



Intercultural Sensitivity and Acculturation Expectations Among Spanish Teachers: Profiles and Associated Factors

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Abstract

The growing cultural diversity in Spanish classrooms requires teachers who are prepared for the inclusion and academic success of all students. Based on the importance of understanding the characteristics of teachers in this context, this study analyses the relationship between intercultural sensitivity and the acculturation expectations of active teachers in Spain (n=431). Profiles and influencing factors associated with these two key variables have been identified. A quantitative, non-experimental, ex post facto approach was used, employing surveys administered to teachers. The short version of the Intercultural Sensitivity Scale and a questionnaire on acculturation expectations were used. The results show that intercultural sensitivity is positively associated with open attitudes towards diversity and previous experiences in multicultural contexts. Different profiles were identified: integrative and multicultural attitudes predominate, although assimilationist tendencies persist in certain subgroups. It is important to strengthen intercultural training adapted to the multicultural reality of Spanish classrooms.

Keywords Intercultural sensitivity · Teachers · Acculturation · Cultural diversity · Inclusion

Introduction

The growing cultural diversity in Spanish classrooms is a defining feature of the current education system. In Spain, approximately 13% of the population is of foreign nationality (INE, 2023), a figure that has been accompanied by a sustained increase in the presence of students from immigrant backgrounds in schools. Shaped by migration flows and globalisation, this context requires teachers to operate effectively in multicultural educational settings, promoting inclusion and academic success for

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all students, regardless of their cultural background (Dionísio et al., 2024). At the same time, the Spanish education system continues to display significant educational inequalities affecting immigrant students, including higher rates of grade repetition and early school leaving, as well as greater barriers to access to higher education (Cebrián et al., 2019; García & González, 2022; Mahía & Medina, 2022). In this scenario, two constructs emerge as central elements for understanding and addressing the challenges of diversity: teachers' intercultural sensitivity and acculturation expectations towards immigrant students. Both constructs are key dimensions for developing intercultural competences as they enable cultural diversity to be managed effectively in the classroom (Beelmann et al., 2021; Bustos & Bustos, 2024).

On the one hand, intercultural sensitivity refers to an individual's ability to experience and understand cultural differences in a positive way and to develop communication skills in multicultural contexts (Cancino & Nuñez, 2023; Chen & Hu, 2023). For teachers, it is a key aspect related to the development of educational inclusion strategies that respond to the needs of increasingly diverse classrooms, as they are considered preventive (Bustos & Bustos, 2024) and transformative (Romijn et al., 2021) agents.

On the other hand, acculturation expectations are the beliefs held by citizens of host societies or majority groups about how immigrants or minority groups should respond to them (Smith-Castro et al., 2021). In this case, they refer to how teachers expect their immigrant students to adapt to the local culture. These expectations are studied from those who expect total assimilation expectations into the host society (with the loss of original identity) to those who expect new members to retain their customs and integrate respectfully and actively into the new society (Berry et al., 2022; Bourhis, 2017).

Although previous research has examined intercultural sensitivity and acculturation expectations as separate constructs, empirical studies analysing their joint configuration among in-service teachers remain scarce. In particular, little is known about how different combinations of these dimensions give rise to distinct teacher profiles and how such profiles may shape approaches to cultural diversity in the classroom. This gap is especially evident in Southern European contexts, where rapid demographic change has challenged traditionally homogeneous education systems.

Against this backdrop, this study analyses the relationship between intercultural sensitivity and acculturation expectations among in-service teachers in Spain, with the aim of identifying distinct teacher profiles. By addressing this relationship, the study seeks to contribute to the theoretical understanding of how affective dispositions and beliefs interact in multicultural educational contexts, while also providing empirical evidence to inform teacher training and inclusive educational practices.

Literature Review

Intercultural Sensitivity

From a theoretical perspective, intercultural sensitivity is recognised as the affective component of intercultural communicative competence (Chen & Hu, 2023). It

encompasses skills such as empathy towards the needs of others, self-awareness and pedagogical flexibility (Bennett, 2020). In addition, empirical studies have identified key components such as trust, emotional involvement and enjoyment of intercultural interactions (Chen & Hu, 2023). Taken together, these affective dimensions shape how teachers emotionally perceive and respond to cultural difference, influencing whether diversity is approached as a challenge or as a pedagogical resource. All of this suggests that the ability to value different cultures and tailor educational responses to specific contexts is essential for combating any form of discrimination in the classroom and promoting inclusive environments (Charoensilp, 2024; Cojocariu & Boghian, 2020).

Developing intercultural sensitivity involves working on cultural self-awareness and gaining a deep understanding of both one's own culture and other cultures. It also requires the development of sociolinguistic awareness to understand the cultural and linguistic dynamics present in educational contexts (Dearnorff, 2006). According to Gómez et al. (2023), high levels of intercultural sensitivity are associated with greater support for the participation of migrant populations in the education system and the promotion of their rights. This association can be theoretically explained by the fact that interculturally sensitive teachers tend to regulate ethnocentric reactions, foster empathy, and interpret cultural diversity through an inclusive normative lens, which predisposes them to support participation and equal educational opportunities.

