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Segregation and Socialization: Academic Segregation and Citizenship Attitudes of Adolescents in Comparative Perspective?

- A focus on the effects of academic segregation in 21 European societies.
- Multilevel modeling with three levels (student, school, countries/educational systems).
- There is an empirical relation between early differentiation (in terms of tracking) and attitudes.
- There is a negative effect of academic segregation on the attitudes towards immigrants and ethnic minorities.
- The introduction of inequality on the basis of achievement seems to gnaw at democratic values.

Purpose: There is a tendency to assess educational systems in terms of their efficiency in gaining high scores on cognitive skills. Schools perform, however, also a socializing function. The whole policy debate tends to ignore the impact of educational systems on attitudes or democratic values. This contribution focuses on the impact of the organization of education in European societies on the civic attitudes of adolescents.

Design/methodology/approach: We explore the impact of academic segregation – the practice of segregating children on the basis of their scholastic achievement – on attitudes of adolescents living in different educational systems. We use the International Civic and Citizenship Education Study (2009) relying on multilevel models.

Findings: Pupils differ in their outlook on fellow citizens, according to the ways in which educational systems select and differentiate throughout school careers. More specifically, there is a negative impact of academic segregation on the attitudes towards immigrants and ethnic minorities.

Research limitations/implications: The experience of adolescents based on their educational achievement seems to affect how they perceive other people. We have not answered the question why this is the case. We hope to have provided a minimal indication of the impact of inequality on social outcomes.

Keywords:

Academic segregation, attitudes towards immigrants and ethnic minorities, 21 European societies, multilevel modeling

1 Introduction

Literature on political socialisation and civic education focuses on the impact of primary relations on the formation of political values and knowledge. The issues at stake in research on civic education are still the same as those envisioned by Almond and Verba since the

beginning of the 1960's. They pertain to the best or most efficient ways to acquire political knowledge and skills in order to sustain a viable democratic civic culture (Almond & Verba, 1963; Galston, 2004; Hahn, 1998; Niemi & Junn, 1998; Schulz, et al., 2010; Torney-Purta et al., 2001; Zukin, et al., 2006).

Since the renewed interest in civic education starting from the noughties, most research has been concerned with conditions enabling or stimulating the development of political knowledge, skills or attitudes at the classroom and school level. The degree of political discussion, the presence of an open classroom climate or the participation of pupils in extra-curricular activities are conditions that have been documented as being important in stimulating a positive citizenship education climate (Barber et al., 2015; Kavadias, 2004; Keating & Janmaat, 2015; Quintelier, 2013 & 2014). Research on the impact of the political system on politically relevant skills is however more scarce but not completely absent (Hooghe et al., 2007; Toots & Lauri, 2015). With the exception of studies looking at the impact of the civic education curriculum and civic knowledge (e.g. Toots & Lauri, 2015), theories looking at the relation between characteristics of educational systems and civic education outcomes are however scarce (Janmaat & Mons, 2011).

The current contribution focuses on the impact of the organization of education in European societies on the civic attitudes of adolescents. Since the comparative

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study of educational systems is a vast and rapidly growing terrain (Bray, Adamson, Mason, 2014), we focus on aspects that have an impact on the social performance of these systems. One of the more contested factors in this domain is the ways in which educational systems track children according to academic performance. More specifically, the age of tracking has been reported to have an impact on the degree of equity of these systems. Early tracking systems or systems that tend to group children early in their school according to performance, tend to have a heavy social gradient: the social class of origin tends to determine the final educational track to a higher degree (Dupriez, Dumay & Vaus, 2008).

Tracking or segregating youngsters in function of their academic performance has an impact on their academic attitudes and influences their motivation. This type of academic segregation might however also influence other – more social or politically relevant – outlooks. In this paper we explore the impact of academic segregation – the practice of segregating children on the basis of their scholastic achievement – on several attitudes of adolescents living in different educational systems (Janmaat & Mons, 2011).

We use the International Civic and Citizenship Education Study (ICCS) from 2009 for citizenship attitudes of 14-year old pupils from 21 European countries (Schulz et al., 2010) in order to ascertain whether academic segregation influences the attitudes of individual youngsters.

2 Socialisation and allocation as functions of school systems

Education is traditionally seen as the process through which knowledge and skills are transmitted from one generation to the next. But even the most utilitarian educational systems try to transmit the quintessence of culture, i.e. conceptions on beauty, justice, and goodness or on what is worth pursuing (Elchardus, Kavadias & Siongers, 1998; Galston, 2004; Kavadias, 2004; McDonnell, 2000; Nussbaum, 2010). This formative task of education becomes even more crucial as societies become more complex and use more abstract knowledge in everyday applications (Delli-Carpini, 2000; Naval, Print & Veldhuis, 2002; Osler & Starkey, 2004).

Alongside the transmission of knowledge, skills and attitudes that are deemed indispensable, educational systems perform a less conspicuous function. They allocate children in society (Durkheim, 1925; Durkheim, 1938; Bernstein, 2000). Or to put it in Durkheimian terms: schools differentiate and assign children a place in the system of social stratification. Indeed, our societies are less inclined to accept inequality on the basis of birth or origin, but are more open to inequalities on the basis of what we achieve as individuals (Marshall, 1977; Parson, 1971; Young, 1958). Michael Young introduced the term “Meritocracy” to capture this shift alongside with the growing focus on schooling and testing as impartial umpires. As individuals we are able to obtain a

position in this meritocracy on the basis of what we achieve throughout our school careers and professional lives. Schools are central to these societies as they enable individuals to acquire these positions through education. Merit is central as it is seen as the combination of “talent” (intelligence) and “motivation” (effort). As a consequence, schools differentiate individuals throughout their school career and assign them a place in the social class structure according to their school results. Their position on the ladder of the educational stratification determines to a great degree their final social position. From this point of view we can conceive schools as the distributor of life chances (De Groof et al., 2012; Parsons, 1959; Parsons, 1971; Danhier et al., 2014).

