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Intercultural values at school and children's sense of belonging: IMMERSE project results

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ABSTRACT

In an increasingly globalised world, fostering inclusivity and a sense of belonging in schools has become a key challenge for educators. The integration of intercultural values in educational institutions is widely recognised as essential for fostering a sense of belonging, particularly among students from migrant backgrounds. However, there is limited research on how school leadership, teacher attitudes, and curriculum content are aligned with intercultural values, and how they affect the sense of belonging among migrant and non-migrant students. This paper examines the role of school leadership around intercultural values and its effect on the sense of belonging of children with both migrant and non-migrant backgrounds. Using a quantitative approach, grounded in a pragmatic research paradigm, the authors analysed data deriving from the IMMERSE project's socio-educational integration indicators collected in 393 educational centres across six European countries. The sample comprised 164 school principals, 2052 teachers and 24,419 children aged 7 to 18. The authors conducted bifactorial ANOVA. The findings underscore the crucial role of an educational institution's identity, centred on intercultural values, in fostering a sense of belonging among students, particularly those from migrant backgrounds. Schools that prioritise intercultural education not only enhance students' connection to the school but also reduce the belonging gap between migrant and non-migrant students. The results are discussed considering the academic literature, and they suggest that there is a need for both principals and teachers to integrate intercultural values in schools, to further reduce the disparity in the sense of belonging between migrant and non-migrant students.

1. Introduction

1.1. Child migration trends and school as key integration contexts

Child migration has become a defining phenomenon in Europe, significantly reshaping its demographic and social landscapes. As of

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2023, nearly 6.6 million foreign-born children were residing in the European Union (EU), with 23 million EU citizens having at least one foreign-born parent (Eurostat, 2024). Notably, countries like Belgium, Germany, Ireland, and Sweden report that migrants and their descendants now constitute over 30 % of their populations (Eurostat, 2023). This trend underscores the growing demographic pressures faced by host countries and highlights the critical need for effective integration policies to ensure social cohesion and sustainable development (European Migration Network, 2022).

Migration patterns, however, vary significantly across Europe, influenced by geographic location, political contexts, and individual motivations such as conflict, economic hardship, or family reunification. For instance, Germany hosts the largest proportion of non-national children in the EU (30.3 %), followed by France (15.7 %), Italy (13.9 %), and Spain (13.4 %) (Eurostat, 2024). Additionally, migration routes and experiences differ widely, with some children arriving unaccompanied or seeking asylum, further emphasising the diverse nature of child migration across the continent (UNICEF, 2021).

The integration of migrant children presents both challenges and opportunities for host societies. Schools play a pivotal role in fostering inclusion, acting as crucial environments where cultural integration and belonging are cultivated. However, many educational institutions lack the resources and consistent strategies needed to address the specific needs of diverse student populations. Moreover, the absence of high-quality data and monitoring tools on migrant integration continues to hinder the development of effective educational practices (European Commission/EACEA/Eurydice, 2019).

For migrant children, adapting to their new environment can be a challenging process. They face unique challenges, including adjusting to new cultures, educational systems, and languages, all of which often impact their academic, social, and psychological well-being (Ahad & Benton, 2018). Moreover, five key areas that shape the integration outcomes of migrant and refugee children have been identified in the literature: legal status, language and communication skills, psychosocial well-being and health, social relationships, and educational achievements (Serrano Sanguilinda et al., 2019). Complementing this, barriers and facilitators within their context—such as political leadership, school segregation, the organization of educational practices, access to learning support and mental health services, and social attitudes—significantly influence their integration process (Serrano Sanguilinda et al., 2020).

The specific challenges that migrant and refugee children encounter when compared to their non-migrant peers may hinder their integration and undermine the development of a sense of belonging to both the school and their peers, which, along with social acceptance, have been described as fundamental needs particularly important for adolescent well-being (Raabe, 2019). Belongingness refers to the internal relationship between an individual and a group to which he or she belongs (Li & Jiang, 2018). A sense of belonging positively and negatively affects an individual's psychological well-being (Epstein, 1998). Furthermore, children from ethnic minority backgrounds may be at higher risk of not forming stable friendships, particularly if opportunities to befriend peers from a similar background are limited (Raabe, 2019). In this regard, schools play a central role in children's development, as they provide key opportunities to build social skills and foster a sense of belonging (Leja & Wesselmann, 2013). Beyond this, schools can also be understood as gateways to belonging, not only within the educational community but also within the host society that becomes the new home for migrant children.

According to Bajo Marcos et al. (2022), migrant children's sense of belonging to school is closely linked to peer relationships, teacher support, and the presence of an inclusive school climate, all of which also influence their confidence, self-esteem, and academic motivation. Recent research provides strong evidence that school practices and policies around cultural diversity are crucial for shaping students' sense of belonging, especially for those from migrant backgrounds. A recent meta-analysis by Bardach et al. (2024) confirmed that a positive multiculturalism climate—that is, a normative environment where diversity is explicitly acknowledged, cultural identities are respected, and intercultural dialogue is encouraged—was consistently and positively associated with students' sense of belonging. Importantly, this effect was observed across educational levels and national contexts, with small but robust effect sizes ($r \approx 0.12$ –.15), highlighting that valuing diversity fosters a sense of acceptance and inclusion among migrant children.

Building on this, Schachner et al. (2019) demonstrated that different dimensions of cultural diversity climate matter in complementary ways. On the one hand, equality and inclusion practices, such as promoting positive intergroup contact and equal treatment, were associated with better socioemotional and academic outcomes. On the other hand, cultural pluralism, which entails embracing students' cultural backgrounds as a resource, further enhanced these outcomes. Crucially, their study identified school belonging as a mediating mechanism, showing that both approaches strengthen outcomes because they help students, irrespective of background, to feel at home in their schools. These findings stress that constructive engagement with diversity is not only beneficial for migrant students but also for their majority peers. At the same time, evidence on the role of teachers' own cultural beliefs is more nuanced. Theoretical work has suggested that teachers with multicultural orientations may be more supportive of immigrant students, but large-scale German studies by Schotte et al. (2022) found no direct relationships between teachers' multicultural, egalitarian, or assimilationist beliefs and students' belonging outcomes. This suggests that beliefs alone may be insufficient unless translated into classroom practices and embedded in the wider school climate.

At the institutional level, Celeste et al. (2019) analysed the diversity policies of 66 Belgian schools and revealed that multicultural policies predicted smaller achievement and belonging gaps between minority and majority youth over time. In contrast, assimilationist approaches were associated with wider belonging gaps. These findings underline how the formal stance of schools towards diversity can either mitigate or exacerbate inequalities in students' experiences of belonging. Finally, evidence from the PISA global competence assessment (OECD, 2018) converges with these findings, showing that students attending schools with practices supportive of cultural diversity reported more positive attitudes towards diversity and stronger feelings of belonging.

Taken together, this growing body of research demonstrates that the school context, through its climate, practices, policies, and actors, plays a pivotal role in shaping migrant students' sense of belonging. This underscores the importance of examining how intercultural values are enacted not only by teachers in their everyday practice but also by principals at the institutional level, and how these enactments jointly contribute to children's integration experiences in schools and beyond.

1.2. The IMMERSE Project: inclusive interculturalism and key related concepts

Building on the central role of schools in fostering not only children's sense of belonging but also their broader integration, this article is situated within the IMMERSE project. Conducted between 2018 and 2023, IMMERSE mapped the socio-educational integration of migrant and refugee children across six European countries. The arrival of refugee and migrant children to Europe—sometimes unaccompanied—has steadily increased over the past two decades, becoming a major concern for European authorities. These children are among the most vulnerable groups in Europe and require appropriate protection and guarantees. Yet, despite their growing numbers, there has been a persistent lack of robust cross-country evidence on their integration, largely due to significant gaps in available data on this population.

IMMERSE directly addressed this gap by producing a new set of indicators and developing harmonised cross-country survey instruments to capture children's integration experiences. The project collected data from over 24,000 children and >400 schools and other experiential environments in Belgium, Germany, Greece, Italy, Ireland, and Spain, targeting migrant-background children from the age of seven onwards. This constitutes the largest survey implemented in Europe to date focusing specifically on migrant and refugee children, and provides an unprecedented evidence base to examine the educational contexts and practices that shape their integration (Serrano Sanguilinda et al., 2024).

