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SOCIAL INEQUALITY IN ATTITUDES AND BEHAVIOR

The Implications of the Flemish Tracking System for Equity

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Introduction

For decades, sociologists of education have shown that educational systems often reproduce, rather than reduce social inequality in society (Breen & Jonsson, 2005). Educational outcomes are not only determined by ability, but they are also influenced by social background characteristics such as ethnicity, socioeconomic status (SES), and gender (Bourdieu & Passeron, 1970). Besides focusing on social differences in cognitive outcomes, it is important to get insight into non-cognitive outcomes, more specifically, into students' attitudes and behaviors at school. While social differences in cognitive outcomes have been extensively researched (e.g., Gamoran, 2010; Van de Werfhorst & Mijs, 2010), research into social inequality in non-cognitive outcomes is less prevalent. However, it is important to gain insight into social inequality in non-cognitive outcomes because these also influence students' educational opportunities. One consequential attitude is a sense of academic futility (Brookover et al., 1979). Students feeling academically futile perceive that the educational system is working against them, and they are more likely to disengage (Demanet & Van Houtte, 2014), and as such have lower achievement and higher dropout rates (Janosz et al., 2008). Moreover, students actively resisting schooling experience higher dropout rates and lower achievement as well (Janosz et al., 2008). Resistance is most openly visible in the form of school misconduct (Demanet & Van Houtte, 2012; Stewart, 2003), which is a form of petty school-deviant behavior that is not necessarily criminal, but is counter to the school rules and is therefore likely to be sanctioned by school authorities. Resistance to the educational system can be more hidden too. For instance, paid work can function as a viable, alternative route to status and success for students feeling they have failed their education (Bachman &

Schulenberg, 1993; Schoenhals et al., 1998; Warren, 2002). As we will argue below, students develop feelings of futility and school resistance when they perceive themselves to be disadvantaged at school. In that regard, it is important to note that students also base their evaluations of their own situation on features at the school level. Particularly, students may feel disadvantaged when they attend schools with lower SES composition (Willms, 1992). As such, attending schools with a low SES composition might lead to feelings of futility, deviant behavior, and part-time work (see also Demanet & Van Houtte, 2011; 2014).

The aim of the current study is to assess the relationship between individualand school-level SES and non-cognitive student outcomes. We focus specifically on students' sense of academic futility, school misconduct, and engagement in part-time work as non-cognitive outcomes that have important implications for students' educational opportunities. The study also investigates the role tracking plays in mediating the outcomes we examine. Tracking is a form of ability grouping, which refers to a situation in which students are taught an entirely different curriculum depending on their ability group. Research showed that, net of ability, students are selected into tracks based on social characteristics (Gamoran, 2010), with lower SES children having a higher chance of ending up in the less esteemed tracks. Given that students in lower tracks are characterized by lower educational opportunities and an anti-school culture, apparent in deviant behavior and low study attitudes (Gamoran, 2010; Hargreaves, 1967; Lacey, 1970; Rosenbaum, 1976; Van Houtte, 2006a), tracking might mediate social differences in the attitudinal and behavioral outcomes of the current study.

This study focuses on the particular case of Flanders - the Dutch-speaking, northern part of Belgium. For international tracking research, the Flemish case is an instructive one. In the cross-national classification scheme of Mons (2007), it can be categorized as a 'separation model', which is a system characterized by early separation of students by using extensive tracking and grade retention. As we will explain more extensively below, in the Flemish system there are four tracks (academic, arts, technical, and vocational) that are hierarchically ordered in the minds of teachers, students, and parents, placing the academic track at the top and the vocational track at the bottom (Van Praag et al., 2017). Between-track mobility virtually exclusively goes 'downwards', fitting within what Rosenbaum (1976) calls tournament track mobility. In his words, the rule for tournament mobility can be described as follows: "when you win, you only win the right to go on to the next round; when you lose, you lose forever" (p. 40).

The current study is guided by the following research questions. First, we aim to uncover whether students' individual SES and the SES composition of their schools is associated with a set of attitudes and behaviors (i.e., sense of futility, school misconduct, and involvement in part-time work) that can affect their educational opportunities. We also consider whether associations between individual- and school-level SES and students' non-cognitive outcomes are mediated by their track position. As such, the current study is, to the best of our knowledge, unique in assessing whether socioeconomic differences in these attitudes and behaviors are patterned according to students' attended track.

Social Inequality, Attitudes, and Behaviors

It is a common finding in the sociology of education that educational opportunities are socially structured (Breen & Jonsson, 2005; Van de Werfhorst & Mijs, 2010). Usually, such studies focus on educational attainment, showing that, net of cognitive ability, social background characteristics such as gender, ethnicity, and SES are associated with educational attainment and occupational destinations (Breen & Jonsson, 2005). As such, this extensive line of research usually concludes that education, instead of promoting social equality by providing equality of educational opportunity, is an important mechanism of social reproduction in society. What is less clear, however, is how social reproduction functions in the everyday lives of students and teachers within their schools. In this regard, it is instructive to inspect school processes, which capture the dynamic side of school life by focusing on teacher and student attitudes and behavior (Good & Weinstein, 1986).