The odds for a pupil on a successful school career rely however strongly on the social environment of origin (Bourdieu & Passeron, 1970; Coleman, et al. 1966; Huyse & Vandekerckhove, 1976; Jacobs et al., 2009; Jacobs & Rea, 2011; Danhier et al., 2014; see also Shavit & Blossfeld, 1993; Bukodi & Goldthorpe, 2013; Breen, 2009). The educational level of the parents is a strong predictor of the life chances of children later in life (De Groof et al., 2012; Kavadias & Franck, 2006; Pelleriaux, 2001; Van der Velde & Wolbers, 2007).

The connection between school career and future social position has increased steadily in societies (for example on the Netherlands and Belgium: see De Groof et al., 2012; Pelleriaux 2001). There is a growing body of empirical evidence on this increasing importance of education.

But the degree of attained education is not only an indicator for the social-economical life chances of a family. It also seems a powerful indicator of the cultural climate in a family (Bourdieu & Passeron, 1970; De Groof et al., 2012; Derks, 2000; Derks, 2002; Pelleriaux, 2001). As a consequence educational systems perform at least two functions that are not always easily reconcilable: the socialisation to equal adult citizens and the differentiation to unequal participants to a differentiated economy. The question concerning the interaction between the socializing function and the differentiating result is in such a context more than trivial. It rather stands at the heart of conflicting roles in schools and conflicting expectations from education.

3 Differentiation and the management of diversity in schools

Each school system tries to handle the existing diversity in pupils’ background. In most cases school systems use diverse mechanisms to reduce heterogeneity (Dupriez, 2010; Dupriez, Dumay & Vaus, 2008; Green, Preston & Janmaat, 2006; Mons, 2007; Rinderman & Cecci; Shavit & Muller, 1998). Green and colleagues (2006) propose a classification in function of the degree and time of selection in school systems on the basis of ability. Mons (2007) introduced a typology of school systems according to the nature of tracking, ability grouping, but taking also grade retention and individual teaching into account. She comes to a fourfold classification, differentiating between a separation model, an ‘à la carte’ integration mo-



del, a uniform integration model, and finally an individualized integration model.

Research on educational inequality tested and demonstrated the utility of this fourfold typology using PISA-data on cognitive outcomes (Dupriez, Dumay & Vaus, 2008; Dupriez, 2010; Lavrijssen, 2013). For our purposes, we reduce this more fine-grained classification to two conflicting models of selection of children in schools, guiding national educational policies. A first model tries to select and group equally able children as early as possible. Children are tested early in their school career on their scholastic talents and qualities and grouped in separate tracks. A classic example of this model is the German system, as it starts to select children from the 4th year after kindergarten on the age of 9-10. After the age of 10 pupils begin a new phase in their education, in separate learning groups with very little mutual contact between these groups (Eurydice, 2012). On the opposite side we find models that try to provide children as long as possible a broad common base in terms of knowledge, skills and possibilities. This does not mean that children are not differentiated, according to their interests, possibilities and strengths or weaknesses. The differentiation occurs rather within age groups for specific subjects and doesn't hamper contact between them. We find these "comprehensive" systems mostly in Scandinavian countries, like Denmark or Finland. Children are grouped according to age until the age of 15. Differentiation between different tracks occurs after the age of 16. Moreover, primary and secondary schools are integrated in one structure. This means that the transition between the first and the second level is not used as an additional selective mechanism (Eurydice, 2012).

The 'early tracking'-model assumes that an early differentiation will lead to a more efficient selection on the basis of quality (Grootaers, 1998). This has however never been empirically ascertained. On the contrary: comparative research provides growing evidence against early differentiation. The most talented pupils do not necessarily progress to a higher degree than in comprehensive systems. Changes in terms of learning gains don't differ between the systems. But early tracking systems seem to curtail systematically the opportunities of the most disadvantaged pupils (Ashwill et al., 1999; Hanushek & Woessman, 2006; Jacobs & Rea, 2012; Mills, 1998; Van der Werfhorst & Mijs, 2010; Zimmer, Ikeda & Ludemann, 2011). Evidence from the several surveys by the OECD-sponsored Program in International Student Achievement (PISA), ascertains the fact that comprehensive systems certainly do not seem to hamper the mathematics or language achievement scores of their best pupils, and work to the benefit of the social disadvantaged pupils. To put it bluntly: investments to weaken social inequality don't necessarily lead to a disrate of the educational level in a country. Or to use the words of the World Bank economists Hanushek and Woessman: "there is very little evidence that there are efficiency gains associated with this increased inequality" (Hanushek & Woessman, 2006: C75). The only aspect in

which early differentiating systems perform better pertains to the smoothness of transition from schools to the labour market: early tracking systems perform on average, slightly better (Cooke, 2003; Elchardus et al., 2012).¹

The proponents of a comprehensive educational system present an argument akin to the one presented by Wilkinson and Pickett (2009). Providing equal opportunities, as well as postponing crucial choices in the educational careers of pupils, increases the quality of learning (and life) of every child (Beckers, 1998). Academic inclusion promotes better results for the biggest group, without harming the results of the best pupils.

