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**Research Report**

## Classroom assignment and social cohesion: Why ethnic origin and gender of students should be considered together

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# **Classroom assignment and social cohesion: Why ethnic origin and gender of students should be considered together**

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May 2021

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# Classroom assignment and social cohesion: Why ethnic origin and gender of students should be considered together

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*Assigning students to school classes is a regular task for school administrators. With current practices focusing on equal class sizes, a balanced sex ratio, and pre-existing ties between students, schools miss out on a fundamental sociological insight: that social cohesion tends to benefit when students' socio-demographic attributes crisscross each other. Using survey data on school classes in four European countries, we study how the degree to which ethnic and gender boundaries align with each other affects students' friendships and identities. Our results show that, when classmates of different ethnic origins tend to be also of the opposite sex, minority students will have few inter-ethnic friendships and end up identifying less as members of the nation.*

As ethnic diversity has increased in Europe, a crucial question has become how to create shared feelings of belonging across ethnic divides and how to foster positive relations between minorities and majorities. A key setting for addressing this task are schools. Adolescence is a critical period in which students form their social affiliations and identities. Schools often provide a context where adolescents of diverse backgrounds meet. Since ethnic diversity tends to be even greater in young age groups, it is here where the new social fabric of societies is taking shape.

As part of a large-scale research project on "Social Integration and Boundary-Making in Adolescence" ([www.socialbond-insights.eu](http://www.socialbond-insights.eu)), we asked how schools can contribute to building social cohesion and avoiding the prospect of ethnic polarization.<sup>1</sup> Our study focused on a crucial decision that school administrators face each year as a new cohort of students enters their school: how to assign students to school classes.

We argue that current practices of classroom assignment can be improved by incorporating a fundamental sociological insight: that social cohesion tends to benefit when students' socio-demographic attributes crisscross each other (Simmel, 1908; Lipset, 1960; Blau, 1977). In contrast, in the extreme case in which the categories to which individuals belong align perfectly, we have mutually exclusive social groups that fragment the social web along a single categorical divide. For example, imagine a situation in which students' ethnic origin determines where they live, whether they are good at school, or which music and sports they prefer. Indeed, previous research in the United States showed that students tend to befriend same-race students in schools where racial groups differ in their socio-economic composition (Moody 2001). Another study from the Netherlands found that the tendency to choose same-ethnic friends gets reinforced in school contexts where ethnic origin aligns with cultural tastes, for example a

preference for Hip-Hop or Rock music, or with attitudes toward social and antisocial behaviors (Stark and Flache, 2012).

For schools, many of these correlates of ethnic origin are given and can hardly be changed. However, school administrators have considerable leeway to influence the gender and ethnic composition of classrooms. This opens up the possibility of positive policy interventions by making sure that gender and ethnic boundaries crisscross each other when admitting students to schools and when assigning them to classrooms.

Our new study (Kroneberg, Kruse, and Wimmer 2021) asked how an alignment between ethnic origin and gender in school classes affects students' friendships and emerging identities. To answer this question, we analyzed survey data from schools in England, Germany, the Netherlands, and Sweden (CILS4EU, 2016; Kalter *et al.*, 2016). Our analyses yields four main insights.

## The alignment between ethnic origin and gender in school classes is largely accidental

When assigning students to school classes, school administrators often aim at a balanced gender composition, group students together that come from the same primary school or neighborhood, or allow students to nominate other students whom they (do not) want to have as classmates. However, schools rarely pay systematic attention to the question of how gender will align with ethnic origin in the school classes that result from their decisions. Suggestive evidence in support of this assumption comes from a small-scale survey that we carried out among the headmasters of 23 German secondary schools. As shown in Table 1, when asked about possible criteria used to assign students to school classes at the beginning of secondary school, 17 out of 23 confirmed to take into account gender, while only 4 selected migration background and only 6 an unspecified alignment of characteristics.

Table 1: Criteria for allocation to school classes (survey responses of 23 school headmasters in Germany)

	N (out of a total of 23)	Relative frequency
Students' primary school	17	0.74
Students' place of residence	11	0.48
Students' sex	17	0.74
Students' native language origin	4	0.17
Students' social background	3	0.13
Students' wishes	18	0.78
Alignment of students' attributes*	6	0.26
Other criteria	7	0.30

NOTE: Translated from German. \* Full text of the criterion: "Alignment of students' attributes (e.g. avoiding class composition where all boys are from primary school A and all girls are from primary school B)."

