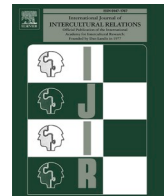




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# Attitudes towards homosexuality among ethnic majority and minority adolescents in Western Europe: The role of ethnic classroom composition

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## ABSTRACT

Ethnic minorities from more traditional countries tend to hold more conservative views towards homosexuality compared to the ethnic majority population in Western Europe. Assimilation theory predicts that this difference diminishes over time because of exposure and contact between these groups. The role of ethnic classroom composition in this process of cultural assimilation is poorly understood. Therefore, this article examines the role of the country of origin of adolescents and their classroom peers in the assimilation of attitudes towards homosexuality. Using two-wave panel data on 18,058 students in 867 classrooms in England, Germany, the Netherlands, and Sweden, we find that the attitudes towards homosexuality in classroom peers' country of origin are positively associated with attitudes towards homosexuality of respondents in the first wave but have no effect on subsequent changes in these attitudes over a two-year period. We find some variations in this association according to individual-level characteristics, but these results are not consistent across the countries that we study. Together, these results suggest that the classroom is an important socializing context in the formation of cultural values, and that its influence is relatively uniform across groups.

## Introduction

Since the late 20th century, the large inflow of immigrants has significantly reshaped the cultural landscape of Western Europe. At the turn of the millennium, this demographic shift has sparked public and political debate on the threat these cultural differences pose to the cohesion of Western European societies (Fleischmann & Phalet, 2012; Kogan et al., 2019). The influx of ethnic minorities is regarded by part of the majority population to threaten liberal Western European culture and values, a perception which has given rise to ethnic prejudice and discrimination (McLaren & Johnson, 2007; Schlüter & Scheepers, 2010). As a result, the cultural distance between the majority and minority population impedes the social integration (Binder et al., 2009) and socio-economic integration of these groups (Larsen & Di Stasio, 2019; Thijssen, Lancee, Veit & Yemane, 2019). Hence, through the perceived irreconcilability of ethnic majorities' and minorities' values, ethnicity has become a salient boundary which draws a divide in contemporary Western European societies.

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Therefore, examining how ethnic minorities' cultural values develop and differ from those of ethnic majorities can improve our understanding of the changing fabric of Western European societies. The current article focuses on one attitude for which there is a particularly large difference between Western European receiving societies and most sending societies from other regions, namely attitudes towards homosexuality (Adamczyk & Liao, 2019). Attitudes towards homosexuality are relatively progressive in Western European societies, as is exemplified (and also caused by) by legal recognition of same-sex marriages over the last two decades (Abou-Chadi & Finnigan, 2019). In contrast, societies in non-Western regions report relatively high levels of prejudice against homosexuality, as is clearly demonstrated by the criminalization of homosexual acts in many of these countries (Asal et al., 2013).

Accordingly, ethnic minorities originating from these more traditional countries have been found to hold more conservative views towards homosexuality compared to the ethnic majority population in Western Europe (Röder, 2015; Soehl, 2017). These cultural differences are also found among younger generations: in her study in England, the Netherlands, Sweden, and Germany, Kogan (2018) finds that the attitudes towards homosexuality of ethnic minority youth from the Middle East, Northern Africa and South Asia are much more conservative compared to their ethnic majority counterparts. Similarly, studies on sexual prejudice among youth in Belgium find that non-Western ethnic minorities hold considerably more conservative attitudes towards homosexuality compared to their ethnic majority peers (Roggemans, Spruyt, Van Droogenbroeck, & Keppens, 2015; Teney & Subramanian, 2010).

As is argued by Inglehart and Norris (2003), how a society views homosexuality speaks volumes about its commitment to equality. The more intolerant attitudes towards homosexuality of migrants from conservative countries challenge the principle of tolerance and egalitarianism that Western-European societies strive to uphold. Therefore, understanding what factors shape attitudes towards homosexuality of ethnic minorities in Western Europe can inform policy makers how to maintain the principle of non-discrimination that is anchored in Western-European legislation (Gerhards, 2010).

In line with classic assimilation theory (Gordon, 1964), previous studies find that the difference in the level of approval of homosexuality between ethnic groups decreases over time (e.g. Röder, 2015; Soehl, 2017). Most of these studies, however, focus only on changes that occur for the adult ethnic minority and majority population. Instead, in this study we focus on changes that occur for ethnic majority and minority youth. As adolescence marks a period in which cultural values are especially susceptible to social influence (Krosnick & Alwin, 1989), studying the socializing context at this life phase can increase our understanding of the mechanisms underlying cultural assimilation. In particular, we examine the influence of a potentially important socializing context that is often overlooked in studies on cultural assimilation, namely that of classroom peers (Ali & Fokkema, 2015). The classroom is a unique socializing context: in almost no other situation are individuals required to be in direct contact with others for such a long period of time (Jackson, 1990). On top of this, classroom socialization occurs in a phase of individual's lives when peer relations are especially intense and important (Brechtwald & Prinstein, 2011). Consequently, the attitudes of classroom peers has been found to play an important role in the development of cultural values in adolescence, such as attitudes towards homosexuality (Poteat, 2007; Poteat & Spanierman, 2010).

This article examines the role of ethnic classroom composition in the development of attitudes towards homosexuality among ethnic majority and ethnic minority youth. We use wave 1 and 3 of the Children of Immigrant Longitudinal Survey in Four European Countries (CILS4EU) conducted in England, Germany, the Netherlands, and Sweden, collected between 2010 and 2013 (Kalter et al., 2017). This unique, large-scale survey supplies full network data of the classroom in secondary school, oversampling schools with a higher share of students with an immigrant background. In addition, using the World Values Survey (Inglehart et al., 2020) and the European Values Study (Gedeshi et al., 2020), we include attitudes towards homosexuality in a total of 115 countries of origin.

## Theory

### *Cultural assimilation*

According to early formulations of assimilation theory, immigrants' distinctive cultural characteristics relative to the majority population are seen as burdensome to their full participation into mainstream Western societies. In order to rise up from their marginal positions in society, immigrants become increasingly similar to the ethnic majority population in terms of language, lifestyle and worldview (Gordon, 1964). In contrast, more recent strands of assimilation theory considers the role of both the immigrants and the natives in the maintenance and erosion of cultural differences (Alba & Nee, 2003). Nowadays, scholars consider assimilation a 'mutual process of convergence' in which "immigrants come to resemble natives over time and vice versa" (Drouhot & Nee, 2019, p. 179). Still, the core idea remains the same: the overall cultural difference between the ethnic majority and minorities diminishes over time.

This paper focuses on one socializing context which may play an important role in the process of cultural assimilation, namely the ethnic composition of the classroom. As attitudes towards homosexuality vary substantially between ethnic minority groups (Adamczyk & Liao, 2019), we do not simply distinguish between the share of ethnic majority and minority classroom peers (see Ali & Fokkema, 2015; Kretschmer, 2018). Instead, we improve upon earlier research by using a more fine-grained method to measure the cultural mainstream in the classroom: the attitudes towards homosexuality in the countries of origin of students' parents.

