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Document Version
Publisher's PDF, also known as Version of record

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Native Student Attitudes towards Equal Rights for Immigrants. A Study in 18 European Countries

The present study investigates the determinants of native student attitudes towards equal rights for immigrants giving particular attention to the effect of immigrant share in the classroom and the extent to which it can be generalized across country contexts. The contribution sheds some new light on the validity of the contact hypothesis, which suggests that mixing native and immigrant students in schools and classrooms can contribute to higher levels of support for immigrants' rights. The analyses were conducted across 18 countries participating to the ICCS survey in 2009. For the analyses we applied a three-level multilevel model controlling for individual, classroom, and country characteristics. We tested a random slope for immigrant share in the classroom at country level, and we modeled both linear and quadratic effects of immigrant share. The overall pattern suggests that in most countries there is a small positive effect of immigrant share, which does not change dramatically in direction or size at higher immigrant share levels.

Keywords

1 Introduction

The disengagement of youth from politics as well as increasing levels of social and ethnic tensions have suggested that support for civic society and democratic political institutions is under pressure. To address the decline of engagement and participation among citizens, many countries introduced programs for civic education or intensified already existing educational programs in this field (Birzea 2003). Schools are required to prepare students for becoming 'active and responsible citizens' (Eurydice 2005). An important aspect of civic and citizenship education concerns the attitude of students towards other social and cultural groups in society. Given the increased number of immigrants in most European societies and the negative views of the native population on immigrants' impact in most European societies (cf. Semyonov, Rajiman, Gorodzeisky 2008), one of the current aims of education for citizenship in Europe is to promote tolerance towards people from other cultures such as immigrants (Eurydice 2005). Putnam (2000) refers in this respect to a distinction between 'bridging social capital' in which bonds are formed across diverse social groups, and

'bonding social capital' that only establishes relationships within relatively homogenous groups. According to Putnam, bonding may have a positive effect for those within a particular group, but it is regarded as having a negative effect for society as a whole. Bridging social capital, on the other hand, implies intercultural or interethnic relationships, which may raise mutual understanding – thereby establishing a foundation for social cohesion (see also Mascherini, Vidoni, Manca 2010).

Schools may impact student's attitudes towards immigrants, as well as other democratic attitudes, along different lines. First, there is a documented belief that schools can help students to develop positive attitudes towards immigrants' rights through the formal and informal experiences they provide. Accordingly, schools can promote students' support for the rights of immigrants by enabling them with the required levels of civic knowledge for understanding and respecting different others (Galston, 2001; Elchardus, Roggemans, Op de Beeck 2009; Popkin, Dimock 2000). Schools may foster these attitudes by creating an open academic climate in which students are encouraged to be actively engaged (Barber, Torney-Purta, Fenelly 2010; Kokkonen, Esaiasson, Gilljam 2010; Scheerens, 2009; Torney-Purta, Wilkenfeld, Barber 2008). An open classroom climate can stimulate students to discuss issues of equal rights and tolerance, and can help students understanding the importance and advantages of democratic values and practices (Perliger, Canetti-Nisim, Pedahzur 2006). Thus, it may have a positive effect on the assimilation of these values by students.

Second, educational researchers often focus on the potential influence of classroom ethnic composition when investigating potential determinants of student's attitudes towards immigrants. From this perspective, two contrasting lines of reasoning are found in the literature. One perspective is based on the ethnic competition theory (see also Janmaat 2012; Kokkonen et al. 2010; Vervoort, Scholte, Scheepers 2011) which emphasizes the importance of the relative size of the minority group and indicates that student's attitudes towards immigrants could be more favorable in homogeneous groups. Accordingly, the larger the size of the immigrant group, the more the members of the majority group feels threatened and will react with increasing negative attitudes towards the out-group.

In contrast, based on Allport's (1954) contact hypothesis, educational researchers often assume that mixing native and immigrant students in schools and classrooms can contribute to higher levels of tolerance and support for immigrants' rights (e.g. Hyland 2006; Janmaat 2012; Kokkonen et al. 2010; van Geel, Vedder 2010). Allport (1954) argued that direct contact between members of different ethnic groups will result in positive intergroup experiences, which will eventually generalize to the entire out-group. These positive attitudes will develop, according to Allport, in case of an equal status of the groups in the situation, common goals, intergroup cooperation and the support of authorities, law or custom. Half a century of research later, Pettigrew and Tropp (2006) conducted an extensive meta-analysis, which revealed a weak positive effect on intergroup attitudes across different outcomes, national settings and out-groups. They also found that positive attitudes towards the specific out-group generalized to the entire out-group. Even though a result of the meta-analysis was that the

optimal contact conditions specified by Allport were not essential but rather facilitated positive effects, Pettigrew, Tropp, Wagner and Christ (2011) emphasize the special importance of cross-group friendship in promoting positive contact effects and note that friendships are likely to invoke many of the optimal conditions specified by Allport.

In classroom settings, as Pettigrew and Tropp (2006) argue, the conditions for positive contact between students from different origins seem to be at place. In classrooms students regularly encounter for a whole year, and often even for several years (see also Kokkonen et al. 2010; van Geel, Vedder 2010). Students are supposed to interact on the basis of equality, sharing the common goals of learning, cooperating on different tasks and receiving support from authority figures such as teachers. Therefore, when native students interact with their immigrant peers in the classroom, they are likely to develop positive attitudes towards them from which they could generalize to form their attitudes towards immigrants in general.