<sup>1</sup> This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (Grant agreement No. 716461). Funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) under Germany's Excellence Strategy – EXC 2126/1– 390838866. We use data from the CILS4EU research project funded in the NORFACE Research Programme on Migration in Europe—Social, Economic, Cultural and Policy Dynamics.

We argue that the lack of attention paid to attribute alignment introduces random variation in the gender composition of ethnic groups in a classroom (and, vice versa, the ethnic composition of gender groups). This allows us to study how attribute alignment affects students' friendship ties and emerging identities.<sup>2</sup>

Our main analyses are based on school-based survey data collected in England, Germany, the Netherlands, and Sweden (CILS4EU, 2016; Kalter *et al.*, 2016). In these four countries, the extent to which ethnic origin and gender align in the sampled school classes is usually moderate (mean correlations close to 0.2) and the observed distributions do not differ from what could be expected if students were randomly assigned to school classes.<sup>3</sup>

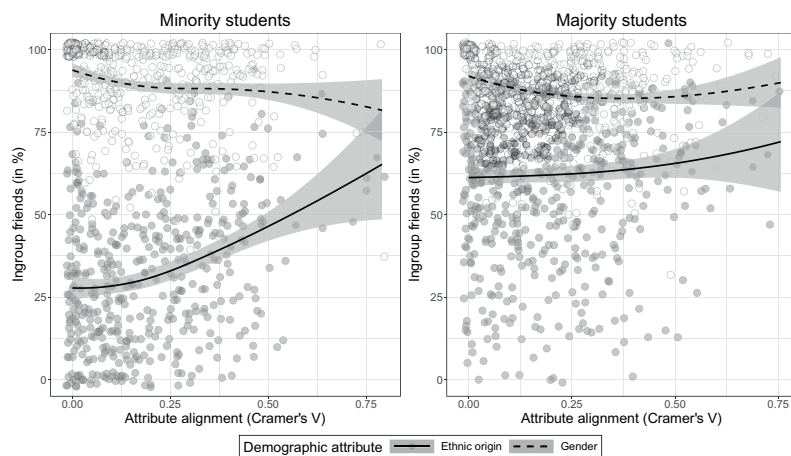


Figure 1: Attribute alignment and segregation in friendship networks (all countries pooled)

Note: Lines depict bivariate, locally weighted scatterplot smoothing curves; jittered scatter plots.

Source: Kroneberg, Kruse, and Wimmer 2021

<sup>2</sup> Our statistical analyses account for structural characteristics of school classes that are analytically related to attribute alignment and that may affect students' friendships and identities: classroom size, ethnic diversity, gender homogeneity, the share of boys, and the share of majority students. Conditional on these classroom characteristics, we find that the degree of attribute alignment is unrelated to a broad range of variables, including socio-economic background, age, survey country, the share of reciprocated friendship ties and of closed triangles, ethno-national identification, gender role attitudes, religiosity, educational aspirations, and students' results from a cognitive test. This lends credibility to our assumption that variation in attribute alignment is largely random after conditioning on its structural determinants.

<sup>3</sup> We define students' ethnic origin based on their parents' and their own country of birth (following Dollmann *et al.*, 2014). Students who themselves and whose parents were born in the survey country are defined as belonging to the native majority group. All other students are referred to as "minority students." We use "gender" and "sex" interchangeably to refer to the binary distinction between "female" and "male" which strongly shapes friendship segregation in adolescence. Our data was collected in 2010 and 2011 in a survey that asked respondents whether they were "female" or "male" without further options or specification. We therefore do not know whether some answers reflected a gender identity that deviates from respondents' biological sex.

### Ethnic friendship segregation becomes stronger when ethnic origin and gender align

How does attribute alignment shape students' friendship networks? For each ethnic group in a classroom (across all four countries), Figure 1 plots the fraction of same-ethnic friends (grey circles) and the fraction of same-sex friends (white circles) against the attribute alignment that students of this group are exposed to. The figure visualizes these relationships separately for ethnic minority groups and majority groups.

For the 468 ethnic minority groups (left-hand side of Fig. 1), attribute alignment is strongly associated with ethnic friendship segregation (solid line): When their ethnic origin is not aligned with gender, about one third of minority students' friends are co-ethnics. This share is estimated to increase to almost two thirds as attribute alignment takes on its maximum. In comparison, gender segregation is always very high and hardly related to attribute alignment (dashed line).

This strong and robust gender segregation is also present among the 657 majority groups in the school classes (right-hand side of Fig. 1). The relationship between attribute alignment and ethnic segregation is also positive but considerably weaker, as the fraction of same-ethnic friends is already very high among majority students even when attribute alignment is absent.

