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Learning of intercultural competences and languages at school and their influence on global competences and immigrant-origin peers' sense of belonging

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In this study, we use PISA 2018 data to analyze (1) how language learning and teaching of intercultural issues are associated with global competences (GC) both in terms of knowledge and skills aspects as well as attitudes towards diversity, (2a) how the teaching of languages and intercultural issues in the school are related to sense of belonging among young people with migration backgrounds, and (2b) how peers' global knowledge and skills as well as attitudes are related to migrant origin students' sense of belonging at school. Aspects of global competences related to attitudes and cognitive skills are investigated separately. The teaching of intercultural competences was found to be positively associated with the four attitudinal aspects of global competences but negatively associated with the knowledge and cognitive skills associated with GC. Students studying two (or more) world languages tended to display more negative attitudes than those studying just one, in particular for respect for people from other cultures. Furthermore, learning two (or more) world languages versus one also tended to be associated with lower knowledge and cognitive skills related to GC. At the school-level the teaching of intercultural competences or languages were not associated with the sense of belonging of children of immigrants. Peers' attitudes, in particular their awareness of intercultural communication, were more strongly associated with children of immigrants' sense of belonging than their peers' cognitive competences. Thus, we argue that the measurement of global knowledge and skills may be in need of critical reconsideration. Furthermore, it would be beneficial to define more explicitly, which aspects are related to effective intercultural training.

Keywords: global competences, intercultural competence, social justice, sense of belonging, world language teaching

1 Introduction

In today's world, linguistically and culturally diverse people are in constant contact with each other (Spotti & Blommaert, 2017), encountering diverse worldviews, perspectives and ways of living (Schwarzenthal et al., 2020). To provide optimal circumstances for this interaction and to avoid deficit perspectives, interlocutors

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need global competence in order to be open to other cultures and build respect in superdiverse relationships where people with diverse backgrounds interact with each other in various social situations (Hunter et al., 2006). This competence, which could also be called intercultural competence, develops during a person's entire life (Deardorff & Jones, 2012).

Schools can be important sites for advancing intercultural or global competence, especially when the students come from diverse backgrounds (Schwarzenthal et al., 2020). However, the presence of diverse students in the environment does not alone lead to intercultural or global competence and can lead to either positive, or in the worst case, negative attitudes towards diversity (Schmid et al., 2014; Schwarzenthal et al., 2020). Nevertheless, some studies have indicated a positive association between schools' ethnic composition and students' intercultural competence (Denson & Chang, 2009; Schwarzenthal et al., 2018).

School climate is impacted by the ways students experience the school, its values and practices, and the interpersonal relationships among teachers and students (Cohen et al., 2009). For immigrant youth, schools play an important role in the integration process. It is of utmost importance that the school climate values diversity and intercultural communication (Schachner et al., 2019), but also actively challenges and works against inequalities (Freire, 1973; Watts et al., 2011). This is also essential for social justice (Mikander et al., 2018; Sleeter, 2014). According to previous research, the school climate has essential impacts on how immigrant background students succeed at school and how they experience a sense of belonging in their school (Schachner et al., 2019). The psychological wellbeing of persons with an immigrant background tends to be highest when there are mutual positive attitudes as well as the absence of discrimination in the surrounding context (Berry, 1997; Yeasmin & Uusiautti 2018). Intercultural education and education for social justice aim to promote these aforementioned issues (Deardorff & Jones, 2012; Freire, 1973; Hoskins & Sallah, 2011), and can potentially be considered as enhancing global competences. However, little is yet known about how teaching of intercultural issues is associated with global competences.

According to some researchers, competence in different languages is related to a person's global competence (Lambert, 1996) since learning new languages always includes learning about other cultures (Byram & Feng, 2004; Kim, 2020). As Harjanne and colleagues (2015, p. 914) put it: "as language and culture are indivisible, FL [foreign language[1]] teaching and studying inevitably also mean teaching and studying culture and intercultural communication. In addition, FL teaching is also education to respect diversity, to enhance awareness and understanding of multiculturalism." The OECD (2020) also argues that "promoting language learning at school could be a tool that educators use to introduce their students to cultural content from around the world" (p. 230). However, critical understanding of power relations should be included when considering cultural topics and othering people should be avoided (Gorski, 2008; Shi-Xu, 2001). Additionally, cultures should not be seen as stable (Dervin, 2010). Nevertheless, it should not be taken for granted that language education advances awareness of societal inequalities nor social justice. These aspects of global competence might require more thorough understanding of power relations and a will to act against inequalities.

We want to advance understanding of how to develop more inclusive education for all students, but especially for those with migration backgrounds.

Additionally, we are interested in investigating whether aspects of intercultural education lead to positive stances towards diversity. We use the PISA 2018 data to investigate these aforementioned aspects. The PISA assessment of global competence was created to investigate how well students are "prepared to examine contemporary issues of local, global, and intercultural significance and live in multicultural societies" and to identify how global education needs to be developed (OECD/Asia Society, 2018, p. 5). In order to further examine the aforementioned aspects, we investigate the teaching of languages and intercultural issues and their potential impact on different aspects of global competences with the following research questions:

1) How are world language learning as well as teaching of intercultural issues associated with students' knowledge, cognitive and social skills related to global competences (hereafter *global knowledge and skills*) and various attitudes towards diversity?
2) How are the teaching of languages and intercultural issues in the school related to the sense of belonging among young people with migration backgrounds?
3) How are peers' global competences in terms of knowledge and skills as well as attitudes associated with the sense of belonging among young people with migration backgrounds?

We used the OECD and Asia Society's (2018) framework to define global competences. However, due to the criticisms towards this definition and measurement of global competences (Auld & Morris, 2019; Engel et al., 2019; Grotlüschen, 2018), discussed more thoroughly below, we investigated aspects related to attitudes and cognitive competences separately.

2 Theoretical background

2.1 Social justice and intercultural competence

There are several distinct but closely related approaches to defining and understanding how to improve education for migrant students or to increase students' abilities to thrive in a diverse world. Among them are intercultural competence, social justice, global competences and critical pedagogy (see, e.g., Curran, n.d; Deardorff, 2004; Freire, 1973; Mikander et al., 2018): In some views, the emphasis is more on getting along and being able to see and benefit from the viewpoints of different people. Those that take a critical stance go beyond simply getting along and focus on structural inequalities and overcoming inequities inherent in current social structures that marginalize non-dominant students and systematically prevent them from achieving their full potential (see, e.g., Mikander et al., 2018).

The data analysed in this study were based on PISA 2018 data that were gathered with an instrument that focused on intercultural competence and global competencies. However, the analysis of the data was framed by critical intercultural education and social justice education approaches wherein social justice viewpoints are highly relevant, and "power relations between the dominant majority and marginalised groups are recognised as having a central role in education and society" (Mikander et al., 2018, p. 40). Even though these approaches

are not synonymous (see Mikander et al., 2018), they have many similarities. As in social justice education, ideals of social justice and education equity are, according to Gorski (2010), also central in intercultural (or multicultural) education: all students should be able to reach their full potential and actively participate in society, both locally and globally. The perspectives of social justice and power are relevant in education when the aim is to challenge structural inequalities, build trust with students from all kinds of backgrounds and empower them, decrease differences in life conditions and, overall, increase equity in all areas of life (Mikander et al., 2018; Sleeter, 2014).

The aim of social justice pedagogy and intercultural education is to increase awareness of one's own attitudes and competences in communication with other people (Deardorff & Jones, 2012; Hoskins & Sallah, 2011). This can be called intercultural competence (Deardorff, 2004) and it can be defined as "knowledge of others; knowledge of self; skills to interpret and relate; skills to discover and/or to interact; valuing others' values, beliefs, and behaviors; and relativizing one's self" (Deardorff, 2004, p. 247). However, according to Dervin and Layne (2013), it should not be a question of tolerance. Instead, intercultural education should question power relations (Alemanji, 2016; Gorski, 2008; Hoskins & Sallah, 2011) and address discrimination or oppression that mainstream organisations might produce (Hoskins & Sallah, 2011), thus implementing also some of the ideas from critical consciousness (Freire, 1973) in the education of all students aiming to gain a more thorough understanding of structural oppression. Critical consciousness focuses on oppressed people's critical reflection of societal inequalities and active engagement in practices aiming to change these inequalities (Freire, 1973; Watts et al., 2011), and thus, it has a somewhat different perspective than intercultural education, which focuses more on communication between people from various backgrounds. As Gorski (2008) argues, in order to decolonize intercultural education, we should avoid othering of non-dominant groups, reject deficit theories and acknowledge individual and systemic power imbalances. Thus, based on the ideas of critical consciousness, education should give room for a real dialogue and relationships that are not colonial or oppressive (see also Freire, 1973; Watts et al., 2011). Further, Hoskins and Sallah (2011) suggest that intercultural competence should include knowledge of political systems, human rights and the complexity of multiple forms of difference.

Intercultural education, according to Dervin (2010), should not see cultures as singular and stable, or focus on encounters with cultures, not with individuals, nor disregard the influence of the interlocutor, or the context of interaction (see, e.g., Dervin, 2010; Shi-Xu, 2001). Furthermore, it should avoid "ahistorical, depoliticized, and uncritical ethnocentric benevolence" (Andreotti, 2011, p. 144), othering people (Gorski, 2008; Shi-Xu, 2001) and colonial perspectives (see also Freire, 1973). Otherwise, as Gorski (2008) puts it, intercultural education is a tool for "marginalization that supports the interests of the powerful at the expense of the oppressed" (p. 520). Instead, critical self-reflection of one's own beliefs and actions towards others, as well as positive and respectful attitudes and values towards social justice are essential skills towards which intercultural education should aim (Deardorff & Jones, 2012; Hoskins & Sallah, 2011) as knowledge alone is not enough (Deardorff, 2004). However, as Freire (1973) argues, "education can never be neutral" (p. 132), and thus, the process of developing critical awareness of social reality through reflection is also never neutral, but occurs from the current perspectives of students and their teachers. Additionally, in-depth reflection

needs time and perspectives change over a time span, and thus, intercultural competence develops during one's entire life-time and does not have a point when it would be fully reached (Deardorff & Jones, 2012; Dervin, 2010).

According to some researchers, linguistic competence can also be seen as an important part of intercultural competence (Byram, 1997). Byram (1997) argues that intercultural competence includes both language-related as well as non-linguistic elements, such as knowledge, attitudes and sociolinguistic skills. Furthermore, it is stated that learning another language enables people to widen their perspective towards other cultures and perspectives but also critically view their own culture (Kim, 2020). However, even though an active and critical approach to culture seems to be associated with effective learning of new languages, there is also evidence that cultural issues are not considered in every language classroom (Young et al., 2009). While, according to some scholars, intercultural competence is an "expected outcome of the insertion of interculturality in language learning and teaching" (Dervin, 2010), we argue that it cannot be assumed that issues of intercultural education would automatically be included in world language classes nor that it would lead to actual competences when communicating with people from diverse backgrounds. Thus, in this study, we investigate how world language teaching per se is related to outcomes related to intercultural competence.

2.2 Global competence and its criticism

Another concept that measures competences in cross-cultural awareness and cooperation between cultures and individuals is global competence (Curran, n.d.). Even though it has been argued that intercultural competence and global competence should not be mixed (Engel et al., 2019), they have several similarities. Further, in our opinion, to become globally competent, one should have an understanding of power relations and social justice, as well as intercultural competence. Thus, the notion of global competence should be critically analyzed to determine its relation to intercultural competence and also to critical consciousness.