These school processes are consequential for educational opportunities. One of these consequential processes is students' sense of academic futility. The concept of sense of futility was launched by Brookover and Schneider (1975) as an aspect of school climate. Brookover and colleagues (1979) attempted to identify factors that might explain the differences in level of achievement among schools, and coined futility as one of those factors. The most important aspects of futility are similar to Coleman's (Coleman et al., 1966) 'sense of control' variable, but explicitly address the school. As such this measure reflects the students' feelings about the possibility of functioning adequately in the school system. A high sense of futility indicates a feeling of having no control over success or failure in the school system (Brookover & Schneider, 1975). Self-determination theory (Deci et al., 1991) explains why a sense of futility can damage students' later opportunities, as it holds that students will put effort into studying when they perceive their own actions to matter. Indeed, futile students have been shown to be prone to disengagement (Demanet & Van Houtte, 2014), which is one of the most important precursors to unqualified dropout (Janosz et al., 2008). Given that students from a lower SES background have fewer educational opportunities, it has been suggested that they are more likely to feel academically futile (Miller, 1980), but empirical research specifically directed towards the association between SES and academic futility has not yet been undertaken, to the best of our knowledge.

Students' future opportunities might also be offset by school-deviant behavior. Given the negative consequences of engaging in school misbehavior, including poorer grades (McEvoy & Welker, 2000), and dropping out (Newcomb et al., 2002), it is important to investigate whether socioeconomic background factors are related to misconduct. This notion that SES is related to rule transgression is central to the strain/anomy theories (Agnew, 1985; Merton, 1968), that hold that lower SES individuals are predisposed towards delinquency as they are likely to perceive the realization of their goals as being thwarted. In other words, when low SES children perceive they are disadvantaged in the realization of their educational goals, they act out with school-deviant behavior (see also Demanet & Van Houtte, 2011). However, empirical research linking SES to school misconduct is mixed. Some scholars find that lower class students are more likely to commit deviant acts (Heimer, 1997; Willis, 1977). In a recent review of the literature, Piotrowska and colleagues (2015) conclude that, among adolescents, antisocial behavior is consistently related to lower SES. Kelly (1975) found that SES was negatively associated with school expulsion, skipping school, and smoking cigarettes, but positively linked to smoking marihuana, shoplifting, and drinking alcohol. However, some studies found higher SES students to be more likely to commit school-deviant behavior (Demanet & Van Houtte, 2011, 2014), while others found no relation between SES and misconduct at all (Blomme, 1988; Krohn et al., 1980). Research, therefore, is still inconclusive.

Another manifestation of school resistance is involvement in paid work (Willis, 1977). In his resistance theory, Willis (1977) notes that students deprived of status within an educational context might look for status sources elsewhere, and involvement in paid work might serve that purpose (see also Bachman & Schulenberg 1993; Schoenhals et al. 1998; Warren 2002). Since the 1980s a vast amount of American studies have focused on the part-time employment of middle- and high-school students, instigated by the growing number of teenagers taking paid jobs, regardless of their gender, or racial or socioeconomic background (e.g., Carr et al., 1996; Staff et al., 2010; Steinberg et al., 1982). These studies are driven by a concern that involvement in paid work might counteract involvement at school, and some studies indeed find that involvement in paid work diminishes effort directed towards school work. Bachman and Schulenberg (1993) find that working during the school year is associated with lack of ambition, poor performance, and a less demanding curriculum, and gather that poor achievement leads students to work more hours. So, students who achieve poorly are more inclined to work (intensively), as a route to success or satisfaction (Bachman et al., 2011; Schoenhals et al., 1998; Staff et al., 2010). Given that students from lower SES tend to have fewer educational opportunities, we hypothesize that they will be more likely to engage in paid work outside school hours.

In summary, we expect students from a lower SES background to feel academically futile, engage in school-deviant behavior, and be involved in paid work, because they feel disadvantaged at school. However, students do not only base their evaluation of their chances on individual-level attributes, but also on school-level features. Schools with a generally low socioeconomic composition - for instance measured as the average SES of the students (Demanet & Van Houtte, 2011) - might impede a successful educational career (Hoffmann & Ireland, 2004). Schools with a lower socioeconomic composition are less esteemed by students and teachers, resulting in lower expectations regarding their future and social mobility in students, and lower teacher expectations (Miller, 1980; Stretesky & Hogan, 2005; Willms, 1992). As such, we expect all students in school with a lower SES composition to be more likely to feel disadvantaged - also those with a high SES - and to be more likely to feel futile (see also Agirdag et al., 2012), act up at school (see also Demanet & Van Houtte, 2011), or engage in paid work.

