



Article

Translation and Validation of the Attitudes Towards Inclusion of Students with Disabilities in Physical Education Questionnaire (AISDPE) and the Basic Empathy Scale (BES) in Basque

Jurgi Olasagasti-Ibargoiien ^{1,*} , Naroa Uria-Olaizola ² and Olatz Zabala-Domínguez ¹

¹ Department of Physical Activity and Sports, Faculty of Education and Sport, University of Deusto, 48007 Bilbao, Spain; olatz.zabala@deusto.es

² Department of Education, Faculty of Education and Sport, University of Deusto, 48007 Bilbao, Spain; naroa.uria@deusto.es

* Correspondence: jurgi.olasagasti@deusto.es; Tel.: +34-943-32-66-00

Abstract

Inclusive education is currently a central priority within the Basque educational system, where the right to education is understood as a fundamental right that must be guaranteed in inclusive environments fostering social interaction among all members of the school community. Attitudes towards inclusion are a key factor for ensuring the participation of students with disabilities, and empathy has been identified as one of the main capacities supporting inclusive practices. The aim of this study was to translate to Basque, culturally adapt, and validate the Attitudes towards Inclusion of Students with Disabilities in Physical Education Questionnaire (AISDPE) and the Basic Empathy Scale (BES). A validation and reliability study was conducted with 151 students enrolled in compulsory secondary education at a public school in Gipuzkoa. Confirmatory factor analysis was applied to assess construct validity. Reliability was examined using Cronbach's alpha and omega coefficients for each dimension of both questionnaires. Results demonstrated satisfactory reliability for both instruments (α and $\omega > 0.75$), supporting their applicability in Basque. These findings contribute to the availability of validated tools to assess attitudes towards inclusion and empathy, thereby facilitating future research on inclusive education in the Basque context.

Keywords: inclusion; disability; attitude; validation; empathy; secondary education



Academic Editor: Jennifer R. Tomasone

Received: 25 September 2025

Revised: 27 November 2025

Accepted: 15 December 2025

Published: 19 December 2025

Copyright: © 2025 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution \(CC BY\)](https://creativecommons.org/licenses/by/4.0/) license.

1. Introduction

Education is recognized as a fundamental human right, as established in Article 26 of the Universal Declaration of Human Rights [1]. In the 1970s and 1980s, students who did not meet educational objectives were often segregated into special education centers. Later, the concept of special educational needs emerged, promoting the integration of students with disabilities into mainstream classrooms. Despite these advances, the integration model proved insufficient, leading to the development of inclusive schools as a new stage in the evolution of inclusive education [2–4].

Inclusive education, defined as the process of identifying and responding to the diverse needs of all students through participation in learning, culture, and community, and reducing exclusion within and from education [5], is a fundamental right recognized internationally [6]. Nevertheless, students with disabilities often face barriers and challenges in accessing and fully participating in education systems [7,8].

According to the Basque Government's Education Framework Plan, "An inclusive school not only ensures that all students have access to quality education but also seeks to enable every student to achieve the highest possible level of life competences" [9]. An effective school is therefore considered to be an inclusive school [10], and inclusive education is understood as a shared responsibility to foster the potential of every student [11]. According to the decree of the Basque Government, creating schools as genuinely inclusive spaces requires the removal of obstacles and barriers that affect the quality of each student's educational process, with particular attention paid to those who are most vulnerable [12]. Importantly, any educational plan that aims at inclusion must also consider social relationships [13]. Positive social interactions can transform attitudes and perceptions towards students with disabilities, both in early childhood education [14] and in compulsory education [15]. Direct or indirect contact with people with disabilities, as well as access to accurate information about different disabilities, contributes to more positive attitudes [16].

Attitudes are understood as actions influenced by emotions in specific social situations [17,18]. Societal attitudes towards disability may range from rejection and stigmatization to acceptance and respect, significantly affecting the quality of life, inclusion, and participation of people with disabilities. Positive attitudes foster interaction, integration, and empowerment, and are constantly evolving. During childhood and early adolescence, attitudes are developed and consolidated, making this period particularly relevant for interventions aimed at shaping and improving them [19,20].

Numerous validated instruments have been developed to assess students' attitudes toward disability in school settings, including Chedoke-McMaster Attitudes towards Children with Handicaps Scale (CATCH) [21] or The Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS) [22]. These tools have been widely used across different cultural contexts, demonstrating that both cognitive and affective components of attitudes play a critical role in shaping inclusive behavior.

Within attitudes towards disability, empathy plays a central role. Empathy is defined as the ability to understand and share another person's feelings and is crucial for social interactions and the development of positive attitudes towards diversity [23]. Other authors differentiate between cognitive empathy, understood as recognizing another person's experiences, and affective empathy, understood as indirectly experiencing their emotional states [24]. Several studies have shown that empathy is associated with higher levels of acceptance, understanding, and support for people with disabilities [25].

Similarly, research on empathy in inclusive education highlights its contribution to prosocial behaviors and acceptance of peers with disabilities, with instruments such as the Interpersonal Reactivity Index (IRI) [26] and the Basic Empathy Scale (BES) being frequently employed internationally [27]. Incorporating these perspectives situates the Basque adaptation of the AISDPE and BES within a broader effort to ensure the availability of valid and contextually appropriate tools for diverse linguistic communities.

In this context, although both the AISDPE (the Spanish adaptation of the ATDQ) and the BES (available in Spanish as a translation of the original English version) have been validated in Spanish languages, no Basque-language versions existed prior to this study. Therefore, this research not only examines the psychometric properties of the Basque versions but also undertakes a full translation and cultural adaptation process to ensure linguistic and conceptual equivalence.