A study by Akcaoglu and Kayis (2021) suggests that attitudes significantly predict intercultural sensitivity and act as precursors to its development, showing a high positive correlation between teachers' levels of sensitivity and their attitudes towards diversity. These findings reinforce the view of intercultural sensitivity as a dispositional orientation that mediates between teachers' underlying attitudes and their educational beliefs. Ruales et al. (2020) have found that teachers' lack of understanding of multiculturalism is related to a lack of preparation or limited interactions with other culturally diverse groups. Other studies have shown a positive correlation between intercultural sensitivity and experiences of travelling to other countries, educational experiences with other cultures, participation in exchange programmes, and socialisation with diverse friends (Jurkovic & Micic, 2024).

For their part, Beltrán-Véliz et al. (2024) conducted a study with a sample of future teachers, identifying a positive correlation between intercultural efficacy and sensitivity. Lykes (2022) conclude that teachers' critical competencies are a determining factor in predicting intercultural sensitivity. Similarly, Charoensilp (2024) highlights that teachers' intercultural sensitivity has a positive impact on their culturally perceptive teaching practices. Overall, these studies suggest that intercultural sensitivity functions as a key affective condition that shapes teachers' pedagogical dispositions and expectations in culturally diverse classrooms.

In summary, various studies have identified key factors that influence intercultural sensitivity. These include exposure to other cultures (Gedik, 2023), age (Habib & Hernández, 2020), gender (Gómez et al., 2023) and training in intercultural education (Segura & Parra, 2019). As Cancino and Núñez (2023) mention, the lack of resources and specific training poses a challenge in the management of multicultural classrooms. This body of evidence supports the relevance of examining intercultural

sensitivity not only as an individual trait, but as a theoretically meaningful dimension shaping teachers' educational attitudes and expectations in multicultural contexts.

Acculturation Expectations

In migration situations, in addition to the macro-level legal framework, citizens of host societies also develop their own personal 'policies' on what ideal coexistence with immigrant populations should look like. These ideas are known as acculturation expectations and refer to beliefs about how immigrants should acclimatise to the host society (Smith-Castro et al., 2021). Research on the subject has proposed several models of acculturation expectations (Berry et al., 2022; Bourhis, 2017). In general, this literature distinguishes four basic expectations: (1) Pluralism or Multiculturalism, which represents the expectation that all cultural traditions and customs of groups should be maintained, respected, and actively promoted; (2) Assimilationism (the melting pot), based on the idea that immigrants should renounce their cultural particularities and adopt those of the host society; (3) Segregation, which assumes that the "coexistence" of groups with different ethnic citizenships is possible only if the groups live physically separated; and (4) Exclusion, which denies cultural preservation and social participation, leading to marginalisation.

Following this idea of differentiated expectations, several studies show that citizens of multicultural societies tend to expect immigrants to adopt mainly integration strategies and, to a lesser extent, assimilation or separation strategies (Berry et al., 2022; Smith-Castro et al., 2021). In addition, research has documented different sources of variability in responses to immigration. For example, some studies have found that more devalued or culturally distant groups are expected to separate or assimilate more than valued or culturally close groups (Batkina et al., 2022), while other studies show that they are expected to integrate in the realm of social relationships and friendships, but to assimilate in the realms of work, economics, and values (Navas et al., 2007).

Research also indicates that these expectations are predicted by psychosocial variables, such as positive attitudes towards cultural diversity, intercultural sensitivity, multiculturalism and perceptions of immigration (Berry et al., 2022; Ozer & Kamran, 2023). In general, it has been observed that greater support for multicultural forms of coexistence may be linked to a greater appreciation of cultural diversity and greater intercultural solidarity and, as well as fewer negative stereotypes and less prejudice, while ethnic and segregationist attitudes are expected to be associated with a lack of intercultural sensitivity, attitudes contrary to cultural diversity, negative stereotypes, and prejudice (Smith-Castro et al., 2021; Zagefka et al., 2022).

Although most research on acculturation expectations has focused on general population samples, their analysis in educational contexts requires particular attention. Teachers constitute a specific professional group whose expectations are not merely personal attitudes, but are embedded in pedagogical norms, classroom interactions, and evaluative practices. While Berry's fourfold model provides a robust analytical framework, its application to educational settings requires consideration of how these orientations are expressed through teachers' professional roles and instructional decisions.

