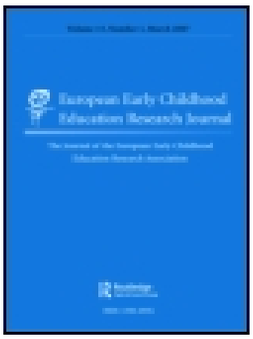

Routledge
Taylor & Francis Group

European Early Childhood Education Research Journal

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/recr20

Adaptation and validation of an instrument for the evaluation of attitudes towards disability in early childhood education

Marta Aparicio Puerta, M. Tamara Polo Sánchez, Antonio Fernández-Castillo & José Miguel Contreras García

To cite this article: Marta Aparicio Puerta, M. Tamara Polo Sánchez, Antonio Fernández-Castillo & José Miguel Contreras García (2023): Adaptation and validation of an instrument for the evaluation of attitudes towards disability in early childhood education, European Early Childhood Education Research Journal, DOI: 10.1080/1350293X.2023.2177402

To link to this article: https://doi.org/10.1080/1350293X.2023.2177402

Published online: 14 Feb 2023.

EUROPEAN EARLY CHILDHOOD EDUCATION RESEARCH JOURNAL
https://doi.org/10.1080/1350293X.2023.2177402

Adaptation and validation of an instrument for the evaluation of attitudes towards disability in early childhood education

Marta Aparicio Puerta [a], M. Tamara Polo Sánchez [a], Antonio Fernández-Castillo[a] and José Miguel Contreras García[b]

[a]Department of Evolutionary Psychology and Education, University of Granada, Granada, Spain;
[b]Department of Didactics of Mathematics, University of Granada, Granada, Spain

ABSTRACT
The aim of this article was to adapt and validate a specific instrument to measure the attitudes of Early Childhood Education students towards different disabilities, assessing the three components of attitudes. Firstly, a direct translation of the desired instruments was carried out and, after the modifications suggested by the experts, a total of 162 participants were tested and, using these data, the validity and reliability of the instrument was calculated. The results have indicated that we have a tool with sufficient validity and reliability to be able to analyse the attitudes towards disability of Early Childhood Education students.

KEYWORDS
Attitudes; childhood education; disability; instrument; pupils; validation

Introduction

At the present time, our society in general, and our schools in particular, are characterised by being diverse environments where a large number of people with different features and abilities coexist on a daily basis. Therefore, undoubtedly, the greatest challenge of education today is to create an inclusive school, which is able to welcome, accept and respect all these students without exception, offering them a quality education adapted to the needs of each one. Specifically, this educational inclusion should know how to respond to students with disabilities, because despite the great achievements made, this is still one of the most marginalised groups in our society (Latorre and Liesa 2016). In fact, in general, students with disabilities tend to have fewer friendships than their non-disabled peers (Avramidis, Avgeri, and Strogilos 2018; Banks, McCoy, and Frawley 2017; Huber et al. 2018; Petry 2018; Schwab 2018; Taheri, Perry, and Minnes 2016). That is why we have to rely on an inclusive school that is aware of the existing barriers and promotes the real participation of all students. This will not only have enormous benefits for people with disabilities, but for the whole society in general.

Despite great attempts at the legislative and social level, today we still cannot affirm that there is complete inclusion in our classrooms and one of the main obstacles to this are the negative expectations and attitudes that exist towards people with disabilities (Polo, Fernández, and Fernández 2018).

CONTACT Marta Aparicio Puerta martaap@ugr.es

These attitudes are defined by Bravo (2013) as a person's way of acting towards certain situations or groups of people. However, when assessing attitudes, it is important to differentiate three aspects because these attitudes do not only involve a behavioural factor but also include affective and cognitive components. The affective value refers to the feelings, whether negative or positive, associated, in this case, with the disability. The cognitive aspect refers to the set of beliefs and perceptions we have (Findler, Vilchinsky, and Werner 2007). Finally, the behavioural factor refers to the intentions and the way of acting towards this group (Ubillos, Páez, and Mayordomo 2004).

Specifically, the school has an important role to play, since, in order to ensure that children with disabilities are truly included, it is essential that the attitudes towards disability of the entire educational community are positive, since, as Polo, Fernández, and Fernández (2018) state, this is a determining factor in the correct care of students with functional diversity. Therefore, it is to be expected that authors such as García-Fernández et al. (2013) found a notable increase in the number of studies interested in analysing attitudes towards disability in the educational sphere from 2006 onwards.