To guide its research, the IMMERSE project developed a comprehensive conceptual framework rooted in the notion of inclusive interculturalism (Serrano Sanguilinda et al., 2019). This approach goes beyond traditional models of multiculturalism or assimilation by emphasising both the recognition of cultural diversity and the active participation of all children in shaping inclusive learning environments. Inclusive interculturalism stresses that integration is not a one-way process of adaptation but rather a reciprocal and dynamic interaction between migrant children, their peers, schools, and host societies. It combines two key dimensions: interculturalism, which values dialogue and mutual learning across cultural groups, and inclusiveness, which underlines equal access, rights, and opportunities for every child irrespective of background. By linking these dimensions, the framework highlights schools as critical arenas where diversity can be transformed into a resource for learning, social cohesion, and belonging. This article adopts inclusive interculturalism as its theoretical lens, using it to examine how intercultural values and practices within schools contribute to migrant children's sense of belonging.

Conceptual clarity is crucial, as many of the terms central to this study are often used interchangeably or without precision. Following the framework of inclusive interculturalism developed in the IMMERSE project, we adopt a set of definitions that situate these concepts in relation to one another. At the broadest level, cultural diversity describes the demographic reality of the coexistence of multiple cultural identities within a society, which can be acknowledged either as a mere descriptive fact or as a value that fosters dialogue and mutual enrichment (Parekh, 2001; UNESCO, 2001). Multiculturalism builds on this by providing a normative stance: it affirms the equal worth of diverse groups and advocates for policies and practices that recognise and protect minority identities (Bardach et al., 2024; Celeste et al., 2019).

While multiculturalism emphasises recognition, interculturalism goes a step further by focusing on interaction and dialogue across groups, aiming to transform diversity into opportunities for cooperation and mutual learning. Within this perspective, intercultural education represents the translation of these principles into the school context, promoting diversity, inclusion, and dialogue not only in curricula but also in pedagogy, governance, and school culture (Barrett, 2018; Muhić, 2024). Intercultural values—as defined by the IMMERSE project—constitute the specific principles that underpin such practices in education, including respect, openness, empathy, and reciprocity. They function as normative guidelines for teachers and school leaders in shaping an inclusive school environment.

Finally, at the individual level, intercultural competence refers to the set of attitudes, skills, and knowledge that enable effective and ethical interaction across cultures, such as awareness of prejudice, respect for difference, and openness to alternative perspectives (Barrett, 2018; Deardorff, 2006). Taken together, these concepts are not parallel but layered: cultural diversity describes a social reality; multiculturalism and interculturalism represent different normative and practical approaches to that reality; intercultural education and intercultural values specify how these orientations are enacted in schools; and intercultural competence refers to the individual capacities needed to navigate and sustain them.

1.3. The present study

The main aim of this article is to examine the relationship between the adoption of intercultural values by teachers and principals, and the sense of belonging reported by students with and without a migrant background. Drawing on the unique IMMERSE data-set—the largest cross-country survey of migrant and refugee children in Europe—this study builds on multi-informant data collected from >24,000 children and over 400 schools in six countries.

Our central research question is: Does the extent to which teachers and principals adopt and promote intercultural values positively affect both migrant-background and non-migrant children's sense of belonging to their schools?

We hypothesise that schools where intercultural values are more strongly embedded in principals' leadership and teachers' practices will report higher levels of belonging among students, regardless of background. This constitutes our main hypothesis. Building on this, we formulate a series of specific hypotheses aligned with the IMMERSE variables:

- H1: Students' sense of belonging will be positively associated with the importance attributed to intercultural values in the school's identity (as reported by principals and teachers).
- H2: Students' sense of belonging will be positively associated with teachers' opinions about pluralism (as reported by principals and teachers).
- H3: Students' sense of belonging will be positively associated with teachers' opinions about multiculturalism (as reported by principals and teachers).
- H4: Students' sense of belonging will be positively associated with the inclusion of key intercultural topics in the school curriculum (as evaluated by principals) and in classroom lessons (as evaluated by teachers), specifically:
 - o H4a: knowledge of different cultures;
 - o H4b: knowledge of different religions;
 - o H4c: respect for cultural diversity;
 - H4d: recognising cultural prejudice and stereotypes

A distinctive feature of this study is its use of a multi-informant design. While students provide self-reports on their sense of belonging, teachers and principals assess the salience of intercultural values within their schools. This design offers several strengths. First, it allows us to avoid the methodological limitation of relying solely on students' perceptions of the school climate, a common approach in diversity climate research (Lüdtke et al., 2009). Second, it enables us to capture different perspectives within the same institutional setting: teachers' evaluations of their colleagues' practices, and principals' assessments of teachers' attitudes and behaviours. Finally, by aggregating these perspectives at the school level, we can draw robust conclusions about how intercultural values are institutionally embedded and whether this has an impact on students' belonging.

At the same time, this approach entails certain limitations. Students are not directly asked about the implementation of intercultural values in their schools, which means their perspective on this dimension is inferred rather than measured. Moreover, prior research has shown that there is often a disconnect between teachers' and students' perceptions of diversity approaches (Civitillo et al., 2017), raising the possibility that adults' reports may not fully align with children's lived experiences. Nevertheless, triangulating perspectives from principals, teachers, and students provides a more comprehensive and reliable account of how intercultural values at school relate to the sense of belonging among children.

2. Methods

The present study adopts a pragmatic research paradigm, reflecting its emphasis on practical outcomes and the integration of theoretical concepts with actionable results (Morgan, 2014). Pragmatism focuses on addressing real-world problems and evaluating their implications through empirical methods. In this context, the research investigates how the promotion of intercultural values within educational institutions affects students' sense of belonging, particularly among migrant populations. The employment of a quantitative approach in this study aligns with the core principle of pragmatism, namely the utilisation of data-driven insights to inform effective policy and practice. This approach is particularly pertinent in the field of educational research, where the nexus of leadership, cultural diversity, and inclusion necessitates a pragmatic framework to create meaningful change (Biesta, 2010; Kaushik & Walsh, 2019).

2.1. Procedure

The study received ethical approval from the Ethics Committee of the Comillas Pontifical University (Approval No 2019–30 dated March 19th, 2019), and informed consent was obtained from all participants prior to participating in the study. The project employed a context-adapted sampling framework to address the challenges posed by migration and refugee influx in Europe. Sampling was guided by methodological goals and logistical constraints, targeting regions and schools with significant migrant populations, primarily in urban areas. A stratified random sampling strategy was used for formal education sites, while non-probability methods were applied for non-formal sites to include hard-to-reach migrant children, such as those in transit or in temporary accommodations. The study was conducted in accordance with ethical principles, ensuring voluntary participation and seeking parental consent when necessary. A comprehensive account of the sampling techniques employed is provided in the project deliverables (Martin et al., 2023; Maier et al., 2020).

¹ Since the research was conducted in six different countries, the ages at which underage children and adolescents could provide consent for themselves (rather than assent) differed according to the country-specific legal and ethical frameworks. The different consent approaches implemented can be consulted in the IMMERSE Deliverable D3.4 Analysis reports after carrying out the research across countries in schools and other learning environments, which can be accessed in the Zenodo repository of the IMMERSE Project: https://zenodo.org/records/10119215

2.2. Sample description

Among the results collected, hereafter, we will present data from 164 educational centres² from those countries, including information provided by their principals, by 2052 of their teachers, and 24419 children from 7 to 18 years old participating in IM-MERSE's data collection, considering both migrant and native children. Below, we present some of the characteristics of each sample:

2.2.1. Educational centres

Of the 393 centres sampled, we include information on 164 educational centres, of which 145 were formal (88.4 %), and 19 were non-formal centres (11.6 %). A total of 229 centres were excluded since they only provided input from principals, teachers, or students, making it impossible to link their responses per centre and provide a meaningful analysis. Regarding their management arrangement, a vast majority was run by a public education authority, government agency, or board appointed by government or elected by public franchise (89 %). The other significant category of centres was those run by a non-government organisation such as a church, trade union, an NGO, a charity, or another private institution (11 %). Table 1 shows the distribution of educational centres in the different countries. The mean number of students per educational centre is 376.82 (SD = 280.57), and the mean percentage of migrant background students (including both first and second generation) is 31.99 % (SD = 23.30).