The AISDPE and BES were selected for this study because they provide complementary insights into inclusion. The AISDPE specifically measures students' attitudes and behavioral readiness to interact with peers with disabilities in physical education settings [28], while the BES assesses both cognitive and affective empathy [29]. By analyzing both instruments together, this study captures not only how students perceive and behave

toward peers with disabilities but also their capacity to understand and share the emotions of others. This dual approach offers a more comprehensive understanding of the social and psychological factors that facilitate inclusive educational environments.

Given this gap, the present study explores whether both instruments can be effectively adapted for Basque-speaking students, whether their original factorial structures are replicated in the Basque context, and whether the translated versions demonstrate adequate internal consistency.

The aim of this study is to translate and culturally adapt the AISDPE [28] and the BES [30] into Basque (Euskara) and to analyze their validity and reliability among secondary education students. Haga clic o pulse aquí para escribir texto. Haga clic o pulse aquí para escribir texto.

2. Materials and Methods

2.1. Participants

A cross-sectional study was conducted with a convenience sample of 151 students enrolled in the first year of compulsory secondary education at a single large public school in the Basque Country, Spain. The school follows the Model D curriculum, in which Basque (Euskera) is the main language of instruction.

Participants were aged 12 to 14 years, and the sample comprised 81 girls (53.6%) and 70 boys (46.4%). Among them, 10 students had repeated at least one academic year.

All students from the first year of secondary education at the school were invited to participate. The school had eight parallel classes (“lines”) in the first year, reflecting its large student body, and students from all eight classes participated in the study, providing a diverse and representative sample of the entire first-year cohort.

2.2. Instruments

The Attitudes towards Inclusion of Students with Disabilities in Physical Education Questionnaire (AISDPE) is designed to examine students’ attitudes toward the inclusion of peers with disabilities in physical education settings and to measure potential changes in these attitudes over time [28]. It has been previously applied in secondary education contexts [31].

The AISDPE is a modified version of the Attitudes towards Disability Questionnaire (ATDQ) [32] and consists of 17 items assessing students’ predisposition to interact with people with disabilities (10 items) and their cognitive perceptions of disability (7 items).

- Behavioral readiness to interact with children with disabilities reflects students’ willingness or reluctance to engage with peers with disabilities in everyday situations, such as feeling uncertain about how to communicate or avoiding participation in shared activities. An example of an item is: “I will not participate in physical activities or sports with people with disabilities.”
- Cognitive perception of children with disabilities reflects stereotypical beliefs about children with disabilities—for example, the idea that they are constantly in need of help, unable to enjoy life, or inherently sad. An example of an item in this subscale is: “If I were blind, I would not be able to do the things I regularly do.”

The Basic Empathy Scale (BES) has proven to be a useful instrument for measuring empathy in adolescents and has applications in educational evaluation [33]. It consists of 20 items that measure two complementary dimensions 9 items assessing cognitive empathy and 11 items assessing affective empathy [29].

- Affective empathy is defined as the capacity to experience a congruent emotional response with another person—that is, to share or resonate with their emotional

experience. An example of an item is: “I can understand my friend’s happiness when they do well at something.”

- Cognitive empathy is defined as the capacity to understand rationally the emotions of another person, recognizing and interpreting their feelings without necessarily sharing the same emotional state. An example of an item is: “My friend’s emotions don’t affect me much.”

Each item of both questionnaires is rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), and in the present study we used the same response scale as in the original versions of both instruments.

Both instruments have been previously validated in Spanish-speaking contexts, and their psychometric properties have been documented in previous studies [28,30], supporting their reliability and validity prior to adaptation to Basque.

2.3. Data Collection

The analyses were conducted on data from 151 students enrolled in the first year of compulsory secondary education at a large public school in Gipuzkoa, Spain. The participants were aged 12–14 years, including 81 girls (53.6%) and 70 boys (46.4%), of whom 10 had repeated at least one academic year. Students came from all eight parallel classes in the first year, providing a broad representation of the cohort.

Data were collected through an online questionnaire (Google Forms) administered during regular school hours. The questionnaire included two instruments: the Attitudes towards Inclusion of Students with Disabilities in Physical Education Questionnaire (AISDPE) and the Basic Empathy Scale (BES).

To ensure confidentiality and anonymity, each participant was assigned a unique identification code that replaced personal identifiers throughout data collection and analysis. Students completed the questionnaire individually in their classrooms to minimize external influence on their responses. Participation in the study was entirely voluntary, and students could choose not to answer any item or withdraw at any time without consequence.

This study did not include a separate pilot testing phase prior to the validation. Instead, the verification of item comprehension was integrated into the validation process itself. During the administration, the research team was present in the classroom to observe potential difficulties, clarify any doubts, and, when necessary, rephrase or probe the meaning of certain items to confirm their understanding.

The school was intentionally selected because of its commitment to inclusive education and its ongoing efforts to implement awareness-raising activities on inclusion. This provided a supportive environment for conducting the study and encouraged participant engagement.

All participants and their parents or legal guardians were informed about the objectives and procedures of the study, and informed consent was obtained prior to participation, in accordance with the ethical approval granted by the Ethics Committee of the University of Deusto.

2.4. Ethical Considerations

This study was reviewed and approved by the Ethics Committee of the University of Deusto (approval code: ETK-24/22-23). It complied with European Union data protection regulations (EU 2016/679) [34], including (i) informed consent procedures, (ii) access to personal data, (iii) use of data for public interest purposes, and (iv) the responsibilities of the researchers in charge of the project.

