Abstract
In various European countries, policy-makers strive for educational desegregation to enhance pupils’ national identifications. Since little empirical evidence supports such a policy and social identity theorists emphasize the importance of context, this article examines the impact of ethnic school composition – measured by the proportion of non-natives and ethnic heterogeneity – on the national (Belgian) and sub-national (Flemish) identifications of pupils. Multi-level data analyses from the surveying of 2,845 pupils (aged 10–12) in sixty-eight Flemish primary schools reveal differential effects for natives and non-natives. While the proportion of non-natives at school is negatively associated with non-native pupils’ identifications, it is positively related to native pupils’ identifications. In general, the ethnic heterogeneity of the school is negatively associated with pupils’ national and sub-national identifications. Our findings indicate that the relation between ethnic school composition and pupils’ identifications is mediated by the latter’s inter-ethnic friendships. The consequences of these findings for educational policy are discussed.

Keywords: National identification; sub-national identification; educational segregation; ethnic school composition; school diversity.

Introduction
A growing concern about ethnic school segregation is evident in many European countries. Such separation is considered not only unfavourable for educational achievement but also an obstruction to the social integration of immigrant and minority pupils (for Belgium: Jacobs, Rea and Teney 2009; Van Houtte and Stevens 2009; for England: Burgess, Wilson and Lupton 2005; for France: Felouzis 2005; for Germany:
Kristen 2005; for the Netherlands: Westerbeek 1999; Karsten et al. 2006; for Sweden: Szulkin and Jonsson 2006). For example, in the aftermath of the 2001 riots in the UK, the ever-growing absence of social cohesion was linked to educational and residential ethnic segregation. Policy-makers argued that desegregation is a requisite for the cultivation of a sense of citizenship, in particular a stronger national identification, i.e. Britishness, and sub-national identification, i.e. Englishness (Cantle 2001; Ouseley 2001; Maxwell 2009). Similar evolutions took place in France. Although the topic of social integration there is commonly linked to the issue of residential segregation (les banlieues), educational segregation is seen as one of the most essential obstacles to attaining a stronger French national identification (Payet 1998; Felouzis 2005). In other words, policy-makers in different countries generally work towards the dispersal of minority/immigrant pupils (we call these groups non-natives), as they believe that the mixing of ethnicities in schools will enhance academic achievement and national identification, particularly with respect to non-native pupils (Mahieu 2002; Burgess, Wilson and Lupton 2005).

However, these policies lack a firm evidential foundation, since little empirical research has been conducted into the determinants of national identifications among children and young adolescents (e.g. Carrington and Short 1995; Verkuyten 2001; Barrett 2002; Reizábal, Valencia and Barrett 2004; Lam and Smith 2009). Moreover, although theorists of identity insist that social identifications are strongly dependent on contextual factors (Oakes, Haslam and Turner 1994), the impact of school attendance in segregated or integrated contexts on the national identifications of native and non-native pupils is obscure. While research has been conducted primarily into the effect of ethnic school segregation on educational achievement, inter-ethnic friendship and racial attitudes (for reviews, see Schofield 1991; Braddock and Eitle 2004), studies linking school segregation to social identifications have focused mostly on ethnic identity and in-group/out-group evaluations (Kinket and Verkuyten 1999; Umaña-Taylor 2004). Hence, the relation between de facto school segregation and the national identifications of pupils remains generally unknown, and consequently the above-stated political beliefs concerning the negative impact of ethnic school context on the development of national identifications are not based on empirical observations.

The main aim of this study is to address this lacuna. More specifically, we investigate the impact of ethnic school context – in terms of ethnic concentration and the ethnic heterogeneity/diversity of the student body – on the national identifications of 2,845 pupils in sixty-eight elementary schools in Flanders. Flanders, which is the Dutch-speaking regional state of Belgium, is a unique context, since, as an autonomous state, it is responsible for almost every aspect of
educational policy. Therefore, besides the Belgian national identification, we also investigate the determinants of sub-national, that is, the Flemish identification of pupils.

National identification

As with gender or religious identifications, national identification can be regarded as a part of the individual’s social identity (Barrett 2002). Tajfel (1981, p. 255) defines social identity as ‘that part of an individual’s self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership’. Drawing upon this definition, national identification can be considered as the self-identification and emotive meaning that an individual derives from membership in a national group.

In contrast to the large number of studies on ethnic and gender identity, relatively little research has been conducted on the national identity of children and young adolescents. Early studies have examined the time span of the national identification process in children. These studies reveal that children begin to categorize themselves as members of a national group by ages 5 or 6. At this moment, however, children’s gender and age identities seem to be more salient than their national identity. Nevertheless, national identity tends to increase in importance until the age of 11 or 12. By the age of 10, youngsters are able to describe the characteristics of their national group (for reviews, see Barrett 2002; Reizábal, Valencia and Barrett 2004).

More recently, different authors have focused on the impact of national identification on children’s in-group favouritism. For example, Barrett (2002) reports that youngsters who categorized themselves as ‘quite British’ or ‘very British’ were more likely to link British people with positive adjectives, such as ‘friendly’, ‘nice’, ‘clean’. Studies of children and young adolescents in the Netherlands (Kinket and Verkuyten 1999) and in the Basque country (Reizábal, Valencia and Barrett 2004) reveal similar results.