Particularly, we should focus on the attitudes held by children, as these can be a major barrier to the inclusion of children with disabilities, since the peers' negative attitudes affect the social atmosphere in the classroom (Frese and Yun 2007; Petry 2018; Schwab 2018). Moreover, these negative attitudes influence not only the child's socialisation, but also his or her self-concept and their academic results (Flórez, Aguado, and Alcedo 2009; Szumski and Karwowski 2015). These also affects their pro or anti-social behavour as well as their future mental health problems (Aluede et al. 2008; Fernández-Castillo 2020). Beckett (2013) even found that students without disabilities felt superior to people with any incapacity. Thus, Nowicki and Sandieson (2002) suggest that peer attitudes may be one of the biggest problems for effective inclusion. Moreover, negative attitudes acquired at an early age, if left unchanged, become internalised and remain with us, to a greater or lesser extent, throughout our lives (Dunham, Chen, and Banaji 2013). Therefore, it is essential to carry out an analysis of the attitudes towards disability of Early Childhood Education students, since it is better to intervene early, as the more years go by, the more ingrained our beliefs and, therefore, our attitudes become (Cameron et al. 2011).

Thus, taking into account the relevance of peer attitudes in achieving a satisfactory educational inclusion, many academics have sought to analyse them, especially in the university setting (Alnahdi, Elhadi, and Schwab 2020; D'Agostino and Douglas 2020; Polo, Fernández, and Fernández 2018; Polo et al. 2020); in Secondary Education (Dias, Mamas, and Gomes 2020; Petry 2018; Pivarč 2020; Szumski, Smogorzewska, and Grygiel 2020), and even in Primary Education (Abellán et al. 2020; Dias, Mamas, and Gomes 2020; Pivarč 2020; Wang and Qi 2020).

Although student's attitudes in Early Childhood Education have not been a widely studied topic in Spain, there is research carried out internationally (de Boer et al. 2014; Dimitrova and Chichevska 2018; Favazza and Odom 1996; Hacıibrahimoğlu and Ustaoğlu 2020; Nowicki 2006; Reis et al. 2020; Tekin, Ata, and Kaya 2020; Werner, Peretz, and Roth 2015). In this sense, the results show that many of the studies that have analysed attitudes in pre-primary education reach the same conclusion: students at this stage tend to show more positive attitudes towards people without disabilities than towards those with disabilities (de Boer et al. 2014; Dimitrova and Chichevska

2018; Hacıibrahimoğlu and Ustaoğlu 2020; Nowicki 2006; Tekin, Ata, and Kaya 2020; Werner, Peretz, and Roth 2015). Therefore, it is important to be able to examine those of the Early Childhood Education students in our environment in order to be able to modify them in the event that, as in these studies, they are negative.

Thus, given that, as we have seen, more and more importance is being given to the role of students in this inclusion, there are different instruments that have been used to analyse these attitudes. Specifically, we carefully analysed the instruments used to measure attitudes towards disability for each educational stage from the most relevant studies in both English and Spanish. The articles and the questionnaires employed are shown in the following table (Table 1).

As can be seen in Table 1, various instruments have been designed and/or used to analyse attitudes towards disability among pupils at different educational stages, both in English and Spanish. However, in the case of the Infant Education stage, the existing instruments are only available in English, which makes it difficult or impossible to use them in Spain. In addition, existing instruments for analysing attitudes towards disability among students at this stage, such as the widely used Acceptance Scale for Kindergarten (Favazza and Odom 1996), do not provide specific results for each of the dimensions of attitudes (affective, cognitive and behavioural) and even use the concept of 'disability' as something generic, without taking into account the diversity that this term implies. Therefore, an instrument that takes into account all these elements can help to have a deeper insight into the situation and make subsequent interventions genuinely effective.

Thus, and taking into account all of the above, the main objective of this study is to adapt and validate an instrument in Spanish that allows us to assess the attitudes towards disability of Early Childhood Education students, taking into account the three aspects of these attitudes, i.e. affective, behavioural and cognitive; and which, in turn, allows us to assess attitudes towards different types of disability.

Method

Participants

In order to obtain the sample, non-probabilistic sampling was used, as the participating centres were selected taking into account their availability and willingness to participate.

Table 1. Instruments used in different studies to evaluate students' attitudes towards disability of peers, classified by educational stage educational stage.