The Role of Tracking

While the role of SES in the discussed non-cognitive outcomes is unclear, much more research has addressed the implications of tracking. Worldwide there has been a long tradition of grouping students in secondary education according to their ability level. Ability grouping is the practice of dividing students for instruction according to their purported capacities for learning and usually refers to the placement of students into homogeneous learning groups (Gamoran et al., 1995). It is applied with the expectation that teaching a group of students with similar ability is more efficient. Moreover, students are expected to have different kinds of talents, therefore to have different futures, and thus they need to learn different things (Oakes, 1985, 2005). This grouping of ability is organized in myriad ways. For example, 'tracking' refers to a situation in which students are taught an entirely different curriculum depending on their ability group.

For decades (starting with Hargreaves, 1967; Rosenbaum, 1976) research has demonstrated that lower-track students tend to develop an anti-school culture to overcome the status deprivation following from being in a lower track (Oakes, 2005; Van Houtte, 2006a). It is established that, in comparison to higher-track students, lower-track students manifest more negative attitudes towards school and themselves (Ireson et al., 2001). Their lack of ability forces them into these tracks, involving status loss (Hargreaves, 1967; Rosenbaum, 1976) and a rather uncertain future working life, given the high unemployment rate of lower educated people (Malmberg & Trempala, 1997). Notwithstanding the profound need for very specific, well-skilled, craftspeople, the manual occupations technical/vocational students are prepared for are usually little esteemed in the present knowledge society. As a result, a technical or vocational training is usually not a positive choice, but rather a second choice because one does not meet the standards set by academic tracks (Ainsworth & Roscigno, 2005; Jellab, 2005). Schafer and Olexa (1971) suggested that lower-track students develop more negative attitudes towards school partly because they reckon that grades, commitment, and staying in school until graduation will yield little reward in the future. Vocational school students express lower levels of control over their future than do general school students (Malmberg & Trempala, 1997), while students in more academically oriented tracks are, on average, more self-efficacious and less fatalistic than students in vocationally oriented tracks (Friedkin & Thomas, 1997). Other research confirms that students' internal locus of control is higher in the higher tracks (Catsambis et al., 1999), and that students' beliefs in themselves and their futures explain why lower-track students tend to exert less effort (Carbonaro, 2005). As such, vocational students have been shown to have higher feelings of futility (Van Houtte & Stevens, 2008; Van Houtte, 2016). Other research has reported an association between track position and deviant behavior, with delinquency and school misconduct being more prevalent in lower tracks (Blomme, 1988; Hargreaves, 1967; Schafer & Olexa, 1971). Moreover, the culture of futility in vocational tracks leads students to search for other sources of status, which they find in paid work outside school hours (Van Houtte & Stevens, 2016).

These effects of track attended would not have implications for social reproduction in education if the selection into the various tracks were completely determined by ability. Research has shown, however, that it is not. Students from low SES groups and ethnic minority groups have - independently from their academic ability - a higher chance of ending up in the lower tracks (Gamoran, 2010; Gamoran & Berends, 1987). Two mechanisms have been forwarded to explain this inequality. First, research points to choice processes (Boudon, 1973). In many European systems, parents have considerable freedom to choose the tracks their children will enroll in, and it has been shown in various countries that service class parents do more often opt for the more demanding academic tracks than their working class counterparts, even if their children achieved equally well in primary school (Germany: Ditton & Krüsken, 2006. Denmark: Jæger, 2009; France: Duru-Bellat, 2002; Flanders: Boone & Van Houtte, 2013). This is in line with the idea of relative risk aversion (Breen & Goldthorpe, 1997), which claims that parents want their children to be at least as successful as themselves, in order to avoid downward social mobility. The second mechanism is through teacher recommendations. A rich literature has evolved that investigates the effects of teacher expectations (Jussim & Harber, 2005), and this literature shows, among others, that teachers' recommendations for track allocation are socially biased (Boone & Van Houtte, 2013): teachers are more likely to recommend a more theoretical curriculum for students of higher socioeconomic backgrounds. By affecting students' attitudes and behaviors, then, tracking exacerbates social reproduction through education.

In the next section, we discuss the specificities of the Flemish situation. The Flemish system can be categorized as 'a separation model' (Mons, 2007) that is categorized by stringent tracking and extensive use of grade retention. As we will explain, tracking occurs at an early age and between-track mobility virtually only goes downward. We therefore expect tracking to be especially important in determining students' opportunities – even more so than in other systems – and therefore students' feelings of futility, deviant behavior, and part-time working. Given these peculiarities of the Flemish situation, the focus on the Flemish system can inform international tracking literature.

The Structure of the Flemish Educational System

Before we describe the methodology of the current study, a word is in order about the specifics of the Flemish tracking system. Compulsory education starts at the age of 6 with primary education (see Figure 7.1). Primary education lasts six years and is comprehensively organized. At the age of 12, children make the transition to secondary education. Secondary education lasts six years, which are divided in three 'units' of two years each. In the first unit, there is a choice between two streams, called the A stream and B stream. The B stream is meant "for students who are less suitable for academic oriented education" (Flemish Department of Education, 2008). Most pupils enroll in the A stream, which has a general curriculum with a broad scope and aims to orient students to the different tracks in the third grade.

