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School ethnic diversity and White students' civic attitudes in England

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ABSTRACT

The current paper focuses on White British students in lower secondary education and investigates the effect of school ethnic diversity on their levels of trust and inclusive attitudes towards immigrants. Use is made of panel data of the Citizenship Education Longitudinal Study (CELS) to explore these relationships. Ethnic diversity is measured with the proportion of students in a grade identifying with a minority. In agreement with contact theory, the paper initially finds a positive relation between diversity and inclusive attitudes on immigrants. However, this link disappears once controls for social background, gender and prior levels of the outcome are included in the model. This indicates that students with particular pre-enrolment characteristics have self-selected in diverse schools and that inclusive attitudes have stabilized before secondary education. Diversity further appears to have a negative impact on trust, irrespective of the number of controls added to the model.

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1. Introduction

England's population, as that of other affluent Western countries and regions, has become increasingly ethnically diverse over the last three decades due to immigration, family reunion and the natural reproduction of immigrant families. While in 1991 just 7% identified with an ethnic group other than White, by 2011 14% did so (Jivraj, 2012). As people of immigrant background typically have a younger age profile than the ethnic majority, ethnic heterogeneity is a particularly salient phenomenon among the school population: in the early 2000s 15.1% of children in primary schools and 13.1% of those in secondary education identified as non-White compared to 9.1% in the whole population of England (Bhattacharyya et al., 2003).

This raises the question how the native majority is responding to this increasing diversity. Does diversity enhance White British students' understanding and sympathy for the ethnic other or does it make them fearful and hostile towards ethnic out-groups? Upon close inspection most of the educational research on the non-cognitive outcomes of diversity focusses on a single outcome, such as tolerance, trust, interethnic friendships or participation (e.g. Campbell, 2007; Dinesen, 2011; Kokkonen et al., 2011; Dejaeghere et al., 2012), when each of these outcomes can be seen as a component of social cohesion, social capital or civic culture more broadly. The drawback of such research is that it leaves us guessing as to whether some positive or negative impact of diversity on one component can be generalised to other components associated with these phenomena. Despite some evidence that diversity indeed has the same effect on a number of indices of social capital and civic culture (e.g. Putnam, 2007), there is reason to explore this further in view of the critique that social capital, social cohesion and civic culture are notoriously incoherent multidimensional concepts, implying that its alleged attributes need not

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always be strongly inter-correlated (Jackman and Miller, 2005; Green et al., 2006; Morales, 2013). If these attributes are not strongly linked with one another, why should diversity have the same effect on them?

Another drawback of existing research on the non-cognitive effects of diversity in educational contexts is that it has, with few exceptions (e.g. Keating and Benton, 2013; Dejaeghere et al., 2012), relied on cross-sectional data. Such research has not been able to address the problem of reverse causation or to assess lagged effects of diversity and the effect of changes in diversity. In educational contexts reverse causation (i.e. the 'outcome' of diversity producing diversity rather than diversity yielding the outcome) often concerns the so-called selection effect. This effect points to the phenomenon of students with particular characteristics from the onset enrolling in particular schools, say White students with high levels of tolerance disproportionally entering diverse schools – or, which seems more likely, intolerant White parents sending their children to all-White schools. Any observed link between school ethnic diversity and a presumed outcome (say tolerance) can wholly or partly reflect such an effect. Selection effects can be explored with longitudinal data, particularly if such data includes measures of the outcome prior to school enrolment. Studies finding selection effects have proposed that tolerance and other civic dispositions are the product of early childhood socialization experiences and change little thereafter (Persson, 2012; Lancee and Sarrasin, 2013).

The present study examines the effect of school ethnic diversity on the civic attitudes of White British students in England. It deals with the two shortcomings identified above. It addresses the first one by focussing on two outcomes generally considered to be typical civic qualities buttressing liberal democracy: inclusive attitudes towards immigrants and social trust.

Inclusive attitudes refer to the belief that immigrants are entitled to the same rights and opportunities as the native population. If people are unwilling to extend civil rights to immigrants and their offspring (that is if they hold exclusionary views), ethnic tensions may arise threatening the democratic order (Scheepers et al., 2002). Although inclusive beliefs need to be distinguished from ethnic tolerance and favourable out-group attitudes, the three concepts have been found to be strongly related (e.g. Brewer, 1986; Scheepers et al., 2002), suggesting that they are all manifestations of a similar latent phenomenon, the antonyms of which are prejudice, racism and ethnocentrism (Dejaeghere et al., 2012, p. 11).

Trust in fellow citizens has also been identified as a key ingredient of stable democratic rule because of its ability to facilitate cooperation and foster a commitment to democratic values (Putnam, 1993; Newton, 2001). In addition, social trust has been said to yield a wide range of other societal benefits, such as economic growth (Knack and Keefer, 1997), innovation (Osberg, 2003) and public health (Wilkinson, 1996). Another reason for focussing on these outcomes is that ethnic diversity has been argued to influence these qualities in very different ways, as the next section will discuss in detail.

The second shortcoming is addressed through the use of a longitudinal data source, the Citizenship Education Longitudinal Study (CELS). I note that the current study builds on a previous study (Keating and Benton, 2013), which has used the same data source to examine how diversity, deprivation and other school characteristics are related to a variety of outcomes associated with community cohesion. It found school diversity not to be significantly related to tolerance and trust, leading the authors to conclude that "school diversity has little bearing on community cohesion outcomes" (*ibid*., p. 14).

Although Keating and Benton also sought to address selection effects by including prior measures of the outcome in their models, they did not clarify whether the non-effects of diversity that they found represented selection effects. Neither did they explore how changeable the outcomes of interest were over a period of four school years, whether diversity had an immediate or a lagged effect or whether changes in diversity had a distinct effect. Utilizing the full potential of the CELS panel data, the current study addresses these remaining questions. The following will also show that my more elaborate and detailed exploration of school diversity yields results which somewhat depart from those of Keating and Benton.

2. Inclusive attitudes, social trust and the effect of diversity

How are inclusive attitudes related to social trust? If they are strongly interlinked, diversity is likely to have the same effect on each of them. The literature suggests the link between trust and inclusivity depends on the nature of trust. If trust is generalized, that is if it is directed outwards and concerns confidence in strangers and members of out-groups, it is likely to be positively related to tolerance and inclusion. By contrast, if it is of the particularized kind, reflecting people you know (family and friends) and who are similar to you (people of the same ethnic or religious group), it is bound to be at odds with inclusive attitudes (Putnam, 2000; Uslaner, 2002; Stolle and Hooghe, 2004). Scholars seeking to demonstrate the existence of a civic democratic culture have the former in mind when they talk about trust as the source or companion of other components of this culture, such as inclusiveness, public spiritedness and civic and political participation (Delhey et al., 2011). However, the tried and tested item "most people can be trusted/you cannot be too careful", which is used in many surveys to capture generalised trust, does not explain how wide the circle of people is that is referred to by the words "most people". Whether it serves as a good measure of generalised trust is thus debatable (*ibid.*). Moreover, research that has identified a syndrome of trust that might be labelled 'generalised' found that it correlated positively with a syndrome of particularised trust (Uslaner, 2002), which compromises the theoretical distinction between the two forms of trust. Thus, uncertainty continues regarding the concepts of generalised and particularised trust and their proposed links with inclusivity.