2.2.2. Principals

A total of 164 principals responded to the IMMERSE questionnaire. Of these, 78 (47.6 %) were male and 86 (52.4 %) were female. Their mean age was 53.14 years (SD = 7.94), and the mean years they had worked at the school in any role were 12.34 (SD = 8.81), while the mean years they had spent in the current position in their schools was 5.99 (SD = 4.60).

2.2.3. Teachers

Regarding the teaching staff, of the 2052 teachers that completed the IMMERSE survey, 486 (23.7 %) were male, 1535 (74.8 %) were female, 14 (0.7 %) described their gender "in another way", and 17 (0.8 %) preferred not to answer. Their mean age was 44.96 (SD = 10.70). In terms of professional experience, the mean years spent in their current position in their schools was 8.58 (SD = 8.80), while the mean years spent in the educational sector in general reached 16.03 (SD = 10.74). The vast majority of the teaching staff had a full-time employment (89.1 %), while around 10 % had a part-time contract, and only 1 % did not answer. The subjects taught by the teaching staff are portrayed in Annex 0.

2.2.4. Children

A total of 24,419 children aged 7 to 21 completed the IMMERSE questionnaire. The mean age was 12.96 (SD = 3.195), and the age ranges are portrayed in Table 2. Of these, 12,163 (50.0 %) were male, 11,277 (46.2 %) were female, 363 (1.5 %) described their gender "in another way", and 536 (2.2 %) preferred not to answer.

Concerning the migrant background of the children, 9584 (39.4 %) were non-migrants, 7721 (31.7 %) were second-generation migrant children, 5623 (37.4 %) were first-generation migrant children, and 1413 (6 %) had an undefined origin. Table 3 shows the distribution of children's migrant background per country of survey. Additionally, 61.2 per cent of the sample of first-generation migrants came from the 16 countries listed in Table 4.

2.3. Instruments

The IMMERSE dashboard of socio-educational inclusion indicators (Serrano et al., 2024) emerged from a co-creation process which involved key stakeholders at the micro (children and their families), *meso* (teachers, principals, social workers) and macro levels (policy-makers), resulting in 30 indicators. Fourteen are indicators for children's integration, and sixteen are for barriers and facilitators at the *meso* and macro levels. Both groups of indicators include those deriving from available secondary sources such as MIPEX, PISA, PIAAC or Eurydice³ and indicators collected through questionnaires for children, teachers and principals designed within the project (Serrano Sanguilinda et al., 2020). The variables analysed in the present paper derived from these questionnaires, which can be consulted in the ZENODO repository of the project (IMMERSE Research Consortium, 2023d, 2023c, 2023b, 2023a). Teachers, principals and children's questionnaires were translated into the official languages of the consortium countries (Dutch, English, French, German, Greek, Italian, and Spanish) and into eight additional languages identified by the partners as the most common foreign languages in their countries (Arabic, Chinese, Farsi, Romanian, Russian, Somali, Ukrainian, and Urdu). All items used in the present analyses are detailed in the footnotes. Additionally, information on the original instruments, their sources, validity and reliability can be found in Annex 21. It also includes the original items of the instruments along with the adaptation conducted within the IMMERSE project.

PIAAC: Evaluates skills in literacy, numeracy, and problem-solving. Eurydice: Provides information on education systems and policies in Europe.

² In this article, the term *educational centres* refers broadly to both formal provisions (ranging from primary to secondary schooling, including vocational training) and non-formal initiatives (such as homework support programmes, community-based initiatives, and similar learning spaces).

³ MIPEX: Measures and compares migrant integration policies across countries.PISA: Assesses 15-year-olds' skills in reading, math, and science.

Table 1
Number of educational centres by country.

	N	%	Valid %
Spain	36	15.0	22.0
Ireland	24	10.0	14.6
Italy	19	7.9	11.6
Germany	8	3.3	4.9
Greece	66	27.5	40.2
Belgium	11	4.6	6.7
Total	164	68.3	100

Table 2
Age ranges of the children's sample.

	N	%	Valid %
Childhood (7 to 10 year-olds)	5981	24.5	24.6
Early adolescence (11 to 13 year-olds)	7258	29.7	29.8
Middle adolescence (14 to 16 year-olds)	7259	29.7	29.8
Late adolescence (17 and 18 year-olds)	3312	13.6	13.6
Beyond IMMERSE's scope (19 or more)	510	2.1	2.1
Total	24,320	99.6	100.0
Missing value	99	0.4	
Total	24,419	100.0	

 Table 3

 Children's migrant background per country of survey.

		Non-migrant	Migrant 2nd generation	Migrant 1st generation	Undefined origin	Total
Belgium	n	257	455	471	76	1259
	%	20.4	36.1	37.4	6.0	100
Germany	n	569	730	1296	90	2685
	%	21.2	27.2	48.3	3.4	100
Greece	n	892	1386	1032	50	3360
	%	26.5	41.3	30.7	1.5	100
Ireland	n	687	492	340	50	1569
	%	43.8	31.4	21.7	3.2	100
Italy	n	4408	2217	1096	455	8176
	%	53.9	27.1	13.4	5.6	100
Spain	n	2771	2441	1388	692	7292
•	%	38.0	33.5	19.0	9.5	100
Total	N	9584	7721	5623	1413	24,341
	%	39.4	31.7	23.1	5.8	100

Table 4 Children's countries of origin (of the 1st generation migrant sample).

	N	%
Morocco	539	9.6
Syria	456	8.1
Ukraine	420	7.5
Afghanistan	324	5.8
Albania	268	4.8
Egypt	209	3.7
Bangladesh	169	3.0
Romania	156	2.8
Colombia	128	2.3
Pakistan	120	2.1
Somalia	119	2.1
Philippines	117	2.1
Iraq	107	1.9
Venezuela	107	1.9
Bulgaria	101	1.8
Russia	100	1.8
Other	2183	38.8
Total	5623	100

2.4. Data analysis

The means were contrasted with bifactorial ANOVA to analyse the differences in the sense of belonging according to the migrant background and the perceived importance of intercultural values, as well as their interaction. Eta-squared (η^2) was used to calculate the magnitude of the differences. The assumptions of homogeneity of variances were examined with Levene's test and normality with the Kolmogorov-Smirnov test. To validate the findings, non-parametric tests were also performed. These included the Scheirer-Ray-Hare (SRH) test for bifactorial ANOVA. IBM SPSS Statistics 23 and JAMOVI 2.2.5 (r-based) software were used to perform the analyses, with p < .05 considered significant. In order to facilitate the interpretation of the results, all analyses are presented using both parametric and non-parametric tests (Table 5). In none of the cases is the assumption of normality of the residuals fulfilled, and only in some cases is Levene's assumption fulfilled. In these cases, where Levene's assumption is met, the results of the parametric test (ANOVA) can be interpreted. However, given the considerable inequality of the samples, we believe that non-parametric analysis should be employed.

The databases used are available in the Zenodo repository (IMMERSE Research Consortium, 2023a, 2023b, 2023c, 2023d). The study analysis code is unavailable.

3. Results

The results of the IMMERSE indicators pertaining to the relevance of intercultural values for schools (as perceived by school principals and teachers) and their relationship with the sense of belonging of their students are presented herein. The descriptive statistics, including means and SD of all the analyses conducted, can be found in the supplementary material. The results were analysed across a range of profiles of children, including those with a migrant background (69.1 % of the sample).