2.5. Translation and Validation Procedure

The adaptation of a questionnaire from Spanish into Basque (Euskara) followed several steps to ensure comprehensibility [35], relevance, and cultural appropriateness as has been done in other languages [36]. First, a forward translation was conducted in which all items from both questionnaires were independently translated and reconciled into a single version. Next, a back translation was performed by an independent translator who had no prior knowledge of the original questionnaire. The back-translated version was compared with the original to identify potential differences or misunderstandings, resulting in a final reconciled version. No modifications were made to the content or number of items beyond linguistic adaptation. The process focused solely on translation and cultural adaptation to ensure clarity and comprehension for Basque-speaking students. Finally, statistical analyses were performed to determine the reliability and validity of the adapted questionnaire. All steps were carefully documented, including decisions taken and the rationale for each modification. This rigorous process ensured that the Basque adaptation preserved the integrity of the original content while remaining appropriate and comprehensible for Basque-speaking students.

2.6. Statistical Analysis

Data analyses were conducted using the Structural Equation Modeling module in JAMOOVI (version 2.3 for Windows). To assess construct validity, confirmatory factor analyses (CFA) were performed [37,38], and the models were represented using path diagrams [39]. CFA was conducted with the maximum likelihood estimation method [40]. The model fit indices evaluated included the Tucker–Lewis Index (TLI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA) [39]. Reliability was examined using Cronbach’s alpha and McDonald’s omega coefficients for each dimension of both instruments. Internal consistency was considered acceptable when $\alpha \geq 0.70$ and $\omega \geq 0.80$.

3. Results

Considering the characteristics of this sample, the following results describe the psychometric properties (validity and reliability) of the adapted Basque versions of the AISDPE and BES questionnaires.

3.1. Basic Empathy Scale (BES)

In the initial confirmatory factor analysis (CFA) of the BES, several items showed low factor loadings (<0.45). Within the affective dimension, items 4 (I am scared by some characters in horror movies), 8 (I do not care about other people’s feelings), and 18 (My friends’ misfortunes do not affect me) presented low values. Within the cognitive dimension, item 6 (I find it difficult to realize when my friends are scared) and item 20 (I find it difficult to realize when my friends are happy) also presented low loadings, which may be explained by the added complexity of wording that affected comprehension.

Following established recommendations for cross-cultural validation, these items were removed from the final model because they did not contribute adequately to the intended latent constructs and generated comprehension issues among participants. Their removal improved the overall model fit, factorial stability, and internal consistency of the Basque version of the BES.

The goodness-of-fit indices obtained in the CFA of the BES were satisfactory, with a Tucker–Lewis Index (TLI) = 0.917, Comparative Fit Index (CFI) = 0.931, and a Root Mean Square Error of Approximation (RMSEA) = 0.067.

Internal consistency results were also high. For cognitive empathy dimension 1 (E_D1_), Cronbach’s $\alpha = 0.777$ and McDonald’s $\omega = 0.754$. For affective empathy dimension 2 (E_D2_), Cronbach’s $\alpha = 0.871$ and $\omega = 0.873$ (see Table 1).

Table 1. Psychometric summary for Basque versions of BES (¹ N = 151).

Instrument	Dimension	No. Items	Cronbach’s α	McDonald’s ω	² CFA Fit Indices (TLI/CFI/RMSEA)	³ Deleted Items/Notes
BES	Cognitive empathy	7	0.777	0.754	0.917/0.931/0.067	Items 6, 20
BES	Affective empathy	8	0.871	0.873	0.917/0.931/0.067	Items 4, 8, 18; items 3 & 14 grouped

¹ N = 151 first-year secondary students, Gipuzkoa. ² CFA = Confirmatory Factor Analysis; TLI = Tucker–Lewis Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation. ³ “Deleted items/notes” includes items with low factor loadings (<0.45) or items reassigned due to high modification indices.

During the model adjustment process, items 3 and 14 were grouped together. This finding suggests that both items may be assessing very similar aspects of the construct, with joy being the common underlying factor (Figure 1).