In the specific field of education, several studies have shown that these beliefs and attitudes about multiculturalism can affect teaching practices in the classroom, some of which can jeopardise students' sociocultural adaptation process, while others can promote their successful adaptation, highlighting the need to study them in the classroom (Beniscelli et al., 2019; Cerón et al., 2017). Research indicates that the type of acculturation expected can have an impact on students' identity development, academic performance, and adaptation to society (Choi, 2023). Níkleva et al. (2017) highlight a study in which primary school students exhibit strong stereotypes associated with the immigrant population that must be explored in order to propose effective training alternatives. Larrañaga et al. (2020) analyse the acculturation orientations of secondary school immigrant students and their adaptation to Basque schools, showing that integration is the main orientation, particularly when bilingualism is encouraged. Research has also pointed out that certain teaching practices (e.g., content, methods, and communication) can be risk factors for the acculturation process of students (Makarova et al., 2019).

Finally, Gospodnetić and Ćorkalo (2024), in a study on primary school teachers' acculturation expectations towards refugee children, highlight that empathy and school climate are important factors in understanding teachers' expectations regarding the integration and assimilation of students.

From a conceptual standpoint, this study posits that intercultural sensitivity and acculturation expectations constitute two analytically distinct yet theoretically interconnected dimensions of teachers' intercultural orientation, linked through a shared affective–normative mechanism. Intercultural sensitivity functions as an affective–attitudinal disposition that shapes how cultural differences are emotionally perceived and evaluated, whereas acculturation expectations reflect the normative beliefs that teachers hold about how students of immigrant origin should adapt to the school context and the host society. Within this framework, higher levels of intercultural sensitivity are expected to foster ethnorelative, integrative, and cultural-preservation-oriented expectations, insofar as they promote empathy, reduce ethnocentric reactions, and encourage the interpretation of diversity as a pedagogical resource. Conversely, it is theorised that lower intercultural sensitivity coexists with more assimilationist or separation-oriented expectations, which may constrain inclusive practices and reinforce ethnocentric orientations in the classroom. This affective–normative linkage between the way cultural difference is experienced and the way adaptation is prescribed constitutes the central theoretical mechanism underpinning the present study and provides the conceptual basis for the proposed hypotheses and the identification of teacher profiles.

Method

Methodological Approach, Objectives and Hypotheses

The design of this quantitative research is non-experimental, *ex post facto* and survey-based (Gamage, 2025). This design is commonly used in educational and psychological research to examine associations and group differences in attitudes and

competences, without inferring causal relationship (i.e. Argüello-Gutiérrez et al., 2025; Peterson & Jensen, 2025). The objective is to identify the profiles of Spanish teachers and the factors that influence their intercultural sensitivity and acculturation expectations. The specific objectives are: (SO1) to ascertain the acculturation expectations and intercultural sensitivity of teachers currently working in Spain; (SO2) to analyse the relationship between sociodemographic variables (gender, age and years of teaching experience) and teachers' acculturation expectations and intercultural sensitivity; (SO3) to classify teachers according to their acculturation expectations and intercultural sensitivity.

Based on the literature review and the study design, the following hypotheses are proposed:

H1 Cultural preservation is associated with higher levels of intercultural sensitivity, while separation is associated with lower levels.

H2 Sociodemographic variables influence the acculturation expectations and intercultural sensitivity of active teachers in Spain.

H3 There are different profiles among active Spanish teachers, depending on their acculturation expectations and intercultural sensitivity.

Variables and Instruments

The main variables in the study were, on the one hand, intercultural sensitivity and, on the other, teachers' acculturation expectations. All scales used response options ranging from 1 (Strongly disagree) to 5 (Strongly agree).

Intercultural sensitivity was measured using the short version of the Intercultural Sensitivity Scale (Wang & Zhou, 2016) in its Spanish adaptation (Segura & Parra, 2019). It consists of 15 items, with higher values indicating greater intercultural sensitivity. An example of an item is *"I believe I have the ability to relate to people from a culture different from my own."* Following the scoring procedure proposed for the short form of the scale, we computed a global intercultural sensitivity score by averaging all 15 items, thus preserving the original 1–5 response metric. In the present sample, this composite showed good internal consistency, as reported in Table 1.

Teachers' acculturation expectations towards migrant students were assessed using the acculturation expectations scale (Smith-Castro et al., 2021). This scale has been used in the Spanish educational context in several studies showing good reliability (Argüello-Gutiérrez et al., 2025; Martín-Gutiérrez et al., 2024). This scale is used to record how people in a society expect migrant groups to adapt to it. The scale consists of 18 items and captures three forms of acculturation expectations: separation: (e.g. *"They live a little apart from us, we don't try to mix much"*); assimilation: (e.g., *"They adopt Spanish traditions and customs"*); and preservation (e.g., *"Each group preserves its own traditions and customs"*). In the present study, we followed this validated structure and the original theoretical model to group items into the three subscales, and we computed mean scores for each dimension so that higher

Table 1 Descriptive statistics, reliability, and Pearson correlations among the main study variables