According to the OECD and Asia Society (2018), global competence is necessary for living cooperatively and working effectively in current and future culturally diverse communities and the global world, and for reaching the Sustainable Development Goals of the United Nations. Global competence can be defined as open-mindedness towards and willingness to understand and value different cultures, their history, norms and expectations, as well as applying this understanding in communication with other people (American Council on International Intercultural Education, 1996; Hunter, 2004; Hunter et al., 2006). In some definitions, also competence in world languages and empathy towards other people have been included in global competence (Lambert, 1996), although especially according to Hunter and others (2006), language learning is not a necessity in becoming globally competent, nor does a person who speaks world languages necessarily have good intercultural competences (Zarate, 2003). As already mentioned in the previous section, there are varying views on whether or not aspects related to cultures and global competence are actually included in language classes even though they would be natural sites for teaching global knowledge and skills (Dervin, 2010; Young et al., 2009). Nevertheless, according to PISA 2018 results (OECD, 2020), speaking two or more languages was positively associated with "awareness of global issues, self-efficacy regarding

global issues, cognitive adaptability, interest in learning about other cultures, respect for people from other cultures, positive attitudes towards immigrants, awareness of intercultural communication and the ability to understand the perspectives of others" in almost all countries and economies (p. 230).

As defined by the American Council on International Intercultural Education (1996) and Curran (n.d.), a globally competent person is aware of the interconnectedness of humans, the environment, and systems and understands that although they may influence the world, the world also has an impact on them, and thus, they understand their responsibility in making choices that might affect the future. According to others, when developing cultural competence, it is essential to understand one's own personal cultural norms and expectations with the help of self-reflection (Hunter, 2004), in order to resist stereotypes (Gorski, 2008; Shi-Xu, 2001), as well as expand awareness of global issues and history and ability to identify cultural differences (Hunter et al., 2006).

The OECD and Asia Society (2018) define global competence to include "cognitive development, socioemotional skills, and civic learning" (p. 5). The OECD (2018) defines global competence as "the capacity to examine local, global, and intercultural issues; to understand and appreciate the perspectives and world views of others; to engage in open, appropriate, and effective interactions with people from different cultures; and to act for collective well-being and sustainable development".

Nevertheless, it is important to recognise and highlight that the way in which the PISA 2018 assessment measures global competence has been criticized in a number of ways: according to Engel and colleagues (2019), when consensus among researchers on how to define global competence does not exist, it also cannot be reliably measured. In particular, they criticize the OECD for not providing a justification for the selection of the components that are used to measure global competence, and for not questioning whether it is possible to generalize the competence universally. Additionally, they contest the reason for the OECD to measure students' knowledge, cognitive and social skills as well as attitudes but leave values out of the measurement without justifying this decision (Engel et al., 2019). Auld and Morris (2019) criticize the framework of global competence for being constructed with an economic mission and that "the OECD remains oriented towards the way in which global competence will enable students to flourish as knowledge workers in a changing labour market" (p. 689).

Further, Grotlüschen (2018) targets her criticism towards the western values supported by the measurement and towards the team that prepared it: the Global South was not sufficiently covered by the team members. "The interest of Western societies or their representation via the OECD seems to be at least one dominant interest hidden in the approach, even if it claims to be neutral and objective" (Grotlüschen, 2018, p. 198). Additionally, Auld and Morris (2019) argue that the image of a global competent person that the OECD builds with its definition of global competence is an image of "a member of the global middle class" (p. 689). Thus, Auld and Morris (2019), Engel and colleagues (2019) and Grotlüschen (2018) recommend critically reviewing the results of the analysis of global competence. Taking into account the critical views on how global competence is defined and measured, it should be noted that the teaching for global competence might not have neutral perspectives on global issues nor avoid colonial othering, and thus, it should not be taken for granted that this kind of a pedagogy avoids deficit perspectives and advances social justice. Thus, cautious interpretation of the results is necessary.

2.3 Sense of belonging and school climate

Being part of a group is one of people's basic needs (Baumeister & Leary, 1995). A sense of belonging also has a positive effect on students' well-being (Anderson & Graham, 2016) as well as school success, and promotes a sense that the student is a valued member of their own school community (Avvisati, 2019; Schachner et al., 2019). Aspects of group identity can include language, ethnicity, gender, socio-economic status, worldview and abilities (see, e.g., Räsänen, 2015). Aspects of schooling that can affect sense of belonging may include courses offered, attitudes of teachers, and peer relationships. Social relationships have been shown to be one of the most important factors behind the success of students with an immigrant background (Yeasmin & Uusiautti, 2018). However, pupils with a migration background experience a lower sense of belonging to school than the majority population in OECD countries in general (Borgonovi, 2018), in some countries especially if they speak a language other than the language of instruction at home (Kilpi-Jakonen & Alisaari, 2021). The feeling of belonging is also influenced by the experience of security (Antonsich, 2010), in other words, the experience that it feels good to come to school. However, students with a migration background often experience feelings of alienation and even discrimination (Saarinen & Zacheus, 2019), which may also affect their experience of school, for example, as a weaker commitment to learning (Heikamp, et al., 2020; Zacheus, 2019).

Students' well-being and sense of equality are also supported by their perceptions of their possibilities to participate in various domains at school, as well as being respected and listened to (Anderson & Graham, 2016). More broadly, students' perceptions of school (Aldridge et al., 2018; Allodi, 2010) and classroom climate (Eccles & Roeser, 2011) are associated with their sense of well-being and life-satisfaction: a school climate that creates a feeling of belonging positively influences students' well-being (Anderson & Graham, 2016).

School climate can be defined as the environment that a school provides, and it includes factors such as safety, relationships and its mission (Cohen et al., 2009). According to a review by Cohen and colleagues (2009), a positive school climate is safe, caring, participatory, and encouraging, and it seems to be associated with "academic achievement, school success, effective violence prevention, students' healthy development, and teacher retention" (p. 181). Additionally, appropriate teaching strategies can contribute to the positive development of school climate (Govorova et al., 2020). Positive interactions between teachers and students also promote an inclusive climate at school (Mælan et al., 2020) and students' well-being (Anderson & Graham, 2016; Eccles & Roeser, 2011; Mannion et al., 2015; Soini et al., 2010; Suldo et al., 2012). When students perceive that the school climate values diversity and intercultural communication, they seem to have a higher sense of school belonging, which in turn tends to be associated with better learning outcomes (Schachner et al., 2019). Additionally, a positive school and intergroup climate is related to better school outcomes for migration background youth (Berkowitz, 2022; Celeste et al., 2019; Schachner et al., 2019).

The way students perceive the school climate explains both their social engagement and their anxieties (Govorova et al., 2020). School safety has also been found to be associated with higher levels of students' belief in self, consisting of self-efficacy, persistence, and self-awareness, which in turn seems to be associated with higher levels of school engagement (Storlie & Toomey, 2020). On the contrary,

declines in perceived school climate have been shown to be unidirectionally associated with declines in psychological and behavioral adjustment of students (Way et al., 2007). Previous studies, conducted in the US, indicate that there are significant differences in experiences of school climate depending on schools' ethnic composition or students' socioeconomic status, academic performance (Jain et al., 2015), gender or race (Fan et al., 2011).

Importantly, experienced discrimination is a threat to one's social identity, particularly for members of minorities (Derks et al., 2007). Experiences of discrimination may lead to academic disengagement and decrease the sense of belonging to school (Baysu et al., 2016; Buhs et al., 2006; Heikamp et al., 2020), whereas perceptions of a positive diversity climate buffer against personal experiences of discrimination and thus predict stronger sense of belonging among minority students (Baysu et al., 2016; Heikamp et al., 2020). Further, a positive climate including contact and cooperation among students, multicultural values and, "surprisingly, also color-evasion (as in emphasizing a common humanity)", has been shown to be positively associated with the intercultural competence of both immigrant and non-immigrant background students (Schwarzenthal et al., 2020, p. 323). However, even though a positive school climate is associated with intercultural competence as well as wellbeing, and although language teaching could lead to increased intercultural competence, it cannot be assumed that teaching for intercultural communication and global competence would unquestionably create more inclusive and welcoming school environments for migrant populations. Thus, it is essential to investigate how the teaching of world languages and intercultural issues in schools as well as peers' global knowledge and skills as well as attitudes influence the sense of belonging of migrant origin youth.

3 Data and methods

To answer the research questions listed in the introduction, we used data from the 2018 Programme for International Student Assessment (PISA) run by the OECD (OECD, 2019). PISA tests the competences of 15-year-old students in various different domains in addition to surveying them about their attitudes and experiences in education. The data are free to download from the OECD's website. Only 17 countries participated in the part related to global competences. These are Brunei Darussalam, Canada, Chile, Colombia, Costa Rica, Croatia, Greece, Hong Kong, Indonesia, Kazakhstan, Latvia, Lithuania, Malta, Philippines, the Russian Federation, Serbia, and Spain. In addition, within the Russian Federation, Moscow Region and Tatarstan were included as their own regions.

For the first research question we analyse all sampled students in these countries, whereas for the second research question we focus on students with a migration background, meaning that they have at least one parent born outside the test country, whereas the students themselves can be born either in the test country (second generation) or abroad (first generation). Table 1 shows the sample size for each of these two research questions per country.

Table 1. Samples by country.

Country	Abbreviation	N all students*	N migrant origin
Brunei Darussalam	BRN	5074	1802
Canada	CAN	18220	7303
Chile	CHL	5112	552
Colombia	COL	5496	309
Costa Rica	CRI	6205	1534
Croatia	HRV	5749	1673
Greece	GRC	5609	1424
Hong Kong	HKG	5495	3710
Indonesia	IDN	11351	271
Kazakhstan	KAZ	16071	3176
Latvia	LVA	4579	1029
Lithuania	LTU	5622	734
Malta	MLT	2823	767
Philippines	PHL	6045	394
Russian Federation	RUS	6493	1224
Serbia	SRB	5001	1419
Spain	ESP	27901	6937
Moscow Region (RUS)	QMR	1766	468
Tatarstan (RUS)	QRT	5086	656

*based on sample used in analysis of global knowledge and skills.

3.1 Main dependent and independent variables

In order to answer the first research question, our two independent variables of interest are the number of languages studied at school and the learning of intercultural competences. The dependent variables are the knowledge and skills related to global competences and four different attitudes related to diversity. In order to answer the second research question, our independent variables of interest are all the independent and dependent variables from the previous research question measured at the school level. The dependent variable is the sense of belonging to school of students with a migrant origin.

The items included in the attitudinal scales as well as learning/teaching of intercultural competences are shown in Table 2. These scales are either already standardised by the OECD or we standardize them to mean 0 and unit variance. As mentioned above, for the second research question we calculate the mean at the school level to measure peers' attitudes and the overall level of teaching of intercultural competences in a school. We then also standardize these school-level measures so the mean is again 0 and the standard deviation 1. As may be expected, the different attitudinal scales correlate moderately with each other, the correlations ranging from 0.23 (between Interest in learning about other cultures and Attitudes towards immigrants) to 0.44 (between Interest in learning about other cultures and Respect for people from other cultures).

Table 2. Items in scales used in analyses and answer options.