An interesting parallel between inclusivity and trust is that early childhood has been identified as a crucial formative period for both of them. The idea that parental upbringing fundamentally shapes tolerance and inclusiveness can be traced back to the work of Adorno (1969) on the authoritarian personality. In essence this theory holds that parents who raise their

children in a strict but inconsistent way create personalities tending towards conformity, deference of authority, and rigid thinking. Subsequently, children's feelings of anger and ambivalence towards their parents are transferred onto other groups and will be expressed under given political circumstances (Milner, 1983). Similarly social trust, and particularly the generalised variety, has been argued to primarily be the product of upbringing (Wuthnow, 1997; Uslaner, 2002). Caring parents, according to Uslaner, instil a feeling of self-confidence in their children, making them less anxious in their contacts with other people. They also lead by example: "Parents who are trusting, tolerant, and involved in their communities are role models leading children to trust" (*ibid*. p. 93). Obviously, if inclusiveness and trust are largely set by the time youngsters reach puberty there would be little space left for education and other conditions to influence these dispositions, and this is precisely the point that the aforementioned studies of Persson (2012) and Lancee and Sarrasin (2013) are making. If these scholars are right, *educational conditions do not influence trust and inclusive attitudes and any link between diversity and these outcomes merely represents a selection effect* (Hypothesis 1).

Yet, even scholars emphasising early childhood as a critical formative period acknowledge that trust and inclusive views are not immutable later in life. Charismatic leaders, for instance, have been identified as key agents in whipping up and unleashing latent hostile sentiments among the adult population towards out-groups (Adorno, 1969; Milner, 1983). Among the scholars who believe that the social environment continues to play an important role in shaping civic dispositions from puberty onwards, some contend that ethnic diversity has positive effects while others argue it has negative effects for attributes associated with social cohesion.

Interestingly, although proponents of both sides can be found in the literatures on tolerance and trust, those working on tolerance and inclusion tend to stress positive effects whereas those focussing on trust are inclined to emphasise negative effects of diversity. This difference seems to be related to the scale of the social context examined. Studies on tolerance and inclusion often focus on micro environments such as classrooms, schools, circles of friends and the workplace, while those looking at trust tend to examine the effect of diversity in larger social units such as neighbourhoods, cities, and whole countries.

Scholars finding positive effects of diversity on inclusivity usually proceed from the proposition that ethnically diverse surroundings expose people to different stimuli and impressions, causing them to challenge their own stereotypes and adopt more favourable attitudes towards out-groups (Van Houtte and Stevens, 2009). This proposition is based on several assumptions linking ethnic diversity to the outcome in a stepwise manner. First, diverse settings, particularly if they are small-scale and physically bounded, increase the probability of interethnic contact because of the propinquity of members of other ethnic groups and the difficulty of avoiding contact with them altogether (Stein et al., 2000; Blau, 1974). Second, interethnic contact diminishes unfounded negative opinions on the ethnic other by enhancing knowledge about and understanding of the out-group, which is the key premise of contact theory as developed by Allport (1954). Third, inter-group contact not only reduces the in-group's prejudice towards members of the out-group directly involved in the contact but also towards other members of the out-group (Pettigrew and Tropp, 2006). In other words, the positive effect of contact is generalised to the entire out-group.

As the current study assesses the effect of diversity in the micro-environment of the school where intercultural contact can hardly be avoided, it can be hypothesized, in line with the 'optimistic' perspective (or contact theory) but contrary to the early socialization perspective and thus to the first hypothesis, that *ethnically diverse schools will contribute to the inclusive attitudes of the ethnic majority* (Hypothesis 2). This is all the more plausible to propose as interaction in the school, and in the classroom in particular, can be said to meet the conditions that Allport identified as necessary for intercultural contact to have positive effects. These conditions are: (1) equal status of the groups engaging in the contact, (2) common goals, (3) intergroup cooperation, and (4) institutional support and monitoring. In educational settings pupils are indeed equal in status (at least formally), the contact often concerns activities involving common goals and cooperation (such as team sports), and the setting is closely supervised by a teacher (Pettigrew, 1998; Kokkonen et al., 2010; Janmaat, 2012).

American research investigating the contact hypothesis in educational settings has indeed generally found positive effects of racially mixed schools for the racial majority. Thus, White students and graduates of desegregated schools have been found to report higher levels of intercultural understanding, more inter-racial friendships and less discomfort in dealing with interracial contacts (Frankenberg et al., 2003; Holme et al., 2005). In contrast, the findings of European research, which has focussed more on inter-ethnic and native-immigrant relations rather than inter-racial ties, have been more equivocal and contradictory. Thus, while some found diversity to be positively linked to tolerance and favourable out-group attitudes (Dollase, 2001; van Geel and Vedder, 2010; Janmaat, 2012), others found no effects (Wagner et al., 1989; Kokkonen et al., 2010; Dejaeghere et al., 2012) and some even found a negative link (Vervoort et al., 2011).

While the idea that diversity has positive effects prevails in the literature on tolerance, the proposition that it has harmful consequences is more prevalent amongst scholars writing on social trust. Diversity is presumed to erode trust because trust is thought to depend on similarity (Alesina and La Ferrara, 2002; Delhey and Newton, 2005). In other words, the more other people are like you and share your beliefs and the more of these like-minded people there are, the more you trust other people. Moreover, the conflict or ethnic competition perspective developed in the literature on tolerance (and usually understood to be the direct opposite of contact theory) is quite influential. This perspective is of particular relevance for the current study as it also focuses on the ethnic majority. Its principal claim is that the dominant group becomes more distrustful and more exclusionary in its attitudes towards out-groups as the social context becomes more diverse. Here the argument is that a higher share of ethnic minorities in a given population enhances the competition for scarce resources, which in turn leads the ethnic majority to perceive these minorities as threatening and to develop hostile attitudes towards

them (Blumer, 1958; Blalock, 1967). Some have argued that not so much levels but rapid changes in diversity due to a sudden inflow of immigrants are experienced as particularly threatening by the dominant group, driving down social trust and fuelling inter-group hostility (Olzak, 1992; Coenders, 2001).

Many studies have indeed found negative effects of diversity on trust, at several levels (neighbourhood, city and country), among both the ethnic majority and the whole population, in different national contexts, and concerning either levels or changes in diversity (e.g. Soroka et al., 2004; Delhey and Newton, 2005; Putnam, 2007; Hooghe et al., 2009; Dinesen and Sønderskov, 2012; Laurence, 2013 – for good reviews, see van der Meer and Tolsma, 2011 and Morales, 2013). However, these studies have examined the effect of diversity only in broader social contexts, where direct intercultural interaction is unlikely to happen. Others have argued that diversity has no effect on trust or even a positive one on out-group trust in environments where actual inter-group contact does occur and where this interaction meets the conditions specified by contact theory (Stolle et al., 2008; Sturgis et al., 2011; Kokkonen et al., 2011; Dinesen, 2011; Uslaner, 2012). Stolle et al. (2013), for instance, find that having actual intergroup contacts is the crucial intermediate variable explaining why some are and others are not affected by a sudden increase of immigrants in their neighbourhood.

As noted earlier, educational settings can be presumed to constitute just such contact-rich environments and we may thus hypothesize *school diversity to have no effect on trust (or a positive one on generalised/out-group trust)* (Hypothesis 3). Consistent with this hypothesis, the few studies that have examined this relationship in educational circles have indeed found non-relationships between diversity and social trust (Janmaat, 2010; Kokkonen et al., 2011; Dinesen, 2011). The difference with the first hypothesis is that a lack of a relationship between diversity and trust is not necessarily a sign of a selection effect or of the unresponsiveness of trust to school conditions.