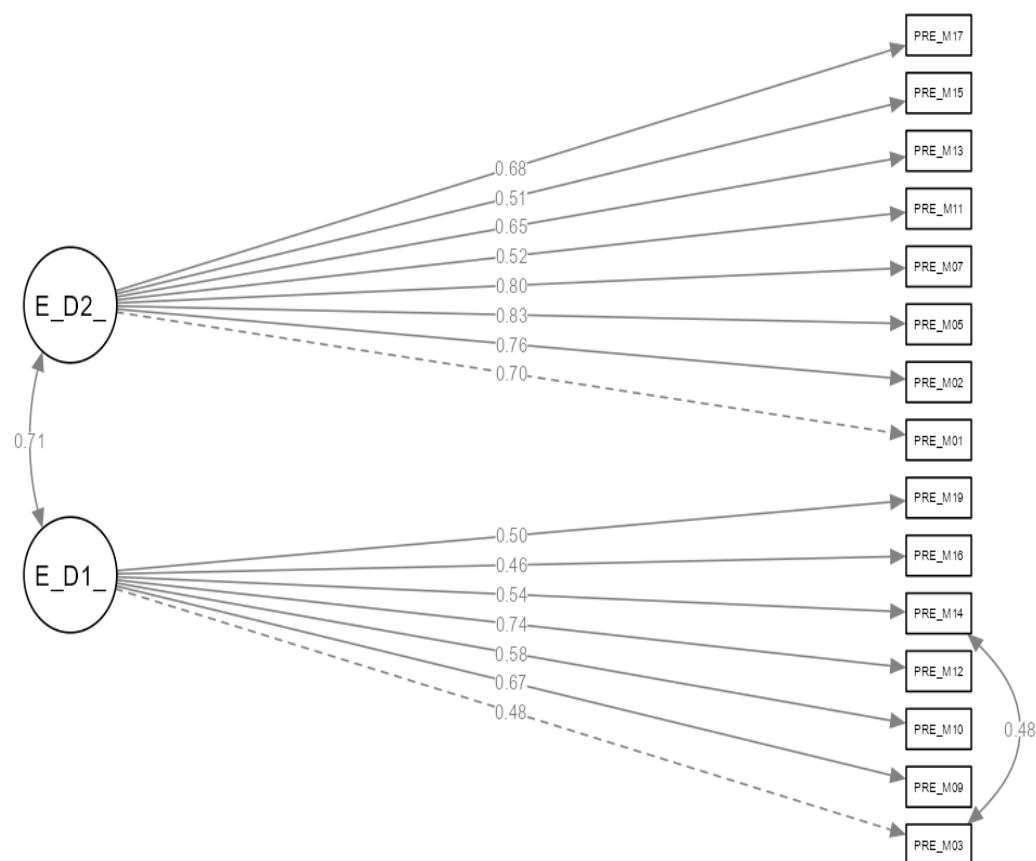


Figure 1. Path diagram of the Basic Empathy Scale (BES).

3.2. Attitudes Towards Inclusion of Students with Disabilities in Physical Education (AISDPE)

In the initial CFA of the AISDPE, several items presented low factor loadings (<0.40). In the cognitive dimension, item 4 (Blind people must always receive help from a guide) showed weak loading. Within the predisposition dimension, items 8 (If I had a family member with a disability, I would avoid talking about it with others) and 12 (If I had a disability, my lifestyle would change completely) also presented low values.

Given their limited contribution to the underlying constructs and the interpretation difficulties observed during data collection, these items were removed from the final Basque

version. Eliminating them enhanced the factorial structure and strengthened the construct validity of the adapted AISDPE, in line with methodological guidelines for questionnaire adaptation and validation.

Additionally, item 16 (People with disabilities should practice specific and independent sports) was reassigned to a different dimension, as suggested by a high modification index (25.517).

The CFA model fit indices were satisfactory: TLI = 0.896, CFI = 0.913, RMSEA = 0.072. Regarding internal consistency, Cronbach’s α and McDonald’s ω varied across dimensions. For predisposition (Dimension 1), $\alpha = 0.820$ and $\omega = 0.826$. For cognitive attitudes (Dimension 2), $\alpha = 0.760$ and $\omega = 0.758$ (see Table 2).

Table 2. Psychometric summary for Basque versions of AISDPE (N = 151¹).

Instrument	Dimension	No. Items	Cronbach’s α	McDonald’s ω	² CFA Fit Indices (TLI/CFI/RMSEA)	³ Deleted Items/Notes
AISDPE	Predisposition	7	0.820	0.826	0.896/0.913/0.072	Items 8, 12
AISDPE	Cognitive perception	7	0.760	0.758	0.896/0.913/0.072	Item 4; item 16 reassigned

¹ N = 151 first-year secondary students, Gipuzkoa. ² CFA = Confirmatory Factor Analysis; TLI = Tucker–Lewis Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation. ³ “Deleted items/notes” includes items with low factor loadings (<0.40) or items reassigned due to high modification indices.

Factor loadings for each item were higher than 1 for both Dimension 1 (J_D1_) and Dimension 2 (J_D2_). All items loaded significantly on their intended factor. Standardized factor loadings ranged from 0.51 to 0.81 for Dimension 1 and from 0.41 to 0.70 for Dimension 2 (Figure 2).

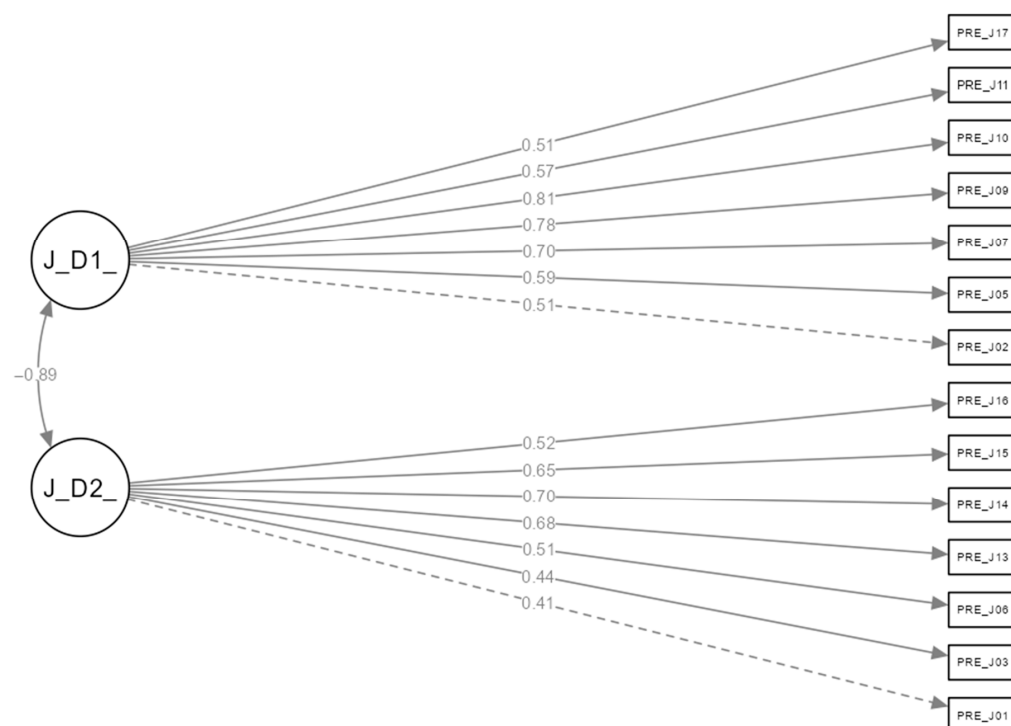


Figure 2. Path diagram of the Attitudes towards Inclusion of Students with Disabilities in Physical Education Questionnaire (AISDPE).

