowledge relative to disability. Also, the improvement in measures for integration, as well as the correction of deficiencies in teaching, are fundamental aspects to consider in order to achieve inclusive education.

Keywords: School inclusion; education; teachers.

Los elementos de un sistema educacional inclusivo desde la perspectiva de los profesores

RESUMEN

La educación inclusiva es el derecho que garante la participación de todos los alumnos, así como su participación y también la posibilidad de progresar dentro del sistema educacional. A lo largo del estudio, daremos una breve mirada en ese proceso, que sigue en marcha, abordando los aspectos más relevantes en relación a la legislación y literatura referente a este tema. El objetivo principal es proponer una escala de medida del nivel de inclusión y conocer cuáles son los aspectos fundamentales para realizar una inclusión verdadera. El aspecto más nuevo incluido en este estudio está relacionado a los resultados de la investigación empírica, que empresta una estructura científica para ese proceso. Proponemos una escala de mensuración para la educación inclusiva (CSEI) que - llevando en consideración la opinión de 133 profesores - incluye 10 factores considerados esenciales para llegarse a una conclusión confiable. Además de eso, usando modelos de regresión causal y linear, podemos ilustrar el hecho de que el conocimiento relativo a la inclusión es más importante que el conocimiento relativo a la deficiencia. Además de eso, la mejora en las medidas de integra, así como la corrección de deficiencias en la enseñanza, son aspectos fundamentales a ser considerados para cumplirse la educación inclusiva.

Palabras clave: Inclusión escolar; educación; profesores.

Os elementos de um sistema educacional inclusivo visto da perspectiva dos professores

RESUMO

A educação inclusiva é o direito que garante a participação de todos os alunos, assim como a sua participação e também a possibilidade de progredirem dentro do sistema educacional. Ao longo do estudo a seguir, daremos uma breve olhada nesse processo, ainda em andamento, abordando os aspectos mais relevantes em relação à legislação e literatura referente a este assunto. O objetivo principal é propor uma escala de medida do nível de inclusão e conhecer quais são os aspectos fundamentais para realizar uma inclusão verdadeira. O aspecto mais novo incluído neste estudo está relacionado aos resultados da pesquisa empírica, que empresta uma estrutura científica para esse processo. Propomos uma escala de mensuração para a educação inclusiva (CSEI) que - levando em consideração a opinião de 133 professores - inclui 10 fatores considerados essenciais para se chegar a uma conclusão confiável. Além disso, usando modelos de regressão causal e linear, podemos ilustrar o fato de que o conhecimento relativo à inclusão é mais importante do que o conhecimento relativo à deficiência. Além disso, a melhoria nas medidas de integração, bem como a correção de deficiências no ensino, são aspectos fundamentais a serem considerados para se atingir a educação inclusiva.

Palavras-chave: Inclusão escolar; educação; professores.

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INTRODUCTION

The inclusion of all children in education is the main challenge facing educational systems throughout the world, both in developing and developed countries (Ainscow & Sandill, 2010). Inclusive education has become the cornerstone of many government policies in an increasing number of countries; however, it has been found that teachers maintain conflicting attitudes toward its implementation and utility (Monsen et al., 2014; Yada & Savolainen, 2017). For this reason, tools must exist that will allow the improvement and implementation of an inclusive educational system.

We believe that inclusive education means that all people with disabilities should be able to access schooling and the opportunities that this education will bring for full participation in society in general (Janney & Snell, 2006). "Inclusion" requires that the child should not only be able to physically attend regular schools, but also that changes regarding values, attitudes, policies and practices be made in order to ensure that all students can fully participate in class (Polat, 2011; Schwab, Sharma, & Loreman, 2018). A fundamental aspect in this sense is the teachers' knowledge on this matter as they are main agents in the process of generating an inclusive system. Teachers require knowledge, understanding and abilities (as well as access to resources, including specialized staff) in order to be able to work with the diversity of students in inclusive classrooms (Hodkinson, 2009).

As Grieve (2009), Goodman and Burton (2010) point out, there are many cases in which teachers are not well trained, do not have practical support nor the access to necessary information in order to feel confident about implementing inclusive practices. This study aims to contribute in this regard by offering and quantifying those variables on which further action must be taken and are especially important when it comes to contributing to an inclusive educational system.

In recent years the implementation of an inclusive education system has faced several challenges such as the growing massification of education that hinders educational quality (Marginson, 2016); a wide range of government approaches and policies on inclusion issues (Hardy & Woodcock, 2015); as well as the breach of international regulations and documents (Clark, Dyson, & Millward, 2018).