Further, in view of the finding of Stolle et al. (2013) noted above, the inter-group interaction in educational settings may insulate members of the dominant group who are faced with an influx of out-group members from developing hostile out-group attitudes. Hence we might expect that *an increase in out-group members does not make the dominant group more distrustful or less inclusive* (Hypothesis 4).

3. The British educational context and the data source used

Lower secondary education constitutes the context in which the data used by this study were collected. Although this stage of education is generally comprehensive in England, the principle of common schooling is undermined by school admission practices, school choice and the retention of a stratified system in some regions (Whitty et al., 1988). A small but elitist private sector, educating about seven percent of all pupils, and the great variety of schools within the state-maintained sector (faith and non-faith; coeducational or single-sex) further contribute to a highly diverse school landscape. This diversity of schools is likely to have ethnic sorting effects and it is therefore not surprising to find high levels of ethnic segregation across schools in England (Burgess and Wilson, 2005). High levels of segregation imply considerable variation between schools in the proportion of ethnic minority students (my measure of ethnic diversity – see the measures section below). Hence, if I were not to find any effect of ethnic diversity on trust and inclusiveness, it cannot be due to a lack of variation in the measure of diversity.

4. Methods

4.1. Data and analytic sample

CELS, as the data source used for the current paper, includes longitudinal data from a cohort of youngsters who were aged 11 and 12 (Year 7; first year of secondary school) when they were surveyed for the first time (in 2002–2003). This data was collected from a nationally representative sample of 75 state-maintained schools in England – representative in terms of region, GCSE attainment and percentage of students on free school meals (Benton et al., 2008). Within the sampled schools all the students of the year of interest were selected (i.e. all the students in a certain grade; a grade can include one or several classes). I used data from Wave 3, when pupils were aged 15–16 and in their final year in lower secondary, for measures of the outcomes of interest and for most of the control variables. Data from Wave 1 (ages 11 and 12; first year of secondary school) and Wave 2 (ages 13 and 14) were used for prior measurements of the outcome variables and for measures of grade ethnic diversity. CELS was commissioned by the Department for Children Schools and Families (DCSF) to monitor the effects of citizenship education, which was introduced as a statutory cross-curricular subject in 2001. It is the only longitudinal study of youth in England with a wide coverage of civic attitudes and behaviours.

CELS is no different from other longitudinal datasets in showing considerable attrition. While the study started out with 18,583 respondents in Wave 1, 58% of this original sample participated in Wave 2 and just 38% did so in Wave 3. Following the method adopted by Eckstein et al. (2012), I compared respondents who only participated in the first wave with those who participated in all three waves (6113) in order to test for attrition effects. Significant attrition effects were found for the Wave 1 variables books at home and education mother and father – with respondents participating in all three waves reporting significantly higher numbers of books and higher levels of parental education. The database, however, includes weights for the waves following Wave 1 to deal with this attrition. Applying these weights makes the data of later waves similar to that of Wave 1 in gender, ethnic and social composition (Keating and Benton, 2013). Consequently, I applied

the Wave 3 weight for the subsequent analyses. Even if these weights would not be able to fully compensate for the attrition, any remaining attrition is not likely to have produced a bias since the substantive models (see below) include the variables for which the attrition effects were found (cf. Paterson, 2013).

In addition to unit non-response (i.e. attrition) there is item non- response on the variables included in the model. As Table 1 shows, percentages of missingness range from zero to 27.8 (on education father). To keep respondents with missing values on board I created 'missing' categories for the categorical variables and included these as dummy variables in the model (cf. Bynner and Joshi, 2002) (see Table 4). For the continuous variables I imputed data using the Bayes estimation technique in Mplus (see Muthen and Muthen, 2009). As the study focuses on the ethnic majority, the analytic sample consists of students identifying as White British and having participated in all three waves (totalling 5015 respondents).

4.2. Measures

4.2.1. Outcomes of interest

To tap inclusiveness towards immigrants I selected an item asking respondents to express their level of agreement (on a Likert scale ranging between 1 'strongly disagree' and 5 'strongly agree') with the statement "People who were not born in Britain, but who live here now, should have the same rights as everyone else". This in my view very well captures the essence of an inclusive posture, which is the belief that newcomers are fundamentally equal to and entitled to the same rights and opportunities as the native population. I also relied on a single item to measure social trust: "How much do you trust the people around you? (1) People of my own age" [categories: 1-not-at-all; 2-a-little; 3-quite-a-lot; 4-completely]. The questionnaire also asked about trust in neighbours, the family and teachers but I selected people of the same age because this group of people is clearly most relevant to my measure of school diversity (which is based on people of the same age - see below). Creating a cohesive trust scale synthesizing the four forms of trust was not possible due to a low reliability ($\alpha = 0.59$). It is not quite clear whether trusting people of one's own age reflects a particularized or generalised form of trust. Uslaner (2002: 54) found it to neither load on a 'trust in strangers' (i.e. generalised) dimension nor on a 'trust in family and friends' (particularised) factor. In all likelihood it combines both forms of trust with respondents having had both their friends and classmates in mind and contemporaries they do not know when they filled out the question. The weak positive link with inclusiveness only confirms this conjecture ($r = 0.04$ at a 0.01 level of significance), as trusting one's peers would have most likely shown a much stronger (negative or positive) relation with inclusiveness had it represented a clear example of particularised or generalised trust.

Table 1
Descriptive statistics of the dependent and independent variables.

Variable	Categories (%)	Min	Max	Mean	SD	Valid *N* (%)
Dependent						
Inclusiveness (wave 3)		1	5	3.18	1.12	4877 (97.2)
Strongly disagree	9.7					
Disagree	14.0					
Neither agree/disagree	33.0					
Agree	30.3					
Strongly agree	10.2					
Trust (wave 3)		1	4	2.72	0.68	4866 (97.0)
Not at all	3.6					
A little	29.3					
Quite a lot	54.8					
Completely	9.3					
Independent						
Inclusiveness (wave 2)		1	5	3.56	1.09	4742 (94.6)
Inclusiveness (wave 1)		1	5	3.78	1.11	4670 (93.1)
Trust (wave 2)		1	4	2.76	0.68	4725 (94.2)
Trust (wave 1)		1	4	2.69	0.72	4663 (93.0)
Gender (1 boy; 2 girl) (w3)		1	2	1.52	0.50	4984 (99.4)
Books at home (w3)		1	6	4.07	1.42	4954 (98.8)
Education mother (cat) (w3)		1	3	1.69	0.76	3840 (76.6)
Education father (cat) (w3)		1	3	1.63	0.78	3620 (72.2)
Further education (cat) (w3)		1	4	3.00	1.19	4339 (86.5)
Grade diversity (w3)		0.00	0.97	0.093	0.100	5015 (100)
Grade diversity (w2)		0.02	0.98	0.099	0.096	5015 (100)
Grade diversity (w1)		0.06	0.98	0.142	0.091	5015 (100)
Change in diversity (w1–w3)		−.15	0.11	−.049	0.039	5015 (100)
Grade social status (w3)		2.86	5.15	4.00	0.47	5015 (100)
Grade social status (w2)		2.97	5.33	4.12	0.43	5015 (100)
Grade social status (w1)		2.96	5.08	4.24	0.35	5015 (100)

Both outcomes show a considerable variation in the responses (see Table 1). Although there is a slight skew towards the more positive responses for both, this does not affect the representation of respondents in each of the categories. Again, if no link is found between diversity and the two outcomes, this cannot result from a lack of variation on the dependent variables.

