Chapter 5
School Segregation of Immigrant Students

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Abstract IEA's International Civic and Citizenship Education Study (ICCS) identifies first- and second-generation immigrants, and hence may reveal patterns of segregation of immigrant students. From a comparative perspective, these may be analyzed to provide the distribution, concentration and spread of immigrant students among schools and countries. Here three methods of analysis were employed: (1) descriptive analysis, (2) construction of segregation indices, and (3) multilevel analysis. In general, countries do not implement systematic policies to concentrate or segregate immigrant students, although there are important differences between countries; instead there is a need to appreciate strong relationships between levels of segregation and inequality or human development indexes, and consider geographical, cultural and economic factors. Schools appear to have a limited effect in transforming attitudes toward immigration.

Keywords Immigration · International Civic and Citizenship Education Study (ICCS) · International large-scale assessments · School segregation

5.1 Introduction

Historically, migrations have occurred throughout human history and are a relevant social phenomenon in the field of social research. However, the dynamics, magnitudes and effects of immigration make this one of the most complex issues in

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contemporary society (Potts 1990; Sassen 2014). Although still a topic of debate, here we define immigration as any movement of people from their country of origin to a different country due to political, social, economic, religious, or other situations.

Interpretations of immigration have generated intense academic debate in recent decades. In some cases, immigration is understood as part of a process of displacement of workers from various regions of the world, caused by the international division of labor and the construction of a world economy (Harvey 2007; Robinson 2004). In other cases, immigration is understood as the product of globalization processes and the increase of networks and relations between countries, thus acquiring a cultural perspective (Castells 2010; Pries 2008). Some researchers understand immigration as a process that accounts for the loss of the importance of the nation state and the reconfiguration of national barriers and forms of state control, especially potent in recent decades (Castles and Miller 2008; Sassen 2005, 2014). Finally, some research has focused on migration as displacements produced by conflicts and wars between or within nations. Beyond these interpretations, immigration has become consolidated in the world as a phenomenon of increasing magnitude and importance (Garay et al. 2015; Texidó et al. 2012). Consequently, different researchers have been clear in showing the need to comprehend the phenomenon of immigration as a political process in which important social, economic, cultural and power differences between groups are produced and reproduced (Perliger et al. 2006; Witschge and Van de Werfhorst 2016).

Schools continue to play a fundamental role in the processes of socialization and social interaction (Brint 2006). Thus, contemporary schools continue to be one of the most common spaces where children can share and socialize with subjects of their own origins, constituting a privileged space for the formation of civic attitudes, including respect for diversity, inclusion of different groups, tolerance toward others, social cohesion and the incorporation of democratic values (Shafiq and Myers 2014).

Here, we analyzed the pattern of segregation of immigrant students from a comparative perspective using the data from the International Civic and Citizenship Education Study (ICCS) 2009. We discuss the distribution, concentration and spread of immigrant students among schools and countries, in order to understand how education systems generate mechanisms to include (or exclude) these students. After presenting a conceptual background to the phenomenon of school segregation, explaining the concept of immigrant and the conceptual link between these two research lines, we describe the methodology, accounting for the variables selected, the segregation index used and the strategy of data analysis. The results provide information on the patterns of distribution of immigrant students, the levels of segregation of immigrant students in the countries, and the relationship between levels of segregation and attitudes toward immigrants. In the conclusion, we reflect further on educational policies designed to promote the inclusion of immigrant students.

5.2   Conceptual Background

5.2.1   School Segregation: An Overview

Segregation can be defined as "a measure of the inequality of the distribution of characteristics of individuals among organizational units" (Gorard and Taylor 2002, p. 877). In the educational field, segregation is understood as that process of separation of students according to some social, cultural, academic or racial condition. Dupriez (2010) identified three units where school segregation can occur: within classrooms in a school; between classrooms in the same school; and between schools. However, comparative research has focused especially on between-school segregation, using data from different large-scale assessments, such as the IEA's Trends in Mathematics and Science Study (TIMSS) and ICCS, and the Organisation for Economic Co-operation and Development's (OECD) Programme for International Student Assessment (PISA) (Chmielewski and Savage 2015; Duru-Bellat and Suchaut 2005; Janmaat 2014; Montt 2011; Willms 2010).

In general, the accumulated evidence has shown clearly that between-school segregation (especially that based on socioeconomic variables) has negative effects in the short, medium and long term on the quality and equity of educational systems (Boger and Orfield 2009; Gorard and Fitz 2000). For this reason, many researchers, policymakers and politicians have learned the processes and mechanisms related to educational segregation, and have made significant efforts to design programs and policies aimed at decreasing levels of segregation in school systems.