4 The possible social outcomes of tracking

Academic segregation, the practice of separating the 'better' pupils and grouping the academic strong and feeble youngsters in separate classrooms or even schools, stimulates mainly social selection in function of social background and origin. Therefore tracking can be seen as a mechanism that continues the existing form of social segregation. Ethnic minorities or immigrant children perform poorly in strongly divided educational systems (Jacobs & Rea, 2012; Schnabel et al., 2002; Weiler, 1998). But if schools are also the socialising institutions where convictions, emotions or values are formed, we can expect this segregation to influence the direction and form of self-steering in these schools systems. Looking at this from the perspective of an individual we might expect that differentiation and segregation at an early age will contribute to a different mental outlook (or habitus), than segregation at a later age. The child that grows up in a system where he/she is early separated will in all likelihood experience segregation as an aspect of everyday life. Living apart is part of the way in which his/her life is organized and will, as time goes by, be experienced as something fundamental to the usual way of life. It will colour the perception, the ways of thinking, but also the feelings, values, discourses, as they will nestle down and inscribe themselves on the soft tissue of the brain (Foucault, 1975).

In one of the few studies investigating the relation between education systems and social cohesion Janmaat and Mons linked the degree of pedagogical differentiation (ability grouping) to values disparities among children (Janmaat & Mons, 2011). Ability grouping tends to segregate, which in its turn can be expected to influence attitudes related to social cohesion. Janmaat and Mons (2011) find a clear impact of tracking on tolerant and patriotic attitudes between social and ethnic groups.

As a consequence, we might expect that separating children on the basis of their academic achievement will hamper the process of social integration of youngsters, but also their ability to cope with social and cultural differences. In more general terms, academic segregation will generate social outcomes that impede the development of democratic citizenship.

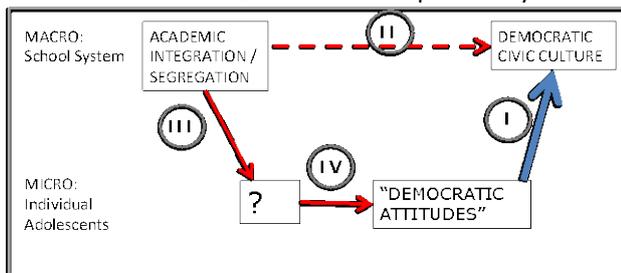
In this exploratory analysis we are aware of what Coleman called a "multilevel systems of propositions" in



his quest for explanations of system behaviour (Coleman, 1990, p. 8). Ultimately, in the footsteps of Almond and Verba (1963), we try to understand how to strengthen a democratic political culture. The original contribution of Almond and Verba, but also the more recent civic education studies, make a theoretical linkage between the presence of democratic attitudes of individuals and the resulting political culture. This relation involves a movement from the micro level of the individuals to the system level (see linkage I in figure 1). For the sake of convenience we have been assuming that a democratic political culture consists of the aggregates of the individual democratic attitudes.²

We are however interested in the translation of aspects of the school system on the political system (linkage II in figure 1). This however involves a relation between system characteristics that should be explored by looking at how systems condition / influence individual actors. If we want to understand the relations between these systems variables, we should look at how the macro context influences individuals at the micro-level.

Figure 1: Components of relationships in order to explore the link between the educational and political systems

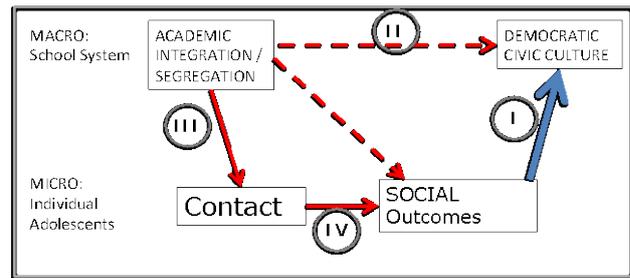


The last component of a possible explanation involves the relations at the level of the individual actors between the outcome of the conditioning by the macro-system and democratic attitudes (relation IV).

Janmaat and Mons (2011) hypothesize that the system of differentiation will in all likelihood influence inter-group dynamics. This linkage (III in figure 1) can be seen as creating the conditions for contact. As a consequence, educational systems foster an environment in which contact between different groups will breed cooperation or cohesion. This explanation lies in line with the contact hypothesis formulated as early as 1958 by Allport and still investigated by Pettigrew and colleagues (Pettigrew, 1998; Pettigrew & Tropp, 2005 & 2006) (see figure 2).

We will restrict ourselves to the exploration of the relation between academic segregation and the influence on social outcomes of individual adolescents. We will look at the impact on a set of social outcomes that are related to social cohesion: namely, expected political participation, trust in civic institutions and the attitudes towards minorities, immigrants and gender equality. Since social cohesion can be a very broad term, we will differentiate between cohesion as an attitude towards civic institutions – or trust (Uslaner, 2012), and cohesion as an attitude towards other social / cultural groups.