Educational stage	Instrument used	Language
University	Escala de Actitudes hacia las Personas con Discapacidad (Verdugo, Jenaro, and Arias 2002).	Spanish
	The Turkish version of the Attitudes towards Disabled Person (Özyürek 2006).	English
Secondary Education	Escala de Actitudes hacia las Personas con Discapacidad (Verdugo, Jenaro, and Arias 2002).	Spanish
	Chedoke-McMaster Attitudes Towards Children with Handicaps (CATCH) scale (Rosenbaum 1986).	English
Primary Education	Escala de Valoración de Términos Asociados con Discapacidad–EVT– (Aguado and Alcedo 1999)	Spanish
	Children's Attitudes Towards Integrated Physical Education Revised (CAIPE-R) (Block 1995)	English
Infants Education	Acceptance Scale for Kindergartners – Revised (ASK-R) (Favazza and Odom 1996)	English

Thus, a total of 162 pre-school students from 4 different schools in the province of Granada took part. Specifically, 89 girls (54.9%) and 73 boys (45.1%) participated, most of whom were 5 years old ($n = 91$) and the rest were 4 years old ($n = 56$) and 6 years old ($n = 15$). There is also diversity in the type of centres they attended, since 41.4% ($n = 67$) study in a Centre subsidised in part by the regional authority; 30.9% ($n = 50$) in a state school; and the remaining 27.8% ($n = 45$) in a private one. In this way, there was nothing to suggest that the sample was idiosyncratic; however, a level of significance could not be established.

Measures

In order to design the validated instrument, three different scales were used as a basis, each measuring one of the aspects of attitudes.

First, for the affective component, an adaptation of Nowicki's Pictographic Scale (2006) was used, for which participants were initially shown four different drawings representing a child without disability, a child with sensory disability, a child with motor disability and a child with intellectual disability. Subsequently, each child had to reflect his or her feelings towards these characters by answering four different questions and pointing to the face that best represented them: Very happy, Happy, I don't care, Sad, I'm scared.

In order to know the behavioural aspect of the participants' attitudes, we started from the Behavioural Intent Scale by Dimitrova and Chichevska (2018), which was translated from English to Spanish, reduced and adapted to the Spanish context. In this sense, participants have to answer eight questions related to their possible actions with the characters presented at the beginning by pointing to one of the three available options Yes, Maybe or No, which were also supported by different representative icons.

Finally, an adaptation of The multi-response attitude scale by Nowicki (2006) enabled us to know the cognitive aspect of attitudes. In this case, the children, with the help of plugs, had to associate each of the different adjectives to the characters mentioned above, being able to point to all the characters, to several, to only one or to none.

Procedure

First of all, we had to bear in mind that the vast majority of studies aimed at constructing and validating an instrument use several techniques, as none of them can be considered complete in isolation (Bullinger et al. 1998). Therefore, in this study, we decided to use three techniques: translation of the instrument, an expert evaluation committee and a pilot study.

To begin, a direct translation of the instruments was carried out separately by different Spanish people with academic training and accredited practice in Infant education and with good and sufficient English language skills, and then the translations were compared. In addition, we had to adapt it culturally to Spain and, therefore, some of the translated items were slightly modified. Later, another person, whose mother tongue is English, carried out the reverse translation and the two results were compared. From these translations, a first version was created, the content of which was then evaluated. There are different ways of validating an instrument,

which will depend mainly on the purpose of the instrument (Anastasi 1986). In this case, the technique of validation by expert judgment was initially used and, according to Carvajal et al. (2011), the more people who participate in it, the more valid it will be. Peculiarly, Landeta (2002) states that the number of experts required for the translation to be considered valid must be between 7 and 30 Therefore, we consider that, in this sense, the instrument has a high degree of validity because 13 experts in the subject (disability, inclusive education, attitudes, etc.) and in the evolutionary characteristics of the target population offered their vision and experience to the construction of this instrument. To this end, they were asked to assess the clarity, coherence and relevance of each of the items, indicating a value from 1 to 4 in each case. In addition, they were given a specific space to write any comments they considered appropriate for each item.

Subsequently, following expert advice, a new version of the instrument was designed excluding certain items for different reasons. For instance, some were too similar to other items or too complicated to the target population's age. Specifically, one question was removed from the affective section, seven from the behavioural section and two from the cognitive section. The construction of the instrument also took into account the requirements established by Ramos et al. (2006), which could be summarised as follows: brevity, simplicity, understandable vocabulary adapted to the characteristics of the participants, short questions without negations or double negations, motivating, attractive in their design, with virtual and theoretical support.

Next, a series of procedures was followed to apply this instrument and test its validity. First, we contacted the potential participating schools to explain the objective, the importance and the way in which the research would be carried out. Once they agreed, we sought the approval of the families, as the participants are minors.