However, empirical studies addressing positive intercultural attitudes in educational settings show inconsistent findings. Some studies found a positive relationship between mixed schools or classrooms, and student's attitudes towards immigrants (Janmaat 2012; van Geel, Vedder 2010). Others found no such relationship across and within countries (Barber et al. 2010; Kokkonen et al. 2010) or even a negative one (Vervoort et al. 2011). These studies illustrate that the contact established in the classroom might not be necessarily sufficient for promoting positive attitudes towards immigrants. A recent longitudinal study in the Netherlands reveals that contact between native and other ethnic students may indeed lead to either positive or negative attitudes towards the out-group, depending on whether the interpersonal relationship established between the groups is positive or negative. This finding indicates that the context of the classroom does not necessarily provide the conditions for the development of positive interpersonal relationships, and therefore for positive attitudes towards immigrants. Stark (2011) concludes that positive effects, nevertheless, are to be achieved when practitioners who work in mixed schools give particular attention to the specific context in which contact takes place by creating the right opportunities for the development of positive interpersonal relationships. This can be accomplished, according to Stark, by designing classroom experiences in which students can truly cooperate in order to achieve shared goals while having similar interests and opinions.

Next to that, Steinberg and Morris (2001) note that the way students come to like and interact with peers can be influenced by schools only to a certain extent. The ways in which they relate with their peers can be dependent on other factors which might be difficult to influence and not necessarily under the control of schools such as personality characteristics and preferences (Stark 2011) and the influence of family, community and other peers outside the school (Steinberg, Morris 2001). Peer influence, next to the type of interpersonal relationships between students from different groups (Pettigrew et al. 2011; Stark 2011) might explain why contact between students from different cultural groups does not consistently result in demoting prejudice. Moreover, educational programs and practices which are implemented in mixed classrooms are often designed at a national level. The overall effect of immigrant share in the classroom across schools within

specific educational contexts might, therefore, be dependent on a unique configuration of national conditions (Janmaat 2012). National educational policies and their implementation as well as other country contextual characteristics can have an impact on the quality of interpersonal relationships between native and immigrant students. Therefore, we could not only expect differences in the impact of immigrant share on students' support for immigrant rights between schools and classrooms within national settings but also differences between educational systems.

Nevertheless, as mixing native and immigrant students in schools and classrooms is often considered to be a beneficial policy measure of particular importance (Hyland 2006), the question still largely remains to what extent mixed classrooms promote positive student attitudes towards immigrants and whether the expected positive effects might be reversed when the immigrant group approaches the numerical majority. This study will address this issue by examining the effect of immigrant share in the classroom on native student attitudes towards immigrants across and within national contexts. For that purpose, the following research questions were formulated: (1) Does the proportion of immigrant classmates positively relate to native student attitudes towards immigrant rights across countries, after controlling for other student, classroom, and country determinants? (2) Would there be an overall positive effect, or are the strength, the direction, and the shape of the relationship different depending on the country?

In addressing these questions we will take into account other factors which might impact native student attitudes towards immigrants' rights. At the individual student level, the influence of civic knowledge, gender, educational expectations and students' socioeconomic status is considered. Based on previous findings female students, students with more civic knowledge, higher educational expectations and a higher socioeconomic status tend to have more favorable attitudes toward immigrants (Barber et al. 2010; Galston 2001; Elchardus et al. 2009; Popkin, Dimock 2000). Moreover, classroom level predictors such as the presence of a democratic classroom climate, the average socioeconomic status and average expected educational attainment are controlled for (see Barber et al. 2010), as well as contextual country variables which were found to be related to adolescents and young adults' attitudes towards immigrants: economic conditions (GDP), size of the out-group (immigrants in society) and government policies regarding immigrants (Semyonov et al. 2008). Adolescents' attitudes towards immigrants are expected to be influenced by the way immigrants are perceived in society, and more advantageous economic conditions, more positive migration policies and lower number of immigrants might be related to student's attitudes towards immigrants.

2 Method

2.1 Sample

For this study data from the International Civic and Citizenship Education Study (ICCS) were used. This study, which was carried out in 2009,

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measures Grade 8 (14-year-olds) students' citizenship competences from 38 countries. The sampling procedure employed by IEA was a two-stage stratified cluster design (Schulz, Ainley, Fraillon, Kerr, Losito 2010). First, in each country approximately 150 schools were sampled using a probability proportional to size. Second, only one intact class was randomly sampled from each selected school. All students attending the sampled class were selected to participate in the study.

In order to have valid information on all variables of interest as well as to make sure that a reasonable amount of immigrant students were attending at least a quarter of all classrooms in each country, the following 18 European countries were selected: Austria, Belgium (Flanders), Cyprus, Denmark, England, Estonia, Finland, Greece, Ireland, Italy, Lithuania, Luxembourg, The Netherlands, Norway, Slovenia, Spain, Sweden, and Switzerland.

The number of schools and students used for this study across these 18 countries was 2503 schools and 49350 students. The number of schools and students participating in each country are reported in Table 1. These final numbers of schools and students were obtained after data cleaning which implied deleting the missing information on the dependent variable as well as the categorical variable indicating whether the student is native or a first or second generation immigrant. Moreover, since our study is concerned with the effect of immigrant share in the classroom on native student attitudes towards equal rights for immigrants, we excluded the number of students with an immigration background.