Qualitatively oriented research has focused on the negotiation of national identity by children and young adolescents, concentrating on the meaning derived by them from ‘belonging’ to a nation-state and the construction of their national identifications through the education system (for Australia: Howard and Gill 2001; for Greek Cyprus: Philippou 2005; for Ireland: Tormey 2006; for Scotland: Carrington and Short 1995). These studies underline the importance of the national context in which national identities are formed and negotiated. For example, Philippou (2005) shows that the importance placed on national identity by Greek Cypriot pupils was related to the highly politicized context of Cyprus, namely, the presence of a
‘national enemy’ on the island. In contrast, Howard and Gill (2001) indicate that Australian children were mostly uninterested in and unconcerned about being Australian.

National identification and ethnic minorities

When we take ethnic differences into account, this picture becomes more complex. For years, the one-dimensional assimilation model was the dominant framework. The theories based on it suggested that national identification and ethnic identification are antipodal, implying that the strength of the ethnic identify of non-natives determines the degree of their national identity (Phinney 1990). By contrast, current scholars argue for a bi-dimensional model. They have pointed out that ethnic identification does not necessarily compete with national identification, since people can combine multiple identities (Hutnik 1991; Phinney et al. 2001). For example, a Turkish immigrant in Flanders may perceive himself as ‘very Belgian’ (national identification) and simultaneously as ‘very Flemish’ (sub-national identification) and ‘very Turkish’ (ethnic identification). This is the notion of hyphenated or multiple identities (Gaertner and Dovidio 2000; Verkuyten 2004; Modood 2005).

Previous empirical studies on national identifications of immigrants and ethnic minorities have generally shown that these non-native groups identify less with the national category than natives do (for studies of Belgium, see Phalet and Swyngedouw 2002; Van Craen, Vancluysen and Ackaert 2007). Research on children and young adolescents reveals similar results (Carrington and Short 1995; Barrett 2002; Lam and Smith 2009). Barrett (2002) indicates that white English children have a higher level of both ‘Englishness’ and ‘Britishness’ than children from ethnic minority groups. A study conducted by Carrington and Short (1995) with 8- to 11-year-old children demonstrates that more than 90 per cent of native children answered ‘British’ when responding to the question ‘Are you British or something else?’. By contrast, only 38 per cent of non-native children said they were ‘British’, while a fifth claimed a specific ethnic identity, such as ‘Chinese’ or ‘Jamaican’. In line with the idea of ‘hyphenated identities’, 25 per cent of non-natives described themselves as having both ethnic and national identity.

For the purpose of the present study, it is important to note that various authors have argued that national identification is partly determined by the social context. For instance, Vadher and Barrett (2009) show that the British identity of Indian and Pakistani is different in private and public spheres. These authors suggest that at the public level (e.g. at school) the British identity is more dominant than it is at the private level (e.g. at home). In their discussion, Lam and Smith (2009) argue that the ethnic school context may be an
important determinant of national identifications, but, unfortunately, they do not provide empirical evidence to test this hypothesis.

**Identification and ethnic school composition**

Children and young adolescents spend almost half of their waking hours in a school context. Most theories on identity, self-categorization theory in particular, emphasize that social identities are strongly dependent on context (Tajfel 1981; Oakes, Haslam and Turner 1994), and empirical evidence supports this point (Hopkins and Murdoch 1999). It is, then, surprising that the relation between the school context and the national identifications of pupils is widely neglected. Therefore, our primary goal in this paper is to examine the manner in which pupils’ national (Belgian) and sub-national (Flemish) identifications are influenced by contextual school factors, especially the ethnic composition of the student body, as measured by the proportion of non-native pupils (i.e. ethnic minority concentration) and the ethnic diversity/heterogeneity at school (see ‘Variables’ section below).

**Reference group theory**

Reference group theory (Kelley 1952; Hyman and Singer 1968; Merton 1968) is a suitable starting point to investigate the association between ethnic minority concentration and the national and sub-national identifications of pupils. According to this theory, a group, in a given context, might constitute either a normative reference or a comparative reference group for individuals. When the group functions as the former, it sets and enforces standards for individuals. This means that when the normative reference group tends to exhibit high national identifications, the individual will also be inclined to have a higher national identification. On the other hand, when the group functions as a comparative reference group, it does not function as the norm, but as a benchmark against which individuals compare and judge themselves. In this case, the contrast between the individual and the group is highlighted, which might enlarge the differences between them (Kelley 1952).

According to Merton (1968), individuals initially tend to choose their own group as their reference group. However, individuals might also choose groups to which they do not belong (e.g. a non-native pupil considering the native group as the point of reference). Because the relative size of a group in a given context (school) may increase or decrease the probability that it is chosen as a reference group, the proportion of natives or non-natives at school will be related to the likelihood that such groups will be chosen as the point of reference by individuals. As such, when normative reference group processes prevail and the proportion of native pupils at school increases (lower ethnic
minority concentration), native pupils are more likely to be the normative reference group for both native and non-native individuals at school. This implies that the standards of natives (i.e. high national identification, see above) will be the norm for non-native individuals and might increase the latter’s low national identifications. However, we do not expect that native individuals will be affected by the native reference group, since they already have high national identifications. In sum, the normative reference group theory generates the following hypothesis:

**H1:** An increasing proportion of native pupils at school (lower ethnic minority concentration) will be related to higher levels of national and sub-national identifications for non-native pupils.