Children's sense of belonging in school is a variable that is embedded in the well-being dimension of IMMERSE's socio-educational inclusion outcomes (Bajo Marcos et al., 2020; Serrano Sanguilinda et al., 2020). This dimension reflects children's subjective hedonic experience of their own lives and their psychosocial adjustment during integration processes. The sense of belonging indicator⁴ reflects how much children feel endorsed by and as a part of their school. This is measured through a scale built with several items in which children must respond how frequently they feel like they belong at school, that they can really be themselves at school, and that people at their school care about them.

3.1. School identity on intercultural values

Statistical analysis reveals significant differences in children's sense of belonging based on school identity on intercultural values as reported by both principals⁵ and teachers⁶ (p < .001). Children in schools where intercultural values are central to the school's identity exhibit higher levels of belonging compared to those where such values are less emphasised. This trend is consistent across both data sources, showing that promoting intercultural values positively impacts students' sense of belonging.

Significant differences in belonging are also observed based on migrant background (p < .01). Non-migrant children demonstrate higher levels of belonging than first- and second-generation migrant children. However, these differences are relatively minor in both data sources.

The interaction effect between school identity on intercultural values and students' migrant background significantly relates to belonging (p < .001). As indicated by the η^2 , effect sizes are small. The Scheirer-Ray-Hare (SRH) test corroborates the findings of Spederor's F test

Figs. 1 and 2 illustrate how promoting intercultural values in schools can enhance belonging, particularly for migrant students. This highlights the importance of inclusive educational policies that value cultural diversity as a core element of a school's identity and mission.

Table 5 summarises the parametric and non-parametric tests for children's sense of belonging by migrant background and school identity on intercultural values. It confirms that both principals' and teachers' perspectives yield consistent results in terms of the positive relation between intercultural values and belonging.

⁴ This question is adapted based on the age of respondents. For younger children this is measured by asking how often four different statements occur to them ("I feel like I belong at my school"; "I can really be myself at school"; "I feel like other children at my school care about me"; "I feel like teachers at my school care about me") in a scale from "almost never", to "sometimes", and "almost always". The younger children's questionnaire includes cartoon-based response options with each statement. For older children this is measured by asking how often three different statements occur to them ("I feel like I belong at my school"; "I can really be myself at school"; "I feel like people at my school care about me") in a scale from "almost never", to "sometimes", and "almost always". Children's responses are summed and transformed to a score from 1-low to 3-high.

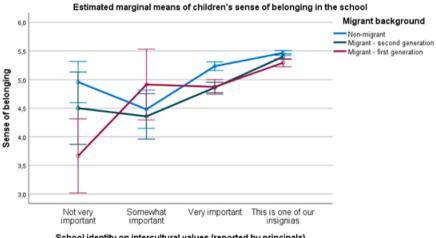
⁵ Measure on "School identity on intercultural values (reported by principals)":Principals were asked: How important are the following aspects for this school (consider how it is presented to parents who approach the school for the first time)?:- Intercultural values (e.g. appreciation of diversity, cultural awareness, openness and tolerance): 1. "Not very important", 2. "Somewhat important", 3. "Very important", and 4. "This is one of our insignias". Here, 'insignias' are a symbolic representation of a key principle or value that defines the school's identity, ethos, or mission.

⁶ Measure on "School identity on intercultural values" (reported by teachers): Teachers were asked: How important are the following aspects for this school (consider how it is presented to parents who approach the school for the first time)?:- Intercultural values (e.g. appreciation of diversity, cultural awareness, openness and tolerance): 1. "Not very important", 2. "Somewhat important", 3. "Very important", and 4. "This is one of our insignias".

Table 5 Children's sense of belonging by migrant background and school identity for all measures (reported by principals and teachers): Parametric (ANOVA), effect size, and non-parametric (Scheirer-Ray-Hare) tests.

		ANOVA			SRH (non-parametric)		
		Principals		Teachers		Principals	Teachers
		F	η^2	F	η^2	Н	Н
School identity on intercultural values	Belonging	65.169***	0.014+	79.47***	0.013+	218.32***	284.54***
	Migrant b.	4.691**	0.001	0.74	0.000	51.027***	47.75***
	Interaction	5.383***	0.002	2.74*	0.001	26.65***	19.81**
Teachers' opinion about pluralism	Belonging	44.207***	0.007	93.882***	0.021 +	119.87***	1810.32***
	Migrant b.	1.652	0.000	0.962	0.000	65.07***	55.36***
	Interaction	2.428*	0.001	1.844	0.001	7.48	238.81***
Teachers' opinion about multiculturalism	Belonging	33.250***	0.005	232.23***	0.035+	90.01***	1751.80***
-	Migrant b.	3.882*	0.001	2.470	0.000	67.69***	55.13***
	Interaction	1.057	0.000	3.087*	0.001	2.09	157.94**
Knowledge of different cultures	Belonging	11.970***	0.001	1.117	0.000	21.97***	1.991
	Migrant b.	1.791	0.000	0.638	0.000	73.32***	14.157***
	Interaction	0.310	0.000	0.105	0.000	2.60	0.249
Knowledge of different religions	Belonging	30.96***	0.003	26.652**	0.002	40.47***	26.851***
	Migrant b.	7.412***	0.001	1.665	0.000	65.80***	0.527
	Interaction	0.023	0.000	3.471*	0.000	3.720	7.839*
Respect for cultural diversity	Belonging	0.053	0.000	0.801	0.000	0.073	6.913**
	Migrant b.	5.468**	0.001	5.342**	0.001	76.79***	14.093***
	Interaction	0.807	0.000	7.867***	0.001	1.88	15.918***
Recognising cultural prejudice and stereotypes	Belonging	97.677***	0.008	11.196***	0.001	125.23***	14.410***
	Migrant b.	5.663**	0.001	2.368	0.000	56.02***	12.729**
	Interaction	4.674**	0.001	1.028	0.000	9.87**	2.653

Note. *p < .05; *p < .05; *p < .01; **p < .001; Effect sizes (p2); +Small > 0.01; †Medium > 0.06; ‡Large > 0.14. Dark shading indicates that the results are significant for both teachers and principals. Light shading indicates that only one of the two, either teachers or principals, is significant.



School identity on intercultural values (reported by principals)

Error bars: 95% CI

Fig. 1. Estimated marginal means of children's sense of belonging in the school by migrant background and school identity on intercultural values (reported by principals).

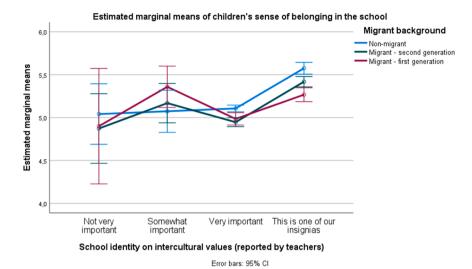


Fig. 2. Estimated marginal means of children's sense of belonging in the school by migrant background and school identity on intercultural values (reported by teachers).

3.2. Teachers' opinions about pluralism

Statistical analysis shows significant differences in children's sense of belonging based on teachers' opinions about pluralism, as reported by both principals⁷ and teachers⁸ (p < .001). Children in schools where most or all teachers share the belief that "It is important for students to learn that people from other cultures can have different values" exhibit the highest levels of belonging. This trend is consistent regardless of whether the belief is reported by principals or teachers, indicating a strong link between shared pluralistic values and a sense of belonging.

When considering children's migrant backgrounds, the Snedecor's F test does not reveal significant differences. However, the non-parametric SRH test (p < .001), which is more reliable in this context due to violations of normality and variance homogeneity, does show differences. In general, non-migrant children tend to have slightly higher levels of belonging than first- and second-generation migrant children, though these differences are relatively small.

The interaction effect between teachers' opinions about pluralism and children's migrant backgrounds also significantly affects their sense of belonging (p < .05). Both principals' and teachers' reports support this finding, with small effect sizes as indicated by η^2 . Figs. 3 and 4 illustrate that schools actively promoting cultural diversity and pluralism -with these values embraced by the majority of educators- have a positive relation with students' sense of belonging. This underscores the importance of inclusive policies and practices that emphasise intercultural understanding as a central component of education. The results from both the parametric and non-parametric analyses are consistent with regard to the perspectives of both principals and teachers on pluralism and its association

practices that emphasise intercultural understanding as a central component of education. The results from both the parametric and non-parametric analyses are consistent with regard to the perspectives of both principals and teachers on pluralism and its association with belonging (Table 5). Contrary to our expectations, the result for 'Shared among none or almost none of the teachers' is higher on the pluralism scale (Fig. 4). However, this result should be disregarded, given that only 0.25 % of participants chose this answer. Therefore, the upward trend in the graph would be consistent with the trend reported by the principals if this first answer option were disregarded.