In this context, the main objective of this study is to contribute to the knowledge regarding the improvement of the educational system as - according to teachers more studies to identify the improvements necessary in this regard need to be carried out. (Brownell, Ross, Colón, & McCallum, 2005). For this purpose, at a theoretical level, the current situation of inclusion is reconsidered and at an empirical level, a scale of components with regards to the inclusive educational system is proposed, and their main causes are established.

Inclusion is increasingly important and the primary mechanism for the education of the future (UNESCO, 2016). The Sustainable Development Goals of the 2030 Agenda set as a great goal for education in objective number 4, to ensure inclusive and quality education. The great novelty of this study lies in the value of the empirical analysis carried out by being able to build and validate a scale of measure about inclusion in the educational system where attitudes, knowledge or advantages of inclusion are collected, that is, its holistic character. In addition, causal models have been made that allow us to know which elements form such an inclusive system.

Inclusive education as a right

Inclusive education reveals the values, views and demands regarding the right of all people to quality education. The first version of Human Rights, which has been redefined due to major social, political and educational changes which have taken place since then, is the backbone of inclusive education (Dávila & Naya, 2013).

The right to an education is a fundamental human right, and it is at the heart of Human Rights; it is also essential and indispensable for achieving other rights. That is why the right to an education -in all its dimensions- is included in Constitutions and legislation throughout all Member States, in order to ensure that it may be enjoyed by each and every person, as well as society as a whole (Opertti & Guillinta, 2015).

As Opertti and Guillinta (2015) point out, the right to an education is reflected in many international documents of different legal nature and according to these, this right implies the right to an inclusive education.

Therefore, the United Nations' High Commissioner for Human Rights (OHCHR, 2013) acknowledges that inclusive education is the most appropriate modality for the States in order to guarantee universality and non-discrimination regarding the right to an education. This is reflected in the International Convention on the Rights of Persons with Disabilities (ONU, 2006) (hereinafter, the Convention), which claims that in order for persons with disabilities to exercise this right, inclusive educational systems must exist. This converts the right to an education into a right to an inclusive education. This matter is confirmed in the Report of the Special Rapporteur on the Right to Education (2007), which affirms that the existing programmatic and legal frameworks regarding human rights clearly acknowledge that inclusive education constitutes a fundamental element with regards to the right of people with disabilities to an education.

The fact is that a great number of documents and proposals have been put together through different conferences and papers, such as: the World Declaration on Education for All (UNESCO, 1990); the World Conference on Educational Special Needs: Access and Quality "Declaration of Salamanca" (UNESCO, 1994); the International Conference on Education (UNESCO, 2008); the Guidelines on Inclusion Policies in Education (UNESCO, 2009); the World Forum on Education (Opertti & Guillinta, 2015); the Monitoring Report on Education in the World (UNESCO, 2015); the European Growth Strategy: Europe 2020, and more specifically, the European Disability Strategy 2010-2020.

These mechanisms contain declarative elements and recommendations for addressing special educational needs. However, as pointed out by Cisternas (2010), the Convention constitutes the main document that specifically addresses this issue by offering enough legal support for inclusive education at all levels. In the case of Europe, there is a mandatory international standard signed by the European Union and all countries in Europe that has been ratified by all except for Ireland and Monaco which means that its enforcement is legally binding. As such, it is a useful juridical tool when it comes to enforcing the rights of persons with disabilities in each of their countries. As indicated by Liasidou and Symeou (2018), all these documents and reports also highlight the need to improve teaching and improve accountability regimes regarding student learning.

Teachers' perception towards inclusion

Teachers are seen as key elements regarding the implementation of inclusive education (De Boer, Pijl, & Minnaert, 2011; Moriña & Carballo, 2018). They show concern about their training and their capacity to deal with more inclusive practices (Horne & Timmons, 2009; Lautenbach & Antoniewicz, 2018). According to Jordan, Glenn and McGhie-Richmond (2010), it is necessary to understand the nature of teachers' convictions and how these convictions are related to professional practices in order to aid school systems to become inclusive educational institutions.

Good opinion and predisposition of teachers is essential, given that they are key elements for the building of an inclusive society. Cook, Cameron and Tankersley (2007) found that teachers with a negative attitude towards children with disabilities represent a handicap for the implementation of inclusion. Although teachers' feelings or attitudes towards disabilities are, in general, positive, teachers seriously doubt the possibilities of implementing a truly inclusive education (Pancsofar & Petroff, 2016; Yada & Savolainen, 2017). However, as demonstrated, Lee, Yeung, Tracey and Barker (2015), there are great differences in this positive attitude between special education teachers and the rest of the teachers being more favorable in the teachers of students with support needs.