Scale	Items	Answer options
Learning of intercultural competences	At school: I learn how to solve conflicts with other people in our classrooms. I learn about different cultures. I participate in events celebrating cultural diversity throughout the school year. I learn how people from different cultures can have different perspectives on some issues. I learn how to communicate with people from different backgrounds.	Yes/no
Interest in learning about other cultures	How well does each of the following statements below describe you? I want to learn how people live in different countries. I want to learn more about the religions of the world. I am interested in how people from various cultures see the world. I am interested in finding out about the traditions of other cultures.	Very much like me/ Mostly like me/ Somewhat like me/ Not much like me
Attitudes towards immigrants	People are increasingly moving from one country to another. How much do you agree with the following statements about immigrants? Immigrant children should have the same opportunities for education that other children in the country have. Immigrants who live in a country for several years should have the opportunity to vote in elections. Immigrants should have the opportunity to continue their own customs and lifestyle. Immigrants should have all the same rights that everyone else in the country has.	Strongly agree/ agree/ disagree/ strongly disagree
Awareness of intercultural communication	Imagine you are talking in your native language to people whose native language is different from yours. To what extent do you agree with the following statements? I carefully observe their reactions. I frequently check that we are understanding each other correctly. I listen carefully to what they say. I choose my words carefully. I give concrete examples to explain my ideas. I explain things very carefully. If there is a problem with communication, I find ways around it (e.g. by using gestures, re-explaining, writing etc.).	Strongly agree/ agree/ disagree/ strongly disagree

Table 2. continued (part 2).

Scale	Items	Answer options
Respect for people from other cultures	How well does the following describe you: I respect people from other cultures as equal human beings. I treat all people with respect regardless of their cultural background. I give space to people from other cultures to express themselves. I respect the values of people from different cultures.	Very much like me/ Mostly like me/ Somewhat like me/ Not much like me
Sense of belonging	Thinking about your school I feel like an outsider (or left out of things) at school. I make friends easily at school. I feel like I belong at school. I feel awkward and out of place in my school. Other students seem to like me. I feel lonely at school.	Strongly agree/ agree/ disagree/ strongly disagree

The number of languages learnt at school refers specifically to the number of world languages that a student is learning at school in that school year. For the first research question, we categorise this into four categories (0, 1, 2, and 3 or more), with one being the reference category. For the second research question, we calculate the school mean from the original continuous variable ranging between 0–10.

Students' level of global knowledge and skills is measured in a one-hour assessment, the goal of which is "to assess how well students can use their general knowledge and experience of global issues and cultural differences to understand specific cases presented in various scenarios" (OECD/Asia Society, 2018, p. 17). These scenarios are related to "global issues and intercultural situations in which people might have different perspectives" (OECD/Asia Society, 2018, p. 17). Not all students are asked all the same questions and thus to determine the student's level of global knowledge and skills, a set of ten plausible values is produced.

When analysed as a dependent variable in the first research question, we use all the plausible values (see methods section below). These have a mean of approximately 440 and a standard deviation of just under 100. For the second research question, we calculate first the mean of these plausible values for each student and standardize this variable, and from that we calculate the mean at the school level. Again, we also standardize the school-level variable.

3.2 Control variables

At the individual level all models control for student's gender, their family socioeconomic status (the OECD's own index of economic, social and cultural status [ESCS]), and the grade that they are in relative to the modal grade in the country, since these are all relevant for competences in particular.

For the different aspects of global competences, the student's background in terms of migration origin and speaking multiple languages at home are likely to be relevant, and thus, in the full models for the first research question, we include a categorical variable that combines whether the student has a majority background or a migration background (defined as at least one of the student's parents being born abroad) and whether they speak another language than the test language at

home. Making use of the question about how much the student speaks different languages with their parents, students speaking another language at home are further divided between those mostly speaking the other language at home and those who mostly speak the test language at home. For students born abroad (with at least one foreign-born parent), we also include the age at migration, categorising all other students as 0. These are also included in the analyses for the second research question, where only students with a migration background are analysed.

At the school level, the full models also control for the mean family socioeconomic status of the school and the proportion of students with a migration background in the school.

3.3 Methods

For both research questions, we use linear regression models that take into account the stratified sampling in the different countries, using the weights provided by the OECD. All analyses are run separately by country. For the analyses of the second research question, we additionally specify in our model the clustering of the data at the school level since our independent variables of interest are measured at the school level. For the analyses of the first research question, where global knowledge and skills are the dependent variable, we use the ten plausible values provided by the OECD. For all our analyses, we use the repest package written for Stata (Avvisati & Keslair, 2014), which allows specifying the appropriate weighting procedures and the analysis of plausible values. All models were also run as multilevel models with students nested in schools, using Stata's mixed command. The results are very similar to the ones reported here. Because the weights provided by the OECD, which combine both school-level and student-level weights, are not compatible with the multilevel modelling framework, where the weights should be specified at each level separately, we have decided to present the models based on the OECD's recommended framework.

4 Results

4.1 The association between learning intercultural competences and world languages with global competences

Our first research question examines how the extent to which students learn intercultural competences and world languages at school is associated with the different aspects of global competences. The results related to these analyses are shown in Figures 1–4 and Table 3. Figures 1 and 2 relate to learning intercultural competences and Figures 3 and 4 as well as Table 3 relate to learning world languages: the figures show the results for the comparison between learning one versus two world languages, whereas the table also includes the results for no world languages and three or more world languages. A large majority of the students learn either one or two world languages at school at the age of 15.

In all these figures, model 1 includes the basic control variables whereas model 2 adds the variables measuring migration and language backgrounds (including age at migration), the school composition variables, and the other independent

variable of interest, that is, learning intercultural competences (for learning world languages) and learning world languages (for learning intercultural competences).

Figure 1 shows that, with very slight exceptions, the teaching of intercultural competences is positively associated with the four attitudinal aspects of global competences—in general most strongly with interest in learning about other cultures (the average of all the coefficients is 0.22) and least strongly with attitudes toward immigrants (the average being 0.09). The strength of this association varies somewhat between countries, with the Philippines tending to have one of the strongest associations across all four attitudinal scales and Croatia tending to have one of the weakest associations. For the most part, the coefficients for learning intercultural competences across the different attitudinal variables correlate relatively highly with each other, many of the pairwise correlations being between 0.6–0.7. In other words, in countries where learning intercultural competences predicts one type of attitude well, it also tends to predict another type of attitude well (and vice versa).

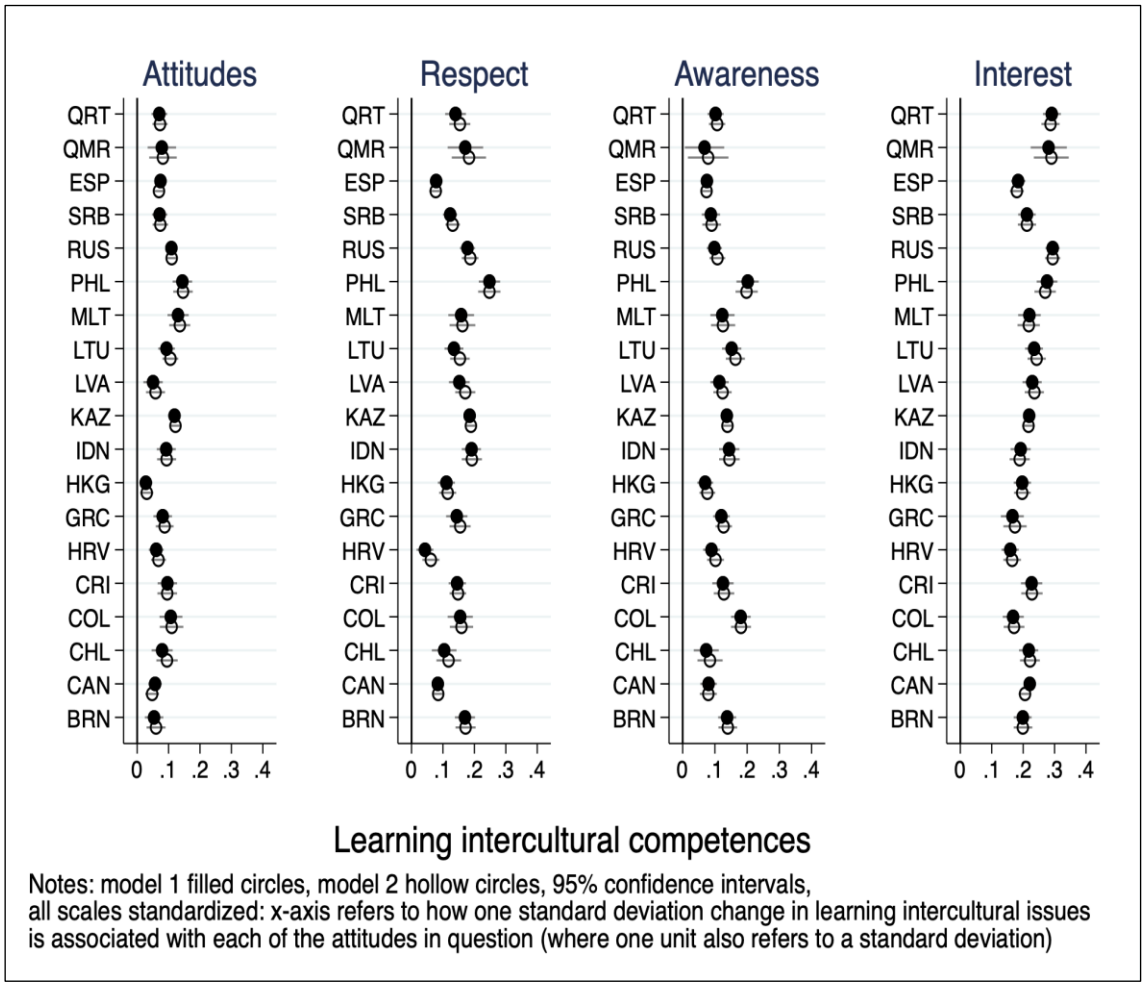

Figure 1. The estimated coefficient (and 95% confidence interval) of learning intercultural competences at school for predicting the four different attitudinal aspects of global competences by country or region.

Figure 2 displays the same results for learning intercultural competences but with the dependent variable being the plausible values of global knowledge and skills.

Somewhat surprisingly, most of the coefficients tend to be negative, although some of them become statistically insignificant in the second model. Colombia is the only country where the association is positive and significant and this is only in the second model. The average of these coefficients is -5.8 for model 1 and -3.5 for model 2. As a comparison, the gender difference is in most countries around 10–20 points.