These patterns also hold in more rigorous tests that control for the set of potential confounders discussed above, as well as for country-specific ethnic group fixed effects.

### Minority students become less likely to identify as a member of the nation when ethnic origin and gender align

In addition to its effect on friendship networks, our study also examines how attribute alignment relates to students' identity development over one year (between age 14 and 15, i.e., at the transition from early to mid-adolescence). In the small-scale contexts of European classrooms, pupils observe all their classmates and their varying attributes on an everyday basis. And they make sense of who they are by assessing the degree to which they are similar to (or different from) others in these immediate environments (Smith and Moore, 2000).

In school classes in which most girls are from one ethnic group and most boys from another, majority students are experienced as fundamentally different, thus inhibiting minority students' identification with the national majority group. In line with this hypothesis, we found that minority students who face stronger attribute alignment identify less as a majority group member over time compared to minority students who face lower levels of alignment. As we measure the change in identification over the time span of only one year, the effect size of the fully standardized coefficient is relatively small. Still, the effect is substantial from an interventionist point of view: Spending the school year in a classroom with complete attribute alignment compared to a classroom without any such alignment leads minority students to identify less strongly with the nation by .47 standard deviations.

### Feelings of national belonging among majority students and gender role attitudes are not affected by attribute alignment

In contrast, attribute alignment does not affect the development of national identification among majority students. This is line with our theoretical expectations, as feelings of national belonging among majority students are widely taken for granted and thus less sensitive to attribute alignment at the local level (Skey, 2010).

In principle, strong alignment of ethnic origin and gender could also contribute to the development of more traditional gender role attitudes. However, we found no support for this hypothesis. The gender role attitudes of students developed similarly, irrespective of whether they were exposed to stronger or weaker attribute alignment.

Figure 2 summarizes the estimates from the respective regression models. Those models condition on an extensive set of potentially confounding covariates (see Kroneberg, Kruse, and Wimmer 2021).

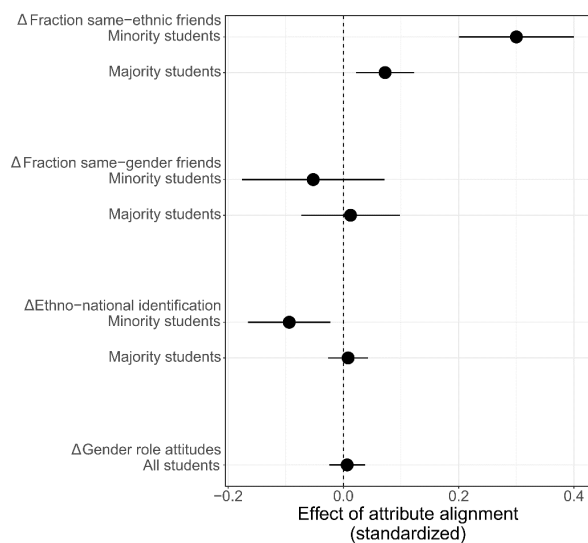


Figure 2: The effect of attribute alignment on changes in students' friendships and identities

### Conclusion

In ethnically diverse societies, schools play an important role in promoting shared feelings of belonging and positive social relations that create social cohesion and buffer against ethnic polarization. An particular early way in which schools can make a difference is to avoid attribute alignment in classroom assignment. Using large-scale survey data on school classes in four European countries, we showed, when classmates of different ethnic origins tend to be of the opposite sex as well, minority students will not only have few inter-ethnic friendships, but also end up identifying less as members of the nation.

School administrators have considerable leeway to influence the gender and ethnic composition of school classes. To promote social cohesion, they could attempt to make sure that gender and ethnic boundaries crisscross each other when assigning students to classrooms. Our findings suggest that the risk of attribute alignment is particularly high in the case of smaller school classes that are numerically dominated by either boys or girls and that include one or more sizable ethnic minority groups. Hence, ensuring a balanced sex ratio shields to some extent against an alignment of gender and ethnic origin. Moreover, classroom assignment decision have to conform to obvious legal and ethical rules and face practical limitations. Still, within these restrictions, school administrators might be able to improve on current practices in order to avoid the polarization of students' friendship ties and identities along ethnic divides.

For more insights on social cohesion and boundary making in schools, visit our project website [www.socialbond-insights.eu](http://www.socialbond-insights.eu) or follow us on Twitter @socialbond\_ERC.

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