From the second unit on, grades are divided into four tracks: academic, arts, technical, and vocational education. The academic track prepares students for higher education. The arts track combines general education with arts training, but the number of pupils in this track is quite low. The technical track combines general and practical training. The vocational track prepares students for a specific vocation. A student who followed the A stream in first and second grade can choose any one of these four tracks, but students in the B stream can only enter the vocational track.

Although the pupil's choice of track officially occurs at the age of 14, mostly that decision is already made at the age of 12. In first and second grade, there are optional courses, which can be grouped into four clusters: Latin, modern sciences, technology, and arts. These options are supposed to prepare students for particular tracks. In addition, these optional courses give shape to homogeneous, fixed class groups in the first unit of secondary education (Boone, 2013). Moreover, not every school offers all optional courses, as most

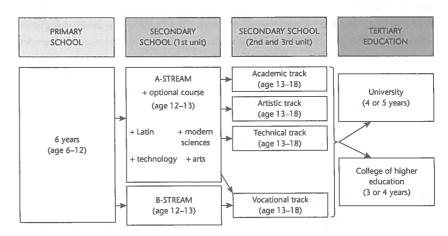


FIGURE 7.1 Structure of the Flemish Educational System

only offer those optional courses in accordance with the available tracks in the second and third units. Hence, the choice for a certain school at the start of secondary education often determines the track.

At the end of each school year, students receive a certificate which determines the students' options for the next school year based on the evaluation of their performance. The A-certificate confirms that a student may proceed to the next grade in the same track. The B-certificate gives a student access to the next grade, but only in a different, usually lower track. If a student wants to remain in the same track, he/she has to repeat the same grade. A C-certificate obliges grade retention, possibly in a lower track. Consequently, the choice of track is not irreversible and pupils can switch, but the existence of the B-certificate and C-certificate principally creates a flow of students in one direction, namely from the more academic-oriented tracks to more practical tracks. Therefore, this phenomenon has been called 'the cascade system' (Van Praag et al., 2012).

The constitutional right of freedom implies that parents may choose the school and track for their children. First, parents can choose the primary and secondary school of their children. The allocation of students to schools has not been regulated (e.g., by place of residence) and each student has the equal right to enrollment in the school chosen by his/her parents, except for certain priority rules in larger cities. The freedom of parental choice has led to socioeconomic and ethnic segregation (see Agirdag et al., 2012). Moreover, the transition from primary to secondary education is not characterized by standardized tests or binding recommendations. Therefore, as in other European systems (see above), it is the responsibility of the parents to select the track of their children at the start of secondary education. As noted above, this is one of the mechanisms driving social selection into the tracks.

In Flanders, between-school tracking is most common, though withinschool tracking exists. Thus, many schools offer one or two tracks, giving rise to academic schools, technical/vocational schools, and a few vocational schools (Van Houtte, Demanet, & Stevens, 2012). Besides these categorical schools, multilateral schools offer academic, technical, and vocational tracks. Nonetheless, in multilateral schools groups are not heterogeneous, as these schools are also characterized by stringent tracking. Important for the purposes of this study is that the system of between-school tracking reinforces social segregation between schools, with the schools offering vocational tracks having a lower SES composition than schools mainly offering the academic track. This makes it plausible that SES composition effects on the non-cognitive outcomes that we study are actually due to track placement (see below).

The Current Study

The general aim of the current study is to test associations between SES and SES composition on the one hand, and a set of student attitudes and behaviors (sense of futility, school misconduct, and involvement in paid work) on the other.

Moreover, we aim to uncover the mediation role of tracking. In order to test mediation (Baron & Kenny, 1986), it is important first to test whether the supposed mediator is affected by the independent variable. In this instance, it is thus first important to investigate whether there are SES differences between the four tracks, and whether we find an association between SES composition and the offered tracks at school. Second, we investigate associations between individual SES and SES composition and the three outcomes, and we test whether this is mediated by the attended track.

Data and Methodology

Sample

We use data from the International Study of City Youth (ISCY), a longitudinal cross-national study in Ghent and 11 other cities (Barcelona, Bergen, Bordeaux, Hong Kong, Melbourne, Montreal, Reykjavik, Sacramento, Santa Barbara, Turku, and Wroclaw). The study tracks one cohort of students in 2013-14 in the modal grade for 15-year-olds - for example, the tenth grade in the US, the fourth grade of secondary school in Flanders - in each city over five years.

For this study, we used data from the first wave of data collection in Ghent, a city in Flanders, the Dutch-speaking part of Belgium. The data was collected in the 2013-14 school year, using a census approach. All secondary schools in Ghent that offered a fourth year of secondary education (39 schools) were asked to participate, yielding a positive response of 76.92 percent (30 schools). Within these secondary schools, our research team asked all fourth-grade students who were present at the schools at the time of our visit to fill out an online questionnaire. The students completed the questionnaires in class in the presence of one or two members of the research team and a teacher. Some students were absent due to illness. Eventually, 2,354 students were surveyed (response rate 90.25 percent). The questionnaires were not anonymous because of the longitudinal nature of the study. Eventually, all names were deleted, so the analyses were carried out on anonymous data.