However, as stated above, *comparative* reference group processes might prevail as well. In this case, when the proportion of natives increases (lower ethnic minority concentration), the native groups’ high national identification becomes a benchmark against which non-native individuals will compare themselves, which might further decrease their national identifications. On the other hand, an increasing ethnic minority concentration implies that the low national identifications of the non-native group will be the yardstick for native pupils. This contrast between the low identification of the non-native reference group and the high identifications of native individuals can be expected to further increase the national identifications of native pupils. Hence, drawing upon the comparative reference group framework the following hypotheses can be formulated. Note that hypothesis 2 is in conflict with hypothesis 1 above.

**H2:** An increasing proportion of native pupils at school (lower ethnic minority concentration) will be related to lower levels of national and sub-national identifications for non-native pupils.

**H3:** An increasing proportion of non-native pupils at school (higher ethnic minority concentration) will be related to higher levels of national and sub-national identifications for native pupils.

**Constrict theory**

Reference group theory is related to ethnic minority concentration, that is, the proportion of non-native pupils at school. In the literature, minority concentration is often confused with *ethnic diversity/heterogeneity*. However, these are two distinct concepts and two distinct measurements of ethnic composition (see Putnam 2007; Van Houtte and Stevens 2009). Ethnic diversity or heterogeneity refers to the degree of ethnic difference in a given context. For example, a school in
England with Pakistani children only is less diverse than a school in which all the children are from different ethnic groups. To conceptu-
alyze the impact of ethnic diversity/heterogeneity at school level, we consider the ‘constrict theory’ as described in Putnam (2007).

According to constrict theory the degree of ethnic diversity in a
given context triggers social anomie or social isolation. In ethnically
diverse environments, both natives and non-natives will be less
engaged in collective actions and will have fewer close friends. It
should be noted that Putnam states that this tendency applies only to
the short run; in the long term, the wider benefits of ethnic diversity
are evident. However, in the short term, ethnically diverse settings can
be expected to be associated with a decrease in collectivity: ‘People
living in ethnically diverse settings appear to “hunker down” – that is,
to pull in like a turtle’ (Putnam 2007, p. 149). The original constrict
theory takes neighbourhoods as units of contextual analysis, while we
will test this hypothesis in the school context. Similarly, the original
constrict theory does not link ethnic diversity/heterogeneity directly
to national identifications, but to collectivity. However, we consider
pupils’ national and sub-national identifications as an utterance of
such collectivity. After all, both native and non-natives are expected to
share these collective identities. Flanders, for instance, is witnessing a
growing tendency to address non-natives as ‘new Belgians’ or ‘new
Flemings’, whereas in the past they were called primarily ‘immigrants’.
In sum, the following hypothesis can be formulated by drawing upon
the constrict theory:

**H4:** Increasing ethnic diversity at school level will be associated with
a decrease in national and sub-national identification for both
native and non-native pupils.

**Inter-ethnic friendship as mediator**

The school effects literature underlines the importance of intermediate
relations, that is, of mediator variables that clarify the relationship
between structural school features and the dependent variable (for
reviews, see Teddlie and Reynolds 2000; Van Houtte 2005). Therefore,
the impact of ethnic school composition on the identifications of pupils
should not be understood as a mechanical one, but rather as a mediating
process. With regard to social identification, the common ingroup
identity model (CIIM) (Gaertner and Dovidio 2000) points to the
importance of inter-ethnic contact and friendships. According to the
CIIM, when extended contact takes place between individuals from
different social groups, these individuals will show a greater propensity
to re-categorize their social identities towards those that connect both
groups. For non-natives, this implies that increasing contact and
friendship with natives might result in increasing national and sub-national identification (see Van Craen, Vancluysen and Ackaert 2007; Maxwell 2009). For natives, on the other hand, increasing contact and friendship with non-natives might temper their national and sub-national identifications, to minimize the social distance between them.

For pupils, these inter-ethnic friendships, in turn, are partly determined by the ethnic composition of the school, since several studies have shown that in schools with higher ethnic heterogeneity, pupils engage more in inter-ethnic friendships (Goldsmith 2004; Van Houtte and Stevens 2009). Hence, a mediational model can be formulated, which states that, given the expected association between ethnic school composition and inter-ethnic friendship and the relationship between inter-ethnic friendship and national identification, the following hypothesis emerges:

**H5**: The impact of the ethnic school composition on pupils’ national and sub-national identifications (H1, H2, H3 and H4) will be mediated by the amount of their inter-ethnic friendships.

### Methods

#### Sample

We used data gathered in 2008–9 from 2,845 pupils (mean age 11.61) in a sample of sixty-eight primary schools in Flanders as part of the Segregation in Primary Education in Flanders (SIPEF) project. Multi-stage sampling was conducted. In the first instance, in order to encompass the entire range of ethnic composition, we selected three cities in Flanders with ethnically diverse populations. Second, using data gathered from the Flemish Educational Department, 116 primary schools within these selected cities were asked to participate; this yielded a positive response of 54 per cent. This relatively high non-response of schools is because Flemish schools are commonly swamped with such requests from investigators, generally resulting in a ‘first come, first served’ outcome. As such, the participating schools did not differ from those that opted out in terms of school sector (i.e. private and public schools) or ethnic composition (as measured by the proportion of non-native pupils). The schools in this dataset encompass the entire range of ethnic composition, from schools having almost no non-native pupils to pure-minority-concentrated schools having 100 per cent non-native pupils. Within these schools, our research team asked all fifth-grade pupils present at school during our visit to fill out a written questionnaire. If the number of fifth-grade pupils was fewer than thirty, we surveyed all the sixth-grade pupils as
well. The pupils completed the questionnaires in class in the presence of one or two researchers and a teacher. The questionnaires were anonymous and were analysed in complete confidentiality.