Table 1. Sample characteristics

Country	N = Classrooms			N = Students
	Total	Only Native	Mixed*	(native)
AUT	134	18	116	2619
BFL	151	59	92	2575
CHE	155	15	140	2091
CYP	68	19	49	2741
DNK	192	74	118	3848
ENG	124	37	87	2372
ESP	148	43	105	2871
EST	138	75	63	2482
FIN	176	132	44	3140
GRC	153	34	119	2717
IRL	144	32	112	2823
ITA	172	77	95	3040
LTU	196	135	61	3652
LUX	31	0	31	2825
NLD	66	14	52	1667
NOR	129	43	86	2503
SVN	163	53	110	2687
SWE	163	46	117	2697
Total	2503	906	1597	49350

Note. * Number of classrooms containing at least 1 immigrant student

2.2 Variables

From the ICCS dataset, information is selected that covers student, country and classroom variables. Descriptive statistics for all variables are presented in Table 2. For more extensive information about the construction and psychometric properties of the scales, the reader is referred to the ICCS Assessment Framework (Schulz, Fraillon, Ainley, Losito, Kerr 2008), the International ICCS Report (Schulz et al. 2010) and the ICCS Technical Report (Schulz, Ainley, Fraillon 2011). Information on country characteristics are derived from country comparisons conducted by the World Bank, the US Department of State (CIA World Factbook), and the British Council.

Table 2. Descriptive statistics for all variables

	Min	Max	Mean	SD
Attitudes towards equal rights for immigrants	18.48	68.89	48.44	9.99
Civic knowledge	73.14	887.01	527.11	95.12
Gender(girl=1)	.00	1.00	.51	.50
Expected further education	.00	4.00	3.02	1.01
SES	-5.01	3.31	.10	.97
% of immigrants in the country	3.88	34.25	12.43	7.13
GDP per capita in US $ (z-score)	-.96	1.87	-.07	.61
Migrant integration policy index	35.00	83.00	55.19	12.24
Classroom average SES	-1.56	1.86	.05	.48
Classroom average expected further education	1.20	4.00	3.01	.45
Open climate for expressing opinions and open discussion	33.77	69.70	50.54	4.06
Immigrant share in the classroom	.00	.97	.10	.13

Note. N:Country = 18; N:Classroom=2503; N:Student=49350

Student's attitudes towards equal rights for immigrants are measured using five items. Students were required to indicate on a 4-point scale (ranging from "strongly agree" to "strongly disagree") their level of agreement with the following statements: a) immigrants should have the opportunity to continue speaking their own language, b) immigrant children should have the same opportunities for education that other children in the country have, c) immigrants who live in a country for several years should have the opportunity to vote in elections, d) immigrants should have the opportunity to continue their own customs and lifestyle and e) immigrants should have all the same rights that everyone else in the country has. The corresponding scale (country reliabilities Cronbach's alpha's ranging from .74 to .89 among the selected countries) was re-coded by the IEA experts so that students with higher scores on this scale were those who agreed that immigrants should have equal rights.

Immigrant share in the classroom is calculated by dividing the number of

(first and second generation) immigrant students in the classroom by the total class size. As indicated in Table 2, the proportion of immigrant classmates ranged from 0 to .97 across the 18 countries included in the analysis, with a mean of .10 (SD = .13).

Control variables - student level:

Student's civic knowledge. Civic knowledge is assessed using a 79 item test (median test country reliabilities Cronbach's alpha's ranging from .81 to .87 among the selected countries) which covered four content domains: civic society and systems, civic principles, civic participation, and civic identities. One-quarter of the test items concerned factual knowledge of civics and citizenship, and the remaining three-quarter covered civic reasoning and analyzing. The scale reflects "progression from being able to deal with concrete, familiar, and mechanistic elements of civics and citizenship through to understanding the wider policy climate and institutional processes that determine the shape of civic communities" (Schulz et al. 2011, 16). Higher scores on the scale reflect higher levels of civic knowledge. Given that the ICCS study followed a matrix-sampling design, where individual students only respond to a set of items obtained from the main pool of items, five plausible values for each student's proficiency level were estimated and provided. For our analysis only the first plausible value was used.

Student *gender* was measured by an indicator taking the value of 1 for girls and 0 for boys.

Student expectations of further education are measured by an item asking the student to indicate which level of education he or she expects to achieve according to the ISCED classification: 0 = no completion of ISCED 2, 1 = completion of ISCED 2 (lower secondary), 2 = completion of ISCED 3 (upper secondary), 3 = completion of ISCED 4 (non-tertiary post-secondary) or ISCED 5B (vocational tertiary), 4 = completion of ISCED 5A (theoretically oriented tertiary) or ISCED 6 (post graduate).

Students' socioeconomic background is measured by an index derived from the following three indices: highest occupational status of parents, highest educational level of parents in approximate years of education according to the ISCED classification, and the approximate number of books at home. The corresponding scale (country reliabilities Cronbach's alpha ranging from .52 to .73 among the selected countries) was re-coded (z-scores) with a mean of 0 and a standard deviation of 1. A higher score on this scale represents a student's higher socioeconomic status.

Control variables – country level:

Immigrant share in the country is determined using the World Bank indicator percentage of immigrants out of the total population of that country as it was recorded in 2010. As Table 2 shows, values on this indicator ranged from 3.88 to 34.25 across the 18 countries included in the analysis, with a mean of 12.43 (SD = 7.13).

GDP per capita in US dollars is an indicator of how prosperous a country feels to each of its citizens. The source of information for this indicator was the CIA World Factbook of the US Department of State. The scores was re-coded (z-scores) and the values on this variable range from -.96 to 1.87 with

a mean of -.07 (SD = .61).

Information on the policies on immigration in each country is captured by the *migrant integration policy index (MIPEX)* 2010, an indicator developed by the British Council and the Migration Policy Group. MIPEX measures policies that promote integration in European societies. In each country, independent scholars and practitioners in migration law, education and anti-discrimination provided information on each of the 148 policy indicators MIPEX in seven policy areas (Labor Market Mobility, Family Reunion, Education, Political Participation, Long-term Residence, Access to Nationality and Anti-discrimination) based on the country's publicly available documents as of May 2010. The overall indicator takes values between 0 and 100 (0 = critically unfavorable; 1-20 = unfavorable; 21–40 = slightly unfavorable; 41-59 = halfway favorable; 60-79 = slightly favorable, and 80-100 = favorable). In the countries included in our analysis, values on the overall indicator range from 35 to 83 (Mean = 55.19; SD=12.24).