Our final sample consisted of 2,354 students across 30 schools. The number of students per school varied considerably, from 7 students (one school) to 168 (one school), with a mean of 78.47 (SD = 47.33). Given the setup of the ISCY study (see above), the majority of students were 15 (56 percent) years old at the time of the survey, while the rest were slightly older than most in their grade, mainly due to retention (18.40 percent). The mean age was 15.38 (SD = 0.89). The sample was quite equally divided across gender: 58.5 percent were girls (see Table 7.1). With respect to ethnicity, we considered students an ethnic minority student if their grandmother on their mother's side was born outside Western Europe (see also Agirdag et al., 2012). Of the respondents, 24.3 percent were thus considered to be from ethnic minority descent.

TABLE 7.1 Sample Descriptive Statistics

Variables			Percentage	M	SD	N
Dependent	Sense of futility			9.45	2.97	2,294
variables	School misconduct			29.73	7.75	2,286
	Work		13.70%			2,268
School level	SES composition			53.21	13.6	30
Student level	SES			57.19	23.04	2,128
	Gender	Female	58.50%			2,310
	Age	remale	38.30%	15.38	0.89	2,304
	Retention					2,143
		Retained	18.40%			
	Track					2,300
		Academic	54.00%			
		Arts	7.10%			
		Technical	17.50%			
		Vocational track	19.10%			

Measures

Outcomes

The first outcome, students' sense of futility, was measured by the internationally validated scale developed by Brookover and colleagues (1979), which consists of five items. Examples are: "People like me will not have much of a chance to do what we want to in life" and "At school, students like me don't have any luck." Students had five possible answers, ranging from absolutely disagree to absolutely agree (1–5). The answers across these items were summed, yielding a range of 5 through 25 (Cronbach's alpha = 0.74). The mean in the sample was 9.45 (SD = 2.97).

School misconduct was measured with the scale developed by Stewart (2003). Students were asked how often they performed deviant acts such as being late for school, cheating on tests, and doing drugs during school hours. They could answer using a five-point scale, ranging from *never* (1) to *very often* (5). Scores were summed to a scale (Cronbach's alpha = 0.85) ranging from 17 to 65 (M = 29.73, SD = 7.75).

Last, we considered whether students worked part-time. Of all respondents, 13.7 percent indicated that they had a part-time job at the moment of the survey administration. We should note that students having part-time jobs

were still fully enrolled at school, combining their part-time jobs with a full-time education.

Independent Variables

To measure track position, we asked students to report on the track they attended. In other educational systems, such self-reported track positions do not necessarily comply with the actual positions (see Arum & Shavit, 1995). However, in Flanders, students are perfectly aware of their position in the academic, arts, technical, or vocational track, given the strong structural divides between these tracks (see Van Praag et al., 2017). Therefore, for the Flemish educational system, self-reports are reliable measures for ascertaining track positions. Of the respondents, 54 percent followed the academic track, 7.1 percent were enrolled in the arts track, 17.5 percent attended the technical track, and 19.1 percent attended the vocational track.

To measure SES, we used the internationally validated International Socio-Economic Index (ISEI; see Ganzeboom & Treiman, 1996) to code the occupational status of students' parents. In a next step, we used the code of the parent with the highest occupational status as the SES-score of the family. The resultant measure ranged from 14.21 to 88.96 in our sample, with a mean of 57.19 (SD = 23.04; see Table 7.1).

For SES composition of the schools, we aggregated this student-level measure to the school level, by calculating the mean SES per school (see also Opdenakker & Van Damme, 2001). For the 30 schools in the sample, this measure ranged from 29.32 to 74.85, with a mean of 53.21 (SD = 13.6).

Data Analyses

As a first step, we investigated whether we find SES differences between students' track position, and whether there is an association between the schools' SES composition and the offered tracks. To determine whether there are significant differences between the tracks regarding the SES of students, we performed a one-way analysis of variance (ANOVA). Subsequently, we performed posthoc tests (Bonferroni) to examine the between-group differences in more detail.

As the other research questions were inherently multilevel in nature, and our data had a nested design – students are nested within schools – the use of multilevel analyses was most adequate (Raudenbush & Bryk, 2002). For the continuous measures for futility and school misconduct, we used linear regression modeling. However, the measure pertaining to part-time work was a dichotomous one (1 = working part-time). For such outcomes, multilevel Bernouilli models are most appropriate (Rodriguez & Goldman, 1995).