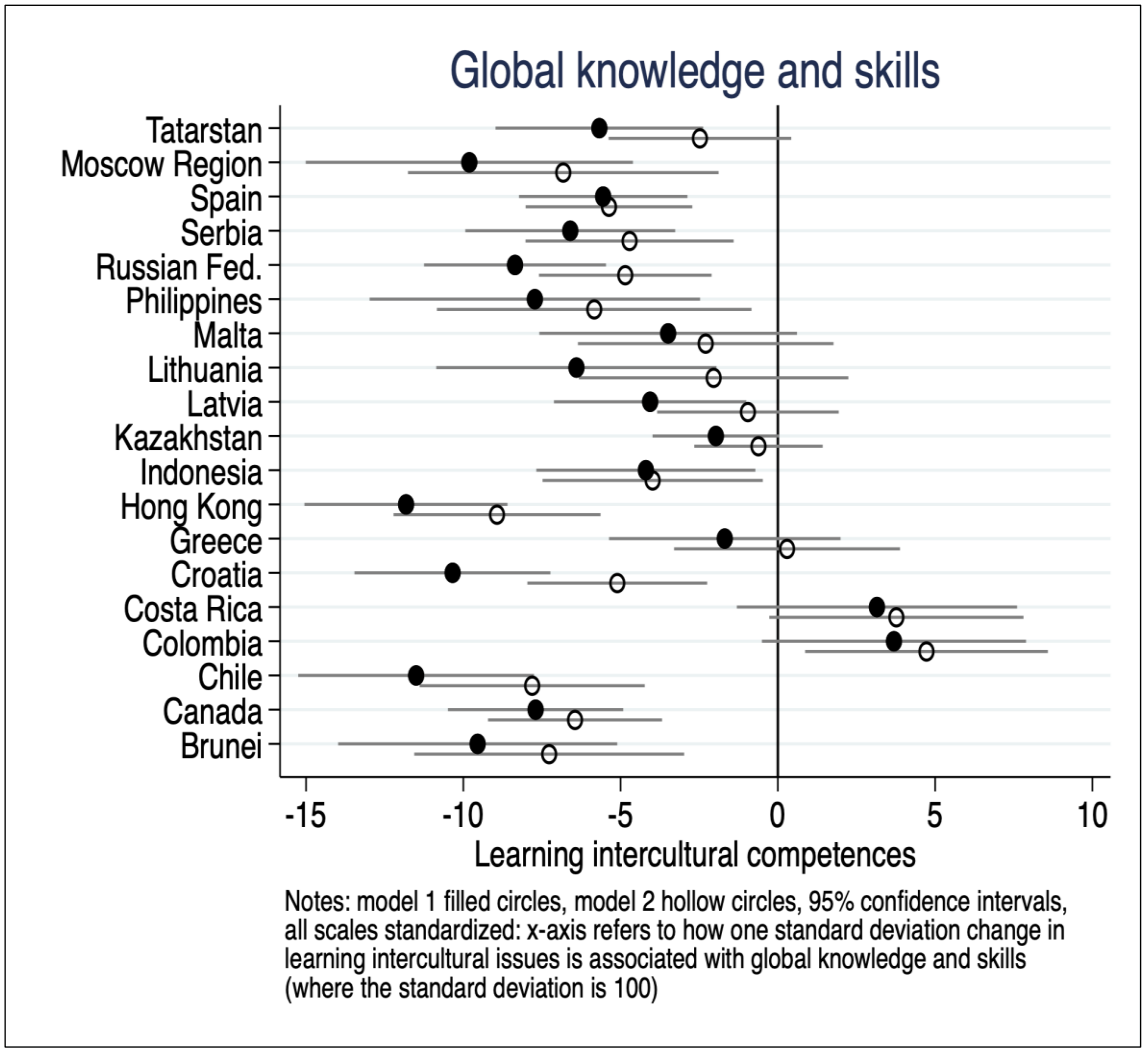

Figure 2. The estimated coefficient (and 95% confidence interval) of learning intercultural competencies at school for predicting global knowledge and skills by country or region.

Figure 3 moves to world language learning at school and focuses on the comparison between learning two world languages versus one. The overall picture is that this is not associated with attitudinal differences. There are a number of cases where students studying two world languages display more negative attitudes than those studying just one, in particular for respect for people from other cultures. Lithuania is the main country to display a strong positive association and this is the case for three of the four outcomes of interest, though smaller positive associations are also seen in some other countries (such as Spain). On the whole, the picture is no different when it comes to learning more than two world languages (shown in Table 3) and there are a number of cases where students studying three or more world languages hold more negative attitudes

towards diversity than their peers studying two. Nevertheless, across most countries not studying any world languages is associated with more negative attitudes than studying one (also shown in Table 3). This is a relatively small group of students overall: in the entire sample analysed here, around 9% do not study any world languages.

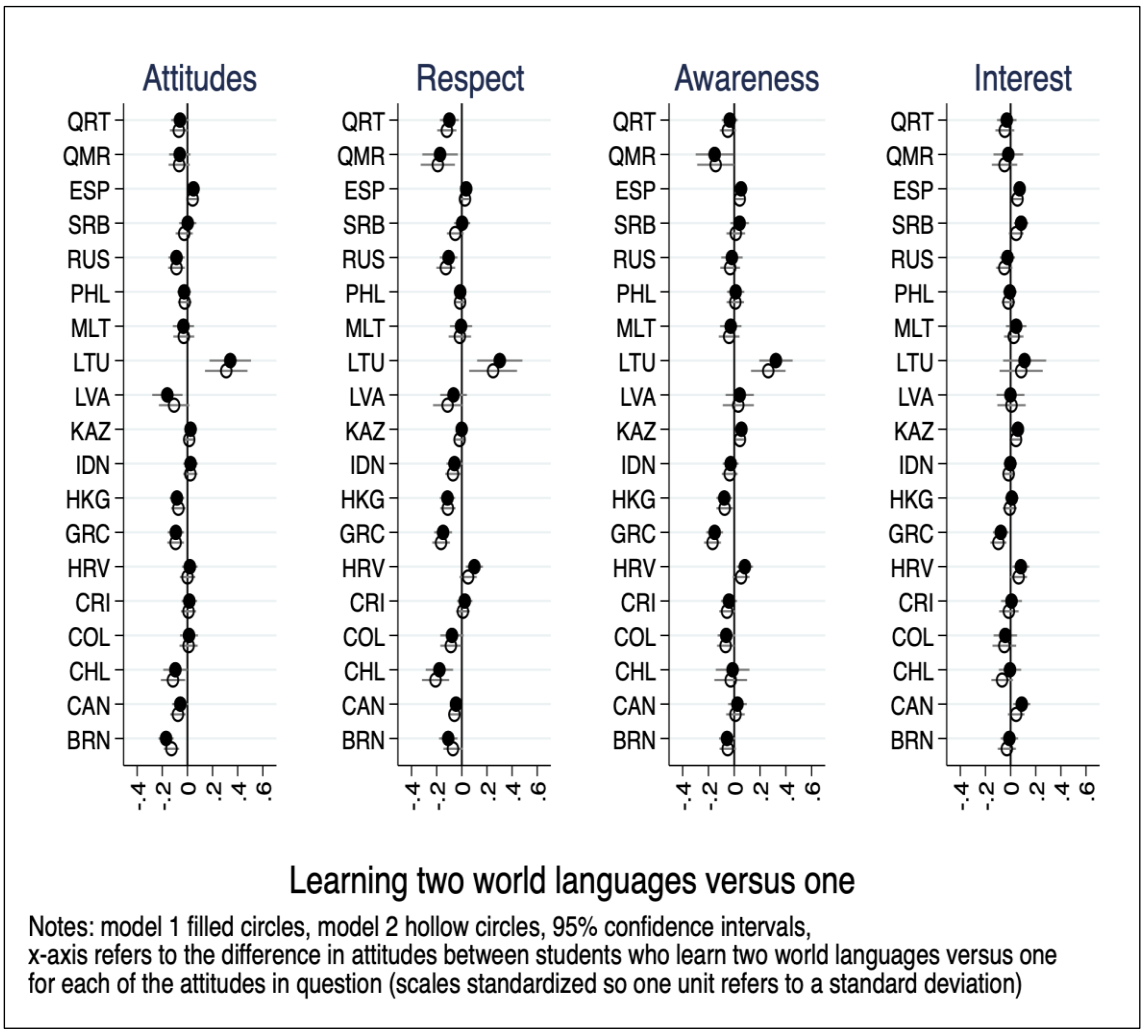

Figure 3. The estimated coefficient (and 95% confidence interval) of learning two world languages versus one at school for predicting the four different attitudinal aspects of global competences by country or region.

Table 3. Estimated effect of the number of world languages learnt at school and different aspects of global competences (results from full models) (part 1).

	Brunei Darussalam	**Canada**	**Chile**	**Colombia**	**Costa Rica**	**Croatia**
Dependent variable: global knowledge and skills (standard deviation 100)						
No world languages	-6.33*	-16.52***	-30.84***	-21.08***	-36.73***	-36.75
	(3.18)	(2.95)	(4.28)	(4.25)	(5.06)	(24.69)
Two world languages	-28.52***	-20.69***	-19.72***	-24.82***	-9.99**	10.97**
	(3.01)	(4.45)	(5.63)	(3.58)	(3.39)	(3.68)
Three or more world languages	-46.02***	-57.26***	-47.50***	-45.14***	-30.62***	20.71***
	(3.57)	(7.84)	(8.49)	(9.16)	(6.09)	(3.87)
Dependent variable: interest in learning about other cultures (standardized)						
No world languages	0.03	-0.15***	-0.26***	-0.10*	-0.10	-0.36*
	(0.04)	(0.02)	(0.05)	(0.05)	(0.06)	(0.15)
Two world languages	-0.03	0.04	-0.07	-0.05	-0.01	0.06
	(0.04)	(0.03)	(0.04)	(0.05)	(0.04)	(0.03)
Three or more world languages	0.04	0.10	0.13	-0.12	-0.10	0.07*
	(0.04)	(0.06)	(0.12)	(0.09)	(0.08)	(0.04)
Dependent variable: awareness of intercultural communication (standardized)						
No world languages	-0.02	-0.09***	-0.16***	-0.17***	-0.32***	-0.08
	(0.04)	(0.02)	(0.05)	(0.05)	(0.06)	(0.16)
Two world languages	-0.05	0.01	-0.03	-0.07	-0.06	0.05
	(0.03)	(0.04)	(0.06)	(0.03)	(0.03)	(0.03)
Three or more world languages	-0.04	-0.11	-0.24	-0.10	-0.19*	0.09**
	(0.04)	(0.07)	(0.15)	(0.13)	(0.07)	(0.03)
Dependent variable: attitudes towards immigrants (standardized)						
No world languages	-0.01	-0.06**	-0.23***	-0.08	-0.25***	-0.33
	(0.03)	(0.02)	(0.05)	(0.04)	(0.06)	(0.23)
Two world languages	-0.13***	-0.08*	-0.11*	0.01	0.01	0.00
	(0.03)	(0.03)	(0.05)	(0.04)	(0.03)	(0.03)
Three or more world languages	-0.13***	-0.15*	-0.45***	0.01	-0.11	-0.01
	(0.04)	(0.06)	(0.12)	(0.09)	(0.05)	(0.04)
Dependent variable: respect for people from other cultures (standardized)						
No world languages	-0.05	-0.11***	-0.32***	-0.19***	-0.16**	-0.33
	(0.03)	(0.02)	(0.05)	(0.06)	(0.06)	(0.26)
Two world languages	-0.07	-0.06*	-0.21***	-0.09*	0.01	0.05
	(0.04)	(0.02)	(0.06)	(0.04)	(0.03)	(0.03)
Three or more world languages	-0.08*	-0.15**	-0.25*	-0.04	-0.20**	0.05
	(0.04)	(0.06)	(0.13)	(0.09)	(0.07)	(0.04)

Notes: reference category for all analyses: one world language, standard errors in parentheses.

Table 3. continued (part 2).