Control variables – classroom level:

At the classroom level, we control for other elements of classroom composition such as *classroom average socioeconomic status* and *classroom average expected further education* which are aggregated measures (classroom means) based on students' responses (see description of individual variables, above).

Moreover, we control for the presence of an *open classroom climate* for expressing opinions and open discussion. This is an aggregated (average) measure based on students' responses. Students could indicate on a 4-point scales (ranging from "never" to "often") how frequently they thought political and social issues were discussed during regular lessons. Higher values on the corresponding scale (country reliabilities Cronbach's alpha ranging from .66 to .81 among the selected countries) reflect perceptions of higher levels of classroom discussion of political and social issues.

Missing values on all variables were substituted with the average at the next higher level for the continuous variables, and imputed randomly for the categorical variables (gender). The effect of the imputation was tested as a final step in the data analysis.

2.3 Data Analysis Strategy

As indicated previously, the ICCS sampling procedure consisted of sampling one intact class from each of the selected schools and selecting all students attending the sampled class to participate in the study. Therefore, the data has a three-level structure with students being nested in schools/classrooms and schools/classrooms being nested in educational systems. Taking this into account, we applied multilevel regression analysis (Snijders, Bosker 2011) using the MLwiN software (Rasbash, Steele, Browne, Goldstein 2009). Guided by the research questions, we followed a forward stepwise model specification procedure.

We analyzed whether immigrant share in the classroom explains differences

across countries in native student attitudes towards equal rights for immigrants. For that purpose, the effect of immigrant share in the classroom has been controlled for other relevant student, classroom and contextual country characteristics in a series of steps. In the first step, an empty model with the specified levels was estimated. In a subsequent step, we controlled for different sets of variables: student characteristics, classroom characteristics and contextual country characteristics. In a third step we tested the effects of the main explanatory variable. Addressing our second research question, we tested in a fourth step a random slope for immigrant share in the classroom at country level. In a last step, we modeled the non-linear effect of immigrants share by estimating fixed and quadratic effects and further tested whether the effects differ between countries. The country parameters, produced in MLwiN, were imported in SPSS for further descriptive analysis.

3 Results

Relationship between immigrant share and native student attitudes towards equal rights for immigrants.

Table 3[1] presents the steps taken in the multilevel analysis to estimate the effect of immigrant share in the classroom on native student attitudes towards equal rights for immigrants across and within countries.

The empty model reveals the distribution of variance in attitudes toward equal rights for immigrants across the three levels. The results indicate that there is hardly any variance in native student attitudes towards equal rights for immigrants between classrooms (nearly 6%) and countries (less than 4%). Therefore, in principle, classroom and country context characteristics are unlikely to be strongly related to student's attitudes towards equal rights for immigrants. The largest differences are to be found between students (around 91%) which make it likely that the main determinants of native student attitudes towards equal rights for immigrants are student-related.

In Table 3, Model 1 the estimated effects of the control variables are summarized. Adding control variables to the model significantly increases model fit ($\Delta\chi^2$ (10) = 3469.393; $p \leq .001$). In line with previous findings, the analysis reveals that students' civic knowledge, gender, level of expected further education and socioeconomic status are important determinants of their attitudes towards equal rights for immigrants. Together, these student characteristics explain approximately 7% of the variation in their attitudes. Native students with more civic knowledge, higher expectations for their further education, and from families with higher socioeconomic status have a significantly more positive attitude towards the rights of immigrants in their country. Moreover, girls are more inclined than boys to grant immigrants the same rights as native citizens.

Significant classroom determinants are average expectations for further education and classroom climate. Native students, who attend classrooms in which pupils have, on average, higher expectations for their further

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1 For Table 3 see Appendix.

education and students who belong to a classroom in which, on average, higher opportunities for expressing opinions and open discussion are perceived, also tend to be more positive towards immigrants. Furthermore, Model 1 also shows the effects of country characteristics. None of the selected national-level determinants of native student attitudes towards immigrants appears to be significantly related to the dependent variable.

Model 2 shows the relationship between immigrant share in the classroom and native student attitudes towards equal rights for immigrants. Adding the effect of immigrant share significantly improves model fit ($\Delta\chi^2$ (1) = 91.253; $p \leq .001$). Across countries, our findings support the assumed positive effect of opportunities for contact between native and immigrant students in classroom settings. Controlling for other determinants of native students attitudes towards immigrants, the share of immigrant students in a classroom is positively related to native students' attitudes towards immigrants (B = 4.869; SE = 1.216, $p \leq .001$). Hence, across countries, when native students attend a classroom with relatively many immigrant students, they are more likely to advocate equal rights for immigrants. This effect, however, is rather small: when a classroom has 10% more immigrant students, an increase of (4.869 x 0.10 =) 0.487 points is observed, which equals to (0.487/9.995 =) 0.049 of a standard deviation for attitudes. Model 2 also reveals that the effects of most control variables tested in Model 1 have a similar direction and magnitude when the effect of immigrant share is added to the model. The only exception is the effect of class average expectations for further education, which is no longer significant in Model 2.

The estimates in Model 2 are obtained assuming that the effect of immigrant share on the attitudes of natives is homogeneous across countries. However, it is likely that the relationship between immigrant share and native student attitudes towards immigrants differs between countries. In Model 3, the size of the effect is allowed to differ between countries. Adding a random slope for the share of immigrants at the country level significantly improves model fit ($\Delta\chi^2$ (2) = 62.404; $p \leq .001$). As Model 3 illustrates, the fixed average effect of immigrant share on the attitudes of natives is still positive and statistically significant (B = 4.502, SE =1.567, $p \leq .01$). Moreover, the random slope standard deviation ($\sqrt{34.515}$) is 5.874, which indicates that the size of the effect varies considerably across countries and the effect of immigrant share in the various countries can be positive as well as negative.