4.2.2. Key explanatory variables

I used the proportion of students in the school grade identifying with a minority (i.e. not as White British) as an indicator of ethnic diversity. In other words, the higher this proportion, the more diverse I considered the grade to be.[1] The drawback of this measure is that it does not capture diversity within the non-White British group, as grades where all the non-White British belong to one minority are given the same value as grades where they all belong to different groups. An alternative measure of diversity would be the well-known ethnic fractionalisation index. This index captures diversity in the true sense of the word. However, it is 'colour blind' in that it fails to differentiate a situation in which 70% express belonging to the ethnic majority and 30% to one of a number of minorities from a situation where the reverse is the case (70% minority and 30% majority) (Tolsma et al., 2009). As the focus of this study is on the ethnic majority (the White British students) and as the conflict perspective pointed to the effects of out-group *size* on the out-group attitudes of the ethnic majority, I selected minority proportion as diversity measure.

The CELS study was very fortunate to have surveyed *all* students of the grade of interest (i.e. not just the ones who participated in the previous waves) as this makes it possible to assess changes in the ethnic composition of grades. Between Wave 1 and Wave 3 grade diversity decreased, as shown by the decline in the average proportion of minority students from 14.2% to 9.3% (see Table 1). This may reflect a higher rate of attrition among minority respondents or higher non-completion rates among this group. There also appears to be a high level of continuity in grade diversity, judging from the very high correlations between the diversity measures of the different waves (between Waves 1 and 2: $.94^{***}$; between Waves 1 and 3: $.92^{***}$; between Waves 2 and 3: $.92^{***}$). In other words, Wave 1 diversity explains 88.4% and 84.6% of the variance in Wave 2 and Wave 3 diversity, respectively. Although the distribution of the three diversity measures is very much skewed towards the homogenous end (see the standard deviations in Table 1; only about 10% of the respondents are in grades where minority students make up more than 20% of the student population), the variation is still substantial as there are also grades where 98 percent of students are of minority backgrounds.

I constructed a measure of change in grade diversity by subtracting wave 1 from wave 3 diversity. Table 1 does not show dramatic changes in grade diversity: The proportion of minority students has declined by 15% at most and risen by 11% maximally over a period of four years.

4.2.3. Control variables

I included prior measures of inclusiveness and trust from Waves 1 and 2 in the model. The wording of the items in these earlier waves is identical to the one in Wave 3. Prior measures of the outcomes can be used to assess whether children with particular levels of trust and inclusiveness from the onset are enrolled into schools with a particular ethnic make-up, in other words to check for reverse causation. Ideally, these measures are available *before* school enrolment and thus before a school's ethnic make-up can have an effect on attitudes. As CELS does not have such measures, I used other control variables to assess selection effects, such as gender, education level mother and father, number of books at home and respondent's expected further education. The last four variables broadly tap family social background. Previous research has demonstrated the strong influence of these variables on a range of civic attitudes including tolerance and trust (for social background and expected further education, see Schulz et al. (2010); for gender, see Scheepers et al. (1992). As social background and gender also affect school enrolment (particularly in England with its school choice policies and high incidence of single sex schools), they represent alternative ways to assess whether the effect of diversity is genuine or represents a selection effect. Finally we included a control variable at the grade level, *social status*, which is the grade average of the number of books at home. Controlling for this variable is important as several studies exploring neighbourhood characteristics have shown that neighbourhood social status and neighbourhood ethnic diversity are intimately related and that once the former is included in the model the link between diversity and a variety of civic outcomes disappears (e.g. Letki, 2008; Oliver and Mandelberg, 2000).

4.3. Analytic approach

I analysed the links between diversity and the two outcomes using linear regression and path analysis in Mplus. Although the two outcomes represent single items with Likert scale response categories, the distribution of responses on these items is not overly skewed (as shown by Table 1) and a test on the residuals of models including all the independent variables shows that these residuals are normally distributed. The data thus permit linear regression. Due to the clustered structure of the sample (respondents in grades; grades in schools), the observations are not independent. I employed the TYPE = COMPLEX

[1] The indicator is based on the following ethnic identity item: "How would you describe yourself? (please tick one box only)" [Asian or British Asian (e.g. Indian, Pakistani, Bangladeshi); Black or Black British (e.g. Caribbean, African); Chinese; Mixed ethnic origin; White British; White European; Other ethnic group]. As the item asks about identity and not country of birth, each of its categories includes first, second and possibly even third generation immigrant children. The share of the first relative to the second/third generation in each identity group will depend on that group's history of settlement. Those who entered the country recently (e.g. East-Europeans) will have more first than second/third generation children, whereas the reverse applies for groups that migrated to Britain in the 1950s and 1960s (e.g. Caribbean Blacks and South Asians).

Table 2
Autocorrelation in trust and inclusiveness.

Model	*b*	*t* Ratio	Explained variance ($R^2 \times 100$)
W3 inclusiveness on W2 inclusiveness	0.34***	23.7	10.8
W3 inclusiveness on W1 inclusiveness	0.19***	13.1	3.8
W2 inclusiveness on V1 inclusiveness	0.28***	17.8	8.0
W3 trust on W2 trust	0.29***	19.0	8.7
W3 trust on W1 trust	0.17***	11.7	3.1
W2 trust on W1 trust	0.19***	10.8	4.1

Nb: the table shows the results of six separate regression analyses.
* $P \leqslant .05$.
** $P \leqslant .01$.
*** $P \leqslant .001$.

method in Mplus to make the standard errors robust to this non-independence, using the school grade variable to indicate the clustering of the data (Muthen and Muthen, 2009). This is especially important as diversity as the key explanatory variable is a grade level variable. Not accounting for non-independence would underestimate the standard errors of grade level variables and thus overestimate their effects. I present a series of models showing what the stepwise inclusion of control variables does to the effect of diversity on inclusiveness and trust. If diversity initially shows a significant link to these outcomes but subsequently becomes unrelated to them, this is evidence that the 'effect' of diversity represents a selection effect (cf. Paterson, 2013). The last models represent cross-lagged path analyses including prior measures of the outcomes and of diversity.[2] These models enable a more precise assessment of selection effects and thus of reverse causation.

5. Results

Before turning to the effects of diversity, let us examine the degree of autocorrelation in each of the two outcomes. The stronger the links between earlier and later measurements of trust and of inclusiveness, the more stable the outcomes would appear to have become during puberty and thus the more likely it is that the first hypothesis, which predicted selection effects, holds. As expected, earlier measures prove to be very strong predictors of later ones suggesting a high level of continuity at first sight (see the high t ratios in Table 2). Yet, in terms of explained variance the level of autocorrelation is not that impressive. Only in the case of Wave 3 inclusiveness being predicted by Wave 2 inclusiveness does the explained variance exceed 10 percent (10.8%). Thus, by far most of the variance in the later measures of inclusiveness and trust cannot be explained by prior measures, indicating that the two outcomes are not set in stone between ages 11–16. Interestingly, trust shows a noticeably lower level of autocorrelation than inclusiveness. This suggests that it is more susceptible to the influence of conditions and experiences during adolescence than the latter.