Conceptually, educational segregation impacts the configuration of the field on at least three levels: the individual level, school level, and societal level. First, at an individual level, the intergroup contact theory (Allport 1954; Pettigrew 1998; Pettigrew and Tropp 2006) has indicated that students exposed to higher levels of diversity at school (also meaning lower levels of segregation) will develop higher levels of tolerance, more positive attitudes toward minorities and lower levels of prejudice. Different studies have analyzed these relationships, with dissimilar results. Rao (2014) found that levels of generosity, cooperation and friendliness increase when heterogenization processes are generated in schools. Further, Moody (2001) suggested that students attending segregated schools exhibit less capacity to form friendships with students who have different characteristics to their own. Other empirical studies have revealed that the effect of segregation on different attitudes toward diversity is less clear and linear, although it is generally recognized that there is at least an indirect effect on this relationship (Janmaat 2015; Shafiq and Myers 2014).

Secondly, educational segregation influences school organization and outcomes. For example, there is evidence that suggests a relationship between school segregation and the distribution of teachers in the school system (Kelly 2007). In general, teachers with less experience and fewer qualifications more frequently teach in schools that educate the poorest social groups (Clotfelter et al. 2005, 2006). In

addition, the concentration of vulnerable students affects educational achievement (Borman and Dowling 2010) and opportunities for learning (Breen and Jonsson 2005), as it generates less challenging classes and educational environments with less diverse experiences, especially affecting the most disadvantaged and vulnerable students. Likewise, relevant school indicators, including expulsion rates, repetition rates, school climate, and disciplinary measures are affected by school segregation (Freeman and Steidl 2016).[1]

Finally, international evidence shows the impact of school segregation on different social issues, such as the quality of democracy or levels of inequality. For example, Dupriez et al. (2008) used data from PISA to reveal the positive relationship that exists between socioeconomic segregation and inequality in schools, where countries with high levels of inequality tend to have high levels of segregation in their school systems. Additionally, evidence shows that the separation of students in schools, and the consequential homogenization of school populations, might have a detrimental effect on the quality of citizenship and civic attitude, in turn creating higher levels of social conflict (Corvalan and Vargas 2015; Esteban and Ray 2011). In this sense, the construction of schools with high social, cultural and economic diversity is a challenge that goes beyond the school system, affecting societies in the short, medium and long term.

5.2.2 The Immigrant Condition: Conceptual Background

From Simmel's seminal studies on forms of socialization (Simmel 1977), Elias's (2000) research on figurations and the process of civilization, and Schutz's (2013) studies of social interaction, the notion of immigrant has been constituted as a central reference for the discussions of western social theory. In general, it is possible to recognize three main elements that must be considered to understand the concept of what it is to be an immigrant.

First, different researchers have shown how the concept of what it is to be an immigrant is constructed through processes of interaction and subjectivity (Schutz 1970). Even though many legal definitions have been sketched of what it is to be an immigrant, the fact is that the notion of immigrant is based mainly on social imaginaries that construct people and societies (Taylor 2004). These imaginaries are based on the generation of a fundamental difference: the distinction between "we" and "others" generated around the distinction between the "national" versus "non-national" condition (Tororov 2010). In this way, the phenomenon of immigration contains differentiating elements such as the country of origin and

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[1]Evidence also shows that the students from segregated schools that continue onto higher education have lower performance in their careers, earn less money and have poorer health; all this reflecting the long-term effects of segregation (Orfield et al. 2012). In contrast, students who have been in integrated schools have a higher probability of searching for and finding more integrated universities, neighbourhoods, and places of work (Mickelson 2001).

nationality, through which different subjects are valued and positioned differently. In short, this implies that the notion of an immigrant is shaped by what Anderson (2006) has named "imagined communities", that is, social groups of people perceiving themselves as part of a certain social group, generating processes of cultural and social differentiation/homogenization that underlie the notion of immigrant.