Over time in scientific literature, there have been several studies which have aimed at revealing the attitude of teachers towards students with disabilities, using different measuring scales. Chronologically, Wilczenski (1992) was one of the pioneers in measuring the opinion of teachers. He developed a scale called ATIES (Attitudes Towards Inclusive Education) that identified four dimensions in teacher attitudes regarding persons with physical, academic, behavioural and social disabilities. After this, Mahat (2008) validated an extension of this scale, "MATIES", based on cognitive, affective and behavioural attitude. Recently, Saloviita (2018) used these scales by applying them in the Finnish context.

Sharma and Desai (2002) focused on developing an instrument to measure educators' concerns about integrated education in India called CIES (Concerns about Inclusive Education Scale). They found that the directors of education centres were more concerned about the integration of students with disabilities than the teachers. However, they both had a main concern in common: the availability of resources to achieve inclusion.

Horne and Timmons (2009) conducted a qualitative and quantitative study of teachers' attitudes where they concluded that some of the teachers' main concerns were: planning a schedule, meeting the needs of all students and continuing to develop professionally in order to be able to respond effectively to the increasingly diverse needs of students in the classroom.

The authors Forlin, Earle, Loreman and Sharma (2011) integrated these three scales into a new one called SACIE (Sentiments, Attitudes and Concerns about Inclusive Education) addressing the perceptions of teachers in three aspects of inclusive education: levels of comfort when dealing with people with disabilities; acceptance of students with different needs; and concerns about the implementation of inclusion.

De Boer, Pijl and Minnaert (2011) reviewed 26 studies that showed that the majority of teachers have a neutral or negative attitude towards the inclusion of students with SEN (Special Educational Needs). The factors that would impact the attitudes of teachers towards this issue were: specific training, gender, years of experience working in inclusive environments and type of educational needs.

Unianu (2012) recently identified the main obstacles regarding the implementation of inclusive principles in conventional schools and for the analysis of different aspects of teachers' attitude towards inclusive education. His study revealed that there was great confusion regarding terms such as "inclusion" and "integration" amongst teachers. It also showed that they were prone to the schooling of students with disabilities in regular schools. In this case, no attempt was made to validate any scale.

However, there are no studies that validate exactly which components are the ones that conform an inclusive system; that is, which aspects must be established and developed in order to guarantee an inclusive education from the teaching point of view and in the current situation. The literature on the subject has not payed attention to this aspect at all. Therefore, a measurement of the elements that constitute inclusive education has not been validated. In fact, no attempt to elaborate a measurement of the components of inclusive education has been made. There are no causative studies that show which are the most important elements to achieve an inclusive education.

METHOD

Sample and field work

This study has taken into account second grade teachers and professionals in the field of therapeutic pedagogy in Spain. In order to obtain the sample, a non-probabilistic snowball sampling was used. The field work was carried out in January 2016.

We found ourselves with a population of about 9,000 teachers in the target region of analysis, from which a sample of 133 subjects was obtained, with a sampling error of 3.7% and a 95% confidence rate. The characteristics of the sample are shown below. It is worthy of mention that 60% of the respondents claimed to have medium/high knowledge about disability whilst 20.2% said they were not familiar with this field. Almost 65% of the sample is composed of by women, and almost 65% of the sample is formed by professionals who work in public educational centres.

Instrument

In order to carry out our study, we used a questionnaire including 53 items as a data collection technique. It was a self-administered online questionnaire, consisting of two different sections: (1) classification of respondents and sociodemographic variables (sex, age, centre, etc.) as well as a total of 45 Likert-type questions (from 1 to 5) about three fundamental aspects: knowledge about disability, consideration and effectiveness of measures of attention related to diversity, opinion and information about inclusion.

A pre-test was carried out in 2015. The results of the survey, answered by 16 educators with 20 years of experience and who worked in public centres, were analysed. The results were used to check the elaboration of the questionnaire and correct the errors that were found. Furthermore, the validity of the content and its accuracy was verified; it reached over 0,7 Alpha de Table 1. Characterization of the sample.

Veriable		Sample		
Variable	Category -	Ν	%	
Candor	Male	47	35,3	
Gender	Female	89	64,7	
Are they familiar with the field of disability	Yes	86	64,7	
	No	27	20,2	
	No answer/doesn't know	20	15,0	
Years of expertise as a teacher (years)	1-5	28	21,1	
	6-10	32	24,1	
	11-15	18	13,5	
	16-20	9	6,8	
	More than 20	45	33,8	
	No answer/doesn't know	1	0,8	
Type of centre	Public	86	64,7	
	Private	16	12,0	
	Private though state financed school	24	18,0	
	No answer/doesn't know	7	5,3	
	21-30	23	17,3	
	31-40	39	29,3	
Age	41-50	37	27,8	
<u>~в</u> с	51-60	30	22,6	
	No answer/doesn't know	4	3,0	

Cronbrach points (0,803).