I begin by presenting the results of a series of regression models with diversity as the sole explanatory variable (see Table 3). It can immediately be seen that diversity is related in contrasting ways to trust and inclusiveness. While students in more diverse grades are significantly less trusting of their contemporaries they at the same time are more inclusive in their attitudes on immigrants than students in the more homogenous grades. In view of Hypotheses Two and Three one would expect diversity to be somewhat differently related to the two outcomes, but perhaps not to this extent. Certainly the negative link with trust was not foreseen in view of the assumption that inter-group contact happening in the micro-setting of the school would prevent diversity from fuelling distrust.

Judging by the rather low t ratios and the tiny levels of explained variance, the strength of these relationships is not impressive though, particularly not for inclusiveness. Only the most recent measure of diversity (Wave 3) shows a significant link with this outcome. The more time one allows between the measure of diversity and that of inclusiveness, the weaker the link becomes. This suggests that, if at all diversity has an effect on inclusiveness, it is more of an immediate than a lagged kind. The pattern is different for trust. Not only are the relationships more significant, earlier measures of diversity also show a stronger link with trust than the most recent one, meaning that diversity might have more of a lagged effect on trust. Lastly, changes in diversity are not significantly related to either of the two outcomes. This at first sight corroborates Hypothesis Four, which anticipated no effects of increasing diversity. However, it may also be the rather modest level of these changes (as noted earlier) that explains why increases or decreases of diversity have no effect.

So does the inclusion of gender and social background variables change these relationships? It turns out that they do for inclusiveness but not for trust (see Table 4). Girls are more inclusive in their attitudes towards immigrants than boys, as are students who have high educational aspirations, a high number of books at home, and who have highly educated fathers. Once these variables are added, diversity loses its link with inclusiveness. Inclusive attitudes are thus primarily shaped by background conditions and there just happen to be more youngsters combining certain background characteristics with relatively high levels of inclusiveness in diverse grades than in homogenous ones. Yet, it would be premature to conclude

[2] Clustered data can also be explored with multilevel analysis (MLA). However, I would not have been able to assess reverse causation (i.e. the effects of prior outcome and individual background characteristics on diversity) with MLA. For this reason I applied the robust standard errors method.

Table 3
Effects of diversity on inclusiveness and trust.

Inclusiveness				Trust			
	b	*t* Ratio	R^2		*b*	*t* Ratio	R^2
W3 Diversity	0.44*	1.96	.002	W3 Diversity	−0.21*	2.07	.001
W2 Diversity	0.41	1.70	.001	W2 Diversity	−0.29**	3.00	.002
W1 Diversity	0.24	0.73	.000	W1 Diversity	−0.28*	2.40	.001
Change w1-3	1.59	1.79	.003	Change w1–3	0.16	0.50	.000

Nb: the table shows the results of eight separate regression analyses.
* $P \leqslant .05$.
** $P \leqslant .01$.
*** $P \leqslant .001$.

that the effect of diversity therefore only represents a selection effect because of the theoretical possibility that inclusiveness levels were lower in diverse grades originally and have risen more than those in more homogenous grades. If this has happened, diversity will have brought about a *change* in inclusiveness. The final models which include prior measures of the outcome can test for this possibility.

Interestingly, the inclusion of the control variables does not change the negative relationship between any of the three diversity measures and trust. Girls are more trusting than boys, but social background (as tapped by books at home, parental education level and educational aspirations) appears to be irrelevant for trust in one's contemporaries. Adding the controls does not change the effects of increasing diversity on trust and inclusiveness either: these effects were and remain insignificant.

Neither does the inclusion of grade social status alter any of the relationships between diversity and the two outcomes.[3] Although grade social status has a marked positive effect on both trust and inclusive attitudes, it does not mitigate the negative relation between diversity and trust nor does it affect the non-relationship between diversity and inclusiveness. Thus, grade diversity does not simply proxy for grade social status.

Finally, let us assess whether the inclusion of prior measures of the outcome makes a difference. Fig. 1 shows the results of two cross-lagged path models. These models are not the same as I decided to only present those which include a measure of diversity that originally showed the strongest link with the two outcomes. I thus show a model on inclusiveness with wave 3 diversity and a model on trust with wave 2 diversity as independent variables of interest.[4] We see that the degree of autocorrelation is very high for both outcomes and also for diversity, which comes as no surprise given the findings of Tables 2 and 3. More importantly, despite preceding diversity by several years, prior measures of the outcome do not affect the relation between diversity and the two outcomes. This is particularly relevant for trust, as it indicates that the negative effect of diversity is genuine and not just a reflection of youngsters with low levels of trust from the onset forming diverse grades. The figure in fact shows that diversity makes trust fall to a significant extent over the course of four years taking wave 1 levels of trust as a baseline. Judging from the coefficient, trust levels on average are 8.6 percent lower in the most diverse grade by comparison to the least diverse one ($0.96 \times -0.27 = -0.259$; $-0.259/3 = -0.0864$). For inclusiveness, the findings mean that diversity does not have the effect of somehow 'repairing' initially lower levels of inclusiveness, as was suggested earlier. It simply retains its non-relationship with inclusiveness, which inevitably leads to the conclusion that the link between diversity and inclusive attitudes indeed only represents a selection effect.

We further see there is no evidence of reverse causation in terms of earlier levels of trust and inclusiveness influencing *changes* in the levels of diversity. In all likelihood the extremely high autocorrelation between the wave 1 and waves 2 & 3 measures of diversity prevented this from happening, as it leaves very little unaccounted variance in waves 2 and 3 diversity for other factors to explain. Despite this high autocorrelation, students with highly educated fathers show a strong positive relation with wave 3 diversity ($b = .008^{***}$; $t = 3.54$) (statistics not shown in Fig. 1). This means that the proportion of students with such fathers has significantly increased in the more diverse grades between the various waves. It reminds us that the student population in schools is not static and that we should therefore always take the possibility of selection effects into account.

6. Discussion

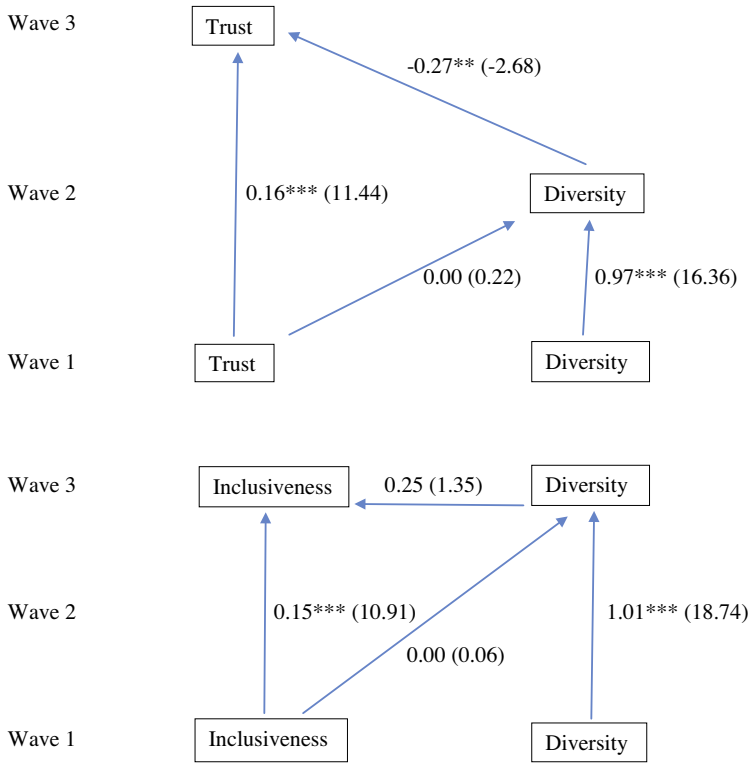
Do ethnically diverse schools make ethnic majority students more trusting and more inclusive in their attitudes towards outsiders? At first sight, the findings of this paper are disillusioning for people who believe that diversity fosters these qualities, which are typically associated with socially cohesive societies. I found the level of grade diversity to show no relation to inclusive attitudes on immigrants and to be negatively related to trust in people of one's own age. Changes in grade diversity were not linked to either of these outcomes.