Figure 2: Components of relationships in order to explore the link between academic segregation and the elements of a democratic civic culture



In line with these insights we will explore the hypothesis whether academic segregation has an impact on attitudes:

1. The larger the degree of academic segregation, the lower the degree of trust in civic institutions.
2. The larger the degree of academic segregation, the lower the levels of tolerance towards ethnic minorities.
3. The larger the degree of academic segregation, the lower the levels of tolerance towards immigrants.
4. The larger the degree of academic segregation, the lower the levels of attitudes towards gender equality.
5. The larger the degree of academic segregation, the lower the degree of expected political participation.

5 Assessing educational systems

In the next sections we would like to explore the impact of academic segregation – the practice of segregating children on the basis of their scholastic achievement – on several attitudes of adolescents living in different educational systems. We expect a ‘corrosive’ impact of academic segregation mainly on attitudes related to social cohesion. Pupils will in all likelihood differ in their outlook on fellow citizens, according to the ways in which educational systems select and differentiate.

We will use variance-component (or multilevel) models to analyse individual level data together with aggregated data (Goldstein, 1995). In the current case we are interested in an analysis on the level of the educational system. Indeed, we are interested to know whether educational systems have a different impact for the youngsters in each of those countries in general. This means that we are primarily interested in the impact of academic segregation on a set of social outcomes. One of the few international comparative sources for this kind of information of youngsters is the International Civic and Citizenship Education Study (ICCS) from 2008-2009. The survey provides information on citizenship attitudes of 14-year old pupils from 38 countries (Schulz et al., 2010) (see table 1).

As the ICCS data does not provide a consistent measure of academic segregation, we restrict our current analysis to 21 European countries from the ICCS-data on which we had information on the degree of academic segregation through PISA (2009). One of the great advantages of the ICCS-study is that it provides comparable data on social and politically relevant attitudes (For a comparison on the 1999 and 2009 results of the ICCS-study see Barber & Toney-Purta 2012). Table 2 provides

an overview of possible indicators that could be used to this end.

Table 1: ICCS samples (2009)

Country	n pupils	n Schools
Austria	3385	135
Belgium – Flanders	2968	151
Bulgaria	3257	158
Czech Republic	4630	150
Denmark	4508	193
England	2916	124
Estonia	2743	140
Finland	3307	176
Greece	3153	153
Ireland	3355	144
Italy	3366	172
Latvia	2761	150
Lithuania	3902	199
Luxemburg	4852	31
Norway	3013	129
Poland	3249	150
Slovak Republic	2970	138
Slovenia	3070	163
Spain	3309	148
Sweden	3464	166
The Netherlands	1964	67
Total	70,142	3,037

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In order to measure the ways in which educational systems separate pupils, we could in theory take the formal ages on which the pupils are assigned into different tracks. But educational systems have also informal ways to organize their practices of differentiation, without necessarily resorting to distinct organisational patterns or norms.

To give an example: Flanders (Belgium) knows a formal differentiation starting in the second degree (3rd year) of secondary education. The first two years are communal. In practice we see that schools resort to a form of differentiation by the optional subjects presented in schools from the first year on, and by organizing the class groups accordingly (Elchardus & Verhoeven, 2000; Grootaers, 1998). To avoid this trap for all educational systems we have opted to look at the degree to which pupils with a same level of knowledge are grouped in the same schools. This is a rather conservative estimate of academic segregation, since schools can still separate children with distinct achievement levels in different classes within the same school. In our estimation we will not see them as segregated.

Table 2. Outcome variables: attitude scales ICCS (2009)

Attitudes - Likert scale	N of items	Cronbach alpha*	Theme
Hypothesis 1: Trust in civic institutions	6	0.84	Trust in civil institutions (in local and national government, parliament, courts, the police, political parties)
Hypothesis 2: Equal Rights for all ethnic / racial groups	5	0.83	Equal opportunities / treatment ethnic minorities (to get a good education, job, rights, respect)
Hypothesis 3: Equal Rights for immigrants	5	0.80	Equal opportunities / treatment migrants (to speak their language, good education, to vote, same rights, etc)
Hypothesis 4: Attitude towards Gender Equality	6	0.79	Equal opportunities / treatment of men –women (to take part in government, same rights, equal pay, participate in politics, etc)
Hypothesis 5: Expected participation to political activities as an adult	4	0.81	Degree of future formal political participation (help a candidate, stand as a candidate, join a trade union, join a party)
Hypothesis 5: Expected informal political participation	4	0.82	Degree of future informal political participation (Discuss, write opinion, convince others online, join cause)

* Reliability computed on the totality of 38 participating countries (Schulz, Ainley & Fraillon, 2011)

Using the PISA mathematic achievement scores on the age of 15, we can compute an intra school correlation for each country/educational system. This measure provides a (conservative) estimate between two pupils taken at random from the same school on their mathematics achievement. A high intraschool correlation would mean that the two pupils taken at random resemble each other more than the pupils from other schools.³

We should however also be careful to take the average level of achievement on mathematics into account. After all, we cannot exclude possible negative effects of academic segregation on civics as a result of an overall lower level of skills and competencies in countries with a strong degree of academic segregation. This would mean that a strong investment in mathematics will most certainly influence the social outcomes in a negative way. We are however interested to compare systems in their social outcomes, given certain levels of mathematic achievements. This means that we will control for the average mathematics score per country.