4. Discussion

The present study aimed to adapt and analyze the reliability of the Attitudes towards Inclusion of Students with Disabilities in Physical Education Questionnaire (AISDPE)

and the Basic Empathy Scale (BES) into the Basque language (Euskara). The findings indicate that both questionnaires demonstrated adequate psychometric properties in this new version, supporting their usefulness for assessing attitudes and empathy towards people with disabilities in the Basque educational context.

4.1. Validity and Reliability of the Basic Empathy Scale (BES)

Confirmatory factor analyses (CFA) showed that the factor structure of the BES in Basque was consistent with the original version [31], although some items presented low factor loadings (<0.45), particularly within the affective dimension. This pattern suggests that their content does not adequately represent the theoretical constructs of affective and cognitive empathy as defined by Jolliffe and Farrington [34]. Affective empathy refers to the tendency to share and resonate with other people's emotional states; however, item 4 (I am scared by some characters in horror movies) mainly captures individual fearfulness in response to fictional stimuli rather than emotional sharing with another person. Items 8 (I do not care about other people's feelings) and 18 (My friends' misfortunes do not affect me) are very extreme statements of emotional insensitivity, which in community adolescent samples are likely to elicit strong social desirability and floor effects, tapping a near callous–unemotional pole rather than the usual continuum of affective empathy and therefore contributing little to discrimination within the normal range.

From a cognitive perspective, empathy is conceptualized as the capacity to understand others' internal states, adopt their perspective, and recognize their emotions. In contrast, items 6 (I find it difficult to realize when my friends are scared) and 20 (I find it difficult to realize when my friends are happy) focus narrowly on difficulties detecting specific emotions in friends and partly overlap with emotion-recognition skills and peer-related social competence. In addition, their metacognitive wording ("find it difficult to realize") may be demanding for younger adolescents. Consistent with these theoretical considerations, these items showed low factor loadings and were removed, underlining the need to review and reformulate them to better capture the target constructs while enhancing clarity and cultural and developmental appropriateness [31].

Despite these issues, the CFA fit indices for the BES were satisfactory (TLI = 0.917, CFI = 0.931, RMSEA = 0.067) falling within the commonly accepted thresholds for measurement models in social sciences [41,42], and the internal consistency of both cognitive and affective dimensions was adequate (α and $\omega > 0.75$). These results support the reliability and validity of the adapted BES, while suggesting the need for targeted improvements in specific items.

4.2. Validity and Reliability of the AISDPE

Attitudes toward inclusion are conceptualized in the AISDPE as beliefs about the abilities and characteristics of people with disabilities (cognitive component) and as a predisposition to interact with them, help them, and share activities with them (behavioral component). In the AISDPE, items 4, 8, and 12 also posed interpretative challenges, as agreement or disagreement with the statements could be perceived as either positive or negative. For example, item 4 (Blind people must always receive help from a guide) may be interpreted as recognizing a right, but also as reinforcing dependency and lack of autonomy. The same applies to items 8 and 12, agreement can be interpreted either as the recognition of a right (for example, to receive help or to have one's own resources) or as a paternalistic stance that reinforces dependence and separation, whereas disagreement can express either a defense of autonomy or a lack of support. This double valence breaks the evaluative unidirectionality required of attitude items, generates heterogeneous response patterns, and explains their low factor loadings. Similarly, item 16 (People with disabilities

should practice specific and independent sports) may reflect limited awareness of inclusive sports opportunities [43] and an ambiguous perspective on inclusion [44], highlighting the need to differentiate between inclusive sports, adapted sports, and inclusion through sport.

Nevertheless, the CFA results showed satisfactory fit indices (TLI = 0.896, CFI = 0.913, RMSEA = 0.072) [28]. The internal consistency of both dimensions (predisposition and cognitive perception) was also adequate (α and $\omega > 0.75$), supporting the reliability of the AISDPE for assessing attitudes towards the inclusion of students with disabilities in the Basque educational context.

4.3. Implications for Inclusive Education

The adaptation of these questionnaires into Basque represents an important step forward in evaluating and improving attitudes towards disability and in fostering empathy in Basque schools. The results underscore the importance of employing valid and reliable instruments to assess these constructs, thereby facilitating the development of more effective and diversity-sensitive educational strategies adapted to students' diverse contexts [45,46].

The fact that some items of the BES and AISDPE presented interpretative difficulties further underlines the importance of considering cultural and linguistic differences when adapting psychometric instruments. Adaptation should not only involve literal translation but also cultural contextualization to ensure clarity, relevance, and comprehension [36].

Although empathy is a general socio-emotional construct and not discipline-specific, assessing it in the context of inclusive physical education is particularly relevant [47]. Physical education provides unique opportunities for social interaction, cooperation, and shared experiences among students with and without disabilities [48]. Validating the BES and AISDPE in this setting allows educators to understand how attitudes and empathic skills manifest in inclusive PE contexts, where inclusion is actively practiced, and to design interventions that promote prosocial behavior, understanding, and collaboration across all school disciplines.