Secondly, and related to the above, social theorists have shown that not all people from other countries or cultures are equally qualified as immigrants. As Simmel (2002) has shown, there is a difference between foreigner and immigrant. The foreign seems to be related to two notions: that of tourist (person who is temporarily visiting elsewhere) and that of people from different countries of origin that come to reside in the medium or long term, but whose origin and nationality is more valued by the society of destiny. In contrast, the notion of immigrant operates to denominate those nationalities undervalued in the societies they move to, by enclosing a set of properties that usually attribute negative characteristics. In this way, the notion of immigrant is constituted as a negative concept (Adorno 1984) meaning, a concept created based on a negative difference with some part of social reality. This implies that, in short, immigrant status is constructed by each country, according to its history and for the categories of domination existing in each nation-state (Sayad 2008).

Finally, it is important to account for the relationship between the notion of immigrant and other dominated groups in society. In general, it is recognized that the immigrant is a subject that has a disadvantage in the societies in which they encounter, suffering from patterns of vulnerability, social exclusion and marginality produced by institutional factors and by processes of social differentiation and segregation. For this reason, it is possible to understand immigration as part of a complex of relationships in which nationality, ethnicity and class are entangled as factors that determine the structural inequalities of social stratification and differentiation systems (Costa 2013). This implies that nationality is not simply a proxy for vulnerability, poverty or exclusion, but neither is a variable independent of the economic, social and cultural characteristics of subjects. Following Bourdieu (1997), this would imply that nationality is an asset or deficit, depending on cultural, social, economic, political, moral and religious characteristics of the social field.

5.3 Methods

5.3.1 Data

The principal data are taken from the International Civic and Citizenship Education Study (ICCS) 2009 (for the specific description of this dataset see Chap. 2 in this volume). The final sample used for the analyses included in this chapter shows small variations from the original dataset.

5.3.2   Variables

Dependent Variables

In order to account for the immigrant status of the students, we analyzed the responses from the ICCS 2009 student questionnaires. In this questionnaire, three items ask about the immigration status of: (1) the student, (2) the mother or female guardian of the student, and (3) the father or male guardian of the student. The combination of possible responses to these items results in four types of students: (1) non-immigrant students, (2) students with one or two immigrant parents, but born in the country of destination (second-generation immigrants), (3) students born outside the country, but whose parents were born in the country of destination (first-generation immigrant, with non-immigrant parents), and (4) students born outside the country and with parents from other countries (first-generation immigrant, with immigrant parents).

In this way, we attempted to capture the discussion about the differentiated effects of first and second-generation immigration (Portes and Rumbaut 2001; Van Ours and Veenman 2003). However, considering the distribution of these "types" of immigration (see Fig. 5.1), we used a dichotomous variable to identify the immigrant students for the analyses involving the segregation index and multilevel models (where 0 indicates a non-immigrant student and 1 an immigrant student).

Additionally, and to explore the effect of immigrant segregation, we used a variable measuring the students' attitudes toward equal rights for immigrants, which was estimated using confirmatory factor analysis (CFA) and with invariance testing (for a more detailed description of the procedures followed to construct these variables, see Chap. 3 in this volume).

Independent Variables

To explore the relationship between the level of immigrant segregation and some country variables, we also used secondary data related to the magnitude of inequality, the so-called Gini coefficient, derived from World Bank data[2] and the human development index (HDI), obtained from the United Nations Development Programme.[3] Additionally, our multilevel model incorporated some variables related to the socioeconomic status of the students and the condition of immigration (in student level of nesting), using the index available in the ICCS 2009 (the national index of socioeconomic background [NISB index]).

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[2]The Gini coefficient is a measure of income inequality within a country. Data are available from https://data.worldbank.org/indicator/SI.POV.GINI

[3]The HDI is a measure of the progress of countries based on indicators from three areas: life expectancy (health), years of schooling (education), and gross national income per person (income). Data are available from http://hdr.undp.org/en/content/human-development-index-hdi

Fig. 5.1 Distribution of non-immigrant and immigrant students

5.3.3 Analytical Strategy

We used three main methods to address our objectives. First, we employed descriptive statistics (univariate and bivariate) to account for the distribution of immigrant students between countries and between schools. This enabled us to generate a general overview of immigrant students in the different school systems, showing the main similarities and differences in a comparative perspective.

Second, we used the Duncan index (Duncan and Duncan 1955) to account for the level of segregation of immigrant students[4] and to show the relationship between immigrant segregation and some variables related to the development of the countries, like the Gini coefficient or the HDI. The Duncan index (D) is defined as:

$$D = \frac{1}{2} \sum_{i=1}^{I} \left| \frac{ESi}{EST} - \frac{EIi}{EIT} \right| \tag{5.1}$$

where i represents a school within a country, *ES* is the number of students that present the analyzed attribute (in our case, an immigrant student) and *EI* are the number of students who do not possess the analyzed attribute in the school i. *EST* corresponds to the total number of students with the attribute in the geographical area of analysis, and *EIT* is the total number of students who do not possess the characteristics of the analysis in the same area. The Duncan index varies between 0 and 1. A value of 0 indicates that immigrant students are identically distributed across schools in the country. Conversely, an index value of 1 would imply that all immigrant students are concentrated in only one school.