The attitudes that prevail in the country of origin of the parents manifest themselves primarily through childhood socialization. Parents are widely considered to be the primary socializing agent, as they provide the norms of acceptable behavior to their children from an early age (Bandura, 1977). As a result, the cultural values of parents have been found to be strongly associated with the cultural values of their children, as has also been found for attitudes towards homosexuality (Jaspers, Lubbers, & De Vries, 2008). The country of origin of the parents plays an important role in this process: if the parents are born in a country with more conservative attitudes towards homosexuality, they are likely to hold more conservative attitudes themselves (Röder, 2015; Soehl, 2017). Subsequently, they pass these values on to their children. Hence, rather than simply using the ethnic majority/minority dichotomy, we give

substantive meaning to ethnic categories by looking at the variation in attitudes towards homosexuality across countries of origin of students' parents. This approach allows us to quantify the differences that exist between ethnic groups.

In tandem with developing emotional autonomy from their parents, the intensity and importance of peer relationships increases rapidly during adolescence (Brechwald & Prinstein, 2011). During this life phase, social contexts such as the classroom or school become more important in the formation of cultural values (Raabe & Beelmann, 2011). Hence, whereas the parents provide their children with the initial framework of cultural values from the country of origin during childhood, these cultural schemes interact and transform drastically in adolescent peer networks. According to assimilation theory, if the expression of cultural values is socially inappropriate at the group level, the intent to maintain such values is reduced (Alba & Nee, 1997). Following our previous reasoning, the 'cultural mainstream' of the classroom is affected by the attitudes toward homosexuality that the students' parents transfer to their children. Hence, the more students parents originate from progressive countries, the more progressive attitudes towards homosexuality are accepted in that classroom. Assimilation theory then predicts that students are likely to assimilate to this cultural mainstream. From this point forward, we refer to this cultural mainstream as *classroom AHCO* (classroom Attitude towards Homosexuality in the Countries of Origin).

Besides better quantifying the ethnic differences between students, using the attitudes towards homosexuality in the country of origin of students' parents has an additional advantage: studies on peer influence often suffer from causality issues when individual (change in) attitudes is explained by (changes in) these attitudes at the group level. This is because it is difficult to exclude the alternative possibility that the changes at the group level occur because of the characteristics of the individual in that group. Using the attitudes in the country of origin of students' parents circumvents this problem. As this variable is exogenous (students cannot influence the attitudes in the country of origin of classmates' parents), we can more accurately measure the extent to which the classroom context influences individual (changes in) attitudes towards homosexuality.

In our analyses, we make a distinction between the attitudes towards homosexuality in early adolescence (wave 1), and the changes in the attitudes towards homosexuality over a two-year period (between wave 1 and wave 3). Because students had already been in the same classroom for at least a year before wave 1, the association between the classroom composition variable and attitudes at wave 1 capture the change that has occurred prior to this wave. In line with assimilation theory, the overall expectation is that – net of their own cultural background – individuals with a more progressive classroom AHCO hold more progressive attitudes towards homosexuality (at wave 1) relative to individuals with a more conservative AHCO. On top of this, we expect that the change in attitudes towards homosexuality between wave 1 and wave 3 is more progressive for individuals with a more progressive classroom AHCO compared to students with a more conservative classroom AHCO. To summarize:

**H1.** : The more progressive the classroom AHCO (a) the more progressive the attitude towards homosexuality at wave 1, and (b) the more progressive the change in attitude towards homosexuality between wave 1 and wave 3.

### *Differences in cultural assimilation*

Research suggests that the degree of assimilation varies substantially within and between groups (Alba & Nee, 1997, 2003). However, the various strands of assimilation theory provide little information about the underlying mechanisms that explain these divergent patterns. As a result, the conditions under which assimilation does or does not occur – and for whom – remain unclear. In response to this shortcoming, Esser (2004, 2010) developed his Model of Intergenerational Integration, which proposes that assimilation behaviours are determined by “situationally reasonable reactions of the involved actors to the respectively given societal conditions” (2004, p. 1127). He argued that individuals adjust their assimilation behaviours according to the structural conditions of the social context to maximize their expected social or economic well-being. The two structural conditions which predict the expected returns of assimilation in this theory are group size and ethnic boundary making.

First, Esser (2004, 2010) proposed that the expected benefits of assimilation varies according to the size of the ethnic group. He stated that the probability of intra-ethnic interactions depend on the contact opportunity structure in the social environment (see also Blau, 1977, 1994), which in turn shape the expected returns of investing in assimilative behaviours. If your ethnic group increases in size, the chances of intra-ethnic contacts increase, which increases the expected payoffs of investing in the values of your ethnic group. In contrast, if your ethnic group decreases in size, the pressure and chances of interethnic contacts increases, which increases the expected payoffs of investing in assimilative behaviours. Indeed, previous studies on peer networks in schools show that adolescents prefer to befriend peers with the same ethnicity, and that this is a function of co-ethnic group size (Smith, Maas, & Van Tubergen, 2014; Smith, McFarland, Van Tubergen, & Maas, 2016). In turn, contact with same-ethnic peers reinforces the attachment to the country of origin (Jugert et al., 2019). In other words, as individuals interact primarily with others who are already cultural similar, the higher the share of co-ethnics, the less assimilation is expected to occur. We expect that this relationship holds for both ethnic minority and majority groups.

**H2.** : The larger the share of co-ethnics in the classroom, the larger the positive effect of classroom AHCO on (a) attitude towards homosexuality at wave 1, and (b) change in attitude towards homosexuality between wave 1 and wave 3.

Second, Esser (2010) suggests that the expected returns of assimilative behaviour is determined by ethnic boundary making. He states that the larger the cultural distance between the individual and the cultural mainstream of the group, the more restricted the opportunities for successful assimilation are. Large cultural differences not only require more extensive cultural shedding and learning (i.e., higher investments), but may also lead to more negative intergroup attitudes (i.e., lower expected payoffs) (see also Berry, 1997). Individuals who are culturally similar are more likely to interact with each other, and consequently become even more similar over

time. In contrast, individuals with little cultural similarity are unlikely to interact with each other and are therefore not likely to grow closer to each other (see also Axelrod, 1997). Consequently, if the difference in cultural values between the individual and the cultural mainstream is too large, this may result in a strong orientation away from the cultural mainstream, and consequently, a smaller investment in assimilative behaviors. In other words, we expect that the larger the difference in the cultural background between a student and his/her classroom peers is, the smaller the influence of the classroom on the cultural values of the student will be. More precisely, we contrast the Attitudes towards Homosexuality in the Country of Origin of the student's parents (*student AHCO*) with that of the classroom.

**H3.** : The larger the distance between student AHCO and classroom AHCO, the smaller the positive effect of classroom AHCO on (a) attitude towards homosexuality at wave 1, and (b) change in attitude towards homosexuality between wave 1 and wave 3.

In Western European societies, religion marks a strong division between the ethnic majority and minority population (Foner & Alba, 2008). More precisely, ethnic minorities differ from ethnic majorities in two important ways: firstly, many ethnic minorities are affiliated with a religion other than Christianity, namely Islam. Secondly, the level of religiosity and religious participation of ethnic minorities is generally higher compared to that of the ethnic majority population (Simsek, Fleischmann, & Van Tubergen, 2019; Van Tubergen & Sindradóttir, 2011). Homosexuality is forbidden in Islam and is punished in many Islamic countries as it contradicts the purpose of sexuality to procreate and challenges the importance of traditional marriage and family life (Asal et al., 2013; Gerhards, 2010). Accordingly, Muslims have been found to hold more conservative attitudes towards homosexuality compared to other religious denominations (Hooghe, Claes, Harell, Quintelier, & Dejaeghere, 2010; Van den Akker, Van der Ploeg, & Scheepers, 2013). We therefore expect that the expected benefits of assimilating to the cultural mainstream of the classroom are lower for Muslims compared to non-Muslims, which would make them less likely to invest in these behaviours.