A clear illustration of the differences between countries in the effect of immigrant share is provided by Figure 1.[2] As can be observed from this Figure, the size of the effects overall is small, but countries differ regarding the strength and the direction of the relationship. In Italy, Cyprus, and Spain negative effects are found for immigrant share in the classroom, although these are close to zero in Cyprus and Spain. This latter applies also to Greece and Ireland, although the relationship between immigrant share and students' attitudes towards equal rights for immigrants on average is positive. In Slovenia and England the effect is clearly positive, but slightly below average, whereas it is on average in Luxembourg and Austria, and slightly above average in Belgium (Flanders), The Netherlands, and Norway.

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2 For Figure 1 see Appendix.

The effect is clearly above average in Switzerland, Denmark, Sweden, and Finland, and much higher than average in Lithuania and Estonia.

The analysis so far assumed a linear effect of immigrant share on student's attitudes towards immigrants. It is, however, likely that the data could be better described by a model in which immigrant share has a non-linear effect.

As illustrated in Table 4[3] we tested this assumption across countries by estimating both linear and quadratic effects of immigrant share. For reasons of simplicity, Table 4 only reports the effects of immigrant share and the random part of the model. These coefficients are estimated while controlling for all other variables (see Table 3, Model 1). As Model 2 in Table 4, shows, adding the linear and quadratic terms significantly improves model fit ($\Delta\chi^2$ (2) = 91.35; p ≤ .001). Across countries, only the linear effect of immigrant share shows a statistically positive relationship with the dependent variable (B = 4.681, SE = 0.787, p ≤ .001). However, Models 3 and 4 illustrate that the effect of both terms varies significantly across countries. The country specific effects are illustrated in Figure 2.[4]

The overall pattern in Figure 2 suggests that in most countries there is a small positive effect of immigrant share which does not change dramatically in direction or size with relatively higher numbers of immigrants in the classroom. However, some countries differ significantly from this overall pattern. One extreme is Italy, in which immigrant share in the classroom is negatively related to native student attitudes towards immigrants at lower share levels while it becomes a positive predictor at higher share levels. In Estonia an opposite trend seems to be apparent in which immigrant share in the classroom is positively related to native student attitudes towards immigrants at lower share levels while it becomes a negative predictor at higher share levels.

4 Conclusion and Discussion

The present study investigated the determinants of native student attitudes towards equal rights for immigrants giving particular attention to the effect of immigrant share in the classroom and the extent to which it can be generalized across countries.

Our findings indicate that, even though there is some variation in native student attitudes toward equal rights for immigrants both across countries and across classrooms within countries, the largest differences are to be found between students. Hence, these results suggest that the determinants of native student attitudes are mainly student-related, while classroom and country characteristics are likely to have only modest effects. Variations in the attitudes of native students towards equal rights for immigrants were found to be related to individual and classroom characteristics, but we could not establish the extent to which the variation across countries can be attributed to country characteristics. Regarding individual determinants, our

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3 For Table 4 see Appendix.
4 For Figure 2 see Appendix.

findings indicated that the more students know about the wider policy climate, institutional processes and so on, the more positive their attitudes towards immigrant rights. Moreover, positive attitudes are more likely to be held by girls, by students with higher socioeconomic status, and by students with high expectations for their further education. These findings are in line with the literature on citizenship education as well as with other studies on young adult attitudes towards immigrants (Barber. et al. 2010; Galston 2001; Elchardus et al. 2009; Popkin, Dimock 2000; Janmaat 2012; van Geel, Vedder 2010).

With respect to classroom characteristics, this study revealed that an open classroom climate could be an important asset if schools want to create right conditions for the development of positive attitudes towards immigrants. On the other hand, aggregated classroom characteristics capturing school composition tend to be statistically insignificant with the exception of immigrant share in the classroom. Indeed, in our analysis conducted across countries, the immigrant share in the classroom proved to be one of the few classroom determinants of native student attitudes towards equal rights for immigrants. Overall, our results confirm the assumption that having the opportunity to interact with more non-native peers could lead to have a more positive attitude among native students towards immigrants in general. The study, thus, overall supports Allport's (1954) contact hypothesis. Moreover, across countries, this relationship does not change dramatically in direction or size at higher immigrant share levels.

However, our country specific analyses revealed considerable variation between countries in the direction, the strength, and the shape of the relationship between immigrant share and native student attitudes towards equal rights for immigrants. When assuming a linear relationship, the study revealed that, while the effects are positive for a wide majority of countries, in some countries the effects are negligible or even negative. This, however, does not imply that the contact hypothesis might not hold for these countries. Rather, these findings indicate that one cannot take for granted that the opportunity for contact in classroom settings is enough to foster positive attitudes towards immigrants. Conditions for meaningful contact, like an equal status of native and immigrant students, might not be ensured in schools within these countries. This requires other individual and context specific factors to be investigated.

Moreover, our study indicated that, at least in some countries, the relationship between immigrant share and student's attitudes towards immigrants is not necessarily linear. In most countries an increase of immigrant students in the classroom seems to maintain a small positive effect, although the presence of relatively large shares of immigrant students tends to reduce the size of this effect. However, more complex patterns emerge for countries like Italy and Estonia. Our findings suggest that in these two countries the relationship between immigrant share and student attitudes is clearly curvilinear. These results could indicate that the inclusion of immigrant students could create a critical mass igniting different dynamics in the way students interact and form their attitudes. Although in Italy there is a negative linear effect of immigrant share in the classroom on native student attitudes towards immigrants' rights, the

quadratic effect of the variable is strong and positive, indicating that the linear negative effect tends to wipe out at larger shares of immigrants in the classroom, and in this sense the Italian example shows further support for the contact hypothesis. In contrast, the case of Estonia shows the opposite with strong positive effects rapidly decreasing at higher numbers of immigrants in the classroom.