Variable	M (SD)	α	ω	1	2	3	4	5	6	7
1. Gender (0 = female, 1 = male)	–	–	–	–						
2. Age (years)	–	–	–	– 0.01	–					
3. Teaching experience (years)	–	–	–	0.06	0.77***	–				
4. Inter- cultural sensitivity	4.34 (.46)	0.82	0.84	0.03	0.02	– 0.01	–			
5. Cultural preservation	3.37 (0.89)	0.87	0.88	0.13*	0.11	0.08	0.25***	–		
6. As- simulation expectations	2.47 (0.83)	0.86	0.86	– 0.22***	0.29***	0.21***	– 0.15**	– 0.20***	–	
7. Separation	1.82 (0.99)	0.90	0.90	– 0.02	0.24***	0.15**	– 0.29***	0.16**	0.29***	–

M mean, *SD* standard deviation. Values are Pearson correlation coefficients. Reliability (α , ω) is reported only for multi-item scales. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$

scores reflect stronger endorsement of the corresponding acculturation expectation. All three subscales showed good internal consistency (see Table 1).

In addition, sociodemographic variables were assessed, specifically age (as a continuous variable), gender (male, female, prefer not to disclose), type of school where teachers work (public, private), and years of teaching experience (as a continuous variable).

Participants

The sample consists of 431 active teachers (71% of participants were women) aged between 23 and 72 ($M = 46.20$, $SD = 9.83$). Seventy-six per cent work in public schools, while 8% work in private schools and 14% in state-subsidised private schools. Teaching experience ranges from 2 to 42 years, with an average of 17.51 years ($SD = 10.40$) and a median of 17.

Procedure and Data Analysis

As part of the "Attitudes towards acculturation and interculturality among compulsory education teachers in Spain", reference PP-2022-06, awarded in the competitive call for UNIR 2022 Research Projects at the International University of La Rioja (UNIR) and with the prior approval of Research Ethics Committee of the International University of La Rioja (Spain) (PI081/2022), teachers were contacted through the headteachers of the educational centres registered on the website of the Spanish Ministry of Education and Vocational Training and by means of a request sent to the various regional education departments of local councils and autonomous communi-

ties in Spain. The invitation link was sent to headteachers of approximately 4.122 schools listed in the registry of the Spanish Ministry of Education and Vocational Training and disseminated via regional education departments. Because the invitations were forwarded by these intermediaries and we did not have direct access to teacher mailing lists, it was not possible to determine the exact number of teachers who received the survey; consequently, a precise response rate cannot be calculated. A total of 504 in-service teachers completed the questionnaire. As inclusion criteria for the present study participants have to have at least one year of teaching experience, complete the the intercultural sensitivity scale and acculturation expectation scale and accept he informed consent. A total of 73 participants were excluded for not meeting the requirements. The data collection instrument was designed using Question Pro and distributed online between March and June 2023. Teacher participation was voluntary after reading the informed consent form provided.

With regard to the statistical analysis of the data, several different types of analysis were developed in the study to address the objectives set out in this study. To respond to OE1, descriptive analyses of mean and dispersion (ST, minimum and maximum) were performed. To address OE2, bivariate correlations and inferential analyses were performed using the Student's t-test and ANOVA. Finally, to respond to OE3, we applied k-means cluster analysis (iterate-and-classify approach) to identify teacher profiles based on acculturation expectations (separation, preservation, assimilation) and intercultural sensitivity. Composite scores were computed as mean item scores to keep interpretation on the original 1–5 response scale. A three-cluster solution was retained. To determine the appropriate number of clusters, alternative solutions (two-, three-, and four-cluster models) were examined and compared in terms of parsimony, interpretability, and distribution of cases across clusters. The three-cluster solution was retained because it provided conceptually distinct and theoretically meaningful profiles consistent with the acculturation-expectation framework, while avoiding overly broad groupings (two-cluster solution) or small and less interpretable subgroups (four-cluster solution). This decision aligns with the exploratory aim of identifying empirically grounded teacher profiles rather than testing a predefined classification. Standard internal cluster validity indices were not computed/reported in the submitted version; therefore, the cluster solution is interpreted as exploratory and this limitation is explicitly acknowledged. Next, we conducted discriminant analysis as a descriptive procedure to summarise separation between the derived clusters and to obtain an internal classification rule. Because discriminant functions are derived from the same variables used to form the clusters, classification accuracy is not interpreted as external validation of the cluster solution.

In this research, IBM's SPSS V.29.0.1.0 and Jamovi, version 2.3.28 (jamovi project, 2022) statistical programmes were used to process and statistically analyse the data. Analyses were conducted using available cases; therefore, the effective sample size varies across analyses due to missing data. For analyses requiring complete data on the variables involved (e.g., clustering and subsequent ANOVA/discriminant analysis), listwise complete cases were used.