	Greece	**Hong Kong**	**Indonesia**	**Kazakhstan**	**Latvia**	**Lithuania**
Dependent variable: global knowledge and skills (standard deviation 100)						
No world languages	-31.50***	-25.38***	-16.46***	-26.85***	-57.33***	-26.53
	(8.59)	(3.50)	(4.17)	(4.44)	(17.21)	(27.64)
Two world languages	-29.50***	-23.28***	-4.27	-8.98***	0.30	34.26***
	(2.82)	(3.11)	(3.62)	(2.14)	(5.78)	(8.54)
Three or more world languages	-52.67***	-58.18***	-15.02***	-16.75***	-25.15***	6.90
	(4.74)	(4.70)	(3.85)	(2.48)	(5.95)	(9.30)
Dependent variable: interest in learning about other cultures (standardized)						
No world languages	0.09	-0.06*	-0.05	-0.12*	-0.20	0.57
	(0.11)	(0.03)	(0.03)	(0.06)	(0.23)	(0.34)
Two world languages	-0.10**	-0.01	-0.02	0.04*	0.01	0.08
	(0.03)	(0.03)	(0.03)	(0.02)	(0.06)	(0.09)
Three or more world languages	-0.10	-0.11**	0.10***	0.04	-0.04	0.01
	(0.06)	(0.04)	(0.03)	(0.02)	(0.05)	(0.09)
Dependent variable: awareness of intercultural communication (standardized)						
No world languages	-0.24**	-0.10*	-0.11*	-0.16**	-0.52*	-0.76*
	(0.09)	(0.04)	(0.05)	(0.06)	(0.22)	(0.37)
Two world languages	-0.17***	-0.07*	-0.04	0.04	0.03	0.26***
	(0.03)	(0.03)	(0.03)	(0.02)	(0.06)	(0.07)
Three or more world languages	-0.22***	-0.15***	-0.03	-0.03	-0.08	0.07
	(0.05)	(0.04)	(0.04)	(0.03)	(0.06)	(0.07)
Dependent variable: attitudes towards immigrants (standardized)						
No world languages	-0.20*	-0.10**	-0.01	-0.19***	0.00	-1.05***
	(0.09)	(0.03)	(0.04)	(0.04)	(0.20)	(0.27)
Two world languages	-0.09**	-0.07*	0.02	0.01	-0.11	0.31***
	(0.03)	(0.03)	(0.03)	(0.02)	(0.06)	(0.09)
Three or more world languages	-0.22***	-0.19***	-0.05	-0.07**	-0.17*	0.12
	(0.05)	(0.03)	(0.03)	(0.02)	(0.07)	(0.09)
Dependent variable: respect for people from other cultures (standardized)						
No world languages	-0.21	-0.13***	-0.13**	-0.14*	0.03	0.45
	(0.11)	(0.03)	(0.05)	(0.07)	(0.19)	(0.29)
Two world languages	-0.16***	-0.11***	-0.07*	-0.02	-0.11	0.25*
	(0.04)	(0.03)	(0.03)	(0.02)	(0.06)	(0.10)
Three or more world languages	-0.31***	-0.28***	-0.11**	-0.09***	-0.27***	0.03
	(0.06)	(0.04)	(0.04)	(0.03)	(0.06)	(0.10)

Notes: reference category for all analyses: one world language, standard errors in parentheses.

Table 3. continued (part 3).

	Malta	**Philippines**	**Russian Federation**	**Serbia**	**Spain**	**Moscow Region**	**Tatarstan**
Dependent variable: global knowledge and skills (standard deviation 100)							
No world languages	-42.52***	-10.40**	-49.33***	-58.82**	-29.04***	-83.88***	-55.55***
	(12.69)	(3.17)	(8.36)	(17.93)	(5.99)	(15.69)	(8.18)
Two world languages	-10.89*	-15.82***	-14.84***	7.94	10.30***	-25.61***	-12.33***
	(4.26)	(2.87)	(3.80)	(4.15)	(2.65)	(6.92)	(3.12)
Three or more world languages	-33.95***	-27.34***	-37.77***	16.60**	-8.74**	-43.45***	-27.05***
	(5.57)	(3.17)	(5.29)	(5.94)	(3.11)	(10.95)	(4.10)
Dependent variable: interest in learning about other cultures (standardized)							
No world languages	-0.18	-0.01	-0.27**	-0.31	-0.04	-0.46*	-0.34**
	(0.11)	(0.03)	(0.08)	(0.16)	(0.06)	(0.23)	(0.11)
Two world languages	0.03	-0.02	-0.05	0.04	0.06*	-0.05	-0.05
	(0.04)	(0.03)	(0.03)	(0.03)	(0.02)	(0.05)	(0.04)
Three or more world languages	0.01	0.03	-0.00	0.01	0.06*	-0.10	-0.05
	(0.05)	(0.03)	(0.06)	(0.04)	(0.03)	(0.12)	(0.04)
Dependent variable: awareness of intercultural communication (standardized)							
No world languages	-0.24	-0.07*	-0.32**	-0.66*	-0.21***	-0.37*	-0.22**
	(0.12)	(0.03)	(0.10)	(0.27)	(0.06)	(0.17)	(0.09)
Two world languages	-0.04	0.01	-0.03	0.01	0.04*	-0.14*	-0.05
	(0.04)	(0.03)	(0.04)	(0.04)	(0.02)	(0.07)	(0.03)
Three or more world languages	-0.12*	-0.12***	-0.11	0.02	-0.05	-0.22	-0.07
	(0.06)	(0.03)	(0.06)	(0.05)	(0.03)	(0.13)	(0.04)
Dependent variable: attitudes towards immigrants (standardized)							
No world languages	-0.11	-0.07*	-0.33***	-0.27	-0.27***	-0.04	-0.34***
	(0.09)	(0.03)	(0.09)	(0.16)	(0.06)	(0.33)	(0.07)
Two world languages	-0.03	-0.02	-0.09**	-0.03	0.04*	-0.07	-0.07
	(0.04)	(0.03)	(0.03)	(0.03)	(0.02)	(0.04)	(0.04)
Three or more world languages	-0.13**	-0.11***	-0.13**	0.02	-0.08**	-0.11	-0.05
	(0.05)	(0.03)	(0.05)	(0.04)	(0.03)	(0.11)	(0.04)
Dependent variable: respect for people from other cultures (standardized)							
No world languages	-0.15	-0.03	-0.61***	-0.70***	-0.12*	-0.27	-0.43***
	(0.13)	(0.03)	(0.07)	(0.17)	(0.05)	(0.28)	(0.11)
Two world languages	-0.02	-0.01	-0.13***	-0.05	0.03	-0.19**	-0.12**
	(0.05)	(0.02)	(0.04)	(0.03)	(0.02)	(0.07)	(0.04)
Three or more world languages	-0.14***	-0.05	-0.24***	-0.07	-0.07***	-0.45***	-0.26***
	(0.04)	(0.03)	(0.06)	(0.05)	(0.02)	(0.12)	(0.05)

Notes: reference category for all analyses: one world language, standard errors in parentheses.

Figure 4 then displays this same relationship with a focus on global knowledge and skills as the dependent variable. As with attitudes, learning two world languages versus one tends to be associated with lower global knowledge and cognitive skills. However, in a few countries, namely Croatia, Lithuania, Serbia and Spain, this relationship is positive. Table 3 also confirms that studying no

world languages is associated with lower global knowledge and skills than studying one (this also tends to be the group with the lowest knowledge and skills) and in most countries studying three or more languages is associated with lower knowledge and skills than studying one or two languages. The main exceptions to this last finding are Croatia and Serbia.

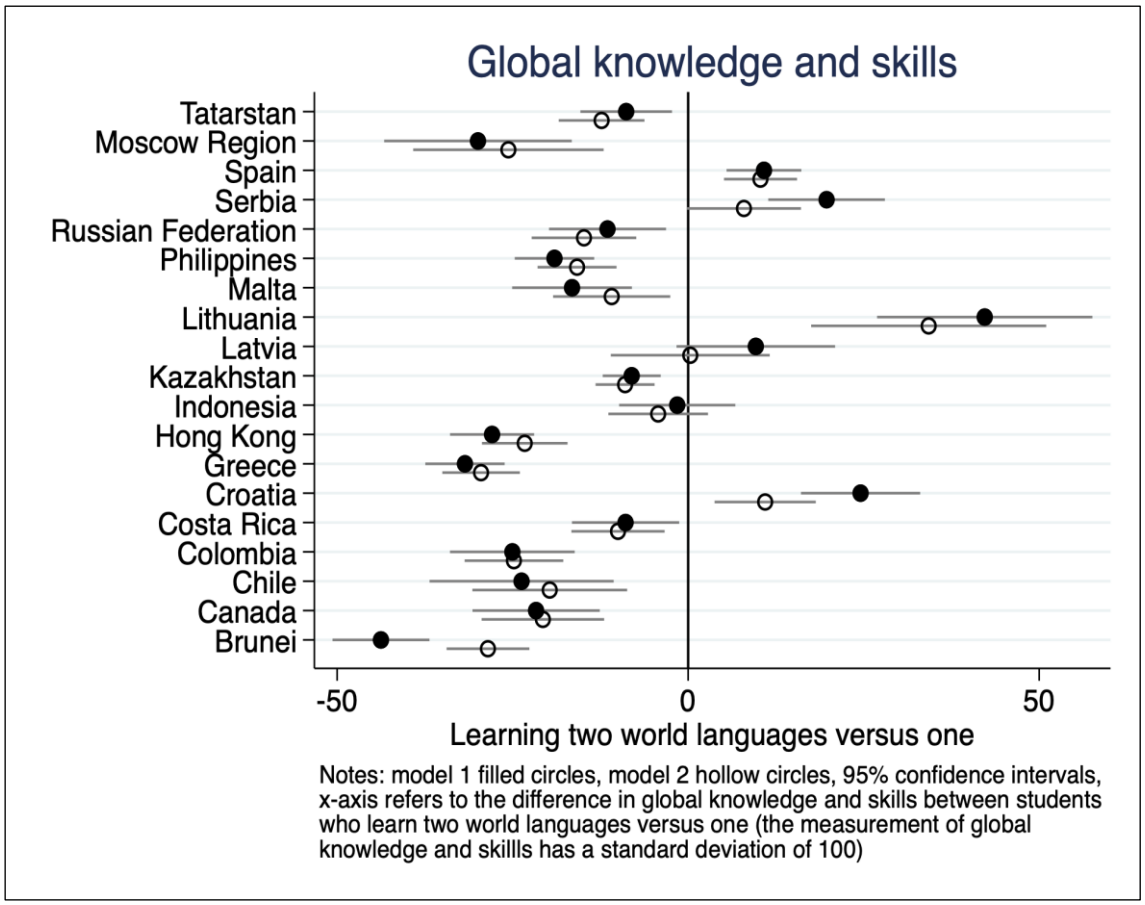

Figure 4. The estimated coefficient (and 95% confidence interval) of learning two world languages versus one at school for predicting global knowledge and skills by country or region.

4.2 The association between teaching, peers' global competences and feelings of belonging among young people with a migration background

Our second research question is concerned with how these aspects of learning (or teaching) and peers' different global competences predict feelings of belonging for young people with a migrant origin. The main results of these analyses are shown in Figures 5 and 6. Figure 5 relates to the two different aspects of teaching and Figure 6 to the five different aspects of global competences. The first model includes all the main control variables, whereas the second model controls for all the independent variables of interest in these analyses. This also means that the second model is somewhat overcontrolled since many of the independent variables—particularly the ones related to attitudes towards diversity—are relatively highly correlated. Despite this, the results do not differ dramatically between models 1 and 2.