3.3. Teachers' opinions about multiculturalism

Statistical analysis reveals significant differences in children's sense of belonging based on teachers' opinions about

⁷ Measure on "Teachers' opinions about pluralism (reported by principals)":Principals were asked: To what extent do the following statements reflect an opinion shared by the teachers of your school?- It is important for students to learn that people from other cultures can have different values.1=shared among none or almost none of the teachers, 2=shared among some of the teachers, 3=shared among many of the teachers, 4=shared among all or almost all of the teachers.

⁸ Measure on "Teachers' opinions about pluralism (reported by teachers)":Teachers were asked: To what extent do the following statements reflect an opinion shared by the teachers of your school?- It is important for students to learn that people from other cultures can have different values.1=shared among none or almost none of the teachers, 2=shared among some of the teachers, 3=shared among many of the teachers, 4=shared among all or almost all of the teachers.

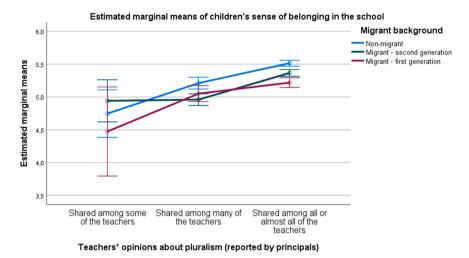


Fig. 3. Estimated marginal means of children's sense of belonging in the school by migrant background and teachers' opinions about pluralism (reported by principals).

Error bars: 95% CI

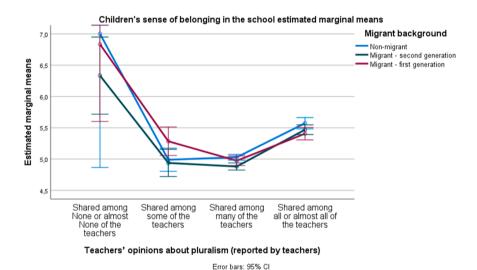


Fig. 4. Estimated marginal means of children's sense of belonging in the school by migrant background and teachers' opinions about pluralism (reported by teachers).

multiculturalism, as reported by both principals and teachers (p < .001). Children in schools where most or all teachers share the belief that "Respecting other cultures is something that students should learn as early as possible" exhibit the highest levels of belonging. This trend is consistent across both data sources, reinforcing the link between multicultural values and students' sense of belonging.

Regarding differences by children's migrant background, the Snedecor's F test does not reveal significant differences. However, the non-parametric SRH test (p < .001), which is more reliable in this context, shows that non-migrant children tend to have higher levels

⁹ Measure on "Teachers' opinions about multiculturalism (reported by principals)":Principals were asked: To what extent do the following statements reflect an opinion shared by the teachers of your school?- Respecting other cultures is something that students should learn as early as possible.1=shared among none or almost none of the teachers, 2=shared among some of the teachers, 3=shared among many of the teachers, 4=shared among all or almost all of the teachers.

¹⁰ Measure on "Teachers' opinions about multiculturalism (reported by teachers)":Teachers were asked: To what extent do the following statements reflect an opinion shared by the teachers of your school?- Respecting other cultures is something that students should learn as early as possible.1=shared among none or almost none of the teachers, 2=shared among some of the teachers, 3=shared among many of the teachers, 4=shared among all or almost all of the teachers.

of belonging than first- and second-generation migrant children. This pattern varies slightly depending on the data source, but the differences remain relatively small.

The interaction effect between teachers' opinions about multiculturalism and students' migrant backgrounds significantly relates to belonging (p < .05). Although effect sizes, as indicated by η^2 , are small, both principals' and teachers' perspectives highlight the importance of promoting multiculturalism in fostering a sense of belonging.

Figs. 5 and 6 provide visual evidence supporting these findings, showing that the active promotion of multiculturalism in schools, particularly when embraced by the majority of educators, positively impacts students' sense of belonging. As indicated in Table 5, the analyses yielded consistent results with regard to both principals' and teachers' reports on multiculturalism and its effects on belonging.

3.4. Inclusion of key intercultural topics in the school curriculum (reported by principals) or in their lessons (reported by teachers)

3.4.1. Knowledge of different cultures

Statistical analysis reveals that the inclusion of the topic "knowledge of different cultures" in the school curriculum or lessons, as reported by principals¹¹ and teachers, ¹² has a limited relation with children's sense of belonging. While schools that include this topic generally show slightly higher levels of belonging, the differences are not statistically significant in most cases, and the effect sizes ($\eta^2 = 0.001$) are small.

Regarding differences by migrant background, the Snedecor's F test does not reveal significant effects, but the non-parametric SRH test (p < .001) shows that non-migrant students tend to have slightly higher levels of belonging compared to first- and second-generation migrant students. However, these differences are minor and consistent across both principals' and teachers' reports.

The interaction effect between the inclusion of this topic and students' migrant backgrounds does not yield statistically significant results (p > 0.05). This suggests that including "knowledge of different cultures" in the curriculum or lessons does not distinctly affect the sense of belonging for different migrant groups.

Annexes 15 and 16 illustrate these findings, showing minor variations in belonging levels with overlapping error bars. These results indicate that other unexamined factors or the manner of implementation may play a more significant role in shaping students' sense of belonging. As shown in Table 5, the results of the parametric and non-parametric analyses indicate that this topic has a limited link with belonging, with only small differences observed across migrant backgrounds.

3.4.2. Knowledge of different religions

Statistical analysis reveals that the inclusion of the topic "knowledge of different religions" in the school curriculum or lessons, as reported by both principals¹³ and teachers, ¹⁴ has a significant but small effect on children's sense of belonging (p < .001). Children in schools where this topic is included tend to have slightly higher belonging scores compared to those in schools where it is not included. The effect sizes ($\eta^2 = 0.003$ for principals, and $\eta^2 = 0.002$ for teachers) indicate that these differences are small.

Regarding differences by migrant background, non-migrant children consistently exhibit higher belonging scores compared to firstand second-generation migrant children (p < .001), although the magnitude of these differences is low ($\eta^2 = 0.001$). The interaction effect between the inclusion of this topic and students' migrant background shows no significant results when reported by principals (p > .05), but a small significant effect is observed when reported by teachers (p < .05, $\eta^2 = 0.000$).

Annexes 17 and 18 illustrate these findings, showing that while including the topic "knowledge of different religions" has a positive connection with students' sense of belonging, the differences across migrant groups are minor and consistent with the small effect sizes. This suggests that other factors beyond curriculum content may play a more significant role in fostering a sense of belonging. The analyses (Table 5) confirm that this topic has a small effect on belonging, and that the patterns seen in the reports from school principals and teachers are similar.

3.4.3. Respect for cultural diversity

The inclusion of the topic "respect for cultural diversity" in the school curriculum or lessons, as reported by both principals¹⁵ and teachers, ¹⁶ does not produce significant differences in students' sense of belonging (p > .01). While there is a slight tendency for higher belonging scores when this topic is included, the differences are not statistically significant, and the effect sizes ($\eta^2 = 0.001$) are low.

¹¹ Measure on "Knowledge of different cultures (reported by principals)":Principals were asked: Does the school curriculum include the following topics?- Knowledge of different cultures 1. "Yes", 2. "No".

¹² Measure on "Knowledge of different cultures (reported by teachers)":Teachers were asked: In your lessons, do you usually include opportunities to promote the following skills?- Knowledge of different cultures 1. "Yes", 2. "No".

¹³ Measure on "Knowledge of different religions (reported by principals)":Principals were asked: Does the school curriculum include the following topics?- Knowledge of different religions 1. "Yes", 2. "No".