Results

Teachers' Expectations of Acculturation and Intercultural Sensitivity

Descriptive, psychometric, and simple correlation statistics have been calculated for all variables under study as part of preliminary analyses to detect extreme cases or violations of assumptions (multicollinearity, for example). Following the recommendations of several authors to use versions of reliability coefficients based on polychoric correlations for ordinal items, McDonald's ω coefficients were calculated to estimate the internal consistency of the scales (Vizioli & Pagano, 2022). For ease of understanding, the measures are also presented using Cronbach's alpha, which is more commonly used. As can be seen in Table 1, all the scales used show adequate psychometric properties. To examine the dimensionality of the Spanish short version of the Intercultural Sensitivity Scale in this sample, we conducted an exploratory factor analysis on the 15 items after reverse-coding negatively worded items. Principal axis factoring with oblimin rotation was used. Bartlett's test of sphericity was significant $\chi^2(105)=2770.14$, $p<0.001$, and the overall KMO index was 0.86, indicating that the data were adequate for factor analysis. A one-factor solution was retained, with all items loading positively on the general intercultural sensitivity factor (standardised loadings ranging from 0.31 to 0.69) and moderate uniqueness values. These results support the use of a global intercultural sensitivity score.

Pearson correlations among the study variables can be seen in Table 1. Age and teaching experience were strongly and positively correlated, and both were positively related to assimilation and separation expectations. In contrast, intercultural sensitivity was not significantly associated with either age or teaching experience. Intercultural sensitivity was positively associated with preservation and negatively associated with assimilation and separation. Gender showed small but significant associations with preservation (men scoring lower) and assimilation (men scoring higher), whereas it was unrelated to intercultural sensitivity and separation. Finally, the three acculturation expectation dimensions were significantly intercorrelated: greater support for preservation was related to lower endorsement of assimilation and only modestly higher separation, while assimilation and separation were positively associated.

Influence of Gender, Age and Years of Teaching Experience

A Student's t-test was performed to determine whether there were gender differences between the variables. Gender comparisons were conducted on the available sample with complete gender information ($N=345$). No significant differences were found between men and women in terms of intercultural sensitivity ($p>0.05$) or separation expectations ($p=0.888$). On the preservation subscale, women scored significantly higher than men ($t(343)=2.840$, $p=0.005$; $d=0.337$), with a mean of 3.46 ($SD=0.88$) for women compared to 3.16 ($SD=0.86$) for men. Finally, on the assimilation subscale, a significant difference by gender was also observed ($t(343)=-3.697$, $p<0.001$; $d=-0.439$); women scored lower ($M=2.38$; $SD=0.80$) than men ($M=2.74$,

$SD=0.86$). These gender differences are interpreted as associative (non-causal) patterns and are contextualised in the discussion.

Classification of Teachers According to Acculturation Expectations and Intercultural Sensitivity

Cluster analysis was conducted on cases with complete data on the clustering variables ($N=336$). The results reveal three clusters grouping the teachers surveyed (Table 2). Cluster 1 can be described as a preservation-oriented profile, characterised by high cultural preservation (4.23) together with low separation (1.24) and low assimilation expectations (1.92). Cluster 2 shows the lowest preservation (2.48) and a comparatively higher assimilation expectationstendency (2.67). Cluster 3 is characterised by high separation (3.53). Regarding intercultural sensitivity, cluster means are presented on the original 1–5 scale to allow direct comparison with the descriptive statistics in Table 1. Intercultural sensitivity is high across the three profiles, with Cluster 1 showing the highest mean ($M=4.46$), followed by Cluster 2 ($M=4.31$) and Cluster 3 ($M=4.25$). For clarity, clusters are labelled based on the relative pattern of cluster centres across acculturation expectation dimensions: Cluster 1: preservation-oriented profile; Cluster 2: low-preservation / higher-assimilation profile; and Cluster 3: separation-oriented profile.

Cluster centres are reported on the original 1–5 scale to facilitate interpretation and direct comparison with Table 1.

The ANOVAs indicated robust differences between clusters on all clustering variables. For separation expectations, the effect of cluster membership was very large, $F(2, 333)=473.10, p<0.001$. For preservation expectations, cluster differences were also substantial, $F(2, 333)=169.75, p<0.001$. Assimilation expectations showed a significant, though comparatively smaller, effect of cluster, $F(2, 333)=45.01, p<0.001$. Finally, intercultural sensitivity also differed significantly across clusters, $F(2, 333)=256.26, p<0.001$. These F tests are interpreted descriptively, given that the clusters were derived to maximise between-cluster differences. The final distribution of the teachers surveyed in each group was as follows. Cluster 2 is the largest, comprising 39.58% of teachers, followed by Cluster 3, which comprises 33.93% of respondents. Finally, Cluster 1 is the smallest, comprising 26.49% of the teaching staff.