**H4.** : The positive effect of classroom AHCO on (a) attitude towards homosexuality at wave 1, and (b) change in attitude towards homosexuality between wave 1 and wave 3 is smaller for Muslims compared to non-Muslims.

## Data and methods

### Sample

To test the hypotheses, we will make use of the Children of Immigrants Longitudinal Survey in Four European Countries (CILS4EU) (Kalter et al., 2017). CILS4EU is a large, cross-national panel survey that focuses on the intergenerational integration of second-generation migrant youth in West-European host societies. This project comprises three waves conducted in Germany, the Netherlands, England and Sweden (2010–2013). We will only use the data of wave 1 and 3, as the dependent variable is only measured in these waves.

The target population in wave 1 consisted of students attending the school grade in which most of the students are (or will become) 14 years old.<sup>1</sup> To achieve this, CILS4EU employed a stratified three-stage sample design: first, schools were randomly sampled from national school lists, oversampling schools with a higher share of students with an immigrant background. When a school refused to participate, a matching strategy was employed to include a new school with similar characteristics, based on region, school type and proportion of students with an immigrant background. Second, two ninth-grade school classes were selected at random when there were more than two classes available in that school. Third, all students within the selected classrooms were included in the sample. Most respondents changed school or entered the labour market after wave 2, which meant that they could no longer be surveyed in the classroom. Therefore, in wave 3 the target population was approached using telephone, postal and web surveys. In other words, when we estimate the change in attitudes towards homosexuality between wave 1 and wave 3, this refers to the change that happens partially after the students have left the classroom context.<sup>2</sup> The average time lag between wave 1 and wave 3 was 26 months (s.d. 2.2 months).<sup>3</sup>

To ensure an adequate representation of the classroom context, we exclude classrooms in which fewer than 10 students participated (66 classrooms with  $n = 468$  students). After applying this restriction, the total number of observations in wave 1 and 3 of the CILS4EU data is 18,058 respondents in 867 classrooms.

### Measures

The dependent variable of this study is *attitude towards homosexuality*. Respondents were asked to indicate the extent to which they believed that homosexuality was ok on a scale of 0 (never ok) to 3 (always ok). In our analyses, we make a distinction between the attitude towards homosexuality at wave 1, and the change in attitudes towards homosexuality between wave 1 and wave 3 as our dependent variable.

To measure *student Attitudes Towards Homosexuality in the Country of Origin (student AHCO)*, we take the mean attitude towards

<sup>1</sup> The first wave of the survey was conducted in the 3rd grade of secondary schools in the Netherlands, the 8th grade in Sweden, the 9th grade in Germany, and the 10th grade in the United Kingdom.

<sup>2</sup> We conducted an additional analysis that included only students who were attending secondary education in both wave 1 and wave 3 (see Appendix E). The pattern of results is not different from the main analysis.

<sup>3</sup> In Appendix F, we present more detailed information about the time between wave 1 and wave 3 per country.

**Table 1**  
Descriptive statistics of the dependent, independent and control variables.

	N	Mean/%	SD	Min	Max
<i>Dependent variable</i>					
Attitude towards homosexuality (W1)	15,413	1.79	1.25	0	3
Attitude towards homosexuality (W3)	9669	2.25	1.10	0	3
<i>Independent variables</i>					
Student AHCO	18,001	1.11	1.20	-1.18	2.79
Classroom AHCO	18,058	1.10	.79	-.92	2.45
Student-classroom AHCO difference	18,001	.68	.59	0	3.36
Share co-ethnic classmates	18,007	.48	.35	0	1
<i>Ethnicity/religion</i>					
Native	18,007	61%	–	0	1
Ethnic minority non-Muslim	17,502	21%	–	0	1
Ethnic minority Muslim	17,502	16%	–	0	1
<i>Control variables</i>					
Male	18,044	50%	–	0	1

homosexuality in the country of birth of both parents (15.1% of the students are children of mixed marriage<sup>4</sup>). To generate this variable, we make use of round 3 (1995–1998) to round 7 (2017–2021) of the World Values Survey (WVS) (Inglehart et al., 2020) and the European Values Study (EVS) (Gedeshi et al., 2020). In these surveys, respondents in 115 countries were asked whether they believed homosexuality is justifiable (1 = never justifiable and 10 = always justifiable). Per country, we stratify the scores according to the highest level of education completed by the respondents: primary school (lower-educated), secondary school (middle-educated) and university (higher-educated).<sup>5</sup> Then, we match this score with the country of origin and education level of students' parents in the CILS4EU data.

We stratify the scores according to education for two reasons: first, as education level has proven to be one of the most important predictors of attitudes towards homosexuality (La Roi & Mandemakers, 2018; Ohlander, Batalova, & Treas, 2005), this takes within-country differences in attitudes towards homosexuality into account. Second, we hereby minimize the risk that our results are biased by positive self-selection of immigrants on socio-economic status (see also Dinesen, 2013). Given that higher-educated individuals generally hold more progressive attitudes towards homosexuality, and that higher-educated individuals are more likely to migrate, assigning a general country score would underestimate their progressive attitude (Röder & Lubbers, 2015). By matching immigrants by education level, we account for the fact that migrants are generally not a random sample from their country of origin.

Preliminary analyses have shown that there is little between-country variation in how attitudes towards homosexuality develop around the world (see Appendix A). In other words, attitudes towards homosexuality tend to become more progressive at a comparable rate in different countries. Therefore, we standardize these country/education scores per wave to retrieve a score that can be compared across waves. This score indicates how progressive attitudes towards homosexuality are in comparison to other country/education groups at that particular wave. If a country/education group has multiple observations over the waves, we take the mean of these scores. If the country of origin of the parents in the CILS4EU data is not included in the EVS and WVS data, we take the mean score of the education group in the region of that country. For respondents whose parents' level of education is missing, we assign the average score for the country (see appendix B for an overview of the scores).

To measure the *classroom Attitudes Towards Homosexuality in the Countries of Origin (classroom AHCO)*, we take the mean score of student AHCO in the classroom in wave 1. For the variable *student-classroom AHCO difference* we then take the absolute difference between the classroom AHCO and student AHCO as measured in wave 1.

The *share of co-ethnic classmates* is measured as the share of classmates with the same country of origin as the respondent. To measure the country of origin, we use the country of birth of the parents of the respondent. If at least one of the parents is born outside the survey country, we use this country as the respondent's country of origin. If the parents are born in different countries outside the survey country, we use the country of birth of the mother. If the country of birth of both parents is not known, we use the country of birth of the respondent.

We also examine differences in the effect of classroom peers according to *religious affiliation*. We first distinguish between two categories, namely Muslims and non-Muslims. However, as the vast majority of Muslims in the dataset are also ethnic minorities, there is a strong association between being Muslim and being an ethnic minority. To still be able to distinguish the effects of being Muslim from being a member of an ethnic minority, we further categorize this variable according to *country of origin*. Accordingly, we distinguish between three categories: ethnic majorities, ethnic minority non-Muslims and ethnic minority Muslims.