More specifically, we assessed the role of SES, SES composition, and tracks in the outcomes with stepwise multilevel models. We start by estimating unconditional 'null' models, which allowed us to ascertain whether multilevel analyses are adequate. In the first model, we ascertained the role of individual SES in the outcomes. To rule out spurious relations and selection effects, we controlled for socio-demographic variables, specifically students' gender and age. Moreover, it was important to account for prior achievement. We included whether students had a history of grade retention, as this is a reliable indicator of poor previous achievement (see Alexander et al., 1994). In the second model, we added SES composition to the analyses. To ascertain the role of track position, we entered students' track position in the third model. The tracks were entered by means of dummy variables, with the vocational track as the reference category.

Results

Socioeconomic Status and Track Selection

To test mediation, first it was important to investigate SES differences between the tracks. The ANOVA results showed differences between tracks on SES (F = 221.700; p < 0.001). Post-hoc analyses (Bonferroni) confirmed that differences between all tracks were significant. Students in the academic track had the highest SES (M = 65.88), followed by the students in the arts track (M = 58.55) and students in the technical track (M = 46.70). As anticipated, students in the vocational track had the lowest mean SES (M = 37.66).

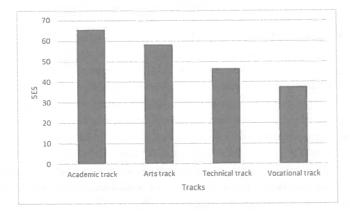


FIGURE 7.2 Association Between Tracks and SES: Results of One-Way ANOVA

Implications for Attitudes and Behavior

To examine the implications of SES, SES composition, tracks, and the non-cognitive outcomes, we used a multilevel analysis (see data analyses section). We start this section with the multilevel analyses taking students' sense of futility as outcome. The unconditional 'null' model showed that 7.46 percent ($\sigma^2 = 8.340$; $\tau 0 = 0.672$; p < 0.001) of the variance in futility was between schools, warranting the use of multilevel modeling. The first model (see Table 7.2) showed that SES was significantly related to feelings of futility ($\gamma = -0.006$; p < 0.05), meaning that students with a lower SES had a lower sense of futility. The second model showed that this occurred because these

TABLE 7.2 Association Between SES, SES Composition, Track Placement, and Sense of Futility: Results of Multilevel Analyses (HLM7)

			Model 1	Model 2	Model 3
Intercept		γ SE	9.507*** 0.191	9.576 *** 0.166	10.481***
School level					
SES composition		γ		-0.033***	-0.002
		SE		0.008	0.011
Individual level					
SES		γ	-0.006*	-0.003	-0.002
		SE	0.003	0.003	0.003
Gender		γ	-0.233	-0.181	-0.18
		SE	0.164	0.163	0.169
Age		γ	0.274*	0.19	0.142
		SE	0.101	0.103	0.106
Retention		γ	0.398	0.387	0.381
		SE	0.214	0.208	0.212
Track (ref type:					
vocational)	Academic track	γ			-1.382***
		SE			0.352
	Arts track	γ			-1.005*
		SE			0.479
	Technical track	γ			-0.770**
		SE			0.287
Variance components					
Intercept		$U_{_{0}}$	0.612**	0.350*	0.415*
SES		U,	0	0	0
Gender		U ₂	0.297	0.268	0.307
Age		U_3	0.025	0.011	0.019
Retention		Ŭ,	0.231	0.303	0.344

Note: The unstandardized (γ) gamma coefficients are presented, with the standard errors (SE).

 $[*] p \le .05, ** p \le .01, *** p \le .001$

students are more likely to attend schools with a low SES composition, as when we took this school feature into account, the effect of individual SES vanished ($\gamma = -0.003$; p > 0.05), while the coefficient of SES composition $(\gamma = -0.033; p < 0.001)$ was significant. These results showed that students in a school with a lower SES composition are more likely to develop a low sense of futility. The third model changed that picture considerably. When students' track placement was added, the effect of SES composition was nullified ($\gamma = -0.002$; p > 0.05), which meant that students' sense of futility was ultimately associated with their attended track. The results showed that students in the vocational track have the highest sense of futility, followed by students in the technical track (y = -0.770; p < 0.01) and the arts track

TABLE 7.3 Association between SES, SES Composition, Track Placement, and School Misconduct: Results of Multilevel Analyses (HLM7)

			Model 1	Model 2	Model 3
Intercept		γ	29.951***	29.990***	32.888***
		SE	0.542	0.537	0.818
School level					
SES composition		γ		-0.024	0.048
-		SE		0.031	0.034
Individual level					
SES		γ	0.003	0.006	0.01
		SE	0.011	0.012	0.012
Gender		γ	-1.580**	-1.571**	-1.593**
		SE	0.487	0.487	0.472
Age		γ	-0.655*	-0.715*	-0.904**
		SE	0.266	0.279	0.266
Retention		γ	4.229***	4.212***	4.302***
		SE	0.751	0.748	0.744
Track (ref type:					
vocational)	Academic track	γ			-3.964***
		SE			0.683
	Arts track	γ			-2.790**
		SE			0.95
	Technical track	γ			-3.187***
		SE			0.557
Variance					
components					
Intercept		U	5.139***	5.213***	5.686***
SES		U,	0.002*	0.002*	0.002**
Gender		U,	2.882*	2.875*	2.490*
Age		U_3^{-}	0.479	0.485	0.493
Retention		U,	7.496**	7.429**	7.353**

Note: The unstandardized (y) gamma coefficients are presented, with the standard errors (SE).