As shown on the left side of Figure 5, the teaching of intercultural competences at school is significantly associated with the sense of belonging of young people of

migrant origin in relatively few countries. There are some significant and positive associations in the first model, and in the second model the only positive and significant associations can be found in Colombia and Spain, where a one standard deviation increase in the teaching of intercultural competences increases sense of belonging by approximately 5% of a standard deviation. On the right side of Figure 5, the results related to the mean number of world languages learnt at the school do not show this to be positively associated with sense of belonging in any of the countries analysed. The coefficient for Kazakhstan in the first model is even significant and negative.

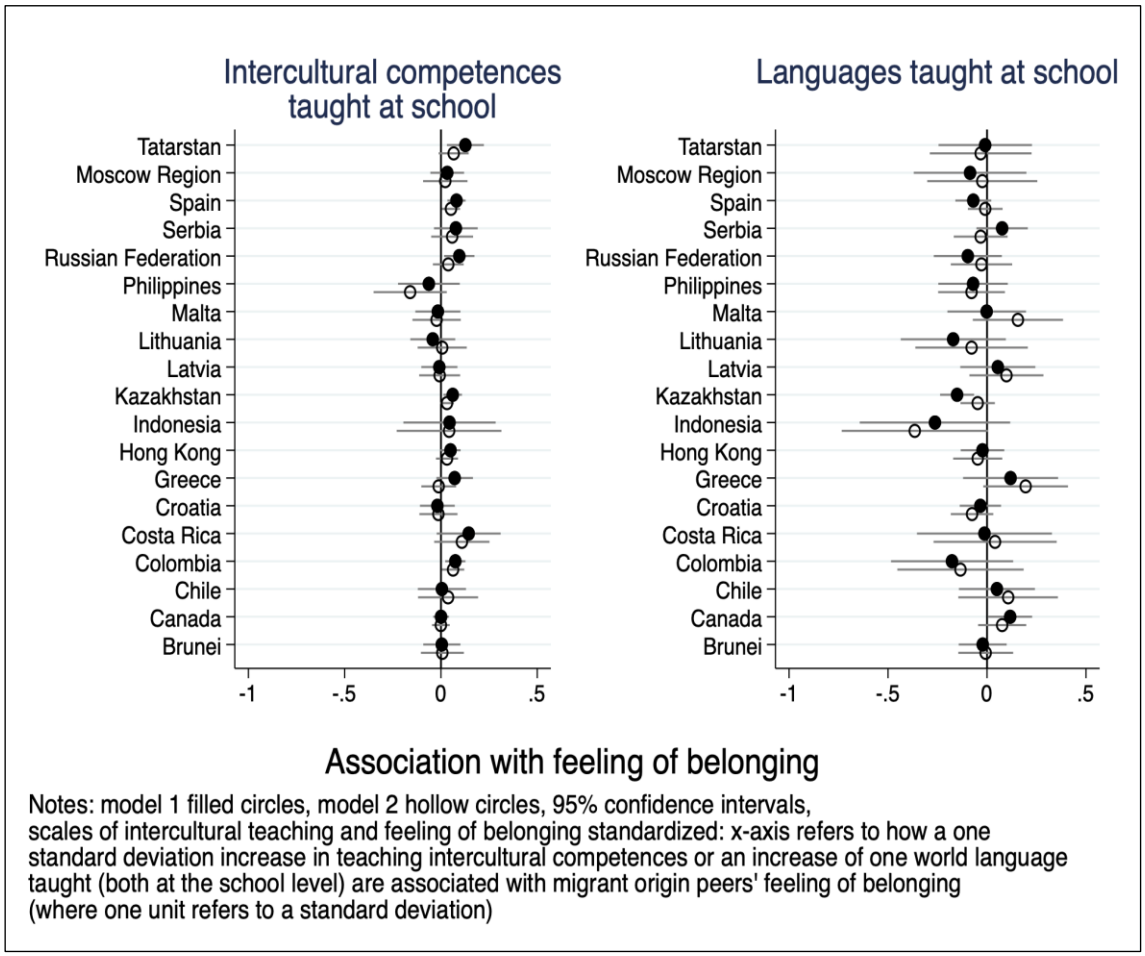

Figure 5. The estimated coefficient (and 95% confidence interval) of teaching of intercultural competences and world languages at the school level for predicting the sense of belonging among young people with migrant origins by country or region.

Finally, Figure 6 displays the results related to the different aspects of peers' global competences and their estimated association with the sense of belonging of students with a migrant origin. On the whole, many of the coefficients from the first models for each measure are positive and significant. The strongest associations are on average from students' attitudes toward immigrants and global knowledge and skills, where across all the countries a one standard deviation increase on both of these is associated with an approximately 13% of a standard deviation increase in sense of belonging. On the other hand, the association is statistically significant in more countries for students' awareness of intercultural communication and less so for global knowledge and skills. The

weakest association is for interest in learning about other cultures. Similar conclusions can be drawn from the full models, although the coefficients (and number of countries in which they are statistically significant) are substantially smaller due to the fact that so many scales measuring correlated aspects of attitudes are included simultaneously.

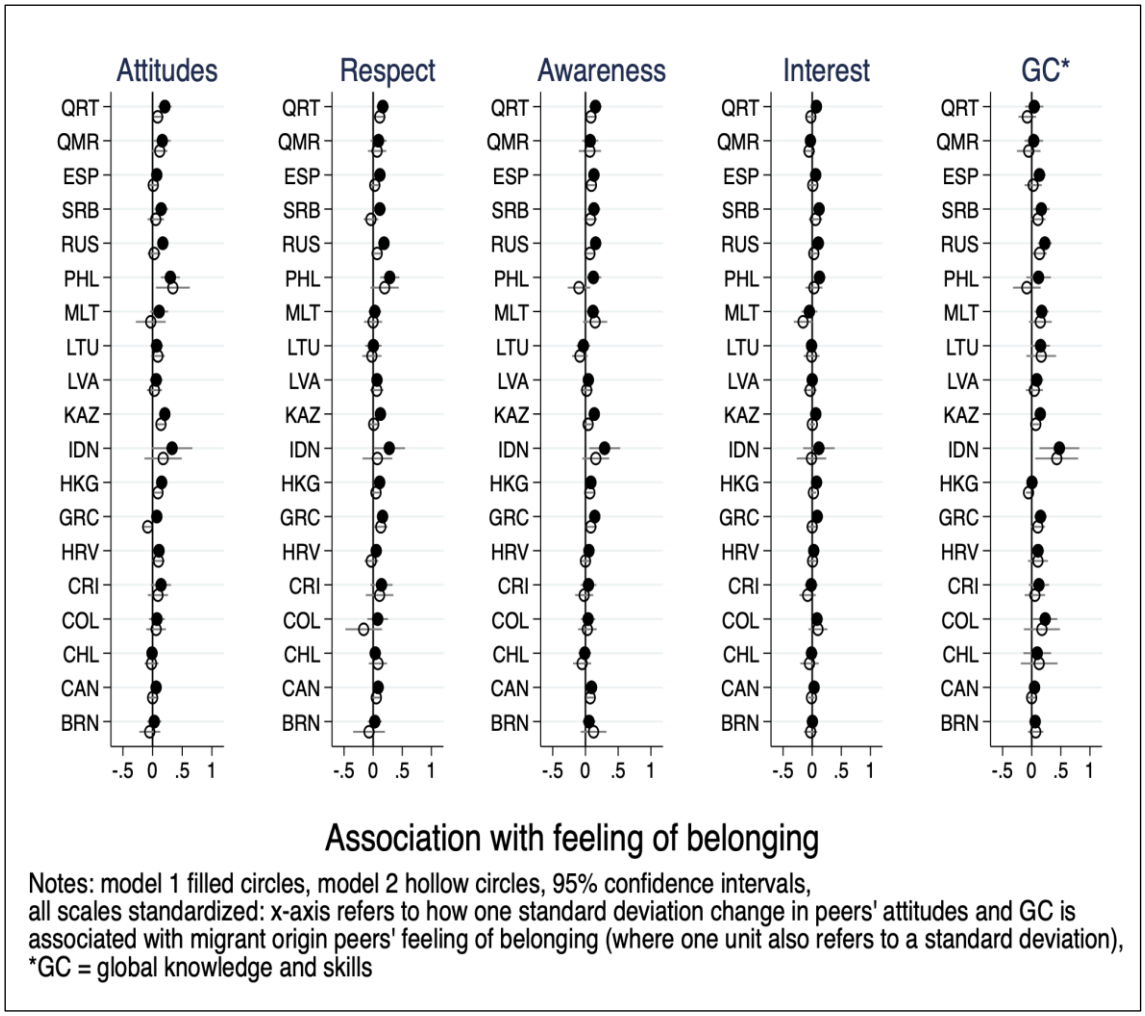

Figure 6. The estimated coefficient (and 95% confidence interval) of different aspects of global competences at the school level for predicting the sense of belonging among young people with migrant origins by country or region.

Overall, the results indicate that the knowledge and cognitive skills aspect of global competence is only weakly—and in some countries even negatively—related to learning of intercultural competences, whereas attitudinal aspects are more strongly related to learning of this. Learning world languages displays a somewhat U-shaped association, with the most positive attitudes being among those studying just one world language. These two aspects of teaching are only very weakly associated with the sense of belonging of young people with migrant origins. Further, peers' attitudes, in particular their attitudes toward immigrants and awareness of intercultural communication, are more consistently associated (across countries) with the sense of belonging of young people with migrant origins than their peers' cognitive competences, although on average equally strongly.

5 Discussion

In this study, we analyzed how world language learning and teaching of intercultural issues were associated with knowledge and cognitive aspects related to GC and attitudes towards diversity, and how peers' global competences in terms of knowledge and skills as well as attitudes were related to migrant origin students' sense of belonging to school. Aspects related to attitudes and cognitive competences were investigated separately. Our results indicated that the teaching of intercultural competences was positively associated with the four attitudinal aspects of global competences but negatively associated with the knowledge and cognitive skills associated with global competences. However, in some countries this negative association became insignificant in the full model. Thus, it seems that one of the aims of social justice pedagogy and intercultural education, increasing students' intercultural competence, is only partly fulfilled. As Freire (1973, p. 126) puts it, "education is communication and dialogue", not transference of knowledge, and based on our results we could cautiously interpret that values and attitudes that might be a result of dialogue and open communication have been more easily developed than more theoretical knowledge which might be transmitted in a more technical manner (see also Freire, 1973). Nevertheless, as positive and respectful attitudes and values are better reached than knowledge and cognitive skills, intercultural education seems to reach valuable outcomes and essential skills related to social justice (Deardorff, 2004; Deardorff & Jones, 2012; Hoskins & Sallah, 2011). As a part of GC, awareness of global issues and history is still to be developed (see also Hunter et al., 2006) —though one may also question whether the OECD's framework measures these in an appropriate way.

Somewhat surprisingly, according to our results, in a large number of countries students studying two (or more) world languages displayed more negative attitudes than those studying just one, all other things considered. This was found in particular for respect for people from other cultures, with only few countries displaying a positive association. Furthermore, learning two (or more) world languages versus one also tended to be associated with lower knowledge and cognitive skills related to GC. However, across most countries, not studying any world languages was associated with more negative attitudes than studying one: thus although Hunter and others (2006) are of the opinion that language learning is not a necessity in becoming globally competent, studying one world language seems to benefit this process. Even though learning new languages would include learning about other cultures (Byram & Feng, 2004; Kim, 2020), learning more than one language does not seem to lead to more positive attitudes. This is also despite arguments that intercultural competence would be an "expected outcome of the insertion of interculturality in language learning and teaching" (Dervin, 2010). As Zarate (2003) has argued, a person who speaks world languages does not necessarily have good intercultural competences. It should also be noted that whereas a previous analysis of PISA 2018 results (OECD, 2020) has shown that speaking two or more languages was positively associated with many of the outcomes studied here, our study focused on the number of world languages learnt at school, controlling for speaking another language than that of the test language at home.