We control for *gender* (0 = female and 1 = male), as boys generally hold more conservative attitudes towards homosexuality than girls (Adamczyk & Pitt, 2009; Roggemans, Spruyt, Van Droogenbroeck, & Keppens, 2015). See Table 1 for descriptive statistics of the dependent, independent and control variables.

<sup>4</sup> In Appendix G, we show the results when we take only the country of origin of the father, only the country of origin of the mother, and when we remove all students whose parents do not have the same country of origin. The results are very similar to the results in our main analysis.

<sup>5</sup> These are the three categories of parental education that were asked in the CILS4EU questionnaire.



## Analytical strategy

To deal with item non-response, we employed multiple imputation using Bayesian analysis in Mplus 7 (Muthén & Muthén, 2012). We used all variables in the analyses and two auxiliary variables (religiosity, values about marriage and sexuality) to create ten multiple imputed datasets. We conducted analyses for each of these datasets separately and combined the coefficients and standard errors (clustered at the classroom level) to come to our results (Rubin, 1996).

We estimate the attitude towards homosexuality at wave 1 and change in attitudes towards homosexuality between wave 1 and wave 3 using multilevel structural equation modelling (MSEM) in Mplus 7 (Muthén & Muthén, 2012). We use a two-level design to take the clustering of students into classrooms into account. All continuous predictors are centred around the grand mean. To account for non-normally distributed data, we make use of a maximum likelihood estimator with robust standard errors (MLR). As the results differ substantially between Germany, England, the Netherlands and Sweden, we employ a multi-group model (fully interacted model) according to survey country.

As changes in a characteristic are often correlated with the initial level of a characteristic, simply using the difference in a score between two timepoints as a dependent variable can exhibit poor reliability (Edwards, 1994). Therefore, we make use of a latent change score model (McArdle, 2001) to estimate the change in attitude towards homosexuality. A latent change score model represents growth by a latent factor that consists of two additive components: constant and proportional growth. First, constant growth refers to the general increase or decrease of scores over time. For example, there may be a general trend towards more conservative or progressive attitudes towards homosexuality between wave 1 and wave 3. Second, proportional growth captures the extent to which a score at one timepoint is related to the change in this score at the next timepoint. For example, it is conceivable that the change in attitudes towards homosexuality between wave 1 and wave 3 depends on the attitude an individual has at wave 1. For a more elaborate description of the model, see Appendix C.

The main focus of this study are the effects *net* of these general trends. Therefore, controlling for the constant and proportional growth, we add student and classroom level predictors to assess to what extent this latent change score between wave 1 and wave 3 and the attitude at wave 1 varies according to these covariates (Model 1). Next, to assess to what extent the effect of the classroom context (classroom AHCO) varies by student-level characteristics, we add random slopes of the student-level variables and include cross-level interactions between these random slopes and this classroom characteristic (Model 2).<sup>6</sup>

## Results

### Descriptive results

Table 2 shows the pathways of attitudes towards homosexuality between waves 1 and waves 3, stratified by ethno-religious group and survey country. In all countries, the attitude towards homosexuality at wave 1 and wave 3 is most progressive for ethnic majorities, followed by minority non-Muslims and minority Muslims, respectively. The average attitude towards homosexuality becomes more progressive over the two-year period for all groups in all countries to a comparable extent. The majority of students show no change in their attitudes towards homosexuality. If their attitudes do change, this is most likely to be in a progressive direction. Minority Muslim students generally show the highest degree of change in a conservative direction, followed by minority non-Muslims and ethnic majorities, respectively.

Fig. 1 shows the (a) mean student attitudes towards homosexuality at wave 1 by student AHCO and (b) mean classroom attitude towards homosexuality at wave 1 by classroom AHCO. The solid lines are the linear fitted regression lines and the dashed lines are the quadratic fitted regression lines. Fig. 1a shows that the more progressive the student AHCO, the more progressive the attitudes towards homosexuality at wave 1. In Fig. 1b, each dot represents one classroom with more than 5 students with non-missing values for attitudes towards homosexuality in wave 1 and wave 3 before imputation. The figure shows that the more progressive the classroom AHCO, the more progressive the mean attitudes towards homosexuality at wave 1 between the classrooms. Fig. 1b shows a slight curvilinear relationship, which seems to be driven primarily by Sweden (see Appendix D). In our multi-group model, including the quadratic term of classroom AHCO and student AHCO did not improve model fit, so we will not include it in our analyses to ease the interpretation of the results. Together, these figures show that the attitudes in the country of origin of students' parents transfer to the attitudes of the students. As a result, the country of origin of classmates' parents plays an important role in forming the cultural mainstream of the classroom. In the following section we will examine to what extent this classroom context influences the (change in) attitudes towards homosexuality of students in the classroom.

### Multivariate results

An intercept-only model (not presented here) showed that the intraclass correlation coefficient (ICC) for attitudes towards homosexuality at wave 1 varies between .15 in Sweden and .23 in the Netherlands. This means that the classroom accounts for 15% and 23% of the total variance in attitudes at wave 1 in Sweden and the Netherlands, respectively, while student characteristics account for

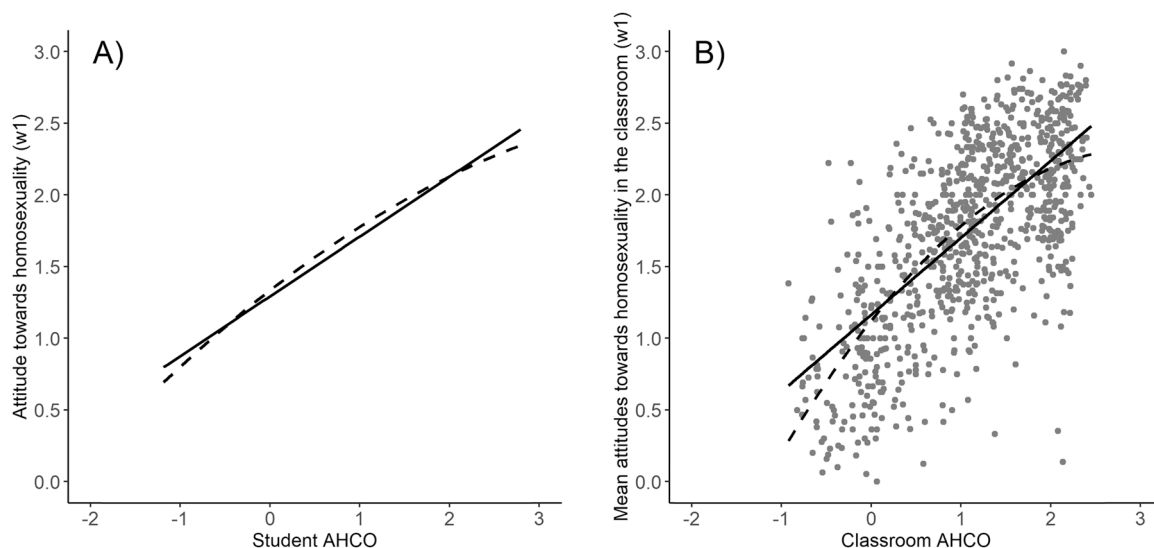
<sup>6</sup> In an additional multilevel multinomial regression model, we found that the predictors affect each step-change in attitudes towards homosexuality in a similar way: for most variables, an increase of 1 in the predictor is associated with an approximately similar increase or decrease in the likelihood of answering each subsequent answer category (versus 'never ok') (see Appendix H).