**Research design**

Given that we are dealing with a clustered sample of pupils nested within schools and with data at different levels, namely, variables of ethnic school composition as the main determinants at the school level and national and sub-national identifications as outcome at pupil level, the use of hierarchical linear modelling is most appropriate (HLM6) (Raudenbush and Bryk 2002). As is common in multi-level analyses, we start by estimating unconditional models to determine the amount of variance that occurs among schools regarding national and sub-national identifications. Then, we add the main determinants to the model, controlling systematically for school features (size and sector) and pupil features (gender, grade, socioeconomic status). In the second model, we add ethnic heterogeneity/diversity at school level, and in the third model inter-ethnic friendship at pupil level. HLM provides only unstandardized gamma coefficients; to evaluate the strength of the associations, we standardize these coefficients. We carry out each analysis separately for native and non-native pupils, since the association between ethnic school composition and national/sub-national identification is hypothesized to be different for both groups.

**Variables**

*Ethnic origin.* Since all the analyses are performed separately for native and immigrant pupils, it is important to explain how we have made the distinction between them. The principal criterion was the birthplace of the pupils’ grandmothers. If these data were missing, we considered their mothers’ and fathers’ birthplaces, as most non-native pupils in Flanders are second- or third-generation immigrants. We consider eleven broad ethnic groups: 1) native Belgians (46.7 per cent); 2) West Europeans including pupils of Dutch, French, or German origin (5.6 per cent); 3) South Europeans, including pupils of Italian or Spanish origin (6.6 per cent); 4) Turks (13 per cent); 5) Moroccans (15.6 per cent); 6) other North Africans (1 per cent); 7) East Europeans (5.8 per cent); 8) sub-Saharan Africans (1.8 per cent); 9) Middle Easterners (1.2 per cent); 10) Southeast Asians (1.7 per cent); 11) others (1.1 per cent). As is common practice, and in line with the official Flemish definition of non-native groups, only West European origins (groups 1 and 2) were considered as producing native descent (see Van Houtte and Stevens 2009). As such, we created a dichotomous variable (0 = native, 1 = non-native).
Outcomes. To assess national (Belgian) and sub-national (Flemish) identification, we used a scale based on five items from the Collective Self-Esteem Scale (Luhtanen and Crocker 1992). Similar items were successfully used with same age children in previous studies in the Netherlands (Verkuyten 2001). The items are as follows: ‘I consider myself as a Belgian/Fleming’; ‘I often regret that I am Belgian/Flemish’ (reverse scored); ‘I am glad to be a Belgian/Fleming’; I often feel that Belgium/Flanders is worthless’ (reverse scored); ‘I feel good about Belgium/Flanders’. There are five answer categories, ranging from ‘absolutely do not agree’ (1) to ‘completely agree’ (5). Responses to these five items were averaged. An exploratory factor analysis revealed that there was one underlying identity dimension for both scales. For the Belgian identification scale, the lowest loading is .62, with an eigenvalue of 2.76 (explaining 55.26 per cent of variance) and a Cronbach’s alpha of .80. For the Flemish identification scale, the lowest loading is .66, with an eigenvalue of 2.95 (explaining 58.52 per cent of variance) and a Cronbach’s alpha of .82. Table 1 demonstrates that, on average, native pupils have a significantly stronger Belgian identification (M = 4.38, SD = 0.69) and Flemish identification (M = 4.22, SD = 0.83) than non-native pupils, respectively (M = 3.18, SD = 0.89, t = 37.99, p < 0.001) and (M = 3.13, SD = 0.92; t = 31.10, p < 0.001).

School-level variables. As stated above, the school ethnic composition is measured by two indicators. First, we consider ethnic minority concentration, that is, the proportion of non-native respondents in a school in our database. On average, the proportion of non-native pupils is 51.50 per cent (SD = 34.16; Table 1). The minority concentration ranges from 2.63 per cent to 100 per cent non-native pupils.

The second indicator of a school’s ethnic composition measures the ethnic diversity/heterogeneity within a school, expressed as the total number of different groups of non-natives, corrected by their size. We use an index of ethnic diversity, which is the Herfindahl index as used by Putnam (2007) multiplied by −1, since Putnam in fact calculated an index of homogeneity, whereas we are interested in heterogeneity. The used index is calculated as \( (p_{\text{ethnic group 1}})^2 + (p_{\text{ethnic group 2}})^2 + \ldots + (p_{\text{ethnic group n}})^2 \). We included the eleven ethnic groups listed above. The index has a range of −1 to 0 and a value of −1 implies no diversity at all, that is, only one ethnic group is enrolled in the school. A value that approaches zero means total diversity: all pupils in school have a different ethnic origin. In our data, on average, schools have a value of −0.46 (SD = 0.20).