With regards to the measurement of the variables, as we have mentioned above, no recent scales of measurement exist related to the inclusion of educational systems, which makes this study a novelty. Some researches, such as Wilczenski (1995), Sharma, Forlin and Loreman (2008) or Humphrey and Symes (2013) measured the attitudes of teachers towards students with disabilities. This objective differs from ours, which seeks to elaborate a broader vision of all the elements of inclusion. However, the variables, opinion items and relevant attitudes found in literature and in the cited articles on the subject have been incorporated.

RESULTS

Underlying dimensions of inclusion in the educational context

In order to understand how the dimensions included in the questionnaire are structured, an exploratory factor analysis was carried out. This analysis was made in order to understand how the items related to educational inclusion behave (45 in total). The analysis offered adequate values of KMO (0.71) and Barlett's sphericity test (p = 0.00), which were favourable for the analysis. The communalities, that is, the representation of the different items of the questionnaire within the factorial analysis, exceeded 0.5, except for the item referring to the "modality of schooling in a specific classroom" (0.459). However, this result was kept as its value is very close to 0.5 and it would not affect the factorial solution given the good results achieved in the analysis of goodness of fit and communality.

Ten factors were selected given the criterion of choosing the eigenvalues greater than 1 and the accordance with the Kaiser test. These factors are a 62.8% of the total variance. Afterwards, a rotation phase was carried out using the Varimax procedure to learn about the structure of the seven factors. This rotation was used because it is an orthogonal method and it is also one of the most widely used approaches, as highlighted by Luque Martínez (2012). The results do not vary when using other orthogonal rotation methods, such as Quartimax or Equimax. Table 2 shows the 10 factors underlying the inclusion that make up the scale we call CSEI (components of an inclusive education system). This scale offers a value of Alpha de Cronbrach over 0,7 in all dimensions of inclusion, which confirms the reliability of the outcomes.

 Table 2. Factorial solution scale inclusion.

FACTOR	DESIGNATION	EXPLAINED VARIANCE (%)	
1	MEASURES TO ADDRESS THE NEEDS OF DIVERSITY	12,97	
2	STUDENT INTEGRATION MEASURES	6,90	
3	ADAPTATION OF THE EDUCATIONAL SYSTEM TOWARDS INCLUSION	6,70	
4	KNOWLEDGE OF DISABILITY	6,00	
5	KNOWLEDGE OF INCLUSION	5,79	
6	ADVANTAGES OF EQUALITY	5,78	
7	MEASURES TO FAVOR EQUALITY	5,05	
8	INCLUSION OF STUDENTS	4,86	
9	DIFFICULTIES DERIVED FROM THE TEACHING STAFF	4,84	
10	SPECIAL EDUCATIONAL NEEDS	3,95	

This factorial solution offers great value, given its ability to propose and build a measurement scale related to inclusion in the educational system from the teaching staffs point of view. An inclusive education system is comprised of dimensions such as attention or integration measures, the teachers and their performance, as well as their knowledge about different aspects of inclusion.

Explanatory models of inclusion in the education system

The factors obtained in the previous section allow us to carry out models or causal relationships that can explain different aspects related to inclusion. This will allow us to understand in a parsimonious and clear way which dimensions strongly correlate with certain key points of the educational system. Such explanatory models will be carried out using the multiple regression technique, and in our case, using the linear regression method.

- Integration as inclusion, parting from knowledge

In the model that we are trying to elaborate, the dependant variable has been considered to be the item "integration favours inclusion", for we consider that this point is the one that best reflects how different integration measurements favour a more inclusive and fair system. This item, as well as the other items, was measured in a scale from 1 to 5 within a categorical variable. The tested model is shown in figure 1.

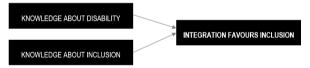


Figure 1. Graphic representation of model 1.

The objective of this causal model is to understand how knowledge can affect the fact that integration favours inclusion - for they are two different concepts and to really reflect whether knowledge about disability and inclusion can be differentiated. Therefore, the causal model would be formulated using the following equation:

INTEGRATION AS INCLUSION= $\beta 1 + \beta 2$ Knowledge about disability+ $\beta 3$ Knowledge about inclusion+ Ui

The results found regarding this model are shown hereunder:

In the first place, the variance analysis indicates that the proposed model is significant (p = 0.000), that is, that it really determines integration as inclusion in a remarkable manner.

Therefore, as the model as a whole is significant, a detailed analysis of the different variables was carried out. Furthermore, the R^2 obtained indicated that, with the present model, more than 50% (54%) of the

integration and inclusion were explained. Therefore, a very high level of the outlined reality was reached, explaining more than half of the variance of the dependent variable.