In terms of interpretation, the Duncan index represents the percentage of immigrant students that should be transferred to other schools in order to achieve a non-segregated distribution in the entire educational system of the geographical area under analysis. Likewise, the levels of segregation of the index can be classified into four categories according to their values: (1) low segregation, between 0 and 0.3; (2) moderate segregation, between 0.3 and 0.45; (3) high segregation, between 0.45 and 0.6; and (4) hyper-segregation, for values over 0.6 (Glaeser and Vigdor 2001).

Finally, a three-level model is used to analyze the relationship between immigration segregation and attitudes toward diversity. The specification used in this model (see Chap. 2 in this volume) allowed us to analyze the outcome variance at each level, as well as to draw cluster-specific inferences (McNeish et al. 2017). The general specification of the model can be represented by three equations (Eqs. 5.2–5.4):

$$Y_{ijk} = \pi_{0jk} + \pi_{1jk} X_{ijk} + \varepsilon_{ijk} \tag{5.2}$$

$$\pi_{0jk} = \beta_{00k} + \beta_{01k} W_{.jk} + r_{0jk} \tag{5.3}$$

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[4]Although in recent years a dynamic discussion has developed on the advantages and disadvantages of using different indices to measure segregation (Alesina and Zhurayskaya 2011; Reardon and Firebaugh 2002), we decided to use the Duncan index for several reasons. First, the index has been widely used in the literature to account for educational phenomena (Allen and Vignoles 2007; Söderström and Uusitalo 2010; Valenzuela et al. 2014). In addition, the index is based on a dichotomous distinction of the population, being useful for the analysis of easily dichotomous groups (as is the case with race or immigration) over continuous indexes, more appropriate for the measurement of socioeconomic level, as rank-order measure (Reardon et al. 2006). Third, this index allows for both intertemporal comparability and the control of invariance in time (Glaeser and Vigdor 2001). Finally, the Duncan index is easy to interpret, making it understandable to a broad audience.

$$\beta_{00k} = \gamma_{000} + v_{00k} \tag{5.4}$$

where Y are the outcomes (in our case, the three attitudes toward immigrant diversity), X represents a set of control variables for students (in our case, being an immigrant and the socioeconomic status of the student) (Eq. 5.2), W represents a set of school characteristics (in our case, the index of immigrant segregation; Eq. 5.3), and Eq. (5.4) indicates that we included a third level with no control variables (Brincks et al. 2016; Sacerdote 2011).

5.4 Results

Our results indicate that most national school systems receive a relatively low portion of immigrant students. With the exception of five countries (Liechtenstein, Luxembourg, Hong Kong, Switzerland and New Zealand), the percentage of immigrant students (first- or second-generation) does not exceed 30%. Countries with the lowest proportion of immigrant students were mostly found in Asian, Latin American and Eastern European countries (see Fig. 5.1).

By contrast, the countries with the highest proportion of immigrant students (between 30 and 70%) are predominantly Western and Central European countries, where migration has become more relevant in recent decades (Algan et al. 2010; Card et al. 1998). In the countries with the highest proportion of immigrants, most of these can be classified as second-generation immigrants, that is, students born in the country of destination but of immigrant parents. Hypothetically, this may indicate that the current immigration wave is not as intense as the waves of the previous generation, which could be understood as an advantage for the generation of policies and programs of educational inclusion in the medium and long term.

In spite of its importance, the proportion of immigrant students per country does not enable a good understanding the distribution of these students between schools. In a significant number of countries, there was no high concentration of immigrants in schools; in all countries (except Luxembourg, Liechtenstein, Hong Kong and Chinese Taipei), in 50% of schools < 20% of students were immigrant students (Fig. 5.2). This may indicate that, in general terms, education systems do not systematically apply strategies to concentrate immigrant students in a particular group of schools.