We determined the school size from the total number of pupils, using data gathered from the Flemish Educational Department. The number of pupils varies from ninety-one in the smallest school to 526 in the largest. The schools catered for an average of 223 pupils (SD = 104.03;
Table 1. Descriptive statistics for the dependent and independent variables: frequencies, means, standard deviations and results of t-test comparing native and non-native pupils

<table>
<thead>
<tr>
<th>Variables</th>
<th>Total</th>
<th></th>
<th></th>
<th></th>
<th>Natives</th>
<th></th>
<th></th>
<th></th>
<th>Non-natives</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>School level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% school sector (private)</td>
<td>51.47</td>
<td>50.35</td>
<td>53.23</td>
<td>50.30</td>
<td>51.47</td>
<td>50.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School size</td>
<td>222.91</td>
<td>(N=68)</td>
<td>104.03</td>
<td>226.27</td>
<td>(N=62)</td>
<td>107.68</td>
<td>222.91</td>
<td>(N=68)</td>
<td>104.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% non-native</td>
<td>51.50</td>
<td>34.16</td>
<td>46.80</td>
<td>32.06</td>
<td>51.50</td>
<td>34.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic diversity</td>
<td>0.46</td>
<td>0.20</td>
<td>0.44</td>
<td>0.18</td>
<td>0.46</td>
<td>0.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pupil level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% grade (sixth)</td>
<td>29.98</td>
<td>(N=2845)</td>
<td>45.82</td>
<td>26.83</td>
<td>(N=1487)</td>
<td>44.32</td>
<td>33.43</td>
<td>(N=1358)</td>
<td>47.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% gender (female)</td>
<td>50.53</td>
<td>(N=2827)</td>
<td>49.98</td>
<td>52.12</td>
<td>(N=1479)</td>
<td>49.97</td>
<td>50.89</td>
<td>(N=1348)</td>
<td>50.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES</td>
<td>4.44</td>
<td>(N=2676)</td>
<td>2.22</td>
<td>5.44</td>
<td>(N=1464)</td>
<td>1.94</td>
<td>3.24</td>
<td>(N=1212)</td>
<td>1.92</td>
<td>2.20 t=29.40***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inter-ethnic friendship</td>
<td>2.28</td>
<td>(N=2561)</td>
<td>1.07</td>
<td>1.95</td>
<td>(N=1371)</td>
<td>0.84</td>
<td>2.66</td>
<td>(N=1190)</td>
<td>1.17</td>
<td>0.71 t=17.37***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National identification</td>
<td>3.82</td>
<td>(N=2621)</td>
<td>0.98</td>
<td>4.38</td>
<td>(N=1409)</td>
<td>0.69</td>
<td>3.18</td>
<td>(N=1212)</td>
<td>0.89</td>
<td>1.20 t=37.99***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-national identification</td>
<td>3.72</td>
<td>(N=2522)</td>
<td>1.03</td>
<td>4.22</td>
<td>(N=1370)</td>
<td>0.83</td>
<td>3.13</td>
<td>(N=1152)</td>
<td>0.92</td>
<td>1.09 t=31.10***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ 0.05, **p ≤ 0.01, ***p ≤ 0.001
Table 1). Finally, the variable *school sector* distinguishes between thirty-three public schools (municipal schools and state schools; score 0) and thirty-five private schools (score 1). It should be noted that, in the Flemish educational system, no distinction is made between public schools and private schools with respect to state support.

**Individual-level independent variables.** Four individual-level variables were included in the multi-level analysis. Our research concentrated on the fifth- and sixth-grade pupils. Therefore, most of the respondents were age 11 (about 49 per cent) or 12 (about 36 per cent) in 2009. It should be noted that psychological research points out that this period is decisive for developing a national identity (Barrett, Wilson and Lyons 2003). Given the high multicollinearity between age and grade (Cramer’s $V = 0.64; p < 0.000$), we had to choose between one of these two variables to enter the model. We opted for grade because the sample was unbalanced for grade.

The sample was equally divided with respect to *gender*, with 51.2 per cent of the respondents being female (male = 0, female = 1).

We measured the *socioeconomic status* (SES) of origin of the pupils by means of the occupational prestige of the father and mother (Erikson, Goldthorpe and Portocarero 1979); the higher of the two is used as an indicator of the SES of the family. The respondents have a mean SES of 4.44 (SD = 2.22). On average, the non-native pupils have a significantly lower SES ($M = 3.24, SD = 1.92$) than the native pupils ($M = 5.44, SD = 1.94$; Table 1).

Finally, to measure pupils’ *inter-ethnic friendship* we asked native respondents to state how many of their friends at school had a non-Belgian origin, and we asked non-native pupils to state how many of their friends at school had a Belgian origin. There were five possible answers: nobody (score 1), a few (score 2), half of them (score 3), most of them (score 4) and all of them (score 5). As can be seen from Table 1, on average native pupils have lower scores on inter-ethnic friendship ($M = 1.95, SD = 0.84$) than non-native pupils do ($M = 2.66, SD = 1.17, t = 17.37, p < 0.001$).

**Results**

**Unconditional model**

Does the school context matter with respect to pupils’ identifications? To provide an answer to this question, Table 2 presents the variance components from the unconditional models. We are particularly interested in the explained variance at school level, computed as the between-school variance component divided by the sum of within-school and between-school variance ($\tau_0 / \sigma^2 + \tau_0$). Consistent with other
school-effect research (Teddlie and Reynolds 2000), most of the variation occurs within schools, between pupils. Nevertheless, justifying the need for a multi-level analysis, Table 2 indicates that significant amounts of the variances in pupils’ identifications are explained at school level (p < 0.001). It is also clear that the school context is more relevant for non-native pupils than it is for native pupils’ identifications: for non-natives around 12 per cent of the variance in national identification and 11 per cent variance in sub-national identification at school level, whereas the figure for natives is respectively around 3 per cent and 6 per cent (Table 2).