4.4. Limitations

Although the results are promising, several limitations should be noted. First, the sample was relatively small and limited to a single school in Gipuzkoa, which may restrict the generalizability of the findings. Future studies should involve larger and more diverse samples to confirm these results.

Second, the need to review and possibly reformulate certain items of the BES and AISDPE remains. The use of focus groups or cognitive interviews may provide valuable insights for refining problematic items and improving the validity of the instruments. Additionally, no independent pilot study was conducted prior to the validation; instead, comprehension of the items was verified within the main validation process itself.

5. Conclusions

The Basque-language versions of the AISDPE and BES proved to be valid and reliable instruments for evaluating attitudes towards the inclusion of students with disabilities and empathy in the Basque educational context. These tools can play a crucial role in promoting inclusive education and fostering positive attitudes towards diversity.

The adaptation and validation of these questionnaires represent an important advance towards building a more inclusive and equitable educational system, aligned with the objectives of the Basque Government's Education Framework Plan and UNESCO's principles on inclusive education.

Future research should incorporate a broader set of demographic variables—such as linguistic background, cultural identity, or personal experience with disability—to examine

how these factors may influence empathy and attitudes toward inclusion. Expanding the diversity of samples and analyzing these variables would help to deepen the understanding of these constructs and strengthen the generalizability of the findings.

Author Contributions: Conceptualization, J.O.-I. and N.U.-O.; methodology, O.Z.-D.; software, O.Z.-D.; validation, J.O.-I., N.U.-O. and O.Z.-D.; formal analysis, J.O.-I.; investigation, J.O.-I. and N.U.-O.; resources, O.Z.-D.; data curation, J.O.-I.; writing—original draft preparation, J.O.-I. and N.U.-O.; writing—review and editing, J.O.-I.; visualization, N.U.-O.; supervision, O.Z.-D.; project administration, J.O.-I. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study, part of the project “Sentitu,” was conducted in accordance with the Declaration of Helsinki and approved by the Ethics Committee of the University of Deusto (approval code: ETK-24/22-23, date of approval: 3 April 2023).

Informed Consent Statement: Informed consent was obtained from all participants involved in the study, as well as from their parents or legal guardians.

Data Availability Statement: Data are contained within the article.

Acknowledgments: The authors would like to acknowledge the support provided by the school staff in facilitating data collection. Additionally, during the preparation of this manuscript, the authors used ChatGPT 5.2 to assist with the translation of the article to English. The authors reviewed and edited all outputs and take full responsibility for the content of this publication.

Conflicts of Interest: The authors declare no conflicts of interest.

Disability Language/Terminology Positionality Statement: The authors of this study have chosen to use person-first language throughout the manuscript (e.g., “students with disabilities”) to emphasize the intrinsic worth and dignity of all individuals. This choice aligns with the social model of disability and the principles of inclusive education promoted by the Basque Government and international guidelines such as UNESCO. We recognize that terminology preferences may vary across cultural and theoretical contexts, but our decision reflects the perspectives of the research team, the educational context of the participants, and the aim of promoting equity, respect, and inclusion. All study participants were treated with dignity and consideration, and their experiences informed the design and interpretation of this research.

Abbreviations

The following abbreviations are used in this manuscript:

AISDPE	Attitudes towards Inclusion of Students with Disabilities in Physical Education
BES	Basic Empathy Scale
ATDQ	Attitudes towards Disability Questionnaire
CFA	Confirmatory Factor Analyses
TLI	Tucker–Lewis index
CFI	Comparative Fit Index
RMSEA	Root Mean Square Error of Approximation

References

1. Rachmayani, A.N. La Declaración Universal de los Derechos Humanos. In *La Censura Maquillada cómo las Leyes Contra el Discurso del Odio “Amenazan la Libertad de Expresión”*; Dykinson, S.L.: Madrid, Spain, 2019; pp. 37–42. [[CrossRef](#)]
2. Cañadas, L.; Zubillaga-Olague, M.; Santos-Calero, E. Actitudes del profesorado de Educación Física hacia la inclusión educativa. *Rev. Electrónica Interuniv. Form. Profr.* **2023**, *26*, 15–28. [[CrossRef](#)]
3. Guasp, J.J. De la integración a la inclusión: Un nuevo modelo educativo. In *25 Años de Integración Escolar en España Tecnología e Inclusión en el Ámbito Educativo, Laboral y Comunitario*; Universidad de La Rioja: Logroño, Spain, 2010.