**Table 2**

Mean attitude towards homosexuality and rate of change in attitudes towards homosexuality for native, minority non-Muslim and minority Muslim respondents. Results stratified by country.

Country	Ethnicity/religion	Attitude (W1)	Attitude (W3)	<i>t</i> (W1 – W3)	% Negative change	% No change	% Positive change
England (N = 1735)	Native	2.1	2.5	14.9 ***	7.3	65.2	34.8
	Minority non-Muslim	1.6	2.1	8.5 ***	9.0	53.0	38.0
	Minority Muslim	0.7	1.0	3.0 **	12.9	60.0	27.1
	Overall	1.8	2.3	17.3 ***	8.1	57.2	34.7
Germany (N = 2692)	Native	2.0	2.5	19.7 ***	5.7	58.8	35.6
	Minority non-Muslim	1.5	2.1	11.3 ***	8.7	49.9	41.3
	Minority Muslim	0.6	1.1	9.7 ***	10.3	50.2	39.5
	Overall	1.7	2.1	24.4 ***	7.3	54.9	37.8
Netherlands (N = 2046)	Native	2.2	2.5	13.8 ***	10.2	59.1	30.7
	Minority non-Muslim	2.0	2.3	5.7 ***	8.1	63.6	28.4
	Minority Muslim	0.8	1.1	3.8 ***	13.4	52.9	33.8
	Overall	2.1	2.4	15.3 ***	10.2	59.2	30.6
Sweden (N = 2080)	Native	2.5	2.7	9.8 ***	6.5	72.2	21.3
	Minority non-Muslim	2.1	2.4	5.9 ***	11.9	62.1	26.0
	Minority Muslim	1.6	1.8	2.2 *	16.9	57.3	25.8
	Overall	2.3	2.5	11.1 ***	9.2	67.7	23.1
Overall (N = 8553)	Native	2.2	2.6	29.3 ***	7.5	61.8	30.7
	Minority non-Muslim	1.8	2.2	16.1 ***	9.6	65.5	34.5
	Minority Muslim	0.9	1.2	10.2 ***	12.7	53.7	33.6
	Overall	1.9	2.3	34.6 ***	8.6	59.5	31.8

Note: \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$  (two-sided tests). Only respondents with non-missing values for both wave 1 and wave 3. Answers range from 0 (never okay) to 3 (always okay).



**Fig. 1.** (a) attitudes towards homosexuality at wave 1 by student AHCO and (b) mean attitudes towards homosexuality in the classroom at wave 1 by classroom AHCO. Note: The solid lines are the linear fitted regression lines and the dashed lines are the quadratic fitted regression lines. Fig. 1b includes only classrooms with more than 5 students with non-missing values for both wave 1 and wave 3 (692 classrooms).

the remaining 85% and 77%. The ICC for changes in attitudes towards homosexuality between wave 1 and wave 3 varies between .03 in Germany and .06 in Sweden.

The multivariate results for Model 1 are presented in Table 3. The constant growth score is captured by the constant of the change score between wave 1 and wave 3. In Model 1, we find a general trend towards a more progressive attitude about homosexuality between wave 1 and wave 3 in all countries. In line with the descriptive results of Table 2, this trend is weakest positive in Sweden ( $b = .14$ ;  $p = .007$ ) and the Netherlands ( $b = .18$ ;  $p = .001$ ) and strongest in Germany ( $b = .47$ ;  $p < .001$ ). The proportional growth score is captured by the regression coefficient of the change score between wave 1 and 3 on the score of wave 1. In all countries to a similar extent, we find that the more progressive the attitudes towards homosexuality in wave 1, the less positive the growth in attitudes towards homosexuality between wave 1 and wave 3. This is most likely due to floor and ceiling effects: students who hold very progressive attitudes towards homosexuality at wave 1 cannot move any further in a progressive direction.

In Model 1 (W1), we find that classroom AHCO is positively associated with attitudes towards homosexuality at wave 1 for students

**Table 3**

Multilevel latent change score model (fixed effects only) to explain attitude towards homosexuality at wave 1 (W1) and change in attitude towards homosexuality between wave 1 and wave 3 (W1-W3) by respondent and classroom characteristics in each country.

	Model 1																							
	England						Germany						The Netherlands						Sweden					
	W1			W1-W3			W1			W1-W3			W1			W1-W3			W1			W1-W3		
Fixed part																								
Constant	2.16	***	(.04)	.31	***	(.05)	1.94	***	(.05)	.47	***	(.06)	2.41	***	(.05)	.18	**	(.06)	2.55	***	(.06)	.14	**	(.05)
Level 1																								
Attitude wave 1				-.53	***	(.02)				-.55	***	(.02)				-.56	***	(.02)				-.53	***	(.02)
Share co-ethnics	-.13		(.10)	-.12		(.11)	.08		(.12)	-.11		(.12)	-.59	***	(.16)	.04		(.19)	-.72	***	(.18)	.01		(.14)
Student AHCO	.26	***	(.04)	.07		(.04)	.23	***	(.04)	.10	**	(.04)	.17	***	(.04)	.11	**	(.04)	.23	***	(.03)	.09	**	(.03)
Student AHCO distance	-.07		(.04)	-.08		(.05)	-.01		(.05)	-.04		(.04)	-.12	*	(.05)	.02		(.06)	-.06		(.04)	.02		(.03)
Minority non-Muslim	-.18	*	(.08)	-.11		(.09)	-.02		(.10)	-.12		(.10)	-.45	**	(.13)	.04		(.16)	-.28	*	(.13)	-.01		(.09)
Minority Muslim	-.64	***	(.10)	-.48	***	(.10)	-.49	***	(.11)	-.44	***	(.10)	-1.02	***	(.15)	-.27		(.17)	-.53	***	(.14)	-.27	**	(.10)
Male	-.77	***	(.04)	-.09	*	(.04)	-.77	***	(.04)	-.19	***	(.03)	-.84	***	(.04)	-.24	***	(.03)	-.80	***	(.04)	-.15	***	(.04)
Level 2																								
Classroom AHCO	.35	***	(.07)	.00		(.07)	.35	***	(.05)	-.08		(.05)	.16	***	(.04)	-.03		(.04)	.21	***	(.04)	-.05		(.04)
Random part																								
Variance level 1	1.09		(.03)	.67		(.02)	1.05		(.02)	.70		(.02)	.86		(.03)	.58		(.02)	1.01		(.03)	.62		(.02)
Variance level 2	.07		(.01)	.04		(.01)	.09		(.01)	.03		(.01)	.12		(.03)	.04		(.01)	.09		(.01)	.05		(.01)
Fit statistics	Parameter DF																							
Deviance	95,876		88																					
AIC	96,052																							
N (students)	4180						4788						4176						4914					
N (classroom)	192						239						198						238					

Note: \*p < .05, \*\*p < .01, \*\*\*p < .001 (two-sided tests). Standard errors between parentheses.



in England ( $b = .35; p < .001$ ), Germany ( $b = .35; p < .001$ ), the Netherlands ( $b = .16; p < .001$ ) and Sweden ( $b = .21; p < .001$ ). We therefore find support for Hypothesis 1 A, that the more progressive the classroom AHCO, the more progressive the attitudes towards homosexuality at wave 1. In contrast, in Model 1 (W1-W3) we find no significant association between classroom AHCO and the change in attitudes towards homosexuality between wave 1 and wave 3 in all countries. We thus find no support for Hypothesis 1B, that a more progressive classroom AHCO leads to a more progressive change in attitudes towards homosexuality.