Our results lead us to reflect on the issue that studying world languages is in itself a reflection of the dynamics of power and privilege. To truly understand the

phenomenon, it would be important to understand who is allowed to, or on the other hand required to, study an additional language. In some countries, studying additional languages is required by national language education policies, and everyone is provided access to instruction but the variety of languages may differ based on geography or finances. In other places, the opportunity to study world languages may depend solely on the financial resources of a particular school, public or private, which vary depending on the socio-economic context. For example, in more affluent areas, there might be greater opportunities or a wider selection of languages. This would be especially important to know in order to understand the findings that a greater number of world languages was associated with lower competences and less open attitudes. Perhaps it is that the access to more languages is provided to those who already are on top of the hierarchy and their position might make them less open to issues related to social justice or intercultural competence. In other words, access to additional languages reinforces their elite status in their society.

Further, when we looked at the sense of belonging of young people with a migrant origin, we did not find any association with the school-level measure of the average number of world languages that students learn. Moreover, the teaching of intercultural competences at school was significantly associated with the sense of belonging of these young people in relatively few countries. It therefore seems that teaching for intercultural competence does not necessarily create more inclusive school environments. Thus, it may be naïve to assume that teaching intercultural competences could make place for social justice, and "contribute to equitable and inclusive education" or support "the educational and social inclusion of migrant and marginalised learners" as stated in the recommendations of the Council of Europe (2022) to its member states on the "importance of plurilingual and intercultural education for democratic culture". It has to be noted that with our data, we were not able to determine how intercultural competence training was provided for the students or whether it included aspects of critically reflecting factors that would support inclusiveness. Further investigations, including comparative studies of different approaches to intercultural competence training, would be beneficial in understanding how to actually increase the kinds of global competences that are seen as desirable.

Future studies could help answer the question of whether teaching for intercultural competence should be reframed to more explicitly encompass critical approaches such as culturally sustaining pedagogy (Paris & Alim, 2017), that are social justice oriented. These approaches are intended to develop a more inclusive atmosphere at schools where people from different backgrounds are not only expected to get along with each other, but also where their identities are nurtured and extended in multiple ways (see also Mikander et al., 2018). Thus, we suggest that perspectives related to social justice and critical consciousness (Freire, 1973) should be included when teaching intercultural competences.

Importantly, the global competences of the student body, whether measured as attitudes or cognitive skills, were associated with a higher sense of belonging among their peers with migration backgrounds although this relationship was not always statistically significant. Thus, even though the teaching of intercultural competences is not strongly associated with this group's sense of belonging at school, peers' GC matters. This is an important finding to reflect on when considering how to develop school cultures to support a feeling of belonging for students with a migration background who often experience feelings of alienation

and even discrimination (Saarinen & Zacheus, 2019), which may also affect their experience of school (Heikamp et al., 2020; Zacheus, 2019). A positive diversity climate at school can improve students' wellbeing and life-satisfaction (Aldridge et al., 2018; Allodi, 2010; Anderson & Graham, 2016; Eccles & Roeser, 2011) and even reduce minority youngsters' personal experiences of discrimination (Heikamp et al., 2020), which makes it important to create such a climate in every school.

There has been strong criticism towards the way GC is measured in PISA assessments (Auld & Morris, 2019; Engel et al., 2019; Grotlüschen, 2018). First of all, there is no consensus on the definition of GC nor a justification for the selection of the components used to measure global competence (Engel et al., 2019). Second, GC measures students' knowledge, cognitive and social skills as well as attitudes but leaves values out of the measurement without justifying this decision (Engel et al., 2019). Third, GC is argued to be constructed with an economic mission (Auld & Morris, 2019) and with western values (Grotlüschen, 2018). Our results indicated that the knowledge and cognitive skills aspect of global competence were only weakly—and in some countries even negatively—related to factors such as world language learning and the teaching of intercultural competences, whereas attitudinal aspects were more strongly related to the teaching of intercultural competences in particular. Further, peers' attitudes, in particular their attitudes toward immigrants and awareness of intercultural communication, were more consistently associated with the sense of belonging of students with migrant origins than their peers' cognitive competences. Thus, we argue that the measurement of global knowledge and skills may be in need of critical reconsideration especially given the critique that the PISA measurement is framed by a western and economic lens, not through the lens of social justice. In particular, it would be beneficial for this measure to also correlate more strongly with behaviours of young people and thus to be reflected in the feeling of belonging of their peers with migration backgrounds.

6 Conclusions

Our results support the conclusion that by teaching intercultural competences it is possible to positively influence students' attitudinal aspects of global competences, with the caveat that this is based on cross-sectional evidence. It should also be highlighted that the measure of learning/teaching intercultural competences used here only consisted of five yes/no items and thus a more detailed measure would likely also uncover different kinds of results. When critically considering the possibilities of measuring GC, our results could be interpreted as indicating that perhaps the current measurement of GC is not meaningful as it is at the global level since countries included in PISA vary immensely (see also Engel et al., 2019). What aspects of GC can be considered as universal and what aspects could be better defined at the local level should also be reconsidered (Engel et al., 2019). Additionally, in future studies, it would be important to examine whether equity issues are part of national curricula in the countries studied since this may also influence the results.

We can also conclude that even though world language education seems to be associated to some extent with positive attitudes towards other cultures—though this is mostly limited to learning one world language rather than none—at the school level it does not seem to promote the sense of belonging of students with migration backgrounds. Furthermore, our findings call into question the OECD's

(2020) finding that language education is associated with positive outcomes related to GC. This topic needs further investigation to determine whether greater attention within world language teaching should be paid to improve intercultural competences. Furthermore, issues related to social justice and critical consciousness should be a beneficial addition in language education in order to foster students' abilities to reflect on societal inequalities (Freire, 1973; Watts et al., 2011). Our results also imply that critical reflection of language education is necessary, especially since there are high-level proclamations promoting language education as a tool for intercultural understanding, such as that of the Council of Europe (2022): "quality language education plays a crucial role in developing the will and ability of individuals and societies to understand those whose backgrounds and views are different from their own". This will and ability doesn't appear from scratch but requires intentional planning and implementation of education for social justice.

Additionally, alongside language education, there has to be a development of school practices that support each student's experience of becoming valued as they are in order to create positive relationships between students (Baak, 2019; Little & Kirwan, 2018) and to help students with migrant origins integrate into their communities (Borgonovi, 2018; Yeasmin & Uusiautti, 2018). This requires promoting equal treatment and value of diversity as parts of a positive school climate (Heikamp, et al., 2020) —and education for social justice and critical consciousness could be valuable assets also in this process.

The perspectives of social justice, critical consciousness and reflection of power hierarchies are relevant in education when the aim is to challenge structural inequalities, build trust with students from all kinds of backgrounds and empower them, decrease differences in life conditions and, overall, increase equity in all areas of life (Mikander et al., 2018; Sleeter, 2014). Our result that studying more than one world language is associated with negative attitudes towards other cultures shows that the perspectives of social justice and critical consciousness should be more comprehensively added in language education since intercultural competence is not yet an outcome of language learning and teaching (see Dervin, 2010). To conclude, teaching for social justice means working with students in a mutual process of learning together and creating a more equitable society.

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Endnote

[1] World languages are also referred to as foreign languages, especially in the European language education context.

References

Aldridge, J., McChesney, K., & Afari, E. (2018). Relationships between school climate, bullying and delinquent behaviours. *Learning Environments Research, 21*(2), 153–172. https://doi.org/10.1007/s10984-017-9249-6

Alemanji, A. A. (2016). *Is there such a thing. . .? A study of antiracism education in Finland* [Doctoral dissertation, University of Helsinki]. Helda digital repository.

Allodi, M. W. (2010). The meaning of social climate of learning environments: Some reasons why we do not care enough about it. *Learning Environments Research, 13*(2), 89–104. https://doi.org/10.1007/s10984-010-9072-9

American Council on International Intercultural Education. (1996). *Educating for the global community: A framework for community colleges.* Report of a conference sponsored by the American Council on International Intercultural Education and the Stanley Foundation (Warrenton, VA.) (ED 407 958). https://www.stanleyfoundation.org/publications/archive/CC2.pdf

Anderson, D. L., & Graham, A. P. (2016). Improving student wellbeing: Having a say at school. *School Effectiveness and School Improvement*, *273*, 348–366. https://doi.org/10.1080/09243453.2015.1084336

Andreotti, V. (2011). *Actionable postcolonial theory in education*. Palgrave.

Antonsich, M. (2010). Searching for belonging – An analytical framework. *Geography Compass, 4*(6), 644–659. https://doi.org/10.1111/j.1749-8198.2009.00317.x

Auld, E., & Morris, P. (2019). Science by streetlight and the OECD's measure of global competence: A new yardstick for internationalisation? *Policy Futures in Education*, *17*(6), 677–698. https://doi.org/10.1177/1478210318819246

Avvisati, F. (2019). *Have students' feelings of belonging at school waned over time?* (PISA in Focus, No. 100). OECD Publishing. https://doi.org/10.1787/bdde89fb-en

Avvisati, F., & Keslair, F. (2014). *REPEST: Stata module to run estimations with weighted replicate samples and plausible values* [Computer software]. Statistical Software Components, Boston College Department of Economics.

Baak, M. (2019) Racism and othering for South Sudanese heritage students in Australian schools: is inclusion possible? *International Journal of Inclusive Education, 23*(2), 125–141, https://doi.org/10.1080/13603116.2018.1426052

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Baysu, G., Celeste, L., Brown, R., Verschueren, K., & Phalet, K. (2016). Minority adolescents in ethnically diverse schools: Perceptions of equal treatment buffer threat effects. *Child Development, 87*, 1352–1366. https://doi.org/10.1111/cdev.12609

Berkowitz, R. (2022). School matters: The contribution of positive school climate to equal educational opportunities among ethnocultural minority students. *Youth & Society, 54*(3), 372–396. https://doi.org/10.1177/0044118X20970235

Berry, J. W. (1997). Immigration, acculturation, adaptation. *Applied Psychology: An International Review*, *46*(1), 5–68. https://doi.org/10.1111/j.1464-0597.1997.tb01087.x

Borgonovi, F. (2018). *How do the performance and well-being of students with an immigrant background compare across countries?* (PISA in Focus, No. 82). OECD Publishing. https://doi.org/10.1787/a9e8c1ab-en

Buhs, E. S., Ladd, G. W., & Herald, S. L. (2006). Peer exclusion and victimization: Processes that mediate the relation between peer group rejection and children's classroom engagement and achievement. *Journal of Educational Psychology, 98*, 1–13. https://doi.org/10.1037/0022-0663.98.1.1

Byram, M. (1997). *Teaching and assessing intercultural communicative competence.* Multilingual Matters.