Finally, we took into account that children of this age, just as Einarsdóttir (2007) pointed out, are people with their own ideas and ways of seeing things, and therefore must be listened to value as we would anyone else. Thus, in agreement with *EECERA Ethical Code for Early Childhood Researchers* (Bertram et al. 2016), an informed consent form was obtained from the participants in a manner that was meaningful and child friendly. They were asked if they wanted to take part, but as it was like a game for them, none of them objected. Nevertheless, it was made clear that they could withdraw at any moment. They each responded individually in a separate room, to avoid distractions or possible influences from their peers. They gave their answers either orally or by pointing to one of the different options represented by the images, thus supporting us in the use of other materials, as recommended by other authors (Brooker et al. 2001; Doverborg and Pramling Samuelsson 2003). This required an adult to ask the child the questions, as the child's reading and writing skills at this age are not yet developed. For each assessment, an approximate time of 10 minutes was needed for each participant.

Data analysis

Once the questionnaires had been completed by all participants, they were entered into a database and analysed with the statistical programme SPSS, version 28, to obtain the results detailed below.

Results

In order to assess the effectiveness of an instrument, it is essential to take into account two fundamental metric characteristics: reliability and validity (Gómez and Hidalgo 2009).

Validity

Validity indicates whether the instrument is really useful for the purpose for which it has been designed, i.e. whether it really manages to measure what it is intended to measure (Carvajal et al. 2011).

Content validity of the instrument

After an initial analysis of the first 40 items, it was decided to remove a total of 12, obtaining a final instrument with 28 items, of which 4 correspond to the affective dimension, 8 to the behavioural dimension and 16 to the cognitive dimension. Specifically, in the instrument that assesses the affective aspect, one question was removed as it was considered to be very general and could be answered with the others. In the case of the behavioural instrument, some items were removed and included in other more general ones, for example, the questions 'Would you lend him your colours?' and 'Would you lend him your toys?' were replaced by 'Would you lend him your things?' In addition, other items such as 'Would you tell him about your family?' were removed as they were not considered relevant for the target age group. Finally, with respect to the cognitive section, the items nice and naughty were deleted as they were too similar to other items used.

Comprehension validity of the instrument

To assess the comprehension validity of the instrument, a pilot study was carried out with participants of the target age group. In this way, we can confirm that, in general, the participants understood all the items of the instrument without any problem, since they are adjectives adapted to their age.

However, it is necessary to point out that, despite their easy comprehension, it has been observed that the youngest participants, i.e. those aged 4 years, on some occasions had more difficulty in fully understanding some of the items and needed clarification. More specifically, these difficulties were observed with more complex adjectives such as 'Aggressive', 'Sociable' or 'Helpful'. However, when it was explained to them what each of them meant, they were able to participate without any problem.

Construct validity

To analyse this type of validity, first, we checked that it complied with an adequate sample size, i.e. that the Kaiser-Meyer-Olkin (KMO) test result was greater than 0.60, and in our case a value of 0.66 was obtained; and with statistical significance in the Barthettsphericity test (<.001) (Costello and Osborne 2005). In addition, the principal component extraction technique was used, with varimax rotation, in order to try to select those factors that explain the maximum of the total variance. Thus, results were obtained that explain 32.77% of the variance, with a total of 3 factors with values

above .10. Particularly, Factor 1, which includes the items of the cognitive aspect of attitudes, i.e. the last sixteen items, obtained 14.28%; Factor 2, referring to the behavioural aspect, i.e. items five to twelve, 11.88%; and Factor 3, which includes the items related to the affective domain, specifically, the first four items, 6.60% were obtained (Table 2).

Reliability

Reliability indicates the degree of precision and internal consistency, that is, to what extent if we repeat the instrument on other occasions, the same results will be obtained (Polit and Hungler 1999). This reliability is measured in a coefficient called Cronbach's alpha, which ranges between 0 and 1. According to George and Mallery (1995), if Cronbach's alpha is lower than .50, the reliability is not acceptable. Oviedo and Campos-Arias (2005), for their part, determine that the appropriate values for this coefficient should be between .70 and .90, since a higher result would indicate that there are redundant items that should be deleted.

In this case, the instrument has an Alpha coefficient of .804, which indicates that it has good reliability. More precisely, the reliability of each of the different aspects measured by the instrument was also calculated, as can be seen in Table 3.

Table 2. Rotated matrix of the principal components of the instrument created to evaluate students' attitudes in Early Childhood Education.