In the table 3, the p-value column indicates, with a confidence level of 95%, which values are significant in our model and which are not.

Therefore, we can deduce, in the first place, that knowledge relative to disability does not infer in a significant manner on the belief that integration favours inclusion (p=0,407). However, knowledge about inclusion does have a significant influence (p=0,000). This is a very relevant result, for it confirms that understanding disability does not imply the understanding of the concept of inclusion nor its consequences. Hence, knowledge about inclusion is what really favours integration.

Thus, for example, knowing the various disabilities and their functioning or limitations (reduced mobility, hearing, visual disability, etc.) does not guarantee a mechanism for matching inclusion. So those teachers with attitudes come to understand that inclusion means that a person with a disability has the same rights, access and options as any person in a community that favors their true integration.

The "Beta" column shows the order of importance of the explanatory or independent variables. The explanatory variable that reaches the lowest level of importance is knowledge about disability (0,056), while the one that has the highest level - the most explanatory - is knowledge of inclusion (0,734).

In addition, the column regarding the B parameters shows the variation coefficients produced in the dependant variable with regards to the unitary variation of some of the variables, assuming that the rest of the variables remain constant. So, following these results, if there is an increase of all the explanatory variables, this would mean an increase in the fact that integration favours inclusion. For example, increasing the knowledge of disability in one unit would increase it by 0.061. Knowledge on inclusion would lead to the highest growth (0,799). All the connexions between independent variables and dependent variable are positive which means that an improvement in any of the significant aspects on which the integration-inclusion depend, would make the latter increase. The model obtained from the multiple regression test is formulated as follows:

INTEGRATION AS INCLUSION= 3,692 + 0,061Knowledge on disability+0,799Knowledge on inclusion + 0,073

- Explanatory model of the inclusive system

In this second model, the main objective is to find out which aspects configure and explain the perception of an inclusive education system. To do so, seven of the dimensions obtained in the factorial solution have been included and are detailed in the following diagram. The factors included are those relative to the capacities and the measures which improve inclusion in education. Also, factors 6 and 10 have not been considered, given that they are consequences of inclusion itself; they do not constitute an inclusive educational system but instead are consequences of it. This is a complete and extensive model of the explanatory and causal variables that enable a system to be perceived as completely inclusive (Figure 2).

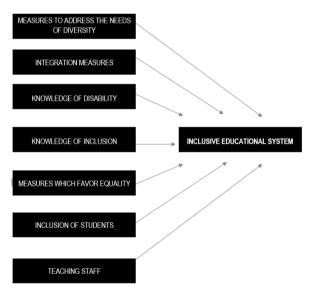


Figure 2. Graphic representation of model 2

The model which explains inclusive education is determined as follows:

INCLUSIVE SYSTEM= $\beta 1 + \beta 2$ Measures to address the needs of diversity + $\beta 3$ Integration measures + $\beta 4$ Knowledge about disability + $\beta 5$ Knowledge about inclusion + Measures which favour equality +

 Table 3. Integration-inclusion model results.

Model	В	Typ. Error.	Beta	t	p-Value
1 (Constant)	3,692	,073		50,572	,000
KNOWLEDGE OF DISABILITY	,061	,073	,056	,833	,407
KNOWLEDGE OF INCLUSION	,799	,073	,734	10,893	,000

β7Incluson of students - β8Teaching staff+ Ui

The model is significant as a whole using the ANOVA (P=0,000) test; in this case, the obtained r squared is 27%, this means that it has an acceptable and sufficient explanatory capacity.

Via a thorough analysis of each of the causal variables included in the model:

- The measures to address the needs of diversity have a positive effect, although they are not statistically significant (p=0,128). This includes various measures, specifically: forming flexible groups in the school, modifying the teaching methodology, carrying out transit programs between the different school stages, or carrying out activities among students on equal opportunities.

- The measures which favour integration constitute the second most important aspect when it comes to significantly creating an inclusive educational system (p=0,000). Improving any aspect related to these measures would increase inclusion in the educational environment (Beta=0,312). Some examples of these measures are: having the opinion of experts for schooling and psychopedagogical evaluation, or programs to clearly differentiate between special educational needs and disability, among teachers.

- With a 10% of confidence level (p=0,059), knowledge of disability has a positive and significant effect. It is the fourth factor in order of importance.

- As expected, knowledge about inclusion is the most important aspect when it comes to configuring an inclusive education. Improving information and knowledge of all the agents participating in the social and educational system would significantly aid the obtainment of greater levels of inclusion.

- Measures to favour equality do not have a significant impact. This includes, above all the

curricular adjustments, this being a minor element for inclusion.

- Surprisingly, favouring the students' inclusion, although positive, does not appear to be very significant. This might be explained by the fact that only two items were included (regarding classrooms and regarding whether inclusion only refers to students with disabilities, a matter that is very related to knowledge of disability).