Table 3. Average PISA scores on mathematical achievement & degree of academic segregation PISA (2009) and Timss (2011)

Country	Average Pisa Math score	Rho Pisa Mathematics	Rho Timss Mathematics
Finland	541	9.7	8.9
Norway	498	12.1	14.4
Sweden	494	19.7	16.6
Poland	495	21.0	12.9
Denmark	503	21.1	22
Estonia	512	22.0	*
Spain	483	23.2	22.5
Ireland	487	23.7	16.7
Latvia	482	26.8	*
England	492	29.8	24.3
Lithuania	477	34.6	18.7
Greece	466	37.1	*
Luxemburg	489	37.2	*
Slovak Republic	497	50.2	26.9
Italy	483	55.3	26.8
Bulgaria	428	58.1	*
Austria	496	59.0	15.8
Slovenia	501	62.1	7.6
Czech Republic	493	62.2	16.4
Belgium – Flanders	537	62.6	16.8
The Netherlands	526	69.0	15.2

*: not available in TIMSS 2011.

In table 3, we can already discern a wide variety concerning the treatment of grouping children (3rd column), given a certain level of achievement on mathematics (2nd column). In table 3, “Rho Pisa Mathematics” gives the variation of mathematics achievement after the students were put in certain tracks and schools.

Finland has the lowest degree of intra-school correlation (9.7% of the variance at the level of the school), while the Netherlands has the highest degree of segregation, according to PISA-scores: more than 2/3 of the differences in mathematics can be traced back to differences between schools.

As a comparison, we also report the intra-school correlations for the mathematics scores at grade 4 (primary school) in Timss (2011). In table 3, column 4, we see that these correlations tend to be more equal than those calculated with the use of the Pisa data.

The Pisa and Timss data seem to indicate that there exists more country diversity in academic segregation in secondary school (judging by the mathematics scores of 15-year-old pupils) than in primary school (judging by the mathematics scores of pupils in grade 4).

6 Analysis on social outcomes

In a first instance we will look at the bivariate correlation between the degree of academic segregation and the attitudes. Since we hypothesised that a part of these differences could be due to general differences in levels of achievement, a minimal statistical control is included by introducing the average achievement on maths per country, but also for individual pupil characteristics that may confound the aggregate relationships. We use age, gender, origin (natives versus non-natives) and social-economic status and control variables. This means that we provide next to the bivariate correlations, also the

standardized regression parameter for academic segregation, controlling for these confounding variables using three-level models (pupils, nested in schools, grouped in educational systems/countries).⁴

The bivariate correlations in table 4 show that academic segregation does not show the same negative correlation with all types of *social outcomes*. The strongest correlation is on the domain of openness towards other groups (“equal rights for ethnic groups”).

Table 4. Correlations and standardized regression coefficients of academic segregation on attitudes, controlling for covariates

Attitude scale	Effect of Academic segregation		
	Ecological Correlation	Beta (multilevel) ✧	
Hypothesis 1: Trust in civic institutions	-0.05	0.00	
Hypothesis 2: Equal Rights for all ethnic groups	-0.52	-0.09	***
Hypothesis 3: Equal Rights for immigrants	-0.26	-0.06	*
Hypothesis 4: Attitude towards gender equality	-0.31	-0.08	
Hypothesis 5: Expected participation to political activities as an adult	-0.34	-0.06	*
Hypothesis 5: Expected informal political participation	-0.03	-0.02	
Hypothesis 5: Expected electoral participation as an adult	-0.33	-0.08	+

✧ ✧: Controlled for: Average mathematics score (z-score), Age (z-score), Gender (boy/girl), Social-Economic Status (z-score) & Origin (natives – non-natives)

Probability of type I Error: +: p ≤ .10 - *: p ≤ .05 - **: p ≤ .01 - ***: p ≤ .001

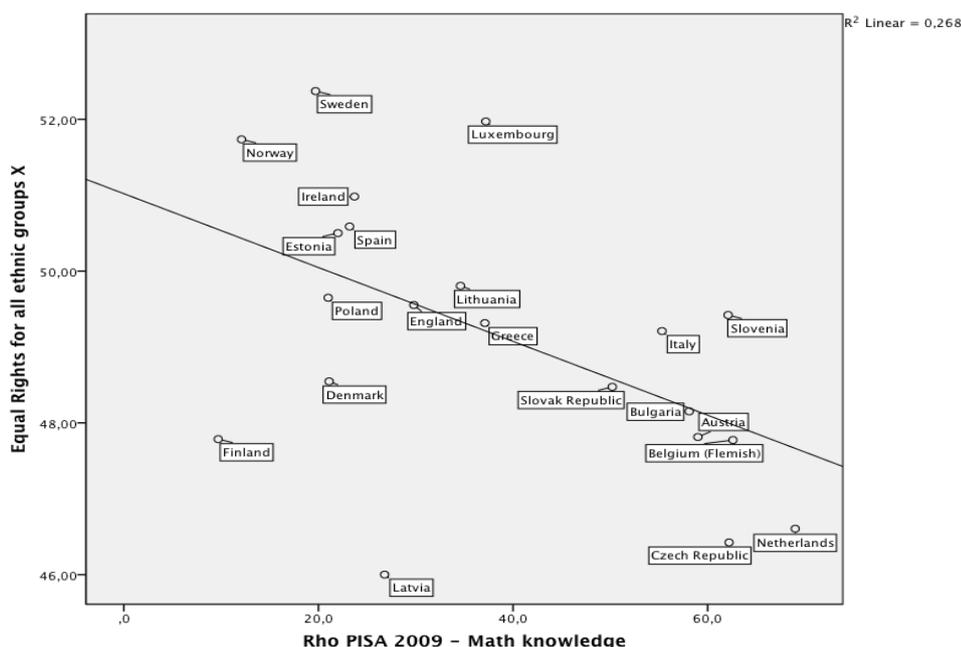
If we control for the levels of PISA mathematics achievement as well as the individual level background variables (age, gender, social-economic status and origin), we get stronger indications for the possible impact of school segregation on integration in society at large.