¹⁴ Measure on "Knowledge of different religions (reported by teachers)":Teachers were asked: In your lessons, do you usually include opportunities to promote the following skills?- Knowledge of different religions 1. "Yes", 2. "No".

¹⁵ Measure on "Respect for cultural diversity (reported by principals)":Principals were asked: Does the school curriculum include the following topics?- Respect for cultural diversity 1. "Yes",2. "No".

¹⁶ Measure on "Respect for cultural diversity (reported by teachers)": Teachers were asked: In your lessons, do you usually include opportunities to promote the following skills?- Respect for cultural diversity 1. "Yes", 2. "No".

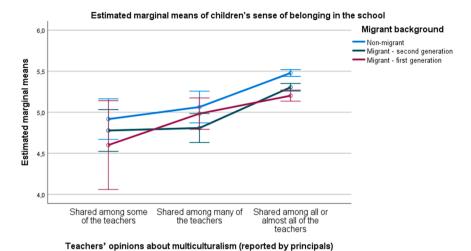


Fig. 5. Estimated marginal means of children's sense of belonging in the school by migrant background and teachers' opinions about multiculturalism (reported by principals).

Error bars: 95% Cl

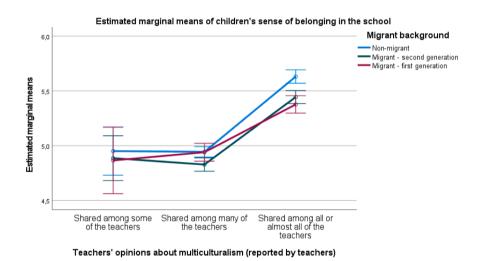


Fig. 6. Estimated marginal means of children's sense of belonging in the school by migrant background and teachers' opinions about multiculturalism (reported by teachers).

Error bars: 95% CI

Significant differences in belonging are observed based on students' migrant background (p < .01), with non-migrant students exhibiting higher belonging scores compared to first- and second-generation migrant students. These differences, consistent across principals' and teachers' reports, remain minor.

A significant interaction effect is observed between the inclusion of this topic in school lessons and students' migrant background on their sense of belonging (p < .001) when reported by teachers. However, the effect size ($\eta^2 = 0.001$) indicates that the magnitude of this interaction is low. No significant interaction effect is observed when the topic's inclusion is reported by principals (p > .05).

Annexes 19 and 20 illustrate these findings, showing a general tendency for higher belonging scores among non-migrant students compared to their migrant peers. However, the overall effect of including "respect for cultural diversity" remains limited, suggesting that other factors might play a more prominent role in shaping students' sense of belonging. As shown in Table 5, the results of the parametric and non-parametric analyses indicate that the inclusion of this topic has a limited connection with belonging, with only minor differences observed across different migrant backgrounds and minimal interaction effects.

3.4.4. Recognising cultural prejudice and stereotypes

Statistical analysis indicates that the inclusion of the topic "recognising cultural prejudice and stereotypes" in the school curriculum, as reported by principals¹⁷ is associated with higher belonging scores among students (p < .001). Students in schools where this topic is included (reported by principals) show slightly higher belonging scores compared to those where it is not, although the effect size (η^2 = 0.008 for principals) is low. However, contrary to our expectations, the result for sense of belonging is higher for those students whose teachers¹⁸ recognised not including cultural prejudice and stereotypes as part of their lessons (p < .001; η^2 =0.001 for teachers) (Fig. 8). This result should be interpreted with great caution given that only 3.30 % of their teachers chose this answer and the differences, although statistically significant, are very small.

Differences in belonging based on students' migrant background are also observed (p < .01), with non-migrant students generally reporting higher belonging scores than first- and second-generation migrant students. These differences, though statistically significant, are minor ($p^2 = 0.001$).

Interaction effects vary slightly between principals' and teachers' reports. Principals' data indicate a significant interaction effect between the inclusion of this topic and students' migrant background (p < .01), whereas teachers' data do not show a significant interaction (p > 0.05). However, in both cases, the effect sizes remain low ($p^2 = 0.001$).

Figs. 7 and 8 illustrate these findings. When principals report that their schools include the topic of recognising cultural prejudice and stereotypes, belonging scores increase slightly across all migrant background groups. However, the patterns vary depending on whether the data are reported by principals or teachers, with no consistent trend favouring any specific group.

As shown in Table 5, the parametric and non-parametric analyses corroborate the consistent, though limited, association of this subject with students' sense of belonging, as perceived from the perspectives of principals.

4. Discussion

The findings of this study reinforce the conceptual foundation of inclusive interculturalism, as set out in the IMMERSE project (Serrano Sanguilinda et al., 2019). They affirm that schools in which intercultural values are embedded in the institution are more likely to foster a sense of belonging among migrant and non-migrant students alike. These results expand upon the theoretical understanding that integration is a dynamic, reciprocal interaction between students, educators, and the school environment, rather than a one-way process (Barrett, 2018; Muhić, 2024).

The overall hypothesis that schools where intercultural values are strongly adopted by school leaders and teachers would exhibit higher levels of student belonging was clearly supported. This aligns with earlier evidence from Schachner et al. (2019), who found that positive diversity climates within schools contribute significantly to improved socio-emotional and academic outcomes through the mediating effect of belonging. In our study, this relationship was particularly apparent in institutions where principals explicitly defined the school identity through intercultural values. As prior research has demonstrated (Hajisoteriou & Angelides, 2014), leadership that enacts inclusive visions at the institutional level plays a decisive role in shaping equitable and welcoming environments.

Hypothesis 1 was supported, with reports from both principals and teachers indicating a strong association between an intercultural school identity and increased student belonging. These findings correspond with the work of Celeste et al. (2019), who found that multicultural school policies predicted smaller belonging and achievement gaps between minority and majority youth. This highlights the power of formal institutional stances in reducing inequalities.

Hypothesis 2 was also supported. Teachers' endorsement of pluralism — specifically, the belief that students should understand that people from other cultures may hold different values — was associated with higher levels of student belonging. This is consistent with the argument that pluralist staff orientations promote inclusive school environments (Barrett, 2018). The fact that this trend emerged in both principal- and teacher-reported data highlights a shared normative commitment, which is likely to enhance its institutional impact.

Similarly, Hypothesis 3 was confirmed. Teachers who emphasised multiculturalism, particularly the importance of respecting other cultures from an early age, contributed to students reporting a greater sense of belonging. This aligns with the meta-analytic review by Bardach et al. (2024), which showed that small, consistent multicultural practices can meaningfully impact belonging outcomes in various educational settings.

Regarding the curricular dimension, Hypothesis 4 yielded mixed results. Sub-hypothesis 4a, which proposed that teaching about different cultures would enhance belonging, was only partially supported. Although schools that included this topic tended to report marginally higher belonging scores, the effects were not statistically significant. This suggests that, unless accompanied by sustained dialogue and participatory teaching approaches, curriculum content alone may be insufficient (Deardorff, 2006).

Hypothesis 4b, which concerned the inclusion of knowledge about different religions, was supported, although with small effect sizes. This aligns with recent calls to integrate religious literacy into global citizenship education to promote empathy and respect (Cerna et al., 2021) and with the findings of Ham et al. (2017) that culturally inclusive curricula strengthen feelings of connection, particularly among students with migrant backgrounds.

¹⁷ Measure on "Recognising cultural prejudice and stereotypes":Principals were asked: Does the school curriculum include the following topics?-Recognising cultural prejudice and stereotypes 1. "Yes", 2. "No".

¹⁸ Measure on "Recognising cultural prejudice and stereotypes (reported by teachers)": Teachers were asked: In your lessons, do you usually include opportunities to promote the following skills?- Recognising cultural prejudice and stereotypes 1. "Yes", 2. "No".

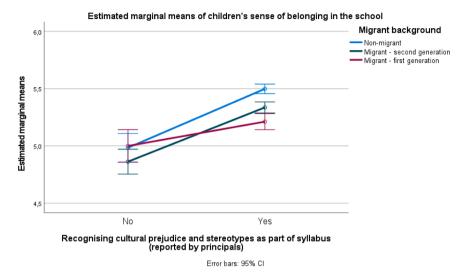


Fig. 7. Estimated marginal means of children's sense of belonging in the school by migrant background and the inclusion of the topic 'recognising cultural prejudice and stereotypes' in the school curriculum.