- Finally, the third most important aspect for achieving an inclusive educational system is the teaching staff (p=,001). It has been established that their shortcomings, their lack of training and their poor efforts to achieve equal opportunities have a negative impact. These items are under the factor called "difficulties associated with the teaching staff". As established in the model's mathematical formula, these shortcomings do have a negative impact (Table 4).

Lastly, the solution obtained for the causal model is:

INCLUSIVE SYSTEM = 2,923 + 0,143Measures to address the needs of diversity + 0,048Measures to favour integration + 0,179Knowledge of disability + 0,354Knowledge of inclusion + -0,014Measures to favour equality + 0,079Inclusion of students-0,307Teaching staff + 0,093

The results achieved, therefore, allow us to know that to achieve greater inclusion, three factors are key: measures that favor inclusion, a teacher more aware of the issue and, above all, increase knowledge about what really is inclusion. The importance of these variables has been determined statistically through the causal models. It is on these variables where the educational centers should place greater emphasis.

CONCLUSIONS AND DISCUSSION

The right to an education implies the right to an inclusive education, as is reflected in the declarations,

Мо	del	В	Typ. Error.	Beta	t	p-Value
2	(Constant)	2,923	,093		31,450	,000
	MEASURES TO ADDRESS THE NEEDS OF DIVERSITY	,143	,093	,129	1,535	,128
	MEASURES TO FAVOR INTEGRATION	,348	,093	,312	3,721	,000
	KNOWLEDGE ON DISABILITY	,179	,093	,161	1,913	,059
	KNOWLEDGE ON INCLUSION	,354	,093	,318	3,788	,000
	MEASURES TO FAVOR EQUALITY	-,014	,093	-,012	-,145	,885
	INCLUSION OF STUDENTS	,079	,093	,071	,848	,398
	TEACHING STAFF	-,307	,093	-,276	-3,292	,001

 Table 4. Inclusive system model results.

conventions and other normative and binding documents, both legal and educational. However, in reality, the educational systems in Europe are still far from being inclusive systems. Hence, it becomes clear that we are dealing with a right that is not, in practice, guaranteed.

One of the most interesting contributions of this study is the construction and proposal of a measurement scale relative to inclusion in the educational system, where attitudes, knowledge or advantages regarding the matter are included (scale called CSEI). This way, we can learn the true dimension underlying teaching staffs' opinions. Taking this into account, the principles needed in order to explain an inclusive education system would be: (1) measures to address the needs of diversity; (2) student integration measures; (3) adequacy of the educational system with regards to inclusion; (4) knowledge about disability; (5) knowledge about inclusion; (6) advantages of equality; (7) measures to promote equality; (8) inclusion of students; (9) teaching staff; (10) special educational needs.

Another important contribution of this work is the attainment of causal models that are able to explain different aspects related to inclusion. We were able to determine which dimensions correlate the most with certain key aspects of the educational system.

The first model explains more than 50% of integration and the consequence of this: inclusion. Therefore, a high level of explained reality is reached. It has been demonstrated that knowledge about disability does not imply that the belief that integration favours inclusion exists. However, knowledge about inclusion does have a significant impact. This is a very important result, for it confirms that knowledge about disability does not imply knowledge about inclusion nor its implications. Therefore, it is the knowledge about inclusion that really favours integration.

The second model explains 27% of the aspects that configure and explain the perception that our educational system is inclusive. Knowledge about inclusion is the most important aspect to consider when configuring an inclusive education system. Improving the quality of information and knowledge of all the agents involved in social and educational systems would lead to higher levels of inclusion. Integration measures are the second most important aspect with regards to shaping an inclusive education system. Teachers' deficiencies have a negative impact on inclusion; these deficiencies are related to lack of proper training or lack of knowledge on the subject. Over all, knowledge about inclusion is the most important factor related to the achievement of inclusion.

The results of this study entail consequences

for several of the agents involved - managerial and political - as changes must be made in educational laws regarding inclusion, in accordance with the precepts of the Convention (ONU, 2006) and the Revised Text (ONU, 2013), given their mandatory compliance and the obligation to modify them according to these laws. In addition, the models have shown that it is important to increase knowledge of inclusion, as well as to improve teacher training in this regard. Also, teachers must analyse their own characteristics and make an effort to improve their knowledge. They should also apply a greater number of measures (related to both integration and equality) in order to improve the inclusion of students. Finally, the directors of educational centres must take into account all these results in order to improve and create synergies amongst those involved in learning in terms of inclusion.