If we turn back to our hypothesis, however, we cannot confirm our first hypothesis. Academic segregation is not related in a significant way to trust in civic institutions. This is also the case for the attitudes towards gender equality (hyp. 4). The hypothesis concerning the impact of segregation on tolerance towards ethnic minorities (hyp. 2) and towards immigrant rights (hyp. 3) are however confirmed. In line with earlier findings, academic segregation leaves a mark on social cohesion defined as the attitude towards outgroups (Janmaat & Mons, 2011). The impact on political participation is not that clear-cut, since, academic segregation seems to inhibit future expected political participation, but is not related to the other forms of political participation in this study.

To interpret this last result, we use Almond and Verba (1963). Adolescents living in strongly segmented systems

are less prone to participate in citizenship related activities at school (like extra-curricular debating clubs, pupil councils, etc.). Adolescents have the impression that schools do not value participation and seem to conform to what Almond and Verba called a “subject political culture” in the 1960’s: they accommodate towards administrative authorities, but will not actively try to get a grip on the things that concerns them as a group or as a community (Almond & Verba, 1963). We can also discern a higher degree of closure towards other groups, including gender equality (although this last association is statistically not significant).

Figure 3. Equal Rights for ethnic minorities (ICCS 2009) in function of intra-school correlations per country on mathematics (PISA 2009)



To illustrate this association and to give an idea of the dispersion of countries concerning these correlations we take the bivariate relation between academic segregation and the attitude towards equal rights for ethnic minorities in a society.

In this case we see that Flanders (Belgium) and the Netherlands form the classical examples of countries combining high degrees of academic segregation with a low support for equal rights for ethnic minorities. This pattern seems to hold quite well, but there are also a number of interesting outliers, with Luxemburg (higher tolerance, given the degree of segregation) but also Latvia and Finland (lower degrees of tolerance, given their degree of segregation) that beg for a further inquiry.

Segregation, contact and resentment

If we refer to our figure 2, we have investigated the relation between a macro antecedent condition and the micro consequences. We should however also be able to explain the causal mechanisms behind this relation. The current data do not let us to ascertain several possible

explanations. We can however posit explore associations that could account for this pattern.

Janmaat & Mons (2011) already provided a first explanation. The contact hypothesis might account for higher levels of social cohesion in more comprehensive systems, since children tend to have more contact on an egalitarian basis. A second type of explanation focuses on the presence of cultures of “demotion” (Pelleriaux, 2001), “resentment” (Spruyt, 2012) or “futility” in schools (Van Houtte en Stevens, 2008).

Contact

In *The Nature of Prejudice* (1958), Allport argued that categorization acts as a necessary precursor of prejudice. Dealing with our environment, we inevitably reduce complexity to a more manageable number of categories.

Imposing categories on stimuli will enhance differences between and similarities within categories. Stereotyping arises directly out of the social categorization process: inferences are drawn from the assignment of a person to a particular category. Stereotypes -- beliefs about the characteristics of groups of individuals -- influences the perception and judgment of others and become prejudices when they involve a negative feeling or attitude towards the member of a group. Categories and stereotypes not only influence what information

is sought and how that information is processed, stored and remembered, but also tend to resist conflicting evidence (Allport, 1958; Eagly and Diekmann, 2005).

Social categorization plays a crucial role in the formation of social identities (Tajfel, 1969; Brown, 1995; Tajfel and Forgas, 2000). The individuals’ self-image and concept of the self are to an important extent dependent on the knowledge that he/she belongs to certain groups. The creation and maintenance of group identities is based on comparison; distinctiveness is established through attributing positive characteristics to one’s own group in comparison to other groups (Dovidio and Gaertner, 1993). Threats to social identity will be responded by attempts to differentiate the in-group positively from the out-groups and/or differentiate the out-groups negatively from the in-group (Tajfel & Forgas, 2000: 59).

Allport held that under specified conditions contact between members of in- and out-groups can reduce prejudice (Allport, 1958: 281). Superficial contact between members of different groups will however, according to Allport, most often lead to the

strengthening of existing prejudices. Casual contact lacks “acquaintance potential”.

The contact hypothesis has received broad research support. Meta-analyses indicate that a large majority of the studies supported the hypothesis (Forbes, 1997; Kenworthy, Turner, Hewstone & Voci, 2005; Pettigrew & Tropp, 2005; Pettigrew & Tropp, 2006).

Analysis on the ICCS-2009 data ascertained that the presence of pupils from outgroups in classrooms influences the attitude towards immigrant rights (Kavadias, Stouthuysen, Dehertogh & Franck, 2012, Isac, Maslowski, van der Werf, 2012). The proportion of non-natives is positively associated with a more positive attitude towards immigrant rights. When youngsters from different background have contact on a daily basis, they are in general more tolerant towards each other. This association could not be attributed to the individual background of each pupil. The context of the classroom seems to offer a plausible explanation. Immigrant rights are just one of the possible outcomes, but we presume that this logic can be extended to different forms of social segregation. Children that are separated early on in diverse societies tend to develop prejudices towards other social groups, while mixing them tends to inhibit negative stereotypes.