Once the relevance of the variables for classification, such as teacher distribution, has been demonstrated, the standardised canonical discriminant functions obtained for classification prediction were:

Funtion 1 = $0.972* \text{Acculturation-Separation} - 0.020* \text{Acculturation-Preserva- tion} + 0.308* \text{Acculturation-Assimilation} + 0.027* \text{Intercultural Sensitivity}$.

Table 2 Cluster profiles based on acculturation expectations and intercultural sensitivity and summary discriminant indices

Final cluster centres	1	2	3
Acculturation-Separation	1.24	1.26	3.53
Acculturation-Preservation	4.23	2.48	3.01
Acculturation-Assimilation	1.92	2.67	2.92
Intercultural Sensitivity	4.46	4.31	4.25

Table 3 Standardised canonical discriminant function coefficients

	Function 1	Function 2
Acculturation-Separation	0.972	- 0.028
Acculturation-Preservation	- 0.020	0.978
Acculturation-Assimilation	0.308	- 0.122
Intercultural Sensitivity	0.027	0.108

Table 4 Eigenvalues and Wilks' lambda for the canonical discriminant functions

Function	Eigenvalue	% variance	Cumulative	Canonical correlation	Wilks' lambda	Chi-square	df	Sig
1	3.134 ^a	75.4	75.4	0.871	0.120	705.299	6	<0.001
2	1.024 ^a	24.6	100.0	0.711	0.494	234.111	2	<0.001

Superscript "a" indicates that only the first two canonical discriminant functions were included in the analysis

Function 2 = - 0.028* Acculturation-Separation + 0.978* Acculturation-Preservation - 0.122* Acculturation-Assimilation + 0.108* Intercultural Sensitivity.

The corresponding canonical coefficients for each predictor are presented in Table 3.

On the one hand, in the first canonical function (YProf_1), acculturation expectations linked to separation are the variable with the greatest discriminating power. On the other hand, in the second canonical function (YProf_2), acculturation expectations linked to preservation are the variable with the greatest discriminating power. Table 4 shows how the canonical function explained variance for the two functions. Also, the data reveal that both canonical discriminant functions are statistically significant, as *p* values of less than 0.001 are obtained.

Once the discrimination between the clusters obtained had been verified, Fig. 1 shows a graphical representation of the distribution of teachers in the groups to which they belong, based on the canonical discriminant functions.

To conclude the results, Table 5 presents the classification matrix from the discriminant analysis. Discriminant analysis is reported here as a descriptive procedure to summarise separation between the derived clusters and to provide an internal classification rule. Because the discriminant functions were derived from the same variables used to form the clusters, the percentage of correctly classified cases (94.0% in the present sample) should not be interpreted as external validation of the cluster solution.

Discussion

The discussion is presented in accordance with the specific objectives set out in this study. In relation to the first specific objective (SO1), the results indicate generally positive, although not uniformly high, orientations towards inclusion and cultural diversity, accompanied by moderate levels of intercultural sensitivity and cultural preservation. These findings coincide with previous research that highlights the importance of intercultural sensitivity as a key competence for managing diversity in educational contexts (Charoensilp, 2024) and with those that conclude that teachers

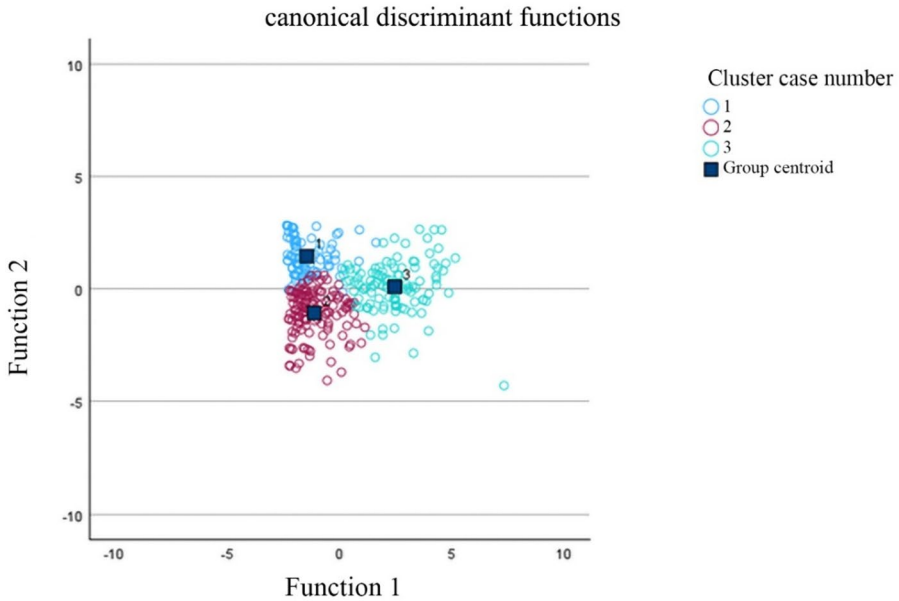


Fig. 1 Graphical representation of the profiles of Spanish teachers according to their acculturation expectations and intercultural sensitivity in clusters 1, 2 and 3