 $(\gamma = -1.005; p < 0.05)$. Students in the academic track had the lowest sense of futility ($\gamma = -1.382$; p < 0.001). So, we concluded from these analyses that students from the lower socioeconomic strata had a higher sense of academic futility, but eventually this was associated with their attendance at schools with a lower SES composition, and ultimately to their overrepresentation in the vocational track. From these analyses, it seemed that in the vocational track, students from a lower socioeconomic background are concentrated, who feel that they lack the power to turn their educational fate around.

In a next set of models, we investigated school-deviant behavior (see analyses in Table 7.3). The unconditional 'null' model showed that 4.18 percent ($\sigma^2 = 57.68$; $\tau 0 = 2.515$; p < 0.001) of the variance in school misconduct was between schools. The first and second models demonstrated respectively no association with SES ($\gamma = 0.003$; p > .05), nor with SES composition $(\gamma = -0.024; p > .05)$. Model 3, however, showed that tracking is associated with school-deviant behavior. The level of school misconduct was highest in the vocational track, followed by the arts track ($\gamma = -2.790$; p < .01), the

TABLE 7.4 Association Between SES, SES Composition, Track Placement, and Part-Time Working: Results of Multilevel Analyses (HLM7)

			Model 1	Model 2	Model 3
Intercept		γ SE	-2.048*** 0.097	-2.015*** 0.099	-1.689*** 0.164
School level					
SES composition		γ		-0.017**	-0.006
•		SE		0.006	0.009
Individual level					
SES		γ	-0.002	0.0001	0.001
		SE	0.003	0.003	0.003
Gender		γ	0.234*	0.257**	0.262**
		SE	0.092	0.087	0.087
Age		γ	0.315**	0.259*	0.226*
		SE	0.094	0.096	0.093
Retention		γ	0.279	0.258	0.272
		SE	0.160	0.160	0.160
Track (ref type:					
vocational)	Academic track	γ			-0.478*
		SE			0.229
	Technical track	γ			0.206
		SE			-1.101
	Arts track	γ			-0.618*
		SE			0.305

Note: The unstandardized (y) gamma coefficients are presented, with the standard errors (SE).

 $[*] p \le .05, ** p \le .01, *** p \le .001$

^{*} $p \le .05$, ** $p \le .01$, *** $p \le .001$

technical track ($\gamma = -3.187$; p < .001) and the academic track ($\gamma = -3.964$): p > .001). We conclude that, although SES and SES composition is not associated to school misconduct, oppositional behavior is most prevalent in the vocational track.

Last, we considered part-time working in the analyses in Table 7.4. In hierarchical non-linear models it is not possible to partition the variance in the outcome into its between and within components (Stewart, 2003). The between-school variance component \(\tau \) estimated in an unconditional model does give an idea of whether or not the between-school variance is significant and can be modeled. For part-time working, $\tau 0$ was 0.201 (p < .001), which warranted the use of multilevel modeling. The results showed that individual-level SES was not related to part-time working $(\gamma = -0.002; p > .05)$. Students in schools with a lower SES composition, however, were significantly more likely to engage in part-time working ($\gamma = -0.017$; p < 0.01), an association which in the third model again appeared to be due to students' track position. Specifically, students in the vocational and the technical track were most likely to work part-time, with students in the arts track ($\gamma = -0.618$; p < .05) and the academic track ($\gamma = -0.478$; p < .05) being less likely to work besides school.

Discussion

For decades, sociologists of education have argued that educational systems reproduce, rather than diminish, social inequality. In the current study we made the case that, to grasp the full picture of social reproduction in education, it is also important to study students' attitudes and behaviors. As we have argued, these non-cognitive outcomes have consequences for educational opportunities. More specifically, we hypothesized that students' sense of futility, school misconduct, and involvement in paid work outside school hours is associated to their own socioeconomic background, and the SES composition of their schools. In essence, we stated that low SES students, and students in schools with a lower SES composition, feel academically disadvantaged, and therefore develop a sense of futility, more school-deviant behavior, and engage in paid work as an alternative source of status. Moreover, this study was unique in assessing the role of tracking in this association. Given that the extant tracking research showed that students from lower SES are overrepresented in the lower tracks which give rise to more anti-school attitudes and behaviors, we hypothesized that tracks mediated the association between SES and the outcomes. Moreover, since in Flanders between-school tracking is common, schools with a lower SES composition are those that offer the vocational tracks, and so it was logical to suppose that the eventual SES composition effects are mediated by the tracks attended.