Following the results, measures or specific actions that would facilitate an inclusive education system and that would be innovative would be: inclusive campuses in pre-university secondary schools; educational transit programs between different school stages and in university access; online courses to train teachers; exchange of teachers to meet schools with a high level of inclusion as well as curricular adaptations for students.

The previous literature on inclusion and disability was mostly in theoretical or qualitative studies, so the data provided in this work is a novelty because they allow us to know what elements give rise to an inclusive educational system empirically.

We would like to mention one of the limitations of this study: the fact that the sample used is limited to the Spanish context. Also, given the novelty, complexity, evolution, amplitude and current situation of inclusion, it is possible that not all the variables and tools that participate in the process of achieving a totally inclusive educational system have been included.

For future studies, it would be of great interest to compare the degree and awareness of inclusion and its tools according in different countries or even in rural or urban areas. This way, the international and geographical horizon would be broadened, achieving a better extrapolation of the results. Also, with the data achieved, could be future work, conducting crosscultural or longitudinal studies to periodically analyze the degree of inclusion and its evolution in society. Although we are aware of the difficulty involved, it would be advisable to periodically analyse the degree of inclusion in society and compare it every few years; this way it would be possible to check the level of achievement of the objectives to be reached and to examine the evolution of inclusion, and knowledge of the term, and the consequences related to both.

REFERENCES

- Ainscow, M.; Sandill, A. (2010). Developing inclusive education systems: the role of organisational cultures and leadership. *International Journal of Inclusive Education*, 14(4), 401-416.
- Brownell, M. T.; Ross, D. D.; Colón, E. P.; McCallum, C. L. (2005). Critical features of special education teacher preparation: A comparison with general teacher education. *The Journal* of Special Education, 38(4), 242-252.
- Cisternas, M. S. (2010). Derecho a la Educación: Marco Jurídico y Justiciabilidad. *Revista Latinoamericana de Educación Inclusiva*, 41-57.
- Clark, C.; Dyson, A.; Millward, A. (2018). *Towards inclusive schools?*. Routledge.
- Cook, B. G.; Cameron, D. L.; Tankersley, M. (2007). Inclusive teachers' attitudinal ratings of their students with disabilities. *The Journal of Special Education*, 40, 230–238.
- Dávila, P.; Naya, L. M. (2013). Derechos de la infancia y educación inclusiva en América Latina. Ediciones Granica.
- De Boer, A.; Pijl, S. J.; Minnaert, A. (2011). Regular primary schoolteachers' attitudes towards inclusive education: A review of the literature. *International Journal of Inclusive Education*, 15(3), 331-353.
- Goodman, R. L.; Burton, D. M. (2010). The inclusion of students with BESD in mainstream schools: Teachers' experiences of and recommendations for creating a successful inclusive environment. *Emotional and Behavioural Difficulties*, 15, 223–237.
- Grieve, A. M. (2009). Teachers' beliefs about inappropriate behaviour: Challenging attitudes? *Journal of Research in Special Educational Needs*, *9*, 173–179.
- Forlin, C.; Earle, C.; Loreman, T.; Sharma, U. (2011). The sentiments, attitudes, and concerns about inclusive education revised (SACIE-R) scale for measuring pre-service teachers' perceptions about inclusion. *Exceptionality Education International*, *21*(3), 50-65.
- Hardy, I.; Woodcock, S. (2015). Inclusive education policies: Discourses of difference, diversity and deficit. *International Journal of Inclusive Education*, *19*(2), 141-164.
- Hodkinson, A. (2009). Pre-service teacher training and special educational needs in England 1970–2008: Is government learning the lessons of the past or is it experiencing a groundhog day? *European Journal of Special Needs Education, 24*, 277–289.
- Horne, P. E.; Timmons, V. (2009). Making it work: Teachers' perspectives on inclusion. *International Journal of Inclusive Education*, *13*, 273–278.
- Humphrey, N.; Symes, W. (2013). Inclusive education for pupils with autistic spectrum disorders in secondary mainstream schools: teacher attitudes, experience and knowledge. *International Journal of Inclusive Education*, 17(1), 32-46.
- Janney, R. E.; Snell, M. E. (2006). Modifying schoolwork in inclusive classrooms. *Theory into Practice*, *45*, 215–223.