[3] The results of the models including grade social status can be obtained from the author upon request.
[4] Properly speaking, therefore, the model on inclusiveness is not cross-lagged.

Table 4
Effects of diversity on trust and inclusive attitudes with controls for gender and social background (unstandardized coefficients and *t* ratios).

	Inclusiveness								Trust							
	b	*t*	*b*	*t*	*b*	*t*	*b*	*t*	*b*	*t*	*b*	*t*	*b*	*t*	*b*	*t*
W3 Diversity	0.30	1.52							−0.22*	−2.23						
W2 Diversity			0.28	1.31							−0.30**	−3.09				
W1 Diversity					0.25	0.92							−0.29**	−2.57		
Change w1-3							0.58	0.82							0.13	0.40
Gender (1 = b; 2 = g)	0.29***	6.61	0.30***	6.61	0.30***	6.57	0.30***	6.79	0.05*	2.07	0.05*	2.10	0.05*	2.07	0.04*	2.00
Books at home	0.10***	7.37	0.11***	7.39	0.11***	7.41	0.10***	7.30	0.00	0.13	0.00	0.10	0.00	0.10	0.00	0.06
Education mother																
Left at 16 (ref)																
Left after college	0.00	0.00	0.00	0.00	0.00	0.02	−0.00	−0.04	0.03	1.24	0.03	1.24	0.03	1.21	0.03	1.22
Studied at uni	0.05	0.97	0.05	0.98	0.05	1.01	0.05	0.97	0.04	0.98	0.04	1.01	0.04	0.95	0.03	0.90
Missing	−0.01	−0.25	−0.01	−0.26	−0.01	−0.25	−0.01	−0.24	0.01	0.26	0.01	0.29	0.01	0.26	0.01	0.24
Education father																
Left at 16 (ref)																
Left after college	0.08	1.89	0.08	1.89	0.08	1.92	0.08	1.93	0.05	1.54	0.05	1.57	0.05	1.54	0.05	1.46
Studied at uni	0.26***	5.56	0.26***	5.55	0.27***	5.63	0.26***	5.47	−0.00	−0.07	−0.00	−0.07	−0.01	−0.15	−0.00	−0.12
Missing	0.08	1.45	0.08	1.46	0.08	1.45	0.08	1.50	0.02	0.61	0.02	0.60	0.02	0.62	0.02	0.59
Further education																
End of Year 11	−0.29***	−4.79	−0.29***	−4.79	−0.29***	−4.80	−0.29***	−4.73	0.05	1.52	0.05	1.50	0.05	1.54	0.05	1.56
At age 17	−0.19***	−3.27	−0.19***	−3.26	−0.19***	−3.29	−0.19***	−3.26	0.07	1.51	0.06	1.49	0.07	1.53	0.07	1.52
At age 18	−0.08	−1.51	−0.08	−1.50	−0.08	−1.53	−0.08	−1.51	0.05	1.58	0.05	1.53	0.05	1.59	0.05	1.62
In early 20s (ref)																
Missing	−0.14***	−3.48	−0.13***	−3.48	−0.43***	−3.46	−0.13***	−3.44	0.02	0.86	0.02	0.85	0.02	0.88	0.02	0.84
R^2	0.069		0.069		0.069		0.069		0.004		0.005		0.004		0.003	
N	5015		5015		5015		5015		5015		5015		5015		5015	

* $P \leqslant .05$.
** $P \leqslant .01$.
*** $P \leqslant .001$.



* P ≤ .05; ** P ≤ .01; *** P ≤ .001

Note: the figure shows unstandardized coefficients and t ratios in parentheses. All the relationships have been controlled for gender, books at home, education mother and father, expected further education and grade social status. The results of the full models can be obtained from the author upon request.

Fig. 1. Two cross-lagged path models showing the links between diversity, trust and inclusiveness.

I carried out analyses in a stepwise fashion to assess whether the effect of diversity was genuine or whether it merely represented a selection effect. The findings on inclusive attitudes suggest the latter. Initially I found a positive link between diversity and inclusiveness, but once controls were added for gender and social background, which proved to be key predictors, the positive 'effect' of diversity disappeared. Including a further control for autocorrelation in the outcome did not alter this non-relationship, indicating that diversity did not influence changes in inclusive attitudes either. In other words, the initial positive 'effect' of diversity only reflected an overrepresentation, in the more diverse grades, of children combining high levels of inclusiveness with specific background characteristics. The findings corroborate the hypothesis that inclusiveness has largely stabilised by the time youngsters reach puberty and that, consequently, we cannot expect school conditions such as diversity to have much of an effect on it.

This finding casts a shadow over studies that have found positive 'effects' of diversity on favourable out-group attitudes based solely on analyses of cross-sectional data, such as Dollase (2001), van Geel and Vedder (2010), and Janmaat (2012). It suggests that the optimism about ethnically diverse schools as breeding grounds for tolerance is unfounded, at least with regards to schools providing secondary education. Possibly favourable out-group attitudes are more pliable at a younger age, indicating that primary schools may have a role to play in fostering them.

At first glance, the findings on trust are downright disconcerting. Even in the model with all controls included, diversity still exerts a small, but nonetheless perceptible, negative influence on trust. The negative relation was anticipated by conflict theory and it is in accordance with the many studies that found neighbourhood ethno-racial heterogeneity to reduce trust (e.g. Alesina and Ferrara, 2002; Putnam, 2007). Yet, it is surprising that this negative link also appears in the micro environment of the school grade. After all, the actual intergroup contact that can be expected to occur in this context should prevent diversity from showing its eroding effects on trust, according to the logic of contact theory. The findings are therefore not in line with the hypothesis derived from this theory (Hypothesis Three). Possibly the grade level is not yet micro enough and we have to go down to the classroom level to find inter-group contact and the other conditions highlighted by Allport to be in place. This would explain why Kokkonen et al (2011) and Janmaat (2012), who indeed focused on the classroom level, did not find negative effects of diversity on trust.

Indeed, the discrepancy of the findings with those of Kokkonen and Janmaat makes sense if grade-level diversity does not accurately reflect within classroom diversity and above all represents between classroom differences in ethnic composition. In that case heterogeneity at the grade level masks homogeneity – or segregation – at the classroom level, which would mean that the opportunities for inter-ethnic contact at the most micro-level are limited. This is a plausible conjecture in view of the pervasive use of ability grouping (streaming and setting) within schools in England (Green et al., 2006), a practice that has been associated with greater ethnic segregation because of its sorting effects (Schofield, 2001; Crul and Vermeulen, 2003). Thus, in England schools that appear diverse at first sight might well show considerable segregation across classrooms within schools. Possibly, in contexts where ability grouping is not allowed, such as in the Scandinavian countries, the ethnic composition of grades and schools more accurately reflects that of classrooms. The implication would be that in such contexts the positive effects proposed by contact theory do emerge in the more diverse schools. Dinesen (2011), who conducted research in Denmark and relied on a measure of *school* ethnic diversity, indeed found diversity to enhance the out-group trust of native Danish adolescents.