Resentment

The contact-hypothesis focuses on the possible positive outcomes of contact. At the same time research on ‘resentment’ has focused on the stimuli of negative attitudes. Country-specific research in Flanders has showed that educational tracks are valued differently. Pupils following the vocational tracks have the impression that others look down on their educational performance (Spruyt, 2013). This contributes to feelings of futility or demotion: those pupils are persuaded that they will not “make it in life”. Their perspectives on social promotion are systematically lower and they fear to remain jobless or to end up in uninteresting numbing jobs (Pelleriaux, 2001). This belief can also be found in differential socialization patterns in schools, according to the tracks. Schools and teachers have other expectations for pupils that will perform management-functions, as for those that will do the manual work (Bourdieu & Passeron, 1970; Anyon, 1989; Kavadias, 2004).

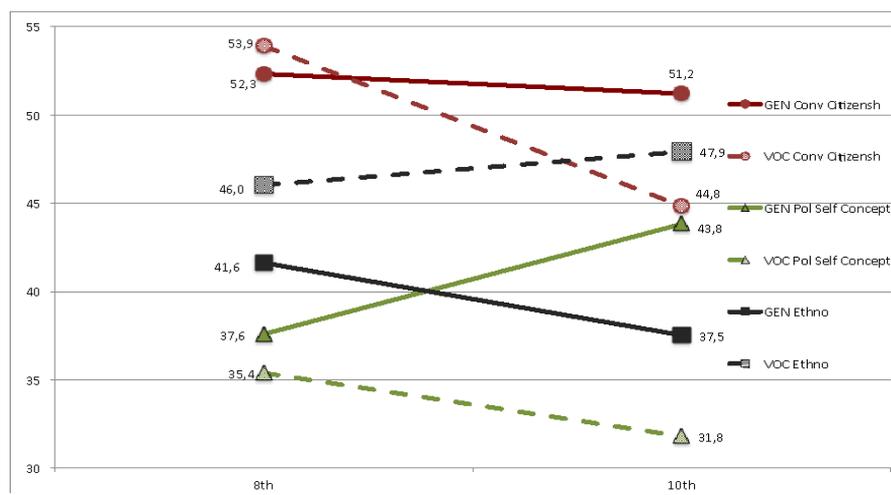
In the wake of Willis (1978) researchers have been documenting the hypothesis that the educational tracks form separate cultural spaces. Pupils in vocational tracks react against the dominant school order. This form of resentment translates into opinions, attitudes, preferences that stand in contrast to “good taste” as defined by schools and teachers. Koen Pelleriaux documented

the rise of these “countercultures” in Flemish schools (Pelleriaux, 2001), while Van Houtte and Van Praag (2014) described the process of action, interaction and reaction of teachers and pupils in vocational tracks. Such a “culture” or subculture has however also political consequences. Pupils from social lower background tend to be more ethnocentric, more conservative in ethical issues but also to feel less competent in politics (Kavadias, Siongers & Stevens, 1999; Pelleriaux, 2001). The Flemish ICCS 2009 research surveyed 8th graders but had also a sample of 10th graders. A comparison within Flanders of both grades provides further indications of these mechanisms.

The ICCS-Flanders team did not find any relevant differences concerning democratic civic attitudes in the tracks of the 8th graders (the so-called A- and B-streams). Among the 10th graders there was however a clear distinction between the tracks.

In figure 4 we reproduce the differences between the 8th and 10th graders according to educational tracks for 3 attitudes: conventional citizenship, political self-concept and ethnocentrism.

Figure 4. Conventional Citizenship, political selfconcept and ethnocentrism according to tracks A /ASO - B/BSO, (grade 8 versus grade 10) in Flanders



Source: ICCS 2009 Flemish sample (De Groof, Franck, Elchardus, Kavadias, 2011).

Conventional citizenship remains stable for the 8th and 10th graders from the general track, while the 10th graders from the vocational track are less prone to engage in conventional activities and have a lower political self-concept (even compared with 8th graders in the same track). The reverse is true for ethnocentrism: pupils from vocational tracks are more ethnocentric but differ even more strongly in the 10th grade (De Groof, Franck, Elchardus, Kavadias, 2011).

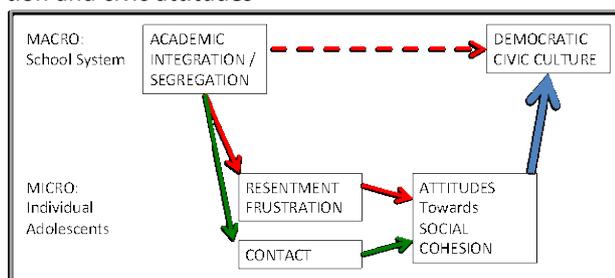
There is evidence for the presence of both types of processes. From an international perspective contact seems to foster mutual understanding, while the Flemish micro-data indicate the growth of resentment at the lower end of the educational (and social) ladder.

7 Conclusion

The ways in which people are physically grouped or separated, but especially the philosophy of selecting early and separating in function of their skills and achievement has in other studies been found to be detrimental for obtaining equitable and just educational outcomes in a society. The current exploratory analysis shows that the introduction of inequality on the basis of achievement seems to gnaw at democratic values or to the openness towards other groups. The least that we can say is that itemizing people in separate cells according to their academic capacities and achievements does not seem to stimulate the degree of democratic solidarity or social cohesion in societies.