Byram, M., & Feng, A. (2004). Culture and language learning: Teaching, research and scholarship. *Language teaching*, *37*(3), 149–168. https://doi.org/10.1017/S0261444804002289

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

Cohen, J., McCabe, L., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record*, *111*(1), 180–213. https://doi.org/10.1177/016146810911100108

Council of Europe (2022). *Recommendation CM/Rec(2022)1 of the Committee of Ministers to member States on the importance of plurilingual and intercultural education for democratic culture.* https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=0900001680a563ca

Curran, K. (n.d.). *Global competencies that facilitate working effectively across cultures.* http://content.monster.com.sg/management/5808/

Deardorff, D. (2004). Internationalization: In search of intercultural competence. *International Educator*, *8*(2), 13–15.

Deardorff, D. K., & Jones, E. (2012). Intercultural competence: An emerging focus in post-secondary education. In D.K. Deardorff, H. de Wit, J. D. Heyl & T. Adams (Eds.). *The Sage Handbook of International Higher Education* (pp. 283–303). SAGE Publications.

Denson, N., & Chang, M. J. (2009). Racial diversity matters: The impact of diversity-related student engagement and institutional context. *American Educational Research Journal, 46*(2), 322–353. https://doi.org/10.3102/0002831208323278

Derks, B., van Laar, C., & Ellemers, N. (2007). The beneficial effects of social identity protection on the performance motivation of members of devalued groups. *Social Issues and Policy Review, 1*, 217–256. https://doi.org/10.1111/j.1751-2409.2007.00008.x

Dervin, F. (2010). Assessing intercultural competence in language learning and teaching: A critical review of current efforts. *New Approaches to Assessment in Higher Education, 5*, 155–172.

Dervin, F., & Layne, H. (2013). A guide to interculturality for international and exchange students: An example of *Hostipitality*? *Journal of Multicultural Discourses, 8*(1), 1–19. https://doi.org/10.1080/17447143.2012.753896

Eccles, J. S., & Roeser, R. W. (2011). Schools as developmental contexts during adolescence. *Journal of Research on Adolescence, 21*(1), 225–241. https://doi.org/10.1111/j.1532-7795.2010.00725.x

Engel, L. C., Rutkowski, D., & Thompson, G. (2019). Toward an international measure of global competence? A critical look at the PISA 2018 framework. *Globalisation, Societies and Education*, *17*(2), 117–131. https://doi.org/10.1080/14767724.2019.1642183

Fan, W., Williams, C. M., & Corkin, D. M. (2011). A multilevel analysis of student perceptions of school climate: the effect of social and academic risk factors. *Psychology in the Schools, 48*(6), 632–647. https://doi.org/10.1002/pits.20579

Freire, P. (1973). *Education for critical consciousness*. Seabury.

Gorski, P. C. (2008). Good intentions are not enough: A decolonizing intercultural education. *Intercultural education, 19*(6), 515–525. https://doi.org/10.1080/14675980802568319

Gorski, P. C. (2010). *A working definition of multicultural education*. http://www.edchange.org/multicultural/initial.html

Govorova, E., Benítez, I., & Muñiz, J. (2020). Predicting student well-being: Network analysis based on PISA 2018. *International Journal of Environmental Research and Public Health, 17*, 4014. https://doi.org/10.3390/ijerph17114014

Grotlüschen, A. (2018) Global competence – Does the new OECD competence domain ignore the global South? *Studies in the Education of Adults*, *50*(2), 185–202. https://doi.org/10.1080/02660830.2018.1523100

Harjanne, P., Reunamo, J., & Tella, S. (2015). Finnish foreign language teachers' views on teaching and study reality in their classes: The KIELO project's rationale and results. *Journal of Language Teaching and Research*, *6*, 913–923. http://dx.doi.org/10.17507/jltr.0605.02

Heikamp, T., Phalet, K., Van Laar, C., & Verschueren, K. (2020). To belong or not to belong: Protecting minority engagement in the face of discrimination. *International Journal of Psychology, 55*, 779–788. https://doi.org/10.1002/ijop.12706

Hoskins, B., & Sallah, M. (2011). Developing intercultural competence in Europe: The challenges. *Language and Intercultural Communication*, *11*(2), 113–125. https://doi.org/10.1080/14708477.2011.556739

Hunter, W. (2004). *Knowledge, skills, attitudes, and experiences necessary to become globally competent* [Doctoral dissertation, Lehigh University]. UMI Dissertation Services.

Hunter, B., White, G. P., & Godbey, G. C. (2006). What does it mean to be globally competent? *Journal of Studies in International Education, 10*(3), 267–285. https://doi.org/10.1177/1028315306286930

Jain, S., Cohen, A. K., Huang, K., Hanson, T. L., & Austin, G. (2015). Inequalities in school climate in California. *Journal of Educational Administration*, *53*(2), 237–261. https://doi.org/10.1108/JEA-07-2013-0075

Kilpi-Jakonen, E., & Alisaari, A. (2021). Does the language spoken at home matter for the education, wellbeing, and sense of belonging of the children of immigrants? And does the answer depend on how we analyse it? *INVEST working papers 29/2021*. https://doi.org/10.31235/osf.io/fh63x

Kim, D. (2020). Learning language, learning culture: Teaching language to the whole student. *ECNU Review of Education*, *3*(3), 519–541. https://doi.org/10.1177/2096531120936693

Lambert, R. (1996). *Parsing the concept of global competence, educational exchange and global competence.* Council on International Educational Exchange.

Mælan, E. N., Eikeland Tjomsland, H., Samdal, O., & Thurston, M. (2020). Pupils' perceptions of how teachers' everyday practices support their mental health: A qualitative study of pupils aged 14–15 in Norway. *Scandinavian Journal of Educational Research, 64*(7), 1015–1029. https://doi.org/10.1080/00313831.2019.1639819

Mannion, G., Sowerby, M., & I'Anson, J. (2015). *How young people's participation in school supports achievment and attainment.* Scotland's Commissioner for Children & Young People. https://www.cypcs.org.uk/ufiles/achievement-and-attainment.pdf

Mikander, P., Zilliacus, H., & Holm, G. (2018). Intercultural education in transition: Nordic perspectives. *Education Inquiry*, *9*(1), 40–56. https://doi.org/10.1080/20004508.2018.1433432

OECD/Asia Society. (2018). *Teaching for Global Competence in a Rapidly Changing World.* http://dx.doi.org/10.1787/9789264289024-en

OECD. (2019). PISA 2018 database. https://www.oecd.org/pisa/data/2018database/

OECD. (2020). *PISA 2018 Results (Volume VI): Are Students Ready to Thrive in an Interconnected World?* PISA, OECD Publishing. https://doi.org/10.1787/d5f68679-en

Paris, D., & Alim, H. S. (Eds.). (2017). *Culturally sustaining pedagogies. Teaching and learning for justice in a changing world.* Teachers College Press.

Räsänen, M. (2015). *Visuaalisen kulttuurin monilukukirja* [*Multiliteracy book of visual culture*]. Aalto-yliopiston julkaisusarja.

Saarinen, M., & Zacheus, T. (2019). "En mä oo samanlainen". Maahanmuuttotaustaisten nuorten kokemuksia ulkopuolisuudesta ["I am not similar". Experiences of being an outsider among youth with migration backgrounds]. In M. Jahnukainen, M. Kalalahti & J. Kivirauma (Eds.), *Oma paikka haussa: Maahanmuuttotaustaiset nuoret ja koulutus* [*Looking for the place of your own:* Youth with migration backgrounds and education] (pp. 170–199). Gaudeamus.

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/edu0000303

Schmid, K., Ramiah, A. A., & Hewstone, M. (2014). Neighborhood ethnic diversity and trust: The role of intergroup contact and perceived threat. *Psychological Science, 25*(3), 665–674. https://doi.org/10.1177/0956797613508956

Schwarzenthal, M., Schachner, M. K., van de Vijver, F. J. R., & Juang, L. P. (2018). Equal but different: Effects of equality/inclusion and cultural pluralism on intergroup outcomes in multiethnic classrooms. *Cultural Diversity and Ethnic Minority Psychology, 24*(2), 260–271. https://doi.org/10.1037/cdp0000173

Schwarzenthal, M., Schachner, M., Juang, L., & Vijver, F. V. (2020). reaping the benefits of cultural diversity: Classroom cultural diversity climate and students' intercultural competence. *European Journal of Social Psychology, 50*, 323–346. https://doi.org/10.1002/ejsp.2617

Shi-Xu (2001). Critical pedagogy and intercultural communication: Creating discourses of diversity, equality, common goals and rational-moral motivation. *Journal of Intercultural Studies, 22*(3), 279–293. https://doi.org/10.1080/07256860120094000

Sleeter, C. (2014, February). Deepening social justice teaching. *Journal of Language & Literacy Education*. http://jolle.coe.uga.edu/wp-content/uploads/2014/01/SSO_Feb2015_Template.pdf

Soini T., Pyhältö K., & Pietarinen J. (2010). Pedagogical well-being: Reflecting learning and wellbeing in teachers' work. *Teachers and Teaching: Theory and Practice, 16*, 735–751. https://doi.org/10.1080/13540602.2010.517690

Spotti, M., & Blommaert, J. (2017). Bilingualism, multilingualism, globalization and superdiversity. Towards sociolinguistic repertoires. In O. Garcia, N. Flores, & M. Spotti (Eds.), *The Oxford Handbook of Language and Society* (pp. 161–178). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780190212896.013.1

Storlie, C. A., & Toomey, R. B. (2020). Facets of career development in a new immigrant destination: Exploring the associations among school climate, belief in self, school engagement, and academic achievement. *Journal of Career Development*, *47*(1), 44–58. https://doi.org/10.1177/0894845319828541

Suldo, M. M., Chappel, A. M., McMahan, M. M., & Loker, T. (2012). Relationships between perceived school climate and adolescent mental health across genders. *A Multidisciplinary Research and Practice Journal, 4*(2), 69–80. https://doi.org/10.1007/s12310-012-9073-1

Watts, R. J., Diemer, M. A., & Voight, A. M. (2011). Critical consciousness: Current status and future directions. *New directions for child and adolescent development,* 134, 43–57. https://doi.org/10.1002/cd.310

Way, N., Reddy. R., & Rhodes, J. (2007). Students' perceptions of school climate during the middle school years: Associations with trajectories of psychological and behavioral adjustment. *American Journal of Community Psychology, 40*, 194–213. https://doi.org/10.1007/s10464-007-9143-y

Yeasmin, N., & Uusiautti, S. (2018). Finland and Singapore, two different top countries of PISA and the challenge of providing equal opportunities to immigrant students. *Journal for Critical Education Policy Studies, 16*(1), 207–237.

Young, T. J., Sachdev, I., & Seedhouse, P. (2009). Teaching and learning culture on English language programmes: a critical review of the recent empirical literature. *Innovation in Language Learning and Teaching*, *3*(2), 149–169. https://doi.org/10.1080/17501220802283178

Zacheus, T. (2019). Kiusaaminen, syrjintä ja rasismi. Kokemuksia peruskoulussa ja toisella asteella [Bullying, discrimination and racism. Experiences at the basic education and secondary level]. In M. Jahnukainen, M. Kalalahti & J. Kivirauma (Eds.), *Oma paikka haussa: Maahanmuuttotaustaiset nuoret ja koulutus [Looking for the place of your own:* Youth with migration backgrounds and education*]* (pp. 137–169). Gaudeamus.

Zarate, G. (2003). Identities and plurilingualism: preconditions for the recognition of intercultural competences. In M. Byram (Ed.), *Intercultural competence*. Council of Europe Publishing.

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