In sum, I cannot state with certainty that diversity reflects only a selection effect (with regard to inclusiveness) and truly has a negative impact on trust because I may have measured it at a level that is too high for a context characterised by grouping by ability (England). Had I been able to measure it at the level of classrooms I would have perhaps seen quite different effects. That the level of measurement indeed makes a lot of a difference is illustrated by Keating and Benton (2013). Relying on the same data source as the present study but measuring diversity at the *school* level, they found diversity not to have any effect on tolerance, social trust and community attachment.

More broadly, the aforementioned conjecture points to the importance of distinguishing between diversity and segregation (Uslaner, 2012). The latter is not simply the antonym of the former if it relates to a lower level of social aggregation. In this case the two can very well co-exist and any negative effect of diversity may well represent a negative effect of segregation at this lower level. In fact, it may be postulated that diversity only or especially has negative effects if it is accompanied by this lower level segregation. In other words, what makes people particularly fearful of the ethnic other is when they live segregated lives in otherwise diverse social environments.

Other qualifications and observations need to be made. First, the data source included no measures on actual inter-group contact or perceived threat, which meant that only the postulated outcomes of contact and conflict theory could be investigated, and not the causal mechanisms proposed by these theories. Second, the non-effects of changes in diversity on the two outcomes may have been due to the modest magnitude of these changes, rather than to any inter-group interaction mitigating perceptions of threat triggered by an inflow of members of the out-group. Third, the data source only included prior measures of the outcomes when students were already in school. This means school conditions such as diversity could well have already affected these outcomes, complicating an assessment of the net effect of these conditions on changes in the outcomes. Finally, it was not clear whether my measure of trust reflected particularised or generalised trust. Had it clearly represented the latter, it would possibly have been more closely correlated with inclusiveness and would perhaps have shown the same non-relationship with diversity as inclusiveness. Yet, the fact that trust responded to diversity while inclusiveness did not could also reflect the slightly more dynamic character of trust (as shown in Table 2). In other words, maybe there was simply more space for diversity and other school conditions to affect trust.

In second instance the advocates of diverse schools can therefore rest assured. We need to have longitudinal data sources addressing all the limitations mentioned above before more definite conclusions can be drawn on the effect of diversity in school settings on civic dispositions.

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References

Adorno, T.W., 1969. The Authoritarian Personality. Norton, New York.
Alesina, A., Ferrara, E.L., 2002. Who trusts others? Journal of Public Economics 85 (2), 207–234.
Allport, G., 1954. The Nature of Prejudice. Addison-Wesley, Reading, MA.
Benton, T., Cleaver, E., Featherstone, G., Kerr, C., Lopes, J., Whitby, K., 2008. Citizenship Education Longitudinal Study (CELS): Sixth Annual Report Young People's Civic Participation In and Beyond School: Attitudes, Intentions and Influences (Research Report DCSF-RR052). National Foundation for Educational Research, Slough.
Bhattacharyya, G., Ison, L., Blair, M., 2003. Minority Ethnic Attainment and Participation in Education and Training: The Evidence. Research Topic Paper RTP01-03.
Blalock, H.M., 1967. Toward a Theory of Minority-group Relations. John Wiley & Sons, New York.
Blau, P.M., 1974. Parameters of social structure. Am. Sociol. Rev. 39, 615–635.
Blumer, H., 1958. Race Prejudice as a sense of group position. Pacific Sociol. Rev. 1, 3–7.
Brewer, M.B., 1986. The role of ethnocentrism in inter-group conflict. In: Worchel, W., Austin, E. (Eds.), Psychology of Intergroup Relations. Nelson-Hall, Chicago, pp. 88–102.
Burgess, S., Wilson, D., 2005. Ethnic segregation in England's Schools. Trans. Inst. Br. Geograph. 30 (1), 20–36.
Bynner, J., Joshi, H., 2002. Equality and opportunity in education: Evidence from the 1958 and 1970 Birth Cohort Studies. Oxford Rev. Educat. 28, 405–425.
Campbell, D.E., 2007. Sticking together: classroom diversity and civic education. Am. Polit. Res. 35 (1), 57–78.
Coenders, M., 2001. Nationalistic Attitudes and Ethnic Exclusionism in a Comparative Perspective. PhD thesis, Radboud University, Nijmegen.