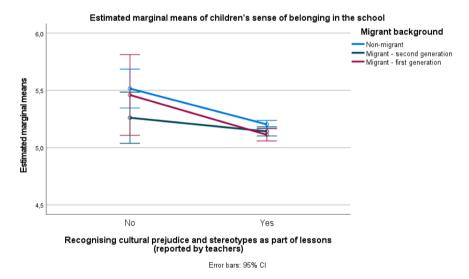


Fig. 8. Estimated marginal means of children's sense of belonging in the school by migrant background and the inclusion of the topic 'recognising cultural prejudice and stereotypes' in the school lessons.

In contrast, Hypothesis 4c, which focused on respect for cultural diversity, was not supported. The absence of significant findings in this area may reflect a discrepancy between symbolic inclusion and actual classroom practice, mirroring the concerns of previous studies that such values are frequently presented in a performative rather than substantive manner (Hajisoteriou, 2012). Despite its rhetorical prominence, including this topic did not measurably affect students' sense of belonging.

Regarding Hypothesis 4d, the findings suggest that including the topic of recognising cultural prejudice and stereotypes in the curriculum is associated with modest yet consistent improvements in students' sense of belonging, as reported by school leaders. While the effect sizes remain small, the data suggest that providing students with opportunities to engage in critical reflection on bias contributes to creating a more inclusive school climate. This finding supports earlier arguments that intercultural education is most effective when it addresses structural inequalities and discriminatory attitudes directly, rather than merely celebrating diversity (Barrett, 2018; Schachner et al., 2019). The positive association also reflects the recommendations of Hajisoteriou and Angelides (2014), who emphasise the importance of anti-bias initiatives and reflective dialogue as core components of intercultural school leadership. While teacher-reported data showed less consistent patterns, likely due to the small number of teachers indicating the absence of this content, the overall findings nonetheless emphasise that explicitly addressing prejudice can strengthen students' sense of being valued members of the school community more effectively than implicitly addressing it. Thus, Hypothesis 4d is partially supported, reinforcing the broader claim that tackling stereotypes and fostering critical awareness are vital strategies for building belonging and social cohesion in diverse educational settings.

One particularly notable finding relates to the discrepancy in impact between the perceptions of principals and teachers. The endorsement of intercultural values by principals was found to be more consistently and strongly associated with student outcomes than that of teachers. This may be attributed to the nature of school leadership, which influences institutional policies, ethos and strategic planning. However, as Álvarez Valdivia and González Montoto (2018) and Hajisoteriou (2012) have cautioned, effectively implementing intercultural principles requires alignment between institutional visions and classroom practices. The weaker association between teachers' reports and student belonging may reflect implementation challenges such as time constraints, a lack of training or varying degrees of intercultural competence.

Although non-migrant students generally reported higher levels of belonging, the disparity between groups narrowed considerably in schools with a pronounced intercultural identity. This suggests that, although migrant students may face systemic disadvantages in integration processes (Li & Jiang, 2018), these can be offset to some extent through inclusive and intentional school policies and practices. In this respect, the school becomes a vital space not only for learning, but also for social inclusion and democratic participation.

Taken together, these findings emphasise the importance of embedding intercultural values in all areas of school life, including the curriculum, pedagogy, leadership and institutional culture. They indicate that inclusive interculturalism is a practical framework that, when effectively implemented, can produce tangible improvements in students' sense of belonging, rather than simply being a normative ideal. In a context of increasing cultural diversity and social polarisation across Europe, such strategies are essential, not merely desirable.

5. Limitations

The findings of this study should be interpreted with caution due to the uneven distribution of participants across the sample, which constitutes a notable limitation. Furthermore, it is important to acknowledge the inherent challenges in accessing underage populations, particularly among migrant children, who are considered a vulnerable demographic. These difficulties further constrained the scope of our sample. Additionally, due to restrictions on manuscript length, we were unable to conduct more extensive analyses, such as exploring gender differences or cross-country comparisons, both of which could have provided deeper insights into the topic. These analyses will be addressed in future outputs. Finally, despite the data being nested within schools and countries, the number of units per level was insufficient for multilevel modelling. It is therefore recommended that future research with more balanced samples consider multilevel analysis.

6. Conclusions

The findings underline the importance of integrating intercultural values in schools, both by principals and teachers, as they are strongly correlated with students' sense of belonging, especially among migrant children. Schools where principals consider intercultural values to be fundamental have higher levels of belonging among both migrant and non-migrant pupils than schools where these values are given less importance. Furthermore, schools where teachers reach a broader consensus on the importance of respecting cultural differences achieve better results in terms of students' sense of belonging.

Although non-migrant students generally report a greater sense of belonging than their migrant peers, the gap between these groups tends to narrow when schools, through the actions of principals and teachers, place a strong emphasis on intercultural values. Among the specific topics analysed, the inclusion of "knowledge of different religions" in both curriculum and classroom practice is associated with small but statistically significant improvements in students' sense of belonging. In contrast, "respect for cultural diversity" shows more limited effects, with no significant differences observed in most analyses. While teachers recognise the importance of intercultural values, the views of principals appear to have a more significant relation with students' sense of belonging. A whole school approach to intercultural competence is necessary encompassing not just ethos and curriculum, but also teaching and learning, policies, staff-student relations, and extracurricular activities.

Ultimately, this study highlights that intercultural values are not just abstract ideals, but practical ways in which schools can encourage a sense of belonging, resilience and democratic participation among all pupils. At a time of growing cultural diversity and social polarisation, the importance of schools as inclusive communities is greater than ever. It is not merely a pedagogical priority, but a societal necessity to empower school leaders and teachers to embed these values authentically. The IMMERSE findings reaffirm that when intercultural values are actively embraced rather than merely proclaimed, schools can become powerful spaces for connection, justice, and shared identity.

CRediT authorship contribution statement

Ángela Ordóñez-Carabaño: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. Elena Rodríguez-Ventosa Herrera: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. Isabel Muñoz-San Roque: Writing – review & editing, Supervision, Resources, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization. Deirdre Horgan: Writing – review & editing, Writing – original draft, Supervision, Methodology, Investigation.

Declaration of competing interest

We have no conflicts of interest to declare.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.ijer.2025.102846.

References

Ahad, A., & Benton, M. (2018). Mainstreaming 2.0: How Europe's education systems can boost migrant inclusion. *Migration Policy Institute Europe*. https://www.migrationpolicy.org/research/mainstreaming-how-europes-education-systems-can-boost-migrant-inclusion.

Álvarez Valdivia, I. M., & González Montoto, I. (2018). Teachers' intercultural competence: A requirement or an option in a culturally diverse classroom? *International Journal of Inclusive Education*, 22(5), 510–526. https://doi.org/10.1080/13603116.2017.1377298

Bajo Marcos, E., Fernández, M., & Serrano, I. (2022). Happy to belong: Exploring the embeddedness of well-being in the integration of migrant and refugee minors. Current Psychology, 42(26), 22576–22588. https://doi.org/10.1007/s12144-022-03341-2

Bajo Marcos, E., Serrano Sanguillinda, I., Ordóñez Carabaño, Á., Rodríguez-Ventosa Herrera, E., & Fernández García, M.. IMMERSE Report on the Results of Evaluation System of Socio-Educational Integration of Migrant Children. Zenodo. https://doi.org/10.5281/zenodo.10119114.

Bardach, L., Röhl, S., Oczlon, S., Schumacher, A., Lüftenegger, M., Lavelle-Hill, R., Schwarzenthal, M., & Zitzmann, S. (2024). Cultural diversity climate in school: A meta-analytic review of its relationships with intergroup, academic, and socioemotional outcomes. *Psychological Bulletin, 150*(12), 1397–1439. https://doi.org/10.1037/bul0000454

Barrett, M. (2018). How schools can promote the intercultural competence of young people. European Psychologist, 23(1), 93–104. https://doi.org/10.1027/1016-9040/a000308

Biesta, G. (2010). Pragmatism and the philosophical foundations of mixed methods research. In A. Tashakkori, & C. Teddlie (Eds.), SAGE handbook of mixed methods in social & behavioral research. Sage Publications.