These findings could be the result of an effect of large numbers of immigrant peers that might either result in more contact and more understanding, or in feelings of alienation. However, an alternative explanation might be that schools with relatively high number of immigrant students might differ from schools with only few immigrant students. In large cities, for example, probably larger numbers of immigrants are found than in rural areas. Similarly, the period and home country of immigrants might differ between urban and rural regions. To determine whether any differences in number and nature of immigrant students across regions or between urban and rural areas, could explain the positive or negative effects found for large shares of immigrant students requires further research. A second alternative explanation could be related to the sample of schools in these two countries. The estimation of the linear and quadratic terms is not robust with small samples of schools. Selection effects, then, can have a considerable effect on the coefficients that are found.

Moreover, the cross-sectional nature of our study does not allow for strong causal inference. We assumed that native students in classrooms with high proportions of immigrant students would hold positive attitudes towards immigrants' rights, but the causality could actually flow in the opposite direction. This issue can be addressed by further research by employing longitudinal designs. Second, even though we were able to show that the size and direction of the effect can differ across educational contexts, we cannot show which individual, classroom, and national context characteristics provide the conditions for the development of positive interpersonal relationships between native and immigrants students in the classroom. Our findings show the need for investigating other characteristics, which could account for country variations in the effect of immigrant share. In this respect, further research might require cross-country studies, which could show which country characteristics might influence how students relate to their immigrant peers. The reviewed literature and our findings seem to indicate that student attitudes could be influenced by contextual factors outside school such as the community, the family, and the peers, or by the extent to which educational systems are prepared to deal with immigrant students. For example, the detected negative linear effects in Italy, Spain, and Cyprus could be related to the social tensions ignited by the relative novelty and growing size of the immigration phenomenon in these countries (OECD, 2008). Native student may have preconceptions towards their immigrant peers, and this negative effect would only wipe out in presence of sufficient interaction between natives and immigrants (i.e. the positive quadratic effect). An alternative explanation could underline how the relationships between native and immigrant students could depend on more local influences (Stark 2011) that would only be detected by in-depth country specific analyses.

To conclude, aside from providing overall support for the contact

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hypothesis across the 18 European countries participating in ICCS 2009, our analysis indicates a number of promising research strands to be followed when investigating native student attitudes towards equal rights for immigrants. First and foremost, the determinants of student attitudes are mainly student-related, and future studies should further explore the relationship between student attitudes and student individual characteristics. Still, some school characteristics do appear to make a difference. Specifically, while most aggregated classroom characteristics capturing school composition – such as average socioeconomic status – tend to be statistically insignificant, the immigrant share in the classroom consistently shows a relationship with student attitudes, and this dimension should therefore receive further attention. Last but not least, this study also suggests the need of looking at contextual factors outside school such as the community, the family, and the peers, or at the extent to which educational systems are prepared to deal with immigrant students. Although the availability of comparable data for all the dimensions of interest limits the number of countries that can be compared, it would be extremely interesting to extend the analysis to other continents. At the same time, the already mentioned importance of community, family, peer factors and the nature of interpersonal relationships established between students also points to the need of more in-depth analyses at national or infra-national level.

References

Allport, Gordon W. 1954. The Nature of Prejudice. Cambridge.

Barber, Carolyn; Torney-Purta, Judith; Fennelly, Katherine. 2010. Adolescents' Attitudes toward Immigrants' Rights and Nationalism in 25 Countries. Paper presented at the 4th IEA International Research Conference (IRC-2010), Gothenburg, Sweden. (http://www.iea-irc.org/index.php?id=cived_and_iccs) accessed November 21, 2010.

Birzea, Cezar. 2003. All European Study on Policies for Education for Democratic Citizenship (EDC). Synthesis of EDC Policies in Europe. Strasbourg.

CIA World Factbook database. 2010. US Department of State. (https://www.cia.gov/library/publications/the-world-factbook/rankorder/2004rank.html) accessed October 5, 2011.

Elchardus, Mark; Roggemans, Lilith; Op de Beeck, Sara. 2009. Citizenship Education and Ethnocentrism. In: Elchardus, Mark; Siongers, Jessy, eds. Strangers: A Cultural Sociological Approach to Ethnocentrism. Belgium.

Eurydice. 2005. Citizenship Education at School in Europe. (http://www.moec.gov.cy/programs/eurydice/publication.pdf) accessed September 31, 2007.

Galston, William A. 2001. Political Knowledge, Political Engagement, and Civic Education. In: Annual Review of Political Sciences, Vol. 4, No. 1, 217-

234.

Hyland, Nora E. 2006. Detracking in the Social Studies: A Path to a More Democratic Education? In: Theory into Practice, Vol. 45, No. 1, 64-71.

Janmaat, Jan G. 2012. The Effect of Classroom Diversity on Tolerance and Participation in England, Sweden and Germany. In: Journal of Ethnic and Migration Studies, Vol. 38, No. 1, 21-39.

Kokkonen, Andrej; Esaiasson, Peter; Gilljam, Mikael. 2010. Ethnic Diversity and Democratic Citizenship: Evidence from a Social Laboratory. In: Scandinavian Political Studies, Vol. 33, No. 4, 331-335.

Mascherini, Massimiliano; Vidoni, Daniele; Manca, Anna Rita. 2011. Exploring the Determinants of Civil Participation in 14 European Countries: One-Size-Fits None. In: European Sociological Review, Vol. 27, No. 6, 790-807.