	Cognitive factor	Behavioural factor	Affective factor
1. How would you feel about helping this child?			.355
2. How would you feel about playing with this child?			.654
3. How would you feel if this child asked you for help?			.658
4. How would you feel if this child asked you to play with him/her?			.660
5. Would you stand next to him/her in line?		.565	
6. Would you lend him/her your things?		.596	
7. Would you talk to him/her in class?		.451	
8. Would you play with him/her at recess?		.621	
9. Would you help him/her pick up toys?		.585	
10. Would you invite him/her to your home?		.583	
11. Would you choose him/her as a playmate?		.670	
12. Would you share breakfast with him/her?		.690	
Who do you think is …			
13. Clean?	.347		
14. Dirty?	.323		
15. Healthy?	.385		
16. Sick?	.125		
17. Good?	.661		
18. Bad?	.511		
19. Kind?	.613		
20. Aggressive?	.499		
21. Happy?	.643		
22. Sad?	.183		
23. Sociable?	.546		
24. Unsociable?	.513		
25. Helpful?	.649		
26. Selfish?	.444		
27. Clever?	.662		
28. Not clever?	.416		

Table 3. Reliability of the different sections of the instrument.

Instrument sections	Cronbach's alpha
Affective	.562
Behavioural	.735
Cognitive	.840

Discussion and conclusions

Creating an inclusive school that offers the same opportunities for all students without exception is a challenge and an obligation of education in the twenty-first century. Therefore, it is important to know the attitudes of the educational community towards students with disabilities, especially those of their peers, as this can be a huge obstacle to their participation in the social life of the classroom. Moreover, this analysis needs to be carried out at an early stage, so that if negative attitudes exist, they can be addressed as soon as possible. However, no instruments have been found that consider the three aspects of attitudes validated in Spanish in order to carry out this assessment effectively in Early Childhood Education classrooms. Therefore, the main objective of this research was to adapt an instrument for this purpose and validate it.

Thus, after taking into account the opinion of experts and carrying out a pilot study with Early Childhood Education students, we determined that the proposed instrument has the necessary conditions of validity and excellent reliability. However, although the three subscales of the instrument have acceptable values, especially the cognitive aspect, the affective dimension of the instrument has a Cronbach's Alpha value below .60, which could be considered as a limitation of the study and the instrument. This could be explained by its low number of items (Oviedo and Campos-Arias 2005), as it only has four items, and could be solved in the future by increasing the number of items in this section to try to achieve a higher reliability.

On the other hand, factorial analysis has allowed us to explain approximately one-third of the variance, establishing three different factors. This fact can be considered as a strength of this study, since the 3 factors obtained coincide almost perfectly with the three original theoretical dimensions, despite the fact that some items do not have a high saturation in their corresponding factor, which we will try to improve in subsequent research.

Thus, it is necessary to highlight the need to create, adapt and/or validate this type of instrument in order to identify attitudes early in our context, as has already occurred in other higher stages (Abellán et al. 2020; Polo et al. 2020). Hence the relevance of this instrument, as it is a pioneering tool in the early childhood education stage aimed at the Spanish population. Moreover, this instrument, which has to be put into practice by the researcher, enabled us to complement the quantitative information through the qualitative information offered by the participants, in such a way that we obtained a more complete and in-depth research, being able to know, in many cases, the justification of each participant's choices. For example, in the cognitive factor, some of the students explained that they had categorised the child with a motor disability as 'Selfish' because by being in a wheelchair they could not help others; or a child with hearing difficulties as 'a bit stupid' because they could not hear the teacher and therefore could not learn. However, the fact that the children's active participation was required could be

considered a limitation of the instrument, since they could be inhibited by the presence of an unknown adult or turn the subject of the conversation to their own interests or, even, not knowing how to identify and express their ideas (Yu, Ostrosky, and Fowler 2012). Likewise, this instrument, by not talking about disability in general, but rather assessing attitudes according to different types of disability, allows us to have a more concrete vision of which group in particular has the main barriers to attitudes. Moreover, the value of this instrument is even greater if we take into account the fact that it is aimed at the Infant Education stage, a developmental stage that is little studied in the subject, but essential considering its preventive nature. Thus, the teacher educators will have an instrument to evaluate the attitudes towards diability of kindergarten's students, but also to create programmes, activities or initiatives that provide the improvement of the inclusion in the childhood education's classroom.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the University of Granada (FPU18).

ORCID

Marta Aparicio Puerta http://orcid.org/0000-0001-5112-1409
M. Tamara Polo Sánchez http://orcid.org/0000-0003-1267-6844

References

Abellán, J., R. Ferriz, N. M. Sáez-Gallego, and R. Reina. 2020. "Actitudes hacia el alumnado con discapacidad en educación física: Validación de la EAADEF-EP a la etapa de educación primaria." *Cultura, Ciencia y Deporte* 15 (44): 235–243. doi:10.12800/ccd.v15i44.1465

Aguado, A. L., and M. A. Alcedo. 1999. "La escala de valoración de términos asociados con discapacidad en una muestra de EGB." *Análisis y Modificación de Conducta* 25 (103): 783–806.