Celeste, L., Baysu, G., Phalet, K., Meeussen, L., & Kende, J. (2019). Can school diversity policies reduce belonging and achievement gaps between minority and majority youth? Multiculturalism, colorblindness, and assimilationism assessed. Personality and Social Psychology Bulletin, 45(11), 1603–1618. https://doi.org/10.1177/0146167219838577

Cerna, L., Mezzanotte, C., Rutigliano, A., Brussino, O., Santiago, P., Borgonovi, F., & Guthrie, C. (2021). Promoting inclusive education for diverse societies: A conceptual framework. OECD education working papers. Organisation for Economic Cooperation and Development (OECD. https://dx.doi.org/10.1787/94ab68c6-en.

Civitillo, S., Schachner, M., Juang, L., van de Vijver, Handrick, A., & Noack, P. (2017). Towards a better understanding of cultural diversity approaches at school: A multi-informant and mixed-methods study. Learning, Culture and Social Interaction, 12, 1–14. https://doi.org/10.1016/j.lcsi.2016.09.002.

Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*, 10(3), 241–266. https://doi.org/10.1177/1028315306287002

Epstein, S. (1998). Cognitive-experiential self-theory. Eds.. In D. F. Barone, M. Hersen, & V. B. Van Hasselt (Eds.), Advanced personality (pp. 211–238). Springer. https://doi.org/10.1007/978-1-4419-8580-4_9

European Commission/EACEA/Eurydice. (2019). Integrating students from migrant backgrounds into schools in Europe: National policies and measures. Publications Office of the European Union. https://doi.org/10.2797/222073

European Migration Network. (2022). Annual report on migration and asylum 2021. https://ec.europa.eu/migrant-integration/system/files/2022-06/EMN_Annual-report_Migration_report_final.pdf.

Eurostat. (2023). Proportion of population by age group, sex and citizenship. https://doi.org/10.2908/DEMO_POPPCCTZ.

Eurostat. (2024). Children in migration - Demography and migration. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Children_in_migration_demography_and_migration.

Hajisoteriou, C. (2012). Listening to the winds of change: School leaders realizing intercultural education in Greek-Cypriot schools? *International Journal of Leadership in Education*, 15(3), 311–329. https://doi.org/10.1080/13603124.2011.605473

Hajisoteriou, C., & Angelides, P. (2014). Facing the 'challenge. Educational Management Administration & Leadership, 42(4_suppl), 65–82. https://doi.org/10.1177/1741143213502194

Ham, S.-H., Yang, K.-E., & Cha, Y.-K. (2017). Immigrant integration policy for future generations? A cross-national multilevel analysis of immigrant-background adolescents' sense of belonging at school. *International Journal of Intercultural Relations*, 60, 40–50. https://doi.org/10.1016/j.ijintrel.2017.06.001

 $IMMERSE\ Research\ Consortium.\ (2023a).\ \textit{IMMERSE}\ older\ children\ questionnaire.\ Zenodo.\ https://doi.org/10.5281/zenodo.10013112$

IMMERSE Research Consortium. (2023b). IMMERSE principals questionnaire. Zenodo. https://doi.org/10.5281/zenodo.10013063 IMMERSE Research Consortium. (2023c). IMMERSE teachers questionnaire. Zenodo. https://doi.org/10.5281/zenodo.10013092

IMMERSE Research Consortium. (2023d). IMMERSE younger children questionnaire. Zenodo. https://doi.org/10.5281/zenodo.10013101

Kaushik, V., & Walsh, C. A. (2019). Pragmatism as a research paradigm and its implications for social work research. Social Sciences, 8(9), 255. https://doi.org/ 10.3390/socsci8090255

Leja, A. M., & Wesselmann, E. D. (2013). Invisible youth: Understanding ostracism in our schools. Communiqué, 42(4), 1.

Li, C., & Jiang, S. (2018). Social exclusion, sense of school belonging and mental health of migrant children in China: A structural equation modeling analysis. *Children and Youth Services Review*, 89, 6–12. https://doi.org/10.1016/j.childyouth.2018.04.017

Lüdtke, O., Robitzsch, A., Trautwein, U., & Kunter, M. (2009). Assessing the impact of learning environments: How to use student ratings of classroom or school characteristics in multilevel modeling. *Contemporary Educational Psychology*, 34(2), 120–131. https://doi.org/10.1016/j.cedpsych.2008.12.001.

Maier, R., Horgan, D., Martin, S., O'Riordan, J., & IMMERSE Research Partners (2020). Report on standardisation across data collection/implementation. Zenodo. doi:10. 5281/zenodo.10119131.

Martin, S., Maier, R., O'Riordan, J., Horgan, D., Serrano Sanguilinda, I., Bajo Marcos, E., ... Ordóñez Carabaño, Á. (2023). IMMERSE analysis reports after carrying out the research across countries in schools and other learning environments. Zenodo. https://doi.org/10.5281/zenodo.10119215

Morgan, D. L. (2014). Pragmatism as a paradigm for social research. Qualitative Inquiry, 20(8), 1045-1053. https://doi.org/10.1177/1077800413513733

Muhić, M. (2024). Standards for intercultural education in North Macedonia: Fostering global citizenship and inclusive societies. *International Journal of Education and Philology*, 5(2), 51–61. https://doi.org/10.69648/AXQW6584

OECD. (2018). Preparing our youth for an inclusive and sustainable world. The OECD PISA global competence framework. 1–64. https://doi.org/10.1074/jbc.M801892200.

- Parekh, B. (2001). Rethinking multiculturalism: Cultural diversity and political theory. *Ethnicities*, 1(1), 109–115. https://doi.org/10.1177/1468796801001001112
 Raabe, I. J. (2019). Social exclusion and school achievement: Children of immigrants and children of natives in three European countries. *Child Indicators Research*, 12 (3), 1003–1022. https://doi.org/10.1007/s12187-018-9565-0
- Schachner, M. K., Schwarzenthal, M., van de Vijver, F. J. R., & Noack, P. (2019). How all students can belong and achieve: Effects of the cultural diversity climate amongst students of immigrant and nonimmigrant background in Germany. *Journal of Educational Psychology*, 111(4), 703–716. https://doi.org/10.1037/edu000303
- Schotte, K., Rjosk, C., Edele, A., Hachfeld, A., & Stanat, P. (2022). Do teachers' cultural beliefs matter for students' school adaptation? A multilevel analysis of students' academic achievement and psychological school adjustment. *Social Psychology of Education*, 25(1), 75–112. https://doi.org/10.1007/s11218-021-09669-0
- Serrano, I., Fernández, M., & Bajo Marcos, E. (2024). Building a set of indicators to assess migrant children's integration in Europe: A Co-creation approach. *Child Indicators Research*. https://doi.org/10.1007/s12187-024-10165-y
- Serrano Sanguilinda, I., Fernández García, M., Bajo Marcos, E., Ordóñez Carabaño, Á., & Rodríguez-Ventosa Herrera, E. (2020). IMMERSE dashboard. D1.5. https://doi.org/10.5281/zenodo.15045576
- Serrano Sanguilinda, I., Fernández García, M., Ordóñez Carabaño, Á., Bajo Marcos, E., Miguel Somavilla, S., & Rodríguez-Ventosa Herrera, E.. Common conceptual framework. https://doi.org/10.5281/zenodo.10117308.
- Serrano Sanguilinda, I., Rodríguez-Ventosa Herrera, E., & Bajo Marcos, E. (2024). IMMERSE dataset catalogue. Zenodo. https://doi.org/10.5281/zenodo.10593352 UNESCO. (2001). Universal declaration on cultural diversity. http://unesdoc.unesco.org/images/0014/001428/142825e.pdf#page=80.
- UNICEF. (2021). Refugee and migrant children in Europe. https://www.unicef.org/eca/emergencies/refugee-and-migrant-children-europe.