4. Vásquez Guachisaca, J.L.; Rojas Valdés, G.R. Juegos recreativos para la inclusión de estudiantes con discapacidad física, en las clases de Educación Física. *PODIUM Rev. Cienc. Tecnol. Cult. Física* **2024**, *19*, e1583.
5. UNESCO. *Education for All 2000–2015: Achievements and Challenges*; UNESCO: Paris, France, 2015.
6. Lindsay, G. Educational psychology and the effectiveness of inclusive education/mainstreaming. *Br. J. Educ. Psychol.* **2007**, *77*, 1–24. [[CrossRef](#)]
7. Castillo-Acobo, R.Y.; Quispe, H.; Arias-González, J.L.; Guzmán, C.J.A. Consideraciones de los docentes sobre las barreras de la educación inclusiva. *Rev. Filos.* **2022**, *39*, 587–596.
8. Humphrey, N.; Lewis, S. “Make me normal”: The views and experiences of pupils on the autistic spectrum in mainstream secondary schools. *Autism* **2008**, *12*, 23–46. [[CrossRef](#)] [[PubMed](#)]
9. Departamento de Educación Gobierno Vasco. Plan Marco Para el Desarrollo de la Escuela Inclusiva 2019–2022. 2019. Available online: <https://www.irekia.euskadi.eus/mobile/en/debates/1201-plan-marco-para-desarrollo-una-escuela-inclusiva-2019-2022?stage=presentation> (accessed on 30 June 2021).
10. Ainscow, M. Developing inclusive education systems: What are the levers for change? *J. Educ. Change* **2005**, *6*, 109–124. [[CrossRef](#)]
11. Simón Medina, N.; Abellán López, M.A.; Cisneros De Britto, J. Sinergia colaborativa en aulas inclusivas: Una experiencia de grupos interactivos con alumnado con discapacidad intelectual. *Rev. Investig. Educ.* **2022**, *20*, 91–108. [[CrossRef](#)]
12. Gobierno Vasco D de educación del G. Decreto 78/2024. de Respuesta a la Diversidad en el Marco de un Sistema Educativo Inclusivo, para las Alumnas y Alumnos de los Centros Docentes no Universitarios de la Comunidad Autónoma del País Vasco. 2024; pp. 1–28. Available online: https://www.berrigasteiz.com/monografikoak/aniztasuna_78_2024/78_2024_c.html (accessed on 30 June 2021).
13. Ríos, M. La inclusión en el área de educación Física en España: Análisis de las barreras para la participación y aprendizaje. *Agora Para Educ. Física Deporte* **2009**, 83–114. Available online: <http://dialnet.unirioja.es/servlet/articulo?codigo=2900340&info=resumen&idioma=ENG> (accessed on 30 June 2021).
14. Çelik, S.; Tomris, G. “A chain of interlocking rings”: Preschool teachers’ experiences regarding home-school collaboration with a focus on children with special needs and their parents in inclusive education. *Child Youth Serv. Rev.* **2024**, *163*, 107700. [[CrossRef](#)]
15. Ocete Calvo, C.; Pérez Tejero, J.; Coterón López, J. Propuesta de un programa de intervención educativa para facilitar la inclusión de alumnos con discapacidad en educación física. *Retos* **2015**, *2041*, 140–145. [[CrossRef](#)]
16. Williams, T. Disability sport socialization and identity construction. *Adapt. Phys. Act. Q.* **1994**, *11*, 14–31. [[CrossRef](#)]
17. Triandis, H.C.; Cirac, J.B. *Actitudes y Cambios de Actitudes*; Toray: Barcelona, Spain, 1974.
18. Vignes, C.; Coley, N.; Grandjean, H.; Godeau, E.; Arnaud, C. Measuring children’s attitudes towards peers with disabilities: A review of instruments. *Dev. Med. Child Neurol.* **2008**, *50*, 182–189. [[CrossRef](#)]
19. Jeon, M. Meta-analysis of disability simulation research for elementary students in Korea. *Int. J. Spec. Educ.* **2018**, *33*, 140–151.
20. Lindsay, S.; Edwards, A. A systematic review of disability awareness interventions for children and youth. *Disabil. Rehabil.* **2013**, *35*, 623–646. [[CrossRef](#)] [[PubMed](#)]
21. Armstrong, M.; Morris, C.; Tarrant, M.; Abraham, C.; Horton, M.C. Rasch analysis of the Chedoke–McMaster Attitudes towards Children with Handicaps scale. *Disabil. Rehabil.* **2017**, *39*, 281–290. [[CrossRef](#)] [[PubMed](#)]
22. Findler, L.; Vilchinsky, N.; Werner, S. The Multidimensional Attitudes Scale Toward Persons with Disabilities (MAS) Construction and Validation. *Rehabil. Couns. Bull.* **2007**, *50*, 166–176. [[CrossRef](#)]
23. Eisenberg, N. Critical issues in the study of empathy. In *Empathy and Its Development*; Cambridge Press: Monash, Australia, 1987.
24. Raine, A.; Chen, F.R. The Cognitive, Affective, and Somatic Empathy Scales (CASES) for Children. *J. Clin. Child Adolesc. Psychol.* **2018**, *47*, 24–37. [[CrossRef](#)]
25. Beltrán, V.H.; Coto, V.A.G.; Calvo, L.G.; Arévalo, E.S.; Puerto, J.M.G. Importancia de las actitudes hacia las personas con discapacidad en Educación Infantil y Primaria: Revisión sistemática. *Bordón Rev. Pedagog.* **2023**, *75*, 83–110. [[CrossRef](#)]
26. Davis, M.H. Measuring individual differences in empathy: Evidence for a multidimensional approach. *J. Pers. Soc. Psychol.* **1983**, *44*, 113–126. [[CrossRef](#)]
27. Cabedo-Peris, J.; Martí-Vilar, M.; Merino-Soto, C.; Ortiz-Morán, M. Basic empathy scale: A systematic review and reliability generalization meta-analysis. *Healthcare* **2022**, *10*, 29. [[CrossRef](#)]
28. Reina, R.; Hutzler, Y.; Iniguez-santiago, M.C.; Moreno-murcia, J.A. Attitudes Towards Inclusion of Students with Disabilities in Physical Education Questionnaire (Aisdpe): A Two-Component Scale in Spanish. *Eur. J. Hum. Mov.* **2016**, *36*, 75–87.
29. Jolliffe, D.; Farrington, D.P. Development and validation of the Basic Empathy Scale. *J. Adolesc.* **2006**, *29*, 589–611. [[CrossRef](#)]
30. Sánchez-Pérez, N.; Fuentes, L.J.; Jolliffe, D.; González-Salinas, C. Assessing children’s empathy through a Spanish adaptation of the Basic Empathy Scale: Parent’s and child’s report forms. *Front. Psychol.* **2014**, *5*, 1438.
31. Abellán, J.; Sáez-Gallego, N.M.; Reina, R. Evaluación de las actitudes hacia la discapacidad en Educación Física: Efecto diferencial del sexo, contacto previo y la percepción de habilidad y competencia. *Cuad. Psicol. Deporte* **2018**, *18*, 133–140.
32. Reina, R.; López, V.; Jiménez, M.; García-Calvo, T.; Hutzler, Y. Effects of awareness interventions on children’s attitudes toward peers with a visual impairment. *Int. J. Rehabil. Res.* **2011**, *34*, 243–248. [[CrossRef](#)] [[PubMed](#)]