In spite of this, it was evident that important variability exists in the composition of schools within school systems. This variability, although not massive, implies that there were schools that contained a significant percentage of immigrant students (and others with a small proportion of immigrant students). There may be numerous explanations for this, but they may correspond to the characteristics of immigration within each country. Thus, in countries with high mobility, such as Liechtenstein or Austria, it is possible that schools located in border regions have high numbers of immigrant students. In other cases, such as Hong Kong, parental employment could explain the concentrations of immigrant students in some
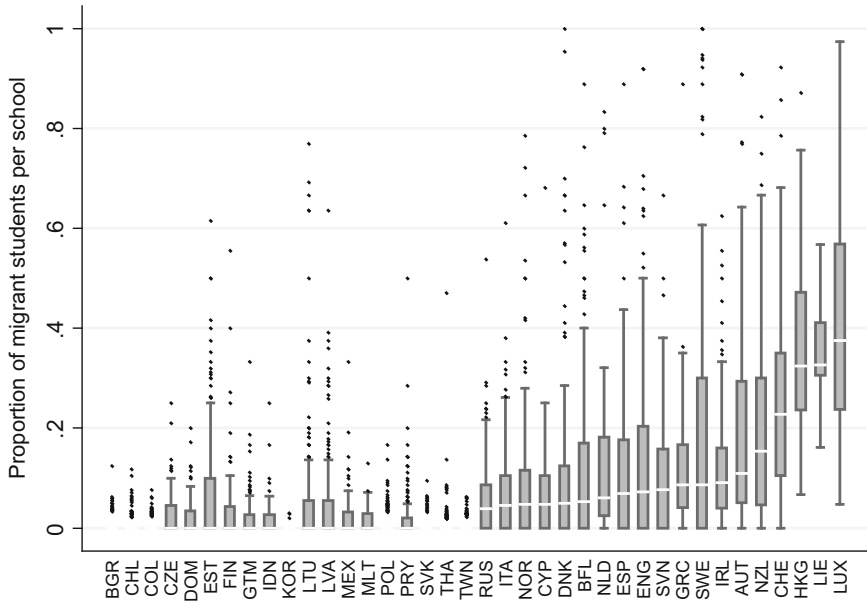
Fig. 5.2 Proportions of immigrant students within schools by country. The box graph is a quartile-based graphical representation of the data, showing the main characteristics of the frequency distribution and indicating atypical or extreme data. The box accounts for 50% of the central distribution of the variable (where the line inside the box marks the mean of the distribution) and the lines around the box account for the upper and lower 25% of the distribution. Points represent outliers (in our case, schools) more than two standard-deviations from the mean

schools. Be that as it may, it is significant that, despite not being a global trend, there are countries that have schools where immigrant students seem to be concentrated.

These findings are complemented by the descriptive results of the Duncan index of immigrant segregation per country. As mentioned earlier in this chapter, the Duncan index accounts for the level of segregation of a group of immigrant students in schools by considering the proportion of migrant students in the country.[5] The results show that, for the population as a whole, segregation is low in all countries, nowhere exceeding 0.015[6] (see Table 5.1).

Note, first of all, that segregation is generally low in all countries. However, there was also great variability between countries, and, for example, segregation

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[5]We incorporated the students' total sample weights after calculating the Duncan index for each student and school. In addition, we tested an alternative weighting method that incorporated the weights in the index calculation. Both forms of calculation showed a correlation of 0.9979.

[6]To compare these results, we constructed a second segregation index, based on Olsson and Valsecchi (2010). The correlation between the two indexes was strong but not identical (0.656). The description of the index and results by country can be found in the Appendix.

Table 5.1 Duncan segregation index per country

Country	Segregation index	Country	Segregation index
Switzerland	0.0025052	Estonia	0.0045341
Russian Federation	0.0025442	Latvia	0.0046809
Denmark	0.0026705	Chile	0.0047151
Greece	0.0027293	Indonesia	0.0048692
Slovenia	0.0028103	Poland	0.0049971
Ireland	0.0030691	England	0.0051094
Lithuania	0.0031847	Chinese Taipei	0.0051886
Sweden	0.0031863	Czech Republic	0.0052984
Italy	0.0032627	Paraguay	0.0054603
Mexico	0.0033161	Thailand	0.0056527
Austria	0.0034548	Guatemala	0.0057438
New Zealand	0.0035053	Bulgaria	0.0059761
Spain	0.0035162	Cyprus	0.0062464
Hong Kong, SAR	0.0038431	Netherlands	0.0064707
Dominican Republic	0.0041943	Korea, Republic of	0.0065633
Belgium (Flemish)	0.0042784	Slovakia	0.0069849
Colombia	0.0042893	Malta	0.0010419
Norway	0.0043517	Luxembourg	0.0122595
Finland	0.0044162	Liechtenstein	0.0144263

Note Across all countries, the average segregation index is 0.0043631

might be considered considerably more pronounced in Liechtenstein than in neighboring Switzerland, without recognizing differences between countries in terms of social, political or cultural development. Three countries (Malta, Luxembourg and Liechtenstein) showed high levels of segregation (> 0.01) , but Luxembourg and Liechtenstein are also the two countries that had the largest populations of immigrant students, suggesting there is a relationship between the percentage of immigrants and the level of segregation.