### National identification

With respect to national (Belgian) identifications of non-native pupils, Model 1b (Table 3) indicates that non-native pupils attending schools with a higher proportion of non-native pupils tend to exhibit lower levels of national identity \((\gamma = -3.20; p < 0.001)\), controlling for school characteristics (size and sector) and pupil-level control variables (grade, gender and SES). The addition of ethnic heterogeneity in the Model 2b does not change this picture, and ethnic heterogeneity is initially not significantly associated with Belgian identification of non-native pupils \((\gamma = -0.066; p = 0.158; \text{Table 3})\). However, as we consider inter-ethnic friendship in Model 3b, the relation between both the ethnic composition variables and national identification changes considerably. First, entering inter-ethnic friendship reduces the effect of minority concentration, which is no longer significant. Inter-ethnic friendship, in turn, is positively related to non-native pupils’ Belgian identifications \((\gamma = 0.298; p < 0.001)\). Second, ethnic diversity/heterogeneity becomes negatively related to national identifications of non-native pupils (Model 3b, Table 3). These findings are

### Table 2. Variance components for national (Belgian) and sub-national (Flemish) identification from the unconditional model

<table>
<thead>
<tr>
<th></th>
<th>Natives</th>
<th></th>
<th>Non-natives</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Belgian identification</td>
<td>Flemish identification</td>
<td>Belgian identification</td>
<td>Flemish identification</td>
</tr>
<tr>
<td>Within-school variance (\tau_p)</td>
<td>0.458</td>
<td>0.660</td>
<td>0.712</td>
<td>0.769</td>
</tr>
<tr>
<td>Between-school variance (\sigma^2)</td>
<td>0.013</td>
<td>0.039</td>
<td>0.095</td>
<td>0.092</td>
</tr>
<tr>
<td>% variance between schools</td>
<td>2.76***</td>
<td>5.53***</td>
<td>11.82***</td>
<td>10.68***</td>
</tr>
</tbody>
</table>

*p ≤ 0.05, **p ≤ 0.01, ***p ≤ 0.001*
Table 3. Influences on national (Belgian) identification: results of the multi-level analysis, standardized gamma coefficients with the standard errors in parentheses

<table>
<thead>
<tr>
<th></th>
<th>Natives</th>
<th>Non-natives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1a</td>
<td>Model 2a</td>
</tr>
<tr>
<td>School level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School sector</td>
<td>$-0.032 (0.048)$</td>
<td>$-0.041 (0.047)$</td>
</tr>
<tr>
<td>School size</td>
<td>$0.018 (0.000)$</td>
<td>$0.030 (0.000)$</td>
</tr>
<tr>
<td>Minority</td>
<td>$0.011 (0.084)$</td>
<td>$0.104 (0.209)$</td>
</tr>
<tr>
<td>Heterogeneity</td>
<td>$-0.078 (0.274)$</td>
<td>$-0.119* (0.243)$</td>
</tr>
<tr>
<td>Pupil level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade</td>
<td>$0.023 (0.063)$</td>
<td>$0.019 (0.063)$</td>
</tr>
<tr>
<td>Gender</td>
<td>$-0.022 (0.035)$</td>
<td>$-0.022 (0.035)$</td>
</tr>
<tr>
<td>SES</td>
<td>$0.092** (0.011)$</td>
<td>$0.093** (0.011)$</td>
</tr>
<tr>
<td>Inter-ethnic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>friendship</td>
<td>$-0.156*** (0.028)$</td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ 0.05, **p ≤ 0.01, ***p ≤ 0.001, †p = 0.065
in line with the hypotheses which we derived from normative reference group theory (H1), constrict theory (H4) and the common ingroup identity model (CIIM) (H5) and disconfirm the hypothesis drawn from comparative reference group theory (H2): for non-native pupils ethnic minority concentration has a negative effect on their national identifications, which can be explained by the number of their inter-ethnic friendships. The negative impact of ethnic diversity/heterogeneity is suppressed by inter-ethnic friendship.

Considering the effects on native pupils, ethnic school composition variables are initially not significantly associated with their national identifications (Model 1a–2a, Table 3). However, in Model 3a, it becomes clear that there is a suppression effect caused by inter-ethnic friendship. After the addition of inter-ethnic friendship, ethnic minority concentration became significantly positively related to the national identifications of native pupils, while inter-ethnic friendship is negatively related to their national identifications (Model 3a, Table 3). This means that the increasing presence of non-native pupils at school positively impacts on this group’s national identification, while inter-ethnic friendship tempers their national identification. Second, when inter-ethnic friendship is held constant, ethnic diversity/heterogeneity is negatively related to native pupils’ Belgian identification, even though this effect is borderline ($\gamma = -0.119; p < 0.065$). These findings are in line with the hypotheses which we derived from comparative reference group theory (H3), constrict theory (H4) and CIIM (H5).

Finally, while the individual level influences are not the primary concern of this article, it is worth mentioning that SES is positively related only to native pupils’ national identifications (a stronger Belgian identification for pupils with higher SES) and that non-native girls exhibit a higher level of Belgian identity than non-native boys. Grade is not associated with Belgian identification (Table 3). When we entered age instead of grade (not shown here), there was no substantial difference with respect to the results.