Migrant Integration Policy Index (MIPEX). 2010. British Council & Migration Policy Group. (http://www.mipex.eu) accessed December 2, 2011.

Organization for Economic Co-operation and Development (OECD). 2008. A Profile of Immigrant Populations in the 21st Century: Data from OECD Countries. (http://www.oecd.org/document/27/0,3746,en_2649_33931_40110299_1_1_1_1,00.html) accessed March 20, 2010.

Perliger, Arie; Canetti-Nisim, Daphna; Pedahzur, Ami. 2006. Democratic Attitudes among High-School Pupils: The Role Played by Perceptions of Class Climate. In: School Effectiveness and School Improvement, Vol. 17, No. 1, 119-140.

Pettigrew, Thomas F.; Tropp, Linda R. 2006. A Meta-Analytic Test of Intergroup Contact Theory. In: Journal of Personality and Social Psychology, Vol. 90, No. 5, 751-783.

Pettigrew, Thomas F.; Tropp, Linda R.; Wagner, Ulrich; Christ, Oliver. 2011. Recent Advances in Intergroup Contact Theory. In: International Journal of Intercultural Relations, Vol. 35, 271-280.

Popkin, Samuel L.; Dimock, Michael A. 2000. Knowledge, Trust and International Reasoning. In: Lupia, Arthur; McCubbins, Mathew D.; Popkin, Samuel L., eds. Elements of Reason: Cognition, Choice, and the Bounds of Rationality. Cambridge, UK, 214–238.

Putnam, Robert. 2000. Bowling Alone: The Collapse and Revival of American Community. New York.

Rasbash, Jon; Steele, Fiona; Browne, William J.; Goldstein, Harvey. 2009. A User's Guide to MLwiN, v2.10. University of Bristol.

Scheerens, Jaap. 2009. Informal Learning of Active Citizenship at School. Springer.

Schulz, Wolfram; Ainley, John; Fraillon, Julian; Kerr, David; Losito, Bruno. 2010. ICCS 2009 International Report: Citizenship Knowledge, Attitudes, and Engagement among Lower-Secondary School Students in 38 Countries. Amsterdam.

Schulz, Wolfram; Fraillon, Julian; Ainley, John; Losito, Bruno; Kerr, David. 2008. International Civic and Citizenship Education Study: Assessment Framework. Amsterdam.

Schulz, Wolfram; Ainley, John; Fraillon, Julian, eds. 2011. ICCS 2009 Technical Report. Amsterdam.

Semyonov, Moshe; Raijman, Rebeca; Gorodzeisky, Anastasia. 2008. Foreigners' Impact on European Societies. Public Views and Perceptions in a Cross-National Comparative Perspective. In: International Journal of Comparative Sociology, Vol. 49, No. 1, 5-29.

Snijders, Tom; Bosker, Roel. 2011. Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling, Second Edition. London.

Stark, Tobias, H. 2011. Integration in Schools. A Process Perspective on Students' Interethnic Attitudes and Interpersonal Relationships. The Netherlands.

Steinberg, Laurence; Sheffield Morris, Amanda. 2001. Adolescent Development. In: Annual Review of Psychology, Vol. 52, No. 83, 83-110.

Torney-Purta, Judith; Wilkenfeld, Britt; Barber, Carolyn. 2008. How Adolescents in 27 Countries Understand, Support, and Practice Human Rights. In: Journal of Social Issues, Vol. 64, No. 4, 857-880.

van Geel, Mitch; Vedder, Paul. 2010. Multicultural Attitudes among Adolescents: The Role of Ethnic Diversity in the Classroom. In: Group Processes & Intergroup Relations, Vol. 14, No. 4, 549-558.

Vervoort, Miranda H.M.; Scholte, Ron H.J.; Scheepers, Peer L.H. 2011. Ethnic Composition of School Classes, Majority–Minority Friendships, and Adolescents' Intergroup Attitudes in the Netherlands. In: Journal of Adolescence, Vol. 34, No. 6, 257-267.

World Development Indicators (WDI) database. 2011. World Bank. (http://databank.worldbank.org/ddp/home.do) accessed December 04, 2011.

Appendix: Tables 3, 4 and Figures 1, 2

Table 3. Results of multilevel analysis: The relationship between immigrant share in the classroom and native student attitudes toward equal rights for immigrants

	Model 0 - Empty		Model 1 - Control variables		Model 2 - Effect of immigrant share		Model 3 - Radom slope immigrant share	
Fixed Part	Par.	SE.	Par.	SE.	Par.	SE.	Par.	SE.
Constant	48.258	0.448	47.039	0.500	46.991	0.506	47.014	0.522
Student characteristics								
Civic knowledge			0.021	0.002***	0.021	0.002***	0.021	0.002***
Gender(girl=1)			2.693	0.232***	2.685	0.232***	2.688	0.232***
Expected further education(GMC)			0.185	0.056**	0.193	0.055***	0.192	0.056**
SES (GMC)			0.369	0.086***	0.349	0.085***	0.354	0.084***
Country characteristics								
% of immigrants in the country			0.055	0.113	0.015	0.117	0.016	0.116
GDP per capita			-0.308	1.357	-0.500	1.374	-0.566	1.373
Migrant integration policy			-0.032	0.052	-0.032	0.052	-0.033	0.053
Classroom characteristics								
Classroom average SES			-0.537	0.297	-0.209	0.381	-0.117	0.347
Classroom average expected further education			0.824	0.400*	0.603	0.422	0.362	0.376
Open climate for expressing opinions and open discussion			0.099	0.041*	0.096	0.037*	0.102	0.035**
Immigrant share					4.869	1.216***	4.502	1.567**
Random effects								
Country level a) intercept	3.527	0.921	3.629	0.760	3.736	0.748	3.982	0.785
b) intercept – slope covariance							-0.385	2.275
c) slope immigrant share							34.515	18.327
School level	5.762	0.720	4.569	0.587	4.300	0.597	3.968	0.526
Student level	91.169	3.788	85.336	3.356	85.301	3.359	85.284	3.362
Deviance	364847.309		361377.900		361286.663		361224.362	
Deviance difference			3469.393*** (10 df)		91.253 *** (1df)		62.404*** (2df)	
Variance explained			≈ 7%		≈ 1%			