- Jordan, A.; Glenn, C.; Mcghie-Richmond, D. (2010). The Supporting Effective Teaching (SET) project: The relationship of inclusive teaching practices to teachers' beliefs about disability and ability, and about their roles as teachers. *Teaching and Teacher Education*, 26, 259–266.
- Lautenbach, F.; Antoniewicz, F. (2018). Ambivalent implicit attitudes towards inclusion in preservice PE teachers: The need for assessing both implicit and explicit attitudes towards inclusion. *Teaching and Teacher Education*, *72*, 24-32.
- Lee, F. L. M.; Yeung, A. S.; Tracey, D.; Barker, K. (2015). Inclusion of children with special needs in early childhood education: What teacher characteristics matter. *Topics in Early Childhood Special Education*, 35(2), 79-88.
- Liasidou, A.; Symeou, L. (2018). Neoliberal versus social justice reforms in education policy and practice: Discourses, politics and disability rights in education. *Critical Studies* in Education, 59(2), 149-166.
- Luque Martínez, T. (Ed.). *Técnicas de análisis de datos para la investigación de mercados.* Madrid: Ed. Pirámide.
- Mahat, M. (2008). The Development of a Psychometrically-Sound Instrument to Measure Teachers' Multidimensional Attitudes toward Inclusive Education. *International Journal* of Special Education, 23(1), 82-92.
- Marginson, S. (2016). The worldwide trend to high participation higher education: Dynamics of social stratification in inclusive systems. *Higher Education*, *72*(4), 413-434.
- Monsen, J. J.; Ewing, D. L.; Kwoka, M. (2014). Teachers' attitudes towards inclusion, perceived adequacy of support and classroom learning environment. *Learning Environments Research*, 17(1), 113-126.
- Moriña, A.; Carballo, R. (2018). University teaching staff and inclusive education: Responding to their training needs. *Psicologia Escolar e Educacional*, 22(SPE), 87-95.
- Opertti, R.; Guillinta, Y. (2015). La educación inclusiva: 48ª Conferencia Internacional de educación. Páginas de Educación, 2(1), 137-148.
- ONU (2006). Convención Internacional de los Derechos de las Personas con Discapacidad. http://www.un.org/esa/socdev/ enable/documents/tccconvs.pdf
- ONU (2013). Consolidated text of the Convention the International Convention on the Rights of Persons with Disabilities. http:// www.un.org/esa/socdev/enable/documents/tccconvs.pdf
- Pancsofar, N.; Petroff, J. G. (2016). Teachers' experiences with co-teaching as a model for inclusive education. *International Journal of Inclusive Education*, *20*(10), 1043-1053.
- Polat, F. (2011). Inclusion in education: A step towards social justice. *International Journal of Educational Development*, 31, 50–58.
- Saloviita, T. (2018). Attitudes of Teachers Towards Inclusive Education in Finland. *Scandinavian Journal of Educational Research*, *64*(2), 270-282. doi: 10.1080/00313831.2018.1541819
- Schwab, S.; Sharma, U.; Loreman, T. (2018). Are we included? Secondary students' perception of inclusion climate in their schools. *Teaching and Teacher Education*, 75, 31-39.

- Sharma, U.; Desai, I. (2002). Measuring concerns about integrated education in India. Asia and Pacific Journal on Disability, 5(1), 2-14.
- Sharma, U., Forlin, C., & Loreman, T. (2008). Impact of training on pre-service teachers' attitudes and concerns about inclusive education and sentiments about persons with disabilities. *Disability & Society*, 23(7), 773-785.
- UNESCO (1990). Declaración mundial sobre educación para todos y marco de acción para satisfacer las necesidades básicas de aprendizaje. Jomtien: UNESCO.
- UNESCO (1994). Declaración de Salamanca y marco de acción para las necesidades educativas especiales: acceso y calidad. Salamanca: UNESCO.
- UNESCO (2008). La Educación inclusiva: el camino hacia el futuro. Ginebra: UNESCO.
- UNESCO (2009). Conferencia Mundial sobre la Educación Superior: La nueva dinámica de la educación superior y la investigación para el cambio social y el desarrollo. Paris: UNESCO.
- UNESCO (2015). Informe de Seguimiento de la Educación en el

Mundo. http://es.unesco.org/gem-report/

- UNESCO (2016). Agenda 2030 y los Objetivos de Desarrollo Sostenible. http://www.sela.org/media/2262361/agenda-2030-y-los-objetivos-de-desarrollo-sostenible.pdf
- Unianu, E. M. (2012). Teachers' attitudes towards inclusive education. *Procedia-Social and Behavioral Sciences*, 33, 900-904.
- United Nations Human Right. (2007). Special Rapporteur on the right to education. https://daccess-ods.un.org/ TMP/7461964.48802948.html
- Yada, A.; Savolainen, H. (2017). Japanese in-service teachers' attitudes toward inclusive education and self-efficacy for inclusive practices. *Teaching and Teacher Education, 64*, 222-229.
- Wilczenski, F. L. (1992). Measuring attitudes toward inclusive education. *Psychology in the Schools*, *29*(4), 306-312.
- Wilczenski, F. L. (1995). Development of a scale to measure attitudes toward inclusive education. *Educational and Psychological Measurement*, *55*(2), 291-299.

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