To explore possible patterns to understand these differences, we examined the relationship between socioeconomic segregation of indigenous students and two critical variables in each country: the level of inequality, measured by the Gini coefficient (Fig. 5.3), and the level of development, as measured by the HDI[7] (Fig. 5.4). We found that the relationship between both variables and the segregation of immigrant students was weak.

For the Gini coefficient, we found a slightly negative relationship, whereas the HDI indicated a slightly positive relationship. Although hypothetical, these results may indicate that the segregation of immigrant students does not develop as a result

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[7]We also explored the relationship between levels of segregation and a nation's gross domestic product based on purchasing power parity (PPP). The results were very similar to those we found using the HDI index.

of a defined or clear policy aimed at concentrating (or, conversely, dispersing) immigrant students in different schools. In this sense, the level of segregation in school seems to be the product or consequence of the application of other types of policies (migratory, legislative, territorial) that do not directly affect the configuration or organization of immigrant students in each of the educational systems studied.

Finally, we used multilevel models to explore the relationship between school segregation and attitudes to immigrant diversity (see Table 5.2).

First, we found that a significant part of the attitudes toward immigrants may be explained by the characteristics of the students. The high percentage of variance explained at the student level[8] and the statistically significant effect of the control variables would indicate that, in general, these conditions, rather than the characteristics of the school, explain the level of tolerance toward equal rights for immigrants.

These results are in line with Bennett et al. (2009), who emphasized the limits that schools have for the promotion and development of civic attitudes in students, considering the (generally) high levels of structuring and hierarchization of the school system.

Particularly important in this context would be the immigration condition, which in 24 of the 38 countries is a statistically significant variable. In all these cases (with the exception of Mexico and Korea), the coefficient is always positive, which means that being an immigrant is related to higher levels of tolerance toward immigrant groups.

The socioeconomic index was significant in 15 countries. In all of them the estimated relationship was positive, which means that students with higher socioeconomic levels had higher scores on the diversity tolerance index. This implies that the overlap between immigration status and vulnerability was neither universal nor empirically clear.

In addition, the school-level characteristic that we included as our focus (the level of segregation of immigrant students per school) showed that, in general terms, this variable was not a highly predictive factor at the comparative level. In fact, the segregation of migrant students between schools was only a significant factor in explaining attitudes toward immigrants in nine countries, and in seven of these it had a negative effect. This implies that in these countries segregation (after controlling for the condition of immigration and the socioeconomic level of the students) explained levels of tolerance toward the immigrant population negatively. The exceptions to this were Chile and Guatemala, where the association between segregation and attitudes toward immigrants was positive.