Sub-national identification

Considering sub-national (Flemish) identifications of non-native pupils, the results are similar to those for their Belgian identifications (Table 4; Model 1b–3b): the strong negative impact of minority concentration in the first two models disappears in the third model, after controlling for inter-ethnic friendship, while a relatively small but significant negative effect of ethnic heterogeneity appears after the addition of inter-ethnic friendship ($\gamma = -0.080; p < 0.05$). This means that non-native pupils tend to exhibit higher levels of both national and sub-national identity in schools with a lower proportion of non-native pupils, and this finding can be explained by the increasing opportunities for inter-ethnic
Table 4. Influences on sub-national (Flemish) identification: results of the multi-level analysis, standardized gamma coefficients with the standard errors in parentheses

<table>
<thead>
<tr>
<th>School level</th>
<th>Natives</th>
<th>Non-natives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1a</td>
<td>Model 2a</td>
</tr>
<tr>
<td>School sector</td>
<td>0.015 (0.056)</td>
<td>0.006 (0.054)</td>
</tr>
<tr>
<td>School size</td>
<td>0.044 (0.000)</td>
<td>0.057 (0.000)</td>
</tr>
<tr>
<td>Minority concentration</td>
<td>-0.075 (0.110)</td>
<td>0.023 (0.229)</td>
</tr>
<tr>
<td>Heterogeneity</td>
<td>-0.083 (0.313)</td>
<td>-0.083 (0.308)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pupil level</th>
<th>Natives</th>
<th>Non-natives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1a</td>
<td>Model 2a</td>
</tr>
<tr>
<td>Grade</td>
<td>0.051 (0.058)</td>
<td>0.049 (0.059)</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.055 (0.042)</td>
<td>-0.055 (0.042)</td>
</tr>
<tr>
<td>SES</td>
<td>0.147*** (0.014)</td>
<td>0.150*** (0.014)</td>
</tr>
<tr>
<td>Inter-ethnic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>friendship</td>
<td>-0.071* (0.034)</td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ 0.05, **p ≤ 0.01, ***p ≤ 0.001
friendship in such schools. In addition, in schools with a higher ethnic diversity/heterogeneity, non-native pupils have lower Flemish identifications when their inter-ethnic friendships are held constant. Analogous to the effects on Belgian identification, non-native pupils tend to have higher Flemish identification when they have more native friends, and non-native girls are more likely to have higher sub-national identifications than non-native boys (Model 1b–3b; Table 4). Again, these findings are in line with H1, H4 and H5, while disconfirming H2.

With respect to native pupils’ sub-national identifications, however, Table 4 indicates that there is no school-level variable significantly associated with native pupils’ sub-national identifications. Hence, with respect to Flemish identification of native pupils, we could not find support for any of our hypotheses. The individual level effects were similar to those on Belgian identification: a higher SES is positively related to native pupils’ Flemish identifications, and increase in inter-ethnic friendships is associated with decreasing Flemish identification (Table 4; Model 1a–3a).

Discussion and conclusion

In different European countries, policy-makers strive for the dispersal of non-native pupils, believing that the mixing of pupils of different ethnic groups will enhance the social integration and national identifications of youngsters. Given the lack of research supporting such policy practices and because theorists of identity emphasize the importance of contexts, the aim of this study was to explore the association between ethnic school composition and pupils’ national and sub-national (Belgian and Flemish) identifications.

The results of this inquiry indeed indicate that the ethnic composition of schools is significantly related to national identifications and partly related to sub-national identifications of native and non-native pupils. First, ethnic minority concentration, as measured by the proportion of non-native pupils at school, has a negative impact on non-native pupils’ Belgian and Flemish identifications, while it has a positive impact on native pupils’ Belgian identifications. In other words, normative and comparative reference group processes prevail for non-natives and for natives respectively. An explanation of this differential effect could be derived from the general reference group theory, as it insists that normative reference processes are more likely to occur when individuals are striving for acceptance by the reference group (Merton 1968). Given the socially dominant position of natives within Flemish society, we assume that non-natives are striving to obtain recognition from the native group. This might explain why normative reference processes prevailed for non-natives. Furthermore, this study lends support to the prediction that we derived from the
constrict theory: as ethnic heterogeneity/diversity rises at school level, the national identifications of native and non-native pupils decrease.

Four remarks should be added to what has been stated above. First, the relation between ethnic school composition variables and pupils’ national and sub-national identifications is not a mechanical one, but, as expected, it is mediated by inter-ethnic friendships. In general, inter-ethnic friendship has a positive impact on non-native pupils’ national and sub-national identifications, while it tempers the identifications of native pupils. Second, compared to the impact of ethnic minority concentration, the size of the effect of ethnic diversity/heterogeneity is much smaller. Third, ethnic diversity/heterogeneity decreases pupils’ identifications only when inter-ethnic friendship is held constant. In other words, the negative impact of ethnic diversity/heterogeneity is suppressed by inter-ethnic friendship. This means that ethnic diversity/heterogeneity as such does not affect Flemish and Belgian identifications; rather it impacts on them only if pupils do not engage in inter-ethnic friendship relations. Fourth, we did not find a significant association between any school-level variable and native pupils’ Flemish identifications. This could be explained by the political situation in Flanders where Flemish identity is being used by far right-wing and racist politics. Therefore, native pupils’ Flemish identifications are potentially expressed with a certain restraint to avert an association with racism. However, this post hoc explanation should be examined in further research.

While individual-level influences were not the primary concern of this article, an interesting finding is that non-native girls have higher Belgian and Flemish identifications than non-native boys. Maxwell (2009) argues that a higher level of perceived discrimination by the broader society contributes to lower levels of national identification, and research in Belgium shows that non-native men report more perceived discrimination than non-native women (De Rycke and Swyngedouw 1997). In other words, while we do not have a conclusive explanation for the gender gap with respect to national and sub-national identifications, we can hypothesize that perceived discrimination might explain this gap.