Note. GMC= group-mean centred; All other continuous variables are grand-mean centred; *** p ≤ .001; **p ≤.01; *p ≤.05

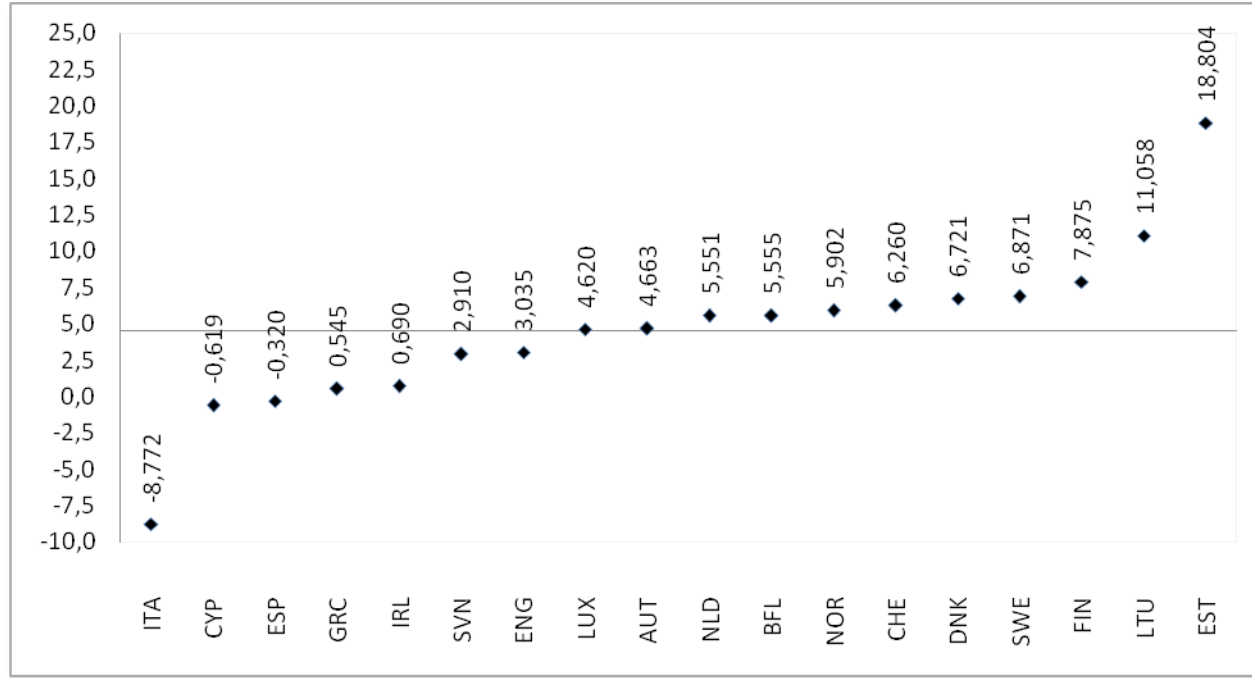Figure 1. Effect of immigrant share by country

Table 4. Results of multilevel analysis: The curvilinear relationship between immigrant share in the classroom and native student attitudes toward equal rights for immigrants

	Model 2 – Linear & quadratic effects of immigrant share		Model 3 - Radom slope immigrant share^1		Model 4 - Radom slope immigrant share^2	
Fixed Part	Par.	S.E.	Par.	S.E.	Par.	S.E.
Constant	46.980	0.465	47.027	0.479	46.957	0.464
Immigrant share^1	4.681	0.787***	4.786	1.618**	5.457	2.098**
Immigrant share^2	0.627	2.002	-1.024	2.187	-0.259	3.534
Random Part						
Country a) intercept	3.737	1.269	3.976	1.357	3.718	1.277
b) intercept – slope (Immigrant share^1) covariance			-0.403	3.019	-0.143	4.095
c) slope Immigrant share^1			34.883	13.386	67.445	26.276
d) intercept – slope (Immigrant share^2) covariance					2.183	6.889
e) Immigrant share^1 - Immigrant share^2 covariance					-106.801	43.302
f) slope Immigrant share^2					162.375	73.871
School level intercept	4.299	0.255	3.967	0.245	3.945	0.245
Student level intercept	85.301	0.557	85.284	0.556	85.287	0.556
Deviance	361286.57		361224		361210.49	

*Note. Model controlled for all other variables (see Table 3, Model 1); *** p ≤ .001; **p ≤.01;*

Figure 2. Linear and quadratic effects of immigrant share by country

	ITA	ESP	CYP	GRC	IRL	SVN	ENG	AUT	NOR	BFL	CHE	FIN	DNK	SWE	LUX	NLD	LTU	EST
share^1	-11,	-3,8	-1,1	0,14	0,58	2,25	3,43	3,68	4,13	5,72	7,18	7,42	7,56	8,30	11,5	12,1	13,5	24,2
share^2	26,1	15,6	11,2	10,2	9,82	5,67	4,61	-0,9	1,08	-3,2	-7,6	-4,1	-5,5	-3,5	-7,4	-9,6	-12,	-30,