Model 2 (Table 4) presents results for the interaction hypotheses. We find that the positive association between classroom AHCO and attitudes towards homosexuality at wave 1 becomes weaker with an increasing share of co-ethnic classmates in the Netherlands ( $b = -.40; p = .02$ , Model 2, W1). Given that we only find this effect in one country, we find little support for Hypothesis 2 A. In addition, the share of co-ethnic classmates does not significantly influence the association between classroom AHCO and the change in attitudes towards homosexuality between wave 1 and wave 3 in all countries (Model 2; W1-W3). We therefore find no support for Hypothesis 2B, that the positive effect of classroom AHCO on changes in attitudes between wave 1 and wave 3 is weaker for students with more co-ethnic classmates.<sup>7</sup>

We find no support for Hypothesis 3 A, which predicted that the positive effect of classroom AHCO would decrease with increasing cultural distance. Instead, we even find that the association between classroom AHCO and attitudes towards homosexuality at wave 1 becomes significantly stronger with increasing student AHCO distance in Sweden ( $b = .09; p = .04$ ). Also, student AHCO distance does not significantly influence the association between classroom AHCO and changes in attitudes towards homosexuality in all countries (Model 2; W1-W3). We therefore find no support for Hypothesis 3B.

We find that, relative to ethnic majorities, minority Muslims hold much more conservative attitudes towards homosexuality at wave 1 in England ( $b = -.83; p < .001$ ), Germany ( $b = -.67; p < .001$ ) the Netherlands ( $b = -1.16; p < .001$ ) and Sweden ( $b = -.62; p < .001$ , Model 2, W1). This is also significantly more negative compared to minority non-Muslims in England (Wald  $\chi^2(1) = 26.91; p < .001$ ), Germany (Wald  $\chi^2(1) = 72.78; p < .001$ ), the Netherlands (Wald  $\chi^2(1) = 11.13; p < .001$ ) and Sweden (Wald  $\chi^2(1) = 35.53; p < .001$ ). Relative to ethnic majorities, the association between classroom AHCO and attitudes towards homosexuality at wave 1 is significantly less positive for minority Muslims in Germany ( $b = -.57; p = .001$ ), but not in the other countries. In Germany, the association between classroom AHCO and attitudes at wave 1 is also significantly weaker for minority Muslims compared to minority non-Muslims (Wald  $\chi^2(1) = 7.38; p = .006$ ). As we do not find these differences in the other countries, we find little support for Hypothesis 4 A, that the positive effect of classroom AHCO on attitudes towards homosexuality at wave 1 is weaker for Muslims compared to non-Muslims.

With regards to changes in attitudes towards homosexuality (Model 2, W1-W3), minority Muslims show a significantly less positive trend compared to ethnic majorities in England ( $b = -.40; p = .002$ ) and Germany ( $b = -.40; p = .001$ ). The trend of minority Muslims is significantly less positive compared to minority non-Muslims in all countries (England (Wald  $\chi^2(1) = 14.37; p < .001$ ), Germany (Wald  $\chi^2(1) = 26.09; p < .001$ ), Sweden (Wald  $\chi^2(1) = 6.46; p = .01$ ), the Netherlands (Wald  $\chi^2(1) = 8.00; p = .005$ ). This means that, even though Muslims, on average, become more progressive (see Table 2), this trend is not as strong as for ethnic majorities (in England and Germany) and minority non-Muslims (in all countries). Relative to ethnic majorities, the association between classroom AHCO and changes in attitudes towards homosexuality is not significantly different for minority Muslims in all countries. We also find no differences between minority Muslims and minority non-Muslims in this association. All in all, we find no support for Hypothesis 4B, that the positive effect of classroom AHCO on change in attitudes between wave 1 and wave 3 is weaker for Muslims compared to non-Muslims.

### Illustrating the results

To illustrate the significant results, we use Model 1 in Table 3 to compute the predicted attitudes towards homosexuality at wave 1 for students with varying classroom compositions. More specifically, for each country, we show the predicted attitudes towards homosexuality at wave 1 for classrooms ranging from consisting of only native students to classrooms with an increasing share of students from two of the largest sending countries. One of these sending countries is the most progressive of the large sending countries (black line) and the other is the most conservative of the large sending countries (grey line) in the EVS and WVS data. Additionally, we split the results according to the country scores of lower-educated (dashed line) and higher-educated (solid line) in the EVS and WVS data. In other words, the solid line shows the predicted attitudes towards homosexuality for a classroom containing only ethnic majorities and ethnic minorities with higher-educated parents, while the dashed line shows the same trend for students with lower-educated parents.

Fig. 2 shows the predicted attitude towards homosexuality at wave 1 for various classroom compositions. As all largest sending countries have lower scores for attitudes towards homosexuality compared to the survey countries in the EVS and WVS data, a higher share of students from these sending countries results in a more conservative classroom AHCO. This, in turn, results in a more conservative predicted attitude towards homosexuality at wave 1, as we have seen in Table 3. The larger the difference in the EVS and WVS score between the survey country and the sending country, the larger the difference in predicted attitudes towards homosexuality according to the classroom composition. For example, the comparatively high standardized scores for Sweden and the Netherlands, compared to Germany and England, contribute to the higher intercept of these countries. Therefore, the contrast with the largest