Table 5 Classification results

	Actual cluster	Predicted cluster 1 (%)	Predicted cluster 2 (%)	Predicted cluster 3 (%)	Total (%)
	1	95.5	2.2	2.2	100.0
94.0% of original clustered cases were correctly classified	2	6.8	92.5	0.8	100.0
	3	3.5	1.8	94.7	100.0

with higher levels of intercultural sensitivity tend to adopt more inclusive teaching practices and perceive diversity as an opportunity for educational enrichment (Lykes, 2022). The identification of different degrees of openness, empathy and willingness towards cultural diversity among teachers suggests the existence of a solid basis for the development of inclusive teaching practices.

However, areas for improvement remain, especially with regard to the recognition and active appreciation of minority cultures, highlighting the need to continue promoting training in intercultural competences. Furthermore, the study reveals that presence of relatively higher scores in separation and assimilation for some teachers suggests that ethnocentric or assimilationist tendencies are still observable in part of the sample, although this pattern should be interpreted with caution given the descriptive nature of the data. This trend, already identified in previous research (Monzalvo et al., 2024; Ruales et al., 2020), represents an obstacle to the creation of truly inclusive educational environments and underlines the urgency of implementing specific continuing training programmes in this area.

The results also confirm the relevance of intercultural sensitivity and acculturation expectations as key dimensions for understanding the ability of active Spanish teachers to manage cultural diversity in educational contexts. In this regard, the Intercultural Sensitivity Scale (ISS) remains a useful and effective tool for assessing intercultural competence in education (Gómez et al., 2023; Moradi, 2020), although there is a need to adapt it to the particularities of each context to ensure its validity and usefulness.

With regard to the second objective (OE2), the results obtained confirm that there are significant relationships between certain sociodemographic variables—such as gender, age, and years of teaching experience—and teachers' expectations of acculturation and intercultural sensitivity. This demonstrates the influence of these personal and professional factors on the development of intercultural competences. In line with the work of Charoensilp (2024) and Lykes (2022), it can be observed that intercultural sensitivity does not depend solely on academic training, but is also affected by personal characteristics and experiences in the environment, such as age, gender, and years of teaching experience. This approach coincides with the contributions of Jurkovic and Micic (2024), who highlight the importance of having had multicultural experiences and interacting on a daily basis with people from different cultural backgrounds, as this contributes to the development of a more open and inclusive attitude. Similarly, authors such as Aksin (2023) and Jurkovic and Micic (2024) emphasise the role of life and professional experience in the development of intercultural sensitivity as a competence. Previous research conducted in non-European contexts, such as that by Aydemir and Kalin (2021) and Ruales et al. (2020), has also found significant differences in the intercultural sensitivity of trainee teachers depending on their previous contact with other cultures, social interaction, participation in multicultural activities and international experiences. In this sample, women reported higher cultural preservation expectations and lower assimilation expectations than men, whereas no gender differences were observed for intercultural sensitivity or separation. These findings are interpreted as associative patterns rather than causal effects. A plausible interpretation is that gender-linked differences in professional experiences or engagement with diversity-related practices may relate to acculturation expectations; however, because potential explanatory mechanisms were not measured, we refrain from causal interpretations. Future research should examine potential mediators such as intercultural contact quality, training exposure, and school climate.

The third objective (OE3) was achieved by identifying and classifying different teacher profiles based on their acculturation expectations and intercultural sensitivity. This research provides empirical evidence linking intercultural sensitivity with acculturation expectations. Teachers who show greater sensitivity tend to adopt more inclusive and ethnorelative approaches, thus promoting educational environments that favour both the integration and academic performance of immigrant students, and highlighting the need for teacher training geared towards critical reflection and the strengthening of intercultural competences. On the other hand, Berry (2022) and Smith-Castro et al. (2021) highlight the influence of teachers' beliefs and attitudes on the integration of immigrant students. Taken together, the fulfilment of these three objectives contributes to a better understanding of the teaching reality in Spain and

offers valuable guidance for improving inclusive education and managing cultural diversity in the classroom.

Theoretical and Practical Implications

Identifying different teacher profiles provides a valuable basis for designing training programmes and educational policies that are better suited to the real needs of teachers, thus facilitating effective management of cultural diversity in educational contexts. In this sense, the clusters identified in this study differ primarily in the patterns of endorsement of cultural preservation versus assimilation and in levels of intercultural sensitivity, rather than in directly observed behaviours or pedagogical practice. By distinguishing groups of teachers with different levels of openness, empathy and willingness towards cultural diversity, this typology provides insight into the heterogeneity of teachers and an empirical basis for developing intervention strategies aimed at inclusion and academic success in multicultural contexts. This classification can also contribute to the identification of good practices and the detection of priority areas for improvement in initial and continuing teacher training. From a training perspective, these profiles can be used to tailor professional development activities to different starting points. Teachers in more assimilationist profiles may benefit from training that explicitly addresses the value of cultural preservation, challenges deficit views of minority cultures, and promotes critical reflection on ethnocentrism. In contrast, teachers in more integrative profiles might engage in advanced activities focused on translating inclusive orientations into concrete classroom strategies, such as culturally responsive curriculum design, cooperative learning in diverse groups, and dialogic approaches to controversial issues.