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[8]The effect of individual school and family variables on attitudes toward diversity is explored more deeply in Chap. 4.
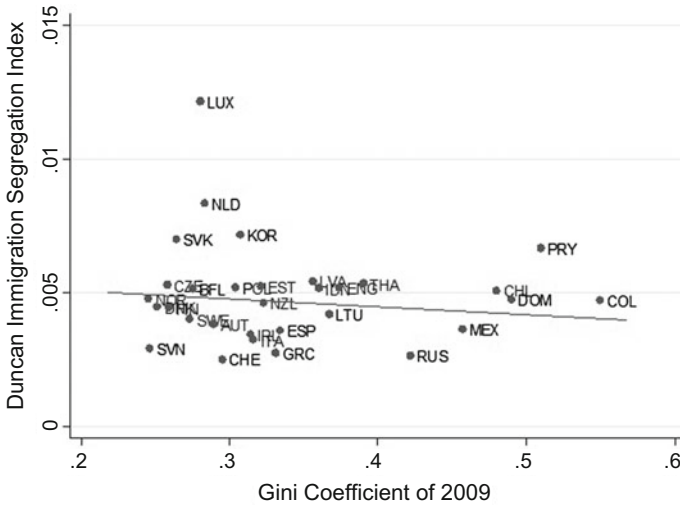
Fig. 5.3 Duncan immigration segregation index, as related to the Gini coefficient of economic inequality. The Duncan segregation index indicates the level of segregation between schools for immigrant students in each country, using the ICCS 2009 data. The Gini coefficient is a measure of income inequality within a country, based on data provided by the World Bank (see Sect. 5.3.2 for more details)
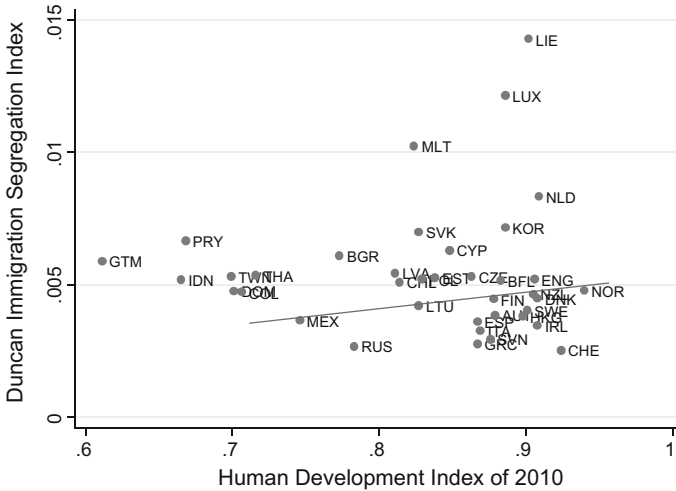
Fig. 5.4 Duncan immigration segregation index, as related to the human development index (2010). The Duncan segregation index indicates the level of segregation between schools for immigrant students in each country, using ICCS 2009 data. The human development index is a measure developed by the United Nations Development Programme to assess the progress of a country, based on indicators from three areas: average life expectancy (health), years of schooling (education) and gross national income per person (income) (see Sect. 5.3.2 for more details)

Table 5.2 Multilevel model exploring the effect of immigrant segregation on attitudes to immigration

Country	Student level ICC (%)	Immigrant condition			Socioeconomic index			School level ICC (%)	Duncan index		
		E	SE	P	E	SE	P		E	SE	P
Austria	92.3	7.45	0.76	0.000	1.18	0.31	0.000	7.7	-0.01	0.00	0.061
Bulgaria	94.7	4.11	2.93	0.161	0.26	0.70	0.708	5.3	-0.01	0.00	0.038
Chile	94.6	3.25	1.80	0.071	0.32	0.44	0.470	5.4	0.02	0.01	0.028
Chinese Taipei	97.8	1.41	1.86	0.449	0.83	0.29	0.004	2.2	-0.00	0.00	0.184
Colombia	96.7	0.44	1.32	0.736	0.89	0.35	0.012	3.3	-0.00	0.00	0.792
Cyprus	98.6	3.35	0.86	0.000	0.94	0.33	0.005	1.4	0.03	0.02	0.105
Czech Republic	96.3	3.62	1.32	0.006	0.14	0.22	0.507	3.8	-0.01	0.00	0.039
Denmark	91.3	5.52	0.53	0.000	1.30	0.19	0.000	8.8	0.00	0.00	0.295
Dominican Republic	97.4	-0.16	1.29	0.898	0.15	0.32	0.155	2.6	0.00	0.00	0.412
Estonia	94.7	0.31	0.77	0.686	0.57	0.32	0.082	5.3	-0.04	0.00	0.000
Finland	96.4	6.53	1.41	0.000	2.23	0.58	0.000	3.6	0.00	0.01	0.998
Greece	95.6	3.19	1.01	0.002	0.87	0.32	0.007	4.4	-0.02	0.00	0.006
Guatemala	97.8	0.1	1.18	0.870	0.46	0.34	0.179	2.2	0.02	0.00	0.004
Hong Kong, SAR	96.2	1.62	0.31	0.000	0.54	0.23	0.021	3.8	-0.00	0.01	0.826
Indonesia	95.6	-1.56	0.91	0.086	0.32	0.18	0.071	4.5	-0.01	0.00	0.009
Ireland	93.8	5.19	0.57	0.000	1.10	0.22	0.000	6.2	-0.00	0.00	0.307
Italy	90.7	6.00	0.62	0.000	0.34	0.40	0.384	9.3	-0.02	0.01	0.037
Korea, Republic of	98.4	-14.76	6.00	0.014	0.94	0.54	0.085	1.6	0.00	0.01	0.823
Latvia	94.1	0.45	1.01	0.654	-0.24	0.37	0.516	5.9	-0.01	0.01	0.156
Liechtenstein	99.0	3.71	1.12	0.001	-0.13	0.68	0.843	1.0	0.36	0.28	0.194
Lithuania	94.6	-0.76	0.79	0.336	1.03	0.24	0.000	5.4	-0.02	0.00	0.008
Luxembourg	96.2	5.95	0.46	0.000	-0.41	0.27	0.122	3.8	0.02	0.03	0.438