Crul, M., Vermeulen, H., 2003. The second generation in Europe. Int. Migrat. Rev. 37 (4), 965–986.
Dejaeghere, Y., Hooghe, M., Claes, E., 2012. Do Ethnically diverse schools reduce ethnocentrism? A two-year panel study among majority group late adolescents in Belgian schools. Int. J. Intercult. Relat. 36, 108–117.
Delhey, J., Newton, K., 2005. Predicting cross-national levels of social trust: global pattern or Nordic exceptionalism? Eur. Sociol. Rev. 21, 311–327.
Delhey, J., Newton, K., Welzel, C., 2011. How general is trust in "Most People"? Solving the radius of trust problem. Am. Sociol. Rev. 76 (5), 786–807.
Dinesen, P.T., 2011. Me and Jasmina down by the schoolyard: an analysis of the impact of ethnic diversity in school on the trust of schoolchildren. Soc. Sci. Res. 40, 572–585.
Dinesen, P.T., Sønderskov, K.M., 2012. Trust in a time increasing diversity: on the relationship between ethnic heterogeneity and social trust in Denmark from 1979 until today. Scand. Polit. Stud. 35 (4), 273–294.
Dollase, R., 2001. Die Multikulturelle Schulklasse – oder: Wann ist der Ausländeranteil zu hoch? Zeitschrift für Politische Psychologie 9, 113–126.
Eckstein, K., Noack, P., Gniewosz, B., 2012. Attitudes toward political engagement and willingness to participate in politics: trajectories throughout adolescence. J. Adolescence 35, 485–495.
Frankenberg, E., Lee, C., Orfield, G., 2003. A Multiracial Society with Segregated Schools: Are We Losing the Dream. The Civil Rights Project, Harvard University, Cambridge, MA.
Green, A., Preston, J., Janmaat, J.G., 2006. Education, Equality and Social Cohesion: A Comparative Analysis. Palgrave Macmillan, Basingstoke.
Holme, J., Wells, A., Revilla, A., 2005. Learning through experience: what graduates gained by attending desegregated high schools. Equity Excellence Educ. 38 (1), 14–25.
Hooghe, M., Reeskens, T., Stolle, D., Trappers, A., 2009. Ethnic diversity and generalized trust in europe: a cross-national multilevel study. Comp. Polit. Stud. 42, 198–223.
Jackman, R.W., Miller, R.A., 2005. Before Norms. Institutions and Civic Culture. The University of Michigan Press, Ann Arbor.
Janmaat, J.G., 2010. Classroom Diversity and its Relation to Tolerance, Trust and Participation in England, Sweden and Germany. LLAKES Research Paper No. 4.
Janmaat, J.G., 2012. The effect of classroom diversity on tolerance and participation in England, Sweden and Germany. J. Ethnic Migrat. Stud. 38 (1), 21–39.
Jivraj, S., 2012. How has Ethnic Diversity Grown 1991-2001-2011? Briefing paper. <http://www.ethnicity.ac.uk/census/869_CCSR_Bulletin_How_has_-ethnic_diversity_grown_v4NW.pdf>.
Keating, A., Benton, T., 2013. Creating cohesive citizens in England? Exploring the role of diversity, deprivation and democratic climate at school. Edu., Citizenship Social Just. 8, 165–184.
Knack, S., Keefer, P., 1997. Does social capital have an economic pay-off? A cross-country investigation. Quart. J. Econ. CX11, 1251–1288.
Kokkonen, A., Esaiasson, P., Gilljam, M., 2010. Ethnic diversity and democratic citizenship: evidence from a social laboratory. Scand. Polit. Stud. 33 (4), 331–335.
Kokkonen, A., Esaiasson, P., Gilljam, M., 2011. Ethnic Diversity and Social Trust: A Multilevel Analysis of 3200 School Classes and 22 Countries. Unpublished Paper.
Lancee, B., Sarrasin, O., 2013. 'Why Does Education Correlate with Attitudes towards Immigrants? Educational Attainment versus Selection Effects'. <http://www.wzb.eu/en/research/migration-and-diversity/migration-and-integration/projects/why-does-education-correlate-with-attitude>.
Laurence, J., 2013. Hunkering down or hunkering away?" The effect of community ethnic diversity on residents' social networks. J. Elect., Public Opin. Parties 23 (3), 255–278.
Letki, N., 2008. Does diversity erode social cohesion? Social capital and race in British neighbourhoods. Polit. Stud. 21 (1), 109–123.
Milner, D., 1983. Children and Race: Ten Years On. Ward Lock Educational, London.
Morales, L., 2013. Assessing the effects of immigration and diversity in Europe: introduction to the special issue. J. Elect., Public Opin. Parties 23 (3), 241–254.
Muthen, L.K., Muthen, B.O., 2009. Mplus User's Guide, fifth ed. Authors, Los Angeles, CA.
Newton, K., 2001. Trust, social capital, civil society and democracy. Int. Polit. Sci. Rev. 22 (2), 201–214.
Oliver, J.E., Mandelberg, T., 2000. Reconsidering the environmental determinants of white racial attitudes. Am. J. Polit. Sci. 44, 574–589.
Olzak, S., 1992. The Dynamics of Ethnic Composition and Conflict. Stanford University Press, Stanford, California.
Osberg, L. (Ed.), 2003. The Economic Implications of Social Cohesion. Toronto University Press, Toronto.
Paterson, L., 2013. Comprehensive education, social attitudes and civic engagement. Longitudinal Life Course Stud. 4 (1), 17–32.
Persson, M., 2012. Does type of education affect political participation? Results from a panel survey of Swedish adolescents. Scand. Polit. Stud. 35 (3), 198–221.
Pettigrew, T.F., 1998. Intergroup contact theory. Annu. Rev. Psychol. 49, 65–85.
Pettigrew, T.F., Tropp, L.R., 2006. A meta-analytic test of inter-group contact theory. J. Pers. Soc. Psychol. 90 (5), 751–783.
Putnam, R., 1993. Making Democracy Work: Civic Traditions in Modern Italy. Princeton University Press, Princeton, NJ.
Putnam, R., 2000. Bowling Alone: The Collapse and Revival of American Community. Simon and Schuster, New York.
Putnam, R., 2007. E Pluribus Unum: diversity and community in the twenty-first century, the 2006 Johan Skytte Prize Lecture. Scand. Polit. Stud. 30 (2), 137–174.
Scheepers, P., Felling, A., Peters, J., 1992. Anomie, authoritarianism and ethnocentrism: update of a classic theme and an empirical test. Polit. Indiv. 2 (1), 43–60.
Scheepers, P., Gijsberts, M., Coenders, M., 2002. Ethnic exclusionism in european countries: public opposition to civil rights for legal migrants as a response to perceived ethnic threat. Eur. Sociol. Rev. 18 (1), 17–34.
Schofield, J.W., 2001. Review of Research on School Desegregation's Impact on Elementary and Secondary School Students. In: Banks, J.A., McGee Banks, C.A. (Eds.), Handbook of Research on Multicultural Education. Jossey-Bass, San Francisco, pp. 597–616.
Schulz, W., Ainly, J., Fraillon, J., Kerr, D., Losito, B., 2010. ICCS 2009 International Report: The Civic Knowledge, Attitudes and Engagement Among Lower Secondary School Students in 38 Countries. IEA, Amsterdam.
Soroka, S.N., Johnston, R., Banting, K., 2004. Ethnicity, trust and the welfare state. In: van Parijs, P. (Ed.), Cultural Diversity versus Economic Solidarity. De Boeck, Brussels, pp. 33–58.
Stein, R.M., Post, S.S., Rinden, A.L., 2000. Reconciling context and contact effects on racial attitudes. Polit. Res. Quart. 53, 285–303.
Stolle, D., Hooghe, M., 2004. The roots of social capital: attitudinal and network mechanisms in the relation between youth and adult indicators of social capital. Acta Polit. 39, 422–441.
Stolle, D., Soroka, S., Johnston, R., 2008. When does diversity erode trust? Neighbourhood diversity, generalized trust and the mediating effect of social interactions. Polit. Stud. 56, 57–75.
Stolle, D., Petermann, S., Schmid, K., Schönwälder, K., Hewstone, M., Vertovec, S., Schmitt, T., Heywood, J., 2013. Immigration-related diversity and trust in German cities: the role of intergroup contact. J. Elect., Public Opin. Parties 23 (3), 279–298.
Sturgis, P., Brunton-Smith, I., Read, S., Allum, N., 2011. Does ethnic diversity erode trust? Putnam's "Hunkering Down" thesis reconsidered. Br. J. Polit. Sci. 41, 57–82.
Tolsma, J., van der Meer, M., Gesthuizen, M., 2009. The impact of neighbourhood and municipality characteristics on social cohesion in the Netherlands. Acta Polit. 44 (3), 286–313.
Uslaner, E.M., 2002. The Moral Foundations of Trust. Cambridge University Press, Cambridge, UK.
Uslaner, E.M., 2012. Segregation and Mistrust: Diversity, Isolation, and Social Cohesion. Cambridge University Press, Cambridge.
Van der Meer, T., Tolsma, J., 2011. Unity in Diversity? Ethnic Diversity and Its Supposed Detrimental Effects on Social Cohesion: A Review of 56 Empirical Studies. 6th ECPR General Conference, Reykjavik.

van Geel, M., Vedder, P., 2010. Multicultural attitudes among adolescents: the role of ethnic diversity in the classroom. Group Process. Intergroup Relat. 14 (4), 549–558.
Van Houtte, M., Stevens, P.A.J., 2009. School ethnic composition and students' integration outside and inside schools in Belgium. Sociol. Educ. 82, 217–239.
Vervoort, M.H.M., Scholte, R.H.J., Scheepers, P.L.H., 2011. Ethnic composition of school classes, majority–minority friendships, and adolescents' intergroup attitudes in the Netherlands. J. Adolescence 34 (6), 257–267.
Wagner, U., Hewstone, M., Machleit, U., 1989. Contact and Prejudice between Germans and Turks. Human Relat. 42, 561–574.
Whitty, G., Power, S., Halpin, G., 1988. Devolution and Choice in Education: The School, the State and the Market. Open University Press, Buckingham.
Wilkinson, R., 1996. Unhealthy Societies: The Affluence of Inequality. Routledge, London.
Wuthnow, R., 1997. The Role of Trust in Civic Renewel. Working Paper #1. College Park, MD: National Commission on Civic Renewal.