Alnahdi, G. H., A. Elhadi, and S. Schwab. 2020. "The Positive Impact of Knowledge and Quality of Contact on University Students' Attitudes Towards People with Intellectual Disability in the Arab World." *Research in Developmental Disabilities* 106: 1–7. doi:10.1016/j.ridd.2020.103765.

Aluede, O., F. Adeleke, D. Omoike, and J. Afen-Akpaida. 2008. "A Review of the Extent, Nature, Characteristics and Effects of Bullying Behavior in School." *Journal of Instructional Psychology* 35 (2): 151–158.

Anastasi, A. 1986. "Envolving Concepts for Test Validation." *Annual Review of Psychology* 3: 1–15. doi:10.1146/annurev.ps.37.020186.000245

Avramidis, E., G. Avgeri, and V. Strogilos. 2018. "Social Participation and Friendship Quality of Students with Special Educational Needs in Regular Greek Primary Schools." *European Journal of Special Needs Education* 33 (2): 221–234. doi:10.1080/08856257.2018.1424779

Banks, J., S. McCoy, and D. Frawley. 2017. "One of the Gang? Peer Relations among Students with Special Educational Needs in Irish Mainstream Primary Schools." *European Journal of Special Needs Education* 22 (4): 1–16. doi:10.1080/08856257.2017.1327397.

Beckett, A. E. 2013. "Non-disabled Children's Ideas about Disability and Disabled People." *British Journal of Sociology of Education* 35: 856–875. doi:10.1080/01425692.2013.800444

Bertram, T., J. Formosinho, C. Gray, C. Pascal, and M. Whalley. 2016. "EECERA Ethical Code for Early Childhood Researchers". *European Early Childhood Education Research Journal*, 24(1): 299–304. doi:10.1080/1350293X.2016.1120533.

Block, M. 1995. "Development and Validation of the Children's Attitudes Toward Integrated Physical Education-Revised (CAIPE-R) Inventory." *Adapted Physical Activity Quarterly* 12 (1): 60–77. doi:10.1123/apaq.12.1.60

Bravo, L. 2013. "Percepciones y opiniones hacia la educación inclusiva del profesorado y de los equipos directivos de los centros educativos de la dirección regional de Cartago en Costa Rica." Unpublished doctoral Thesis, University of Alicante.

Brooker, L., M. G. Naughton, S. Rolfe, and I. Siraj-Blatchford, eds. 2001. "Interviewing Children." In *Doing Early Childhood Research: International Perspectives on Theory and Practice.* Buckingham: Open University Press.

Bullinger, M., J. Alonso, G. Apolone, A. Leplege, M. Sullivan, S. Wood-Dauphinee, B. Gandek, et al. 1998. "Translating Health Status Questionnaires and Evaluating their Quality: The IQOLA Project Approach." *Journal of Clinical Epidemiology* 51 (11): 913–923. doi:10.1016/S0895-4356(98)00082-1.

Cameron, L., A. Rutland, R. Turner, R. Holman-Nicolas, and C. Powell. 2011. "Changing Attitudes with a Little Imagination: Imagined Contact Effects on Young ChildreńS Intergroup Bias." *Anales de Psicología* 27 (3): 708–717.

Carvajal, A., C. Centeno, R. Watson, M. Martínez, and A. Sanz Rubiales. 2011. "¿Cómovalidar un instrumento de medida de la salud?" *Anales del SistemaSanitario de Navarra* 34 (1): 63–72.

Costello, A. B., and J. Osborne. 2005. "Best Practices in Exploratory Factor Analysis: Four Recommendations for Getting the Most from Your Analysis." *Practical Assessment Research & Evaluation* 10 (7): 1–9. doi:10.7275/jyj1-4868.

D'Agostino, S. R., and S. N. Douglas. 2020. "Early Childhood Educators' Perceptions of Inclusion for Children with Autism Spectrum Disorder." *Early Childhood Education Journal* 49: 725–737. doi:10.1007/s10643-020-01108-7

de Boer, A., S. J. Pijl, A. Minnaert, and W. Post. 2014. "Evaluating the Effectiveness of an Intervention Program to Influence Attitudes of Students Towards Peers with Disabilities." *Journal of Autism and Developmental Disorders* 44: 572–583. doi:10.1007/s10803-013-1908-6

Dias, P. C., C. Mamas, and R. Gomes. 2020. "Attitudes of Students Towards Peers with Special Educational Needs in Mainstream Portuguese Schools." *European Journal of Special Needs Education* 35 (5): 636–647. doi:10.1080/08856257.2020.1743410

Dimitrova, D., and N. Chichevska. 2018. "Preschool Children: Attitudes Toward Children with Disabilities". Paper presented at the IX international scientific conference "Improving the Quality of Life of Children and Youth", Harkany, Hungary.