The results also reinforce the idea that teachers' intercultural sensitivity is not only a desirable competence but a requirement for successfully managing cultural diversity in the school environment. Relevant training components could include brief, contact-based activities with diverse families and communities, targeted discussions of classroom dilemmas about diversity, and supervised teaching or observation with feedback on intercultural communication and inclusion.

Limitations and Future Lines of Research

The present study has several limitations that should be considered when interpreting the findings. First, the sample was obtained through non-probabilistic, voluntary participation of in-service teachers from specific regions and educational levels, which limits the generalisability of the results to the wider population of Spanish teachers. Second, all constructs were measured using self-report questionnaires, which may be influenced by social desirability and only capture certain dimensions of intercultural sensitivity and acculturation expectations, rather than their full expression in everyday classroom practice. Third, the cross-sectional, non-experimental design and the use of exploratory cluster and discriminant analyses mean that the identified profiles are descriptive and associative, and do not allow causal inferences or the establish-

ment of definitive typologies. Future research should therefore employ mixed-methods and longitudinal designs, as well as independent samples, to validate and extend these profiles and to examine how they manifest in concrete teaching practices.

An limitation is that standard internal validation indices for the clustering solution (e.g., average silhouette, Davies–Bouldin, Calinski–Harabasz) were not computed in the present analyses. Therefore, the three-cluster solution should be interpreted as exploratory and primarily justified by interpretability and adequate cluster sizes. Replication and/or additional internal validation is recommended.

Despite the progress made, the study recognises the need for further qualitative research to capture in greater detail the dynamics underlying intercultural education. It also highlights the need to continue validating the intercultural sensitivity model in Spain and to develop measurement instruments that reflect the sociocultural reality in which they are applied. Finally, it proposes as a line of future research the search for training strategies to combat stereotypes and prejudices towards the immigrant population, a key step in building a truly inclusive and transformative education system.

These results highlight the importance of designing teacher training programmes that not only address the development of intercultural competences, but also consider teachers' expectations of acculturation, promoting ethno-relative attitudes and openness to diversity. Furthermore, the limitations of the study, such as the sample size and the possible self-selection of participants, must be taken into account when interpreting the results, and further research is recommended to analyse other contextual and personal factors that may influence teachers' intercultural sensitivity.

Conclusions

The results of this study suggest that both intercultural sensitivity and acculturation expectations among Spanish teachers function as dynamic factors that are associated with a range of personal and contextual variables. The findings indicate that higher levels of intercultural sensitivity tend to co-occur with more favorable attitudes towards inclusion and diversity in multicultural school settings. At the same time, the data point to the potential relevance of personal and professional experiences in culturally diverse environments, as well as sociodemographic characteristics such as age, gender and years of experience, when designing and tailoring teacher training initiatives.

This study contributes to the existing body of knowledge on teachers' intercultural orientations in Spain and offers an empirical basis for future research on the joint configuration of intercultural sensitivity and acculturation expectations. The profiles identified may be useful to better understand the diversity of teachers' orientations towards cultural diversity and to inform the development of training and support measures aimed at strengthening inclusive practices in increasingly multicultural classrooms.

One of the main contributions of this research is that it documents systematic associations between intercultural sensitivity and acculturation expectations. Teachers who report higher intercultural sensitivity tend to endorse more inclusive and ethnorelative expectations, which is consistent with the idea that these orientations

can support the creation of classroom environments that are more conducive to the integration and academic adaptation of immigrant students. At the same time, the persistence of ethnocentric attitudes and assimilationist expectations in a subset of teachers suggests that additional efforts are needed to foster critical reflection and the development of intercultural competences through initial and continuing teacher education.

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Availability of Data and Materials The following website provides access to data related to the project: <https://diverprof.es/>. However, any information deemed necessary may be requested from the authors of this publication.

Declarations

Competing interests The authors confirm that this work is original and has not been published elsewhere, nor is it currently under consideration for publication elsewhere. The authors no conflicts of interest to disclose.

Ethics Approval and Consent to Participate This study was approved by the Research Ethics Committee of the International University of La Rioja (Spain) (PI081/2022). Informed consent was obtained from all participants.

Consent for Publication The authors declare their consent to the publication of this study. All authors have read and agreed to the published version of the manuscript.

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