33. Villadangos, M.; Errasti, J.; Amigo, I.; Jolliffe, D.; García-Cueto, E. Características de la empatía en jóvenes medidas con la adaptación española de la escala de empatía básica. *Psicothema* **2016**, *28*, 323–329. [[CrossRef](#)] [[PubMed](#)]
34. de la Unión Europea, Diario Oficial. REGLAMENTO (UE) 2016/679 DEL PARLAMENTO EUROPEO Y DEL CONSEJO de 27 de Abril de 2016 Relativo a la Protección de las Personas Físicas en lo que. Available online: https://www.grupoacms.net/documentos/doc_0415954f939a61f94ca1a8b6e792ec03.pdf (accessed on 22 March 2025).
35. Bartram, D.; Berberoglu, G.; Grégoire, J.; Hambleton, R.; Muniz, J.; van de Vijver, F. ITC Guidelines for Translating and Adapting Tests (Second Edition). *Int. J. Test.* **2018**, *18*, 101–134.
36. Loureto, G.D.L.; Santos LCde, O.; Castelhana, M.V.C.; Benevides, D.S.; de Lucena, H.H.; Leite, V.S. The Basic Empathy Scale: Evidence of Internal Structure in the Brazilian Context. *Psico-USF* **2022**, *27*, 581–593. [[CrossRef](#)]
37. Herrero, J. El Análisis Factorial Confirmatorio en el estudio de la Estructura y Estabilidad de los Instrumentos de Evaluación: Un ejemplo con el Cuestionario de Autoestima CA-14. *Psychosoc. Interv.* **2010**, *19*, 289–300. [[CrossRef](#)]
38. Lloret-Segura, S.; Ferreres-Traver, A.; Hernández-Baeza, A.; Tomás-Marco, I. El análisis factorial exploratorio de los ítems: Una guía práctica, revisada y actualizada. *An. Psicol.* **2014**, *30*, 1151–1169. [[CrossRef](#)]
39. López-antón, R. Validación preliminar de la escala de autoeficacia estadística en estudiantes de Grado en Medicina españoles: Análisis factorial confirmatorio. *REIRE Rev. D Innovaci I Recer. En Educ.* **2019**, *12*, 1–13.
40. Marsh, H.W.; Shavelson, R. Self-concept: Its multifaceted, hierarchical structure. *Educ. Psychol.* **1985**, *20*, 107–123. [[CrossRef](#)]
41. Hu, L.T.; Bentler, P.M. Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives. *Struct. Equ. Model.* **1999**, *6*, 1–55. [[CrossRef](#)]
42. Hooper, D.; Coughlan, J.; Mullen, M.R. Structural Equation Modelling: Guidelines for Determining Model Fit. *Electron. J. Bus. Res. Methods* **2008**, *6*, 53–60. Available online: www.ejbrm.com (accessed on 22 March 2025).
43. Jaarsma, E.A.; Dekker, R.; Koopmans, S.A.; Dijkstra, P.U.; Geertzen, J.H.B. Barriers to and Facilitators of Sports Participation in People with Visual Impairments. *Adapt. Phys. Act. Q.* **2014**, *31*, 240–264. [[CrossRef](#)] [[PubMed](#)]
44. Valdés, R. ¿Es posible conceptualizar la educación inclusiva? La necesidad de un lenguaje común y situado. *Rev. Investig. En Educ.* **2024**, *22*, 472–487. [[CrossRef](#)]
45. Herbert, B.; Fischer, J.; Klieme, E. How valid are student perceptions of teaching quality across education systems? *Learn. Instr.* **2022**, *82*, 101652. [[CrossRef](#)]
46. Morad, S.; Ragonis, N.; Barak, M. The validity and reliability of a tool for measuring educational innovative thinking competencies. *Teach. Teach. Educ.* **2021**, *97*, 103193. [[CrossRef](#)]
47. Diego, N.-M.; Jandvmsandpgv, F.-O. To be or not to be an inclusive teacher: Are empathy and social dominance relevant factors to positive attitudes towards inclusive education? *PLoS ONE* **2019**, *14*, e0225993. [[CrossRef](#)]
48. Rojo-Ramos, J.; Gomez-Paniagua, S.; Adsuar, J.C.; Mendoza-Muñoz, M.; Castillo-Paredes, A.; Denche-Zamorano, A.; Garcia-Gordillo, M.A.; Barrios-Fernandez, S. Attitudes towards Peers with Disabilities among Schoolchildren in Physical Education Classes. *Int. J. Environ. Res. Public Health* **2023**, *20*, 3802. [[CrossRef](#)] [[PubMed](#)]

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.