The results underscored the association between SES and sense of futility. We can thus empirically support the claim by Miller (1980) that students from the lower social strata are most likely to feel powerless at school. However, in later analyses it appeared that the source of futility should be sought at the school level. When accounting for the SES composition, it appeared that all students in lower SES composition schools are at higher risk to feel futile. This suggests that school-level indicators of educational opportunities are more important than individual-level ones. Ultimately, however, our analyses supported that the relationship between SES and futility was mediated by track position. Supporting previous studies (e.g., Van Houtte & Stevens, 2008; Van Houtte, 2016), we found that vocational students feel powerless to counter their educational fate. As such, in the Flemish system at least, track position seems to be more important than social background when students gauge their ability to control their educational outcomes.

As for school misconduct, our results displayed no association to SES, nor to SES composition. As such, the findings endorse the image sketched by previous studies that the relation between SES and misconduct is not that straightforward. As noted by Kelly (1975), it might be that some forms of deviance are more likely to be committed by lower strata students, while others are more likely to be committed by their high SES counterparts. Given that we grouped different kinds of deviant behavior in one scale, it might be that these differences counterbalance in our present results. We did find a clear association between track position and misconduct, and as such our results endorse the view of the extant tracking research, which consistently finds that oppositional school behavior is most likely committed by students in the lower tracks (e.g., Blomme, 1988; Hargreaves, 1967; Van Houtte & Stevens, 2008).

With regard to part-time working, we found an association with SES composition: not taking track position into account, students in the lower SES composition schools were more likely to work after school hours. Eventually, again this was associated with students' track position, as students in the lower SES composition schools are more likely to attend technical and vocational tracks, and this is where the working students predominantly can be found (see also Van Houtte & Stevens, 2016).

In short, we found that what appeared to be social differences can actually be attributed to students' track placement. Consistently, students in the vocational track displayed the attitudes and behaviors that lead to lower educational opportunities more than their counterparts in the other tracks. As this is where the lower social strata students predominantly can be found, this is an important mechanism of social reproduction in our educational system, and we can therefore support previous studies that show that tracking exacerbates social inequality (Bol et al., 2014; Condron, 2008; Lleras & Rangel, 2008; Tach & Farkas, 2006). We add to these studies by specifically showing which attitudes and behaviors are affected by tracking. Other Flemish research, moreover, attests to this pervasive impact of track position. For instance, the track position relates to student attitudes, including self-esteem (Van Houtte et al., 2012), and study involvement (Van Houtte & Stevens, 2009) and their interethnic (Van Praag et al., 2015) and overall friendships (Demanet & Van Houtte, 2016). Moreover, the track their students belong to impacts teachers' attitudes as well, as teachers in technical and vocational tracks have a less academically oriented culture (Van Houtte, 2004) and report lower levels of job satisfaction (Van Houtte, 2006b).

Therefore, we might conclude that the track system in Flanders has many important negative side-effects. To overcome this, the negative image of technical/vocational education needs to be addressed. As we explained above, the choice of technical or vocational education is usually a second, negative choice, when students do not succeed in academic education. It is precisely this idea of 'having failed' that leads to opposition to education in the lower tracks. Countering the negative image of the lower tracks could render the choice for technical/vocational education a more positive one, resulting in a more heterogeneous student composition in the different tracks in terms of cognitive capacity and social background, and student attitudes towards school and studying would be less negative (Van Houtte, 2006a). Moreover, it should be stressed that merely abolishing tracks is not the solution (Van Houtte et al., 2013), as the variety of tracks corresponds with students' different capacities and interests and allows for specialization in secondary education, consonant with students' talents and interests. Furthermore, tracks prepare students for different futures, and societies are as much in need of manual workers as of brainworkers (see also Rosenbaum, 2001). Therefore, the solution lies not in an abolishment of the track system per se, but in an equal societal appreciation of the various tracks.

We should note some limitations of the current study. First, we should stress that this study is cross-sectional, and so is not suited as a basis to make causal claims. Specifically, we cannot be sure about the direction of the effects. Our theoretical framework led us to hypothesize that SES determines track position, which affects the non-cognitive outcomes, but it might as well be that disruptive, futile, and working students have a higher chance of ending up in the vocational track. Although our results are congruent with the extant tracking literature and previous longitudinal research regarding the development of feelings of futility in the vocational track (Van Houtte, 2016), future longitudinal studies might investigate our claims. Second, as we noted in the methodology section, we used self-reported measures to gauge students' track position. Although in other systems these self-reports do not necessarily correspond to actual track position (see Arum & Shavit, 1995), in the Flemish system students are very much aware of their attended track (Van Praag et al., 2017). As such, we contend that these self-reports are generally accurate. Another limitation might be that we have also used self-reports to gauge school-deviant behavior,

which might be biased by social desirability and cover-up strategies. However, previous studies found people's self-reports of school-deviant behavior to be largely accurate (Hindelang et al., 1981), and these scholars even recommend the use of self-reports when not targeting delinquent subpopulations.

In conclusion, the tracking system appears to have a pervasive impact on students' attitudes and behaviors. Importantly, tracking even seems to exacerbate social differences in these non-cognitive outcomes. Given their important impact on future opportunities, we contend that tracking might be at least partly responsible for social reproduction in education.

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