Doverborg, E., and I. Pramling Samuelsson. 2003. *Understanding Childrens' Thinking: Child Interview as a Pedagogical Tool.* København: Hans Reitzel.

Dunham, Y., E. Chen, and M. R. Banaji. 2013. "Two Signatures of Implicit Intergroup Attitudes: Developmental Invariance and Early Enculturation." *Psychological Science* 24 (6): 860–868. doi:10.1177/0956797612463081

Einarsdóttir, J. 2007. "Research with Children: Methodological and Ethical Challenges." *European Early Childhood Education Research Journal* 15 (2): 197–211. doi:10.1080/13502930701321477

Favazza, P. C., and S. L. Odom. 1996. "Use of the Acceptance Scale to Measure Attitudes of Kindergarten-Age Children." *Journal of Early Intervention* 20: 232–249. doi:10.1177/105381519602000307

Fernández-Castillo, A. 2020. "Early Childhood Social Competence Scale (EC-SCS): Factor Structure and Psychometric Properties." *Sustainability* 12 (15): 6262. https://doi.org/10.3390/su12156262.

Findler, L., N. Vilchinsky, and S. Werner. 2007. "The Multidimensional Attitudes Scale Towards Persons with Disabilities (MAS): Construction and Validation." *Rehabilitation Counseling Bulletin* 50 (3): 166–176. doi:10.1177/00343552070500030401

Flórez, M.Á., A.L. Aguado, and M.Á. Alcedo. 2009. "A Review and Analysis of Programmes Promoting Changes in Attitudes Towards People with Disabilities". *Annuary of Clinical and Health Psychology* 5: 81–94.

Frese, E., and J. Yun. 2007. "Effects of Disability Awareness on General Acceptance, Acceptance of Inclusive Physical Education, and Knowledge of Secondary Level Students in Physical Education". *Research Quarterly for Exercise and Sport*, 78(1), 98.

García-Fernández, J. M., C.J. Inglés, M. Vicent, C. Gonzálvez, and C. Mañas. 2013. "Actitudes hacia la discapacidad en el ámbitoeducativo a través de SSCI (2000-2011). Análisis temático y bibliométrico". *Electronic Journal of Research in Educational Psychology*, 11(1): 139–166.

George, D., and P. Mallery. 1995. *SPSS/PC+ Step by Step: A Simple Guide and Reference*. Marceline: Wadsworth Publishing Company.

Gómez, J., and M. Hidalgo. 2009. "La validez en los tests, escalas y cuestionarios". *La sociología en los escenarios*, 8: 1–14.

Hacıibrahimoğlu, B. Y., and A. Ustaoğlu. 2020. "The Acceptance of Turkish Kindergarten Children Toward Children with Disabilities." *European Early Childhood Education Research Journal* 28 (3): 391–412. doi:10.1080/1350293X.2020.1755497

Huber, C., A. Gerullis, M. Gebhardt, and S. Schwab. 2018. "The Impact of Social Referencing on Social Acceptance of Children with Disabilities and Migrant Background: An Experimental Study in Primary School Settings." *European Journal of Special Needs Education* 33 (2): 269–285. doi:10.1080/08856257.2018.1424778

Landeta, J. 2002. *El método Delphi*. Barcelona: Ariel.

Latorre, C. and M. Liesa. 2016. "La inclusión social de personas con diversidad funcional en una experiencia de vida independiente". *Revista de educación inclusiva*, 9(2): 171–185.

Nowicki, E. A. 2006. "A Cross-sectional Multivariate Analysis of Children's Attitudes Towards Disabilities." *Journal of Intellectual Disability Research* 50 (5): 335–348. doi:10.1111/j.1365-2788.2005.00781.x

Nowicki, E. A., and R. Sandieson. 2002. "A Meta-analysis of School-age Children's Attitudes Towards Persons with Physical or Intellectual Disabilities." *International Journal of Disability, Development and Education* 49: 243–265. doi:10.1080/1034912022000007270

Oviedo, H. and A. Campos-Arias. 2005. "Aproximación al uso del coeficiente de Cronbach". *Revista Colombiana de Psiquiatría*, 34 (4): 572–580.

Özyürek, M. 2006. *Changing Attitudes Towards the Disability*. Kök Publishing.