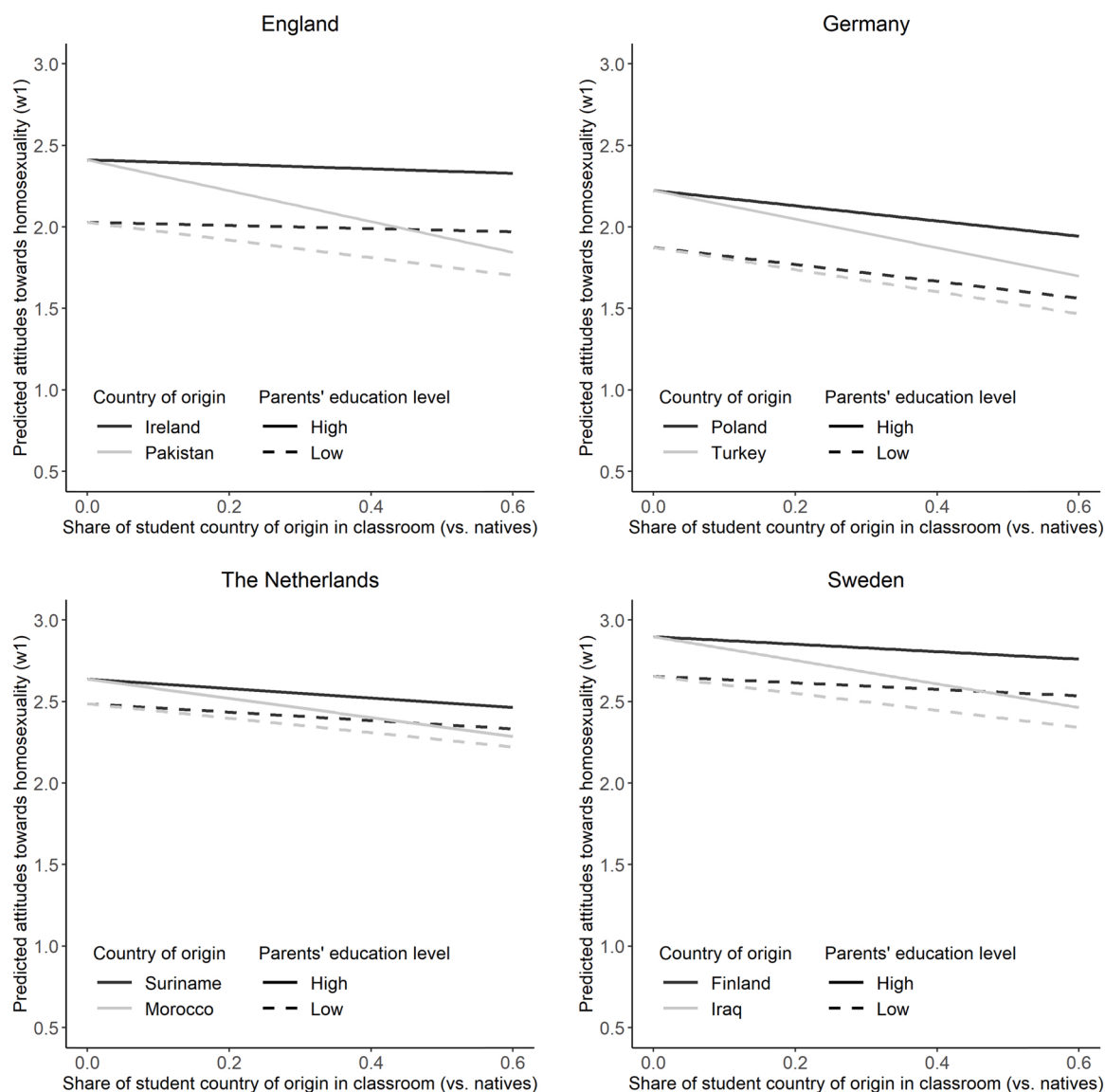
<sup>7</sup> We also run the analyses separately for native, minority non-Muslims and minority Muslims (not shown here) and we find no significant differences between these groups in the influence of the share of co-ethnic classmates on the association between classroom AHCO and the (change) in attitudes towards homosexuality.

**Table 4**

Multilevel latent change score model (including cross-level interactions) to explain attitude towards homosexuality at wave 1 (W1) and change in attitude towards homosexuality between wave 1 and wave 3 (W1-W3) by respondent and classroom characteristics in each country.

	Model 2																							
	England						Germany						The Netherlands						Sweden					
	W1			W1-W3			W1			W1-W3			W1			W1-W3			W1			W1-W3		
Fixed part																								
Constant	2.22	***	(.06)	.26	***	(.05)	1.95	***	(.06)	.46	***	(.06)	2.50	***	(.07)	.13	*	(.06)	2.59	***	(.06)	.12	*	(.06)
Level 1																								
Attitude wave 1				-.53	***	(.02)				-.55	***	(.02)				-.56	***	(.02)				-.53	***	(.02)
Share co-ethnics	-.25		(.20)	.00		(.13)	-.22		(.16)	-.06		(.14)	-.53		(.29)	.16		(.21)	-.80	**	(.24)	.13		(.19)
Student AHCO	.26	***	(.04)	.07	*	(.04)	.23	***	(.04)	.10	**	(.04)	.14	**	(.05)	.12	**	(.04)	.26	***	(.03)	.10	**	(.03)
Student AHCO distance	-.05		(.05)	-.08		(.05)	.06		(.06)	-.04		(.05)	-.13	**	(.05)	.02		(.06)	-.03		(.04)	.02		(.03)
Minority non-Muslim	-.29	*	(.14)	-.04		(.10)	-.13		(.11)	-.09		(.10)	-.49	*	(.22)	.12		(.16)	-.34	*	(.15)	.05		(.11)
Minority Muslim	-.83	***	(.17)	-.40	**	(.13)	-.67	***	(.12)	-.40	**	(.12)	-1.16	***	(.25)	-.19		(.20)	-.62	***	(.17)	-.19		(.13)
Male	-.78	***	(.04)	-.09	*	(.04)	-.78	***	(.04)	-.19	***	(.03)	-.84	***	(.04)	-.24	***	(.03)	-.80	***	(.04)	-.16	***	(.04)
Level 2																								
Classroom AHCO	.38	**	(.14)	-.09		(.11)	.61	***	(.11)	-.26	*	(.12)	.07		(.12)	-.03		(.11)	.24	*	(.10)	-.13		(.08)
* Share co-ethnics	-.32		(.28)	.06		(.20)	-.22		(.18)	.03		(.16)	-.40	*	(.17)	-.06		(.17)	-.08		(.15)	-.01		(.14)
* Student AHCO distance	.11		(.12)	.01		(.09)	-.12		(.08)	.02		(.06)	-.01		(.05)	.01		(.06)	.09	*	(.04)	.04		(.04)
* Minority non-Muslim	-.10		(.20)	.12		(.17)	-.29		(.16)	.02		(.16)	.04		(.19)	.05		(.16)	-.07		(.14)	.06		(.10)
* Minority Muslim	-.26		(.20)	.12		(.20)	-.57	**	(.17)	.06		(.15)	-.05		(.20)	.06		(.15)	-.10		(.15)	.09		(.12)
Random part																								
Variance level 1	1.09		(.03)	.66		(.02)	1.03		(.03)	.69		(.02)	.85		(.03)	.57		(.02)	.99		(.03)	.60		(.02)
Variance level 2	.06		(.02)	.03		(.01)	.10		(.02)	.02		(.02)	.12		(.04)	.03		(.02)	.08		(.02)	.04		(.02)
Fit statistics																								
Deviance	95668	184																						
AIC	96036																							
N (students)	4,180						4,788						4,176						4,914					
N (classroom)	192						239						198						238					

Note: \*p <.05, \*\*p <.01, \*\*\*p <.001 (two-sided tests). Standard errors between parentheses.



**Fig. 2.** Predicted attitudes towards homosexuality at wave 1 for students in classrooms consisting of only natives (zero point on x-axis) and an increasing share of students from either the largest progressive sending country (black line) or the largest conservative sending country (grey line) in the CILS4EU dataset. Results split by country scores of higher-educated (solid line) and lower-educated (dashed line). *Note:* results based on Model 1 of the main analysis (see Table 3).

conservative sending countries is larger, which contributes to a steeper slope for these sending countries. This, of course, also depends on the strength of the effect of classroom AHCO on attitudes towards homosexuality at wave 1 in these countries, which in turn is stronger in Germany and England compared to the Netherlands and Sweden.

As can be seen in Fig. 2, the difference in the predicted attitude towards homosexuality between ethnic majorities and minorities is somewhat larger for the higher-educated category than the lower-educated category. This is because, in the EVS and WVS data, the contrast in attitudes towards homosexuality in the country of origin of ethnic majorities and minorities is generally larger for higher-educated than for lower-educated individuals. For example, the difference in attitudes towards homosexuality of higher-educated English and Pakistani individuals (2.04) is much larger compared to that of lower-educated English and Pakistani individuals (1.57).