(continued)

Table 5.2 (continued)

Country	Student level ICC (%)	Immigrant condition			Socioeconomic index			School level ICC (%)	Duncan index		
		E	SE	P	E	SE	P		E	SE	P
Malta	93.8	1.06	1.51	0.484	0.61	0.45	0.180	6.2	0.06	0.03	0.088
Mexico	94.9	−3.18	1.29	0.014	0.39	0.30	0.190	5.1	−0.01	0.10	0.067
Netherlands	91.9	6.46	0.76	0.000	0.71	0.30	0.019	8.2	0.01	0.03	0.641
New Zealand	92.0	4.88	0.42	0.000	0.94	0.26	0.000	8.0	0.01	0.00	0.136
Norway	95.2	4.94	0.74	0.000	0.79	0.41	0.054	4.8	−0.00	0.00	0.518
Paraguay	94.8	0.64	1.00	0.523	0.18	0.31	0.555	5.2	−0.01	0.01	0.300
Poland	93.9	−0.17	1.84	0.926	0.45	0.25	0.079	6.1	0.01	0.00	0.218
Russian Federation	94.8	2.08	0.70	0.003	0.34	0.22	0.126	5.2	−0.00	0.00	0.499
Slovakia	94.5	1.87	1.50	0.213	−0.69	0.49	0.157	5.5	−0.01	0.01	0.319
Slovenia	94.1	2.82	0.88	0.002	0.41	0.34	0.235	5.9	−0.00	0.00	0.875
Spain	94.5	5.20	0.86	0.000	1.16	0.55	0.034	5.5	0.00	0.00	0.318
Sweden	86.4	8.47	0.83	0.000	0.86	0.32	0.008	13.6	−0.00	0.00	0.268
Switzerland	95.0	5.58	0.61	0.000	−0.17	0.28	0.550	5.0	0.00	0.00	0.680
Thailand	96.8	1.47	0.45	0.001	0.28	0.33	0.399	3.2	−0.00	0.00	0.476
England	89.3	7.26	0.81	0.000	0.14	0.37	0.690	10.7	0.02	0.01	0.071
Belgium (Flemish)	91.9	4.53	0.87	0.000	−0.71	0.25	0.006	8.1	0.00	0.00	0.957

ICC intra-class correlation; *E* estimated coefficients; *SE* standard deviation; *P* p-value

5.5 Discussion and Conclusions

In this chapter, we examined levels of segregation of migrant students, and assessed how these levels relate to different country characteristics and to student attitudes toward immigration. We found that the immigration condition involves only a small proportion of students in most countries and, in general, there is little segregation of immigrant students across schools, although there is a wide heterogeneity across different countries. In addition, we found that the effect of school segregation on attitudes toward immigration is limited for some countries and moderate in its magnitude.

From these results, it is possible to make two conclusions. First, it seems that countries do not implement systematic policies to concentrate and/or segregate immigrant students in the same school. This tentatively indicates that school can be understood as a meeting place between different cultures, and implies that, unlike other variables such as socioeconomic level or academic ability, the immigration condition is not a variable that is frequently used to select students; conversely geographic, cultural or economic factors seem to generate certain distribution patterns for these students. This could, at least hypothetically, explain why variables classically used to compare levels of educational segregation across countries (such as level of development or inequity of the country) have not been particularly relevant in this study.

Secondly, it is interesting to discuss the relationship between attitudes toward immigration and educational segregation of immigrant students. Although preliminary, it is clear that individual variables are more important than school characteristics.

Complementary to the results of Chap. 4, in this chapter, we showed that school composition (measured in this case as the level of school segregation) was not a crucial factor in explaining attitudes toward diversity. This indicates that schools may have a limited role in the transformation of certain attitudes, thus reinforcing the importance of designing policies, programs and actions that enhance the knowledge and development of civic skills, enabling schools to become promoters of attitudes conducive to diversity.

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