Petry, K. 2018. "The Relationship between Class Attitudes toward Peers with a Disability and Peer Acceptance, Friendships, and Peer Interactions of Students with a Disability in Regular Secondary Schools." *European Journal of Special Needs Education* 33: 254–268. doi:10.1080/08856257.2018.1424782

Pivarč, J. 2020. "Attitudes of Czech Primary School Pupils towards People with Intellectual Disabilities: The Role of Experience and Participant Demographics." *EducationalStudies* 48: 185–204. doi:10.1080/03055698.2020.1746637.

Polit, D., and B. Hungler. 1999. *Nursing Research: Principles and Methods*. Philadelphia, PA: JB Lippincott and Co.

Polo, M. T., H. Chacón-López, M. J. C. Caurcel, and B. Z. Valenzuela. 2020. "Attitudes towards Persons with Disabilities by Educational Science Students: Importance of Contact, its Frequency and the Type of Disability." *International Journal of Disability, Development and Education* 68 (5): 617–626. doi:10.1080/1034912X.2020.1716960

Polo, M. T., C. Fernández, and M. Fernández. 2018. "The Attitudes of Different Partners Involved in Higher Education Towards Students with Disabilities." *International Journal of Disability, Development and Education* 65 (4): 442–458. doi:10.1080/1034912X.2017.1406066

Ramos, R., A. I. Giménez, A. Muñoz-Addell, and E. Lapaz. 2006. *Cuestionario para la evaluación de autoestima en educación primaria*. Madrid: Tea Ediciones.

Reis, H., A. Silva, B. Simões, J. Moreira, P. Dias, and M. Dixe. 2020. "Preschool Children's Attitudes towards their Peers with Special Needs". *International Journal of* Disability, Development and Education 69 (6): 1963–1973. doi:10.1080/1034912X.2020.183407.

Rosenbaum, M. E. 1986. "The Repulsion Hypothesis: On the Nondevelopment of Relationships." *Journal of Personality and Social Psychology* 51 (6): 1156–1166.

Schwab, S. 2018. *Attitudes towards Inclusive Schooling. A Study on Students', Teachers' and Parents' Attitudes*. Münster: Waxmann.

Szumski, G., and M. Karwowski. 2015. "Emotional and Social Integration and the Big-fish-little-pond Effect among Students with and without Disabilities." *Learning and Individual Differences* 43: 63–74. doi:10.1016/j.lindif.2015.08.037

Szumski, G., J. Smogorzewska, and P. Grygiel. 2020. "Attitudes of Students toward People with Disabilities, Moral Identity and Inclusive Education – A Two-Level Analysis." *Research in Developmental Disabilities* 102: 1–12. doi:10.1016/j.ridd.2020.103685

Taheri, A., A. Perry, and P. Minnes. 2016. "Examining the Social Participation of Children and Adolescents with Intellectual Disabilities and Autism Spectrum Disorder in Relation to Peers." *Journal of Intellectual Disability Research* 60: 435–443. doi:10.1111/jir.12289

Tekin, D., S. Ata, and S. Kaya. 2020. "Acceptance in Early Childhood: A Study from Turkish Children." *International Journal of Early Childhood Special Education* 12 (1): 20–27. doi:10.20489/intjecse.713680

Ubillos, S., D. Páez, and S. Mayordomo. 2004. "Actitudes: definición y medición. Componentes de la actitud. Modelo de acción razonada y acción planificada". In. *Psicología social, cultura y educación*, edited by I. Fernández-Sedano, S. Ubillos, E. Zubieta, and D. Páez, 301–326. Madrid: Pearson Educación.

Verdugo, M. A., C. Jenaro, and B. Arias. 2002. "Actitudes sociales y profesionales hacia las personas con discapacidad: Estrategias de evaluación e intervención [Social and professional attitudes towards persons with disability: Strategies of evaluation and intervention]." In *Personas con discapacidad. Perspectivas psicopedagógicas y rehabilitadoras*, edited by M. Verdugo, 79–135. Siglo XXI Editores.

Wang, L., and J. Qi. 2020. "Effect of Student-related Factors on Their Attitudes towards Peers with Disabilities in Physical Education: Evidence from Elementary Schools in China." *Asia Pacific Journal of Education* 40 (2): 143–153. doi:10.1080/02188791.2019.1692781

Werner, S., H. Peretz, and D. Roth. 2015. "Israeli Children's Attitudes toward Children with and without Disabilities." *Early Childhood Research Quarterly* 33: 98–107. doi:10.1016/j.ecresq.2015.07.003.

Yu, S., M. Ostrosky, and S. Fowler. 2012. "Measuring Young children's Attitudes toward Peers with Disabilities: Highlights from the Research." *Topics in Early Childhood Special Education* 32 (3): 132–142. doi:10.1177/0271121412453175