## Discussion and conclusion

In this paper, we examined to what extent the ethnic composition of the classroom explains (changes in) attitudes towards homosexuality among native and ethnic minority youth in Western Europe. Using two-wave panel data on 18,058 students in 867 classrooms in England, Germany, the Netherlands, and Sweden, this study makes a number of contributions to the current literature on

cultural assimilation. First, our results stress the importance of a social context which has often been ignored in this line of research, namely the classroom. In all countries, there is a strong association between ethnic classroom composition and attitudes towards homosexuality at wave 1, though we find no positive association between the composition of the classroom and subsequent changes in these attitudes between wave 1 and wave 3. It could be that we find no effects on the change in attitudes towards homosexuality because the first wave of the survey was not administered in the first year of secondary school (McArdle, 2009). If the classroom has exerted most influence on attitudes towards homosexuality prior to when the first wave was conducted, we capture this only in the effect at wave 1.

Second, our results show that the assimilation process is relatively uniform. In all countries, we find a strong association between ethnic classroom composition and attitudes towards homosexuality, with only a few inconsistent differences according to individual characteristics (e.g. Muslims, share of co-ethnics and cultural distance). The finding that the composition of the classroom plays an important role in all four countries, underscores the importance of the classroom in the formation of cultural values. However, as all four countries are Western European, our data allow no conclusion on whether these results may generalize to other contexts.

Besides the association between classroom AHCO and attitudes towards homosexuality at wave 1, our results also show one other robust finding: in all countries, minority Muslims hold more conservative attitudes towards homosexuality at wave 1, and develop less strongly toward more progressive values between wave 1 and wave 3 relative to ethnic majorities. As we do not find differences between Muslims and non-Muslims in the effect of classroom composition, it is likely that other socializing contexts are more important in explaining differences between these ethno-religious groups. Indeed, a recent study suggests that the more conservative attitudes towards homosexuality among European Muslims is due to socialization in conservative religious communities and hostility from host-country populations (Röder & Spierings, 2021). When migrants move to a context that is very different from their country of origin (and sometimes even hostile), this may strengthen the feeling that their culture is under threat, which increases their determination to transfer their ethno-religious culture to others in their community (Kelley & De Graaf, 1997; Spierings, 2015). Given the high degree of anti-Muslim hostility in Western-Europe (Savelkoul, Scheepers, Van der Veld, & Hagendoorn, 2012), religious socialization is likely more important than the school classroom for the formation of young Muslims' attitudes towards homosexuality.

Our research has a number of limitations: first, both for the dependent and independent variable, attitudes towards homosexuality are measured using a single item. However, some researchers have suggested that attitudes towards homosexuality are multi-dimensional, depending on for example the context or the target (Adolfson et al., 2010; Steffens, 2005). Even though these important nuances are not captured by using one single item, using this measure is still a relatively efficient and reliable way to retrieve general attitudes towards homosexuality among a large sample. The results produced by single self-report measures and other multi-item measures have been found to be highly correlated (Herek, 2009).<sup>8</sup>

Second, there is a relatively high degree of attrition between wave 1 and wave 3, which results in a substantial number of missing values for the dependent variable in the latter wave (46% at wave 3 compared to 14.7% at wave 1). If these values are not missing at random, multiple imputation and the subsequent analyses may render biased results, especially when the number of missing values is so high. In additional analyses (not shown here), we found that missing values on this variable were more likely to be among Muslim minority students (54%) and non-Muslim minority students (47%) compared to native students (43%). By taking this variable, and correlates such as religiosity, values about marriage and sexuality and attitudes at wave 1 into account when imputing the dataset, multiple imputation produces less biased results compared to alternatives such as listwise deletion (Van Ginkel, Linting, Rippe, & Van der Voort, 2020).

Third, when students are self-selected to schools with peers of similar origin, for example due to residential segregation, this undermines the exogeneity of our main independent variable. However, residential segregation is not as pronounced in Western Europe as in for example the United States, be it in terms of ethnicity or social class (Musterd, 2005). In the Western-European context, the distance between the home and the school is by far the most important determinant for school choice, as studies in the Netherlands (Koning & Van der Wiel, 2013) and England (Burgess, Greaves, Vignoles & Wilson, 2015) have shown. This means that residential segregation translates strongly to educational segregation (Boterman, 2019; Burgess, Greaves, Vignoles & Wilson, 2011). In turn, socio-economic status is often coined as a driving force behind (ethnic) residential segregation (Musterd & Van Kempen, 2009). Therefore, by stratifying attitudes towards homosexuality in the country of origin according to the socio-economic status (education) of the parents, we take into account possible self-selection of students.

Fourth, while we ascribe the changes that we find to the process of cultural assimilation, it should be noted the change may also be the result of developmental processes that this age group experiences. Adolescence is a period in which individuals undergo a process of cognitive sophistication, which can change how they understand items and how they feel about others, which in turn can lead to more progressive attitudes towards homosexuality (Ohlander, Batalova, & Treas, 2005). When assimilation and this cognitive development coincide, it is not always possible to determine what factor drives the change in values. To address this issue, future research could compare ethnic minority and majority subgroups with varying ages and lengths of residence to disentangle these two effects (see Michel, Titzmann, & Silbereisen, 2012; Titzmann & Silbereisen, 2012).

Last, we operationalize attitudes towards homosexuality in the country of origin of student's parents using EVS and WVS data that stems from the period 1995–2021. Most likely, the student's parents have moved to the destination country before this period.

<sup>8</sup> When we correlate 'attitudes towards homosexuality' with other cultural values in the dataset, namely 'living together without being married', 'divorce' and 'abortion' we find that these correlations are moderate (see Appendix I). From this we can conclude that attitudes towards homosexuality do not reflect conservative values in general, but that respondents treat this item as distinct from other items that consider (sexual) liberalism.

Accordingly, the data might not reflect the culture the parents (and indirectly their children) were socialized in. However, additional analyses (see appendix A) show that there is an overall trajectory towards more progressive attitudes towards homosexuality over time for the countries in this data, that does not vary substantially between the countries. Therefore, by using standardized country scores, we get a good indication of the degree to which student's parents originate from a conservative or a progressive country, even though this was most likely measured after they have migrated.

The cultural distance between the majority and minority population has been the subject of public and political discussion for decades in Western European societies. It is therefore important to understand to what extent the cultural values are indeed different between ethnic groups and what processes can reconcile these differences. The results of this paper suggest that the classroom is an important social context in the process of cultural assimilation. Focussing on attitudes towards homosexuality, we find that students in more progressive classrooms hold more progressive attitudes towards homosexuality compared to students in more conservative classrooms, net of their own cultural background. To bridge the social and cultural divide between ethnic groups in Western Europe, policy makers should therefore aim to facilitate opportunities for these groups to interact. For example, as school tracking has been found to increase the degree of ethnic segregation in schools in Germany and the Netherlands (Karsten, Felix, Ledoux, Meijnen, Roeleveld & Van Schooten, 2006; Kruse, 2019), our results suggest that such policies can in turn also exacerbate cultural cleavages between ethnic groups. Reducing the degree of school tracking could allow adolescents to fully profit from the integrative potential of the classroom.

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## Disclosure statement

The authors report no potential conflict of interest.

## Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.ijintrel.2022.04.001](https://doi.org/10.1016/j.ijintrel.2022.04.001).

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