It is important to keep in mind a few limitations of this study. First, because the focus of the research project is on the impact of school ethnic composition, we considered the influence of only school context variables. However, other contexts (e.g. neighbourhood, country) might also contribute to youth’s identifications and the position of the school on the school market might play a role as well (see Verhoeven 2002). Second, this investigation employs a limited measure of inter-ethnic friendship. We asked all pupils to state how many of their friends were natives and how many were many non-natives. A more elaborated technique would be to provide pupils a list with the names of all pupils at school and to ask them to indicate their best
friends and friends. However, such a technique was unsuitable not only because the survey would have needed a higher time investment but also because it was completely anonymous. Third, we made a raw distinction between native and non-native pupils. This distinction neglects the ethnic differences within the non-native group. However, a separate analysis for each ethnic minority group would have harmed the reliability of our analysis, because the individual groups in our data are too small. While considering non-natives as one category is consistent with most of the previous studies conducted in Belgium (e.g. Jacobs, Rea and Teney 2009; Agirdag 2010), future research should, if possible, make a distinction within the non-native groups.

In terms of educational policy, this article finds considerable support for the concerns about the negative impact of ethnic school segregation, but, most importantly, it also challenges these policies. On the one hand, our findings indicate that schools with a high minority concentration and high ethnic heterogeneity might indeed have a negative impact on non-native pupils’ national and sub-national identifications. However, we demonstrate that these effects are mediated by their inter-ethnic friendships. While the school is an important context in which pupils make friends, opportunities outside the school for inter-ethnic friendships should not be neglected. Hence, besides school desegregation, policy-makers should consider stimulating inter-ethnic contact and friendship opportunities both inside and outside the school. At this point, we should also notice that cultivating national identification might be considered not to be a means of assimilation. As noted in our introduction section, national identities do not necessarily compete with ethnic identities and most people have multiple or hyphenated identities, which are very important with respect to pupils’ well-being and educational achievement (see Phinney et al. 2001; Modood 2005). In this study, however, it was not feasible to measure all different ethnic identities, due to the large scale design of the research. However, we strongly recommend further studies that investigate the intersections between the school context and pupils’ ethnic and national identities and examine the mediating role of inter-ethnic relationships.

Acknowledgements

This article was made possible through funding from the the Research Foundation Flanders (FWO-project G.040908). The authors would like to thank two anonymous referees for their constructive comments. Special thanks to Paul Mahieu, Loes Vandenbroucke and Simon Boone for their helpful comments.
References


BARRETT, MARTYN 2002 ‘Children’s views of Britain and Britishness in 2001’, paper given at Annual Conference of the Developmental Psychology Section of the British Psychological Society, University of Sussex, 5–8 September


DE RYCKE, LIEVEN and SWYNGEDOUW, MARC 1997 ‘The subjective experience of discrimination of Moroccan and Turkish immigrants in Brussels’, paper given at the Annual Conference of the ESA, University of Essex


HOWARD, SUE and GILL, JUDITH 2001 “It’s like we’re a normal way and everyone else is different”: Australian children’s constructions of citizenship and national identity’, Educational Studies, vol. 27, no. 1, pp. 87–103


JACOBS, DIRK, REA, ANDREA and TENEY, CELINE 2009 De sociale lift blijft steken: De prestaties van allochtone leerlingen in de Vlaamse Gemeenschap en de Franse Gemeenschap (The Social Lift Stops Working: The Performance of Immigrant Pupils in the Flemish Community and the French Community), Brussels: Koning Boudewijnstichting


KRISTEN, CORNELIA 2005 School Choice and Ethnic School Segregation: Primary School Selection in Germany, Münster: Waxmann Verlag


MODOOD, TARIQ 2005 Multicultural Politics: Racism, Ethnicity, and Muslims in Britain, Minneapolis, MN: University of Minnesota Press


VAN CRAEN, MAARTEN, VANCLUYSEN, KRIS and ACKAERT, JOHAN 2007 Voorbij wij en zij? De sociaal-culturele afstand tussen autochtonen en allochtonen tegen de meetlat (Beyond Us and Them? Social-Cultural Distance between Natives and Immigrants Measured), Brugge: Vandenbroele
VERHOEVEN, MARIE 2002 École et diversité culturelle: regards croisés sur l’expérience scolaire de jeunes issus de l’immigration, Louvain-la-Neuve: Academia-Bruiylant
WESTERBEEK, KARIN 1999 ‘The colours of my classroom: a study into the effects of the ethnic composition of classrooms on the achievement of pupils from different ethnic backgrounds’, PhD, European University Institute, Florence

ORHAN AGIRDAG is a researcher in Research Group CuDOS, Department of Sociology at Ghent University.
ADDRESS: Korte Meer 5, 9000 Gent, Belgium.
Email: orhan.agirdag@ugent.be

MIEKE VAN HOUTTE is a lecturer in Research Group CuDOS, Department of Sociology at Ghent University.
ADDRESS: Korte Meer 5, 9000 Gent, Belgium.
Email: mieke.vanhoutte@ugent.be

PIET VAN AVERMAET is the Director of the Centre for Diversity and Learning at Ghent University.
ADDRESS: Sint-Pietersnieuwstraat 49, 9000 Gent, Belgium.
Email: piet.vanavermaet@ugent.be