Figure 5 summarizes the possible pathways through which the educational system tends to influence the political system. Academic segregation offers or rather inhibits opportunities for contact, but also seems to condition processes of frustration or resentment. At the level of the individual youngsters, frustration and (the lack of) contact tend to influence politically relevant attitudes.

Figure 5. Relationships between the academic segregation and civic attitudes



Schools are becoming more important to integrate youngsters in society but also to allocate them a place in the social structure. Both functions remain in a tension towards each other. Moreover, the existing variation within the European educational systems shows that there is not a one best way to manage this tension. There is however a growing proof *against* an early systematic selection through education.

Most studies on characteristics of educational systems hardly integrate any empirical evidence on the impact on democratic citizenship attitudes (Elchardus, et al., 2011; Janmaat & Mons, 2011). We have made plausible, however, that there is an empirical relation between early differentiation (in terms of tracking) and attitudes. Early segregation in school careers (e.g. the Czech Republic, the Netherlands, Flanders, Austria) (measured in this text as the academic segregation of pupils in secondary school) correlates with a lack of tolerance. Countries that postpone segregation (e.g. Sweden, Norway, Denmark) tend *on average* to have more tolerant and democratically minded adolescents. Yet, the characteristics of educational systems are not always easy to unravel. Educational systems that tend to postpone the tracking of pupils also tend to exhibit other characteristics of welfare states and welfare state

provisions. This makes us cautious about possible inferences. We should try to go a step further in disentangling the impact of educational characteristics, i.e. the degree of standardization, differentiation, or the presence of a quasi-market for that matter on democratic citizenship attitudes.

The current analysis is but a first step in the exploration of these relations. Since we know that correlation is not the same as causation, we should try to expand this analysis. This could be done by gathering data on more countries and by using multilevel models and adding other control variables. We should also try to disentangle the social gradient of this process. Previous research has repeatedly shown that the children from the lower social classes are always at a disadvantage in academic segregated systems. Are they more prone to develop negative attitudes in this store? And how do the winners of the segregation-game react in terms of openness, tolerance and democratic consciousness? Finally we should dig deeper in the systemic differences between levels of welfare state-development. We might hypothesize that this effect will be more important in systems where education plays a larger role in the selection and socialization of the future citizens than in systems in which this is not the case.

To provide a solid and reliable basis to the study of the effects of inequality on social outcomes there is still a necessity for a theoretical foundation. The experience of children and adolescents on the basis of their earlier educational achievement seems to affect what they see as normal, just, good, beautiful, proper, etc. Inequality and an unequal treatment affect not only a culture but also different subcultures within societies. For the time being, we have not answered the question as on the reason of this association. But with the current contribution we hope to have provided a minimal indication of the impact of inequality in the domain of social outcomes. One possible explanation is that early tracking systems and their tendency for early separation of children limit the number of encounters for different children. Segregation limits by this way the number of spaces in which sympathetic emotions between children from different background could develop. It also fosters resentment.

Early segregation seems at this stage a normative choice, as the empirical backing for its benefits is very meagre. It seems to be a choice that is driven by the tendency of educated middle class parents to support mainly 'the best' (areisti) of society. In the Netherlands but also in Belgium the higher educated fractions of the middle class exhibit a strong tendency to distinct themselves from the lower classes, on the domain of equal educational opportunities (Cuperus, 2009). Every proposal for more equity and a more comprehensive curriculum are countered by anxious highly educated professionals on the assumption that this would lead to a loss of quality of the education of their children. It even provides the impetus for a discourse *against equal educational opportunities* and for 'a new elitism in education'.

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Endnotes:

¹ One should however note that having work after education does not give any indication as to the quality and remuneration of these positions (Lohmann & Marx, 2008). Having a job in these contexts is not a guarantee to an acceptable standard of living, as testified by the phenomenon of working poor. Recent empirical research also shows that we find a trade-off in vocational education tracks in this system between a smooth transfer to the labour market and a more general operational capability in later career (Hanushek, Woessman & Zhang, 2011). A general operational capability requires the ability to adapt oneself (due to technological innovations) to changing task.

² The current contribution will not examine this relation, but it is clear that this should be explored instead of assumed.

³ This measure – rho – can be read as the percentage of the variance in the dependent variable (mathematics achievement) that could be attributed to the level of the school, apart from individual variations (Snijders & Bosker, 1999). We estimated this measure using a multilevel model per country, with 2 levels: individual and school (Maximum Likelihood estimates using GLS-algorithm in Mlwin 2.33). The rho's for the Timss 2011 data were calculated with the use of SPSS 21 (with Maximum Likelihood). Reported results are the mean of all analyses with the five plausible values for mathematics achievement.

⁴ The estimated equations for all attitude scales have the form:
 $(Attitude)_{ijk} = b_{0ijk}(Intercept) + b_1(academic\ Segreg)_{k} + b_2(Average\ Math)_{k} + b_3(age)_{ijk} + b_4(Girl)_{ijk} + b_5(Non-Native)_{ijk} + b_6(Social-Economic\ Status)_{ijk}$
 $b_{0ijk} = b_0 + v_{00k} + u_{